EUROPEAN AVIATION SAFETY AGENCY
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE
EUROPÄISCHE AGENTUR FUR FLUGSICHERHEIT

EASA policy DRAFT

for

Procedure for Approval of Flight Conditions to prototype A/C if flown by customers (pre initial certification)

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Disclaimer

- The content of this file was presented in the GA seminar the 10th of October 2013 but has raised questions and comments and is currently under internal review.

- The final version will be published on the GA web.

Scope of the presentation

- The subject of this presentation is the process to allow an applicant for a TC **to deliver some A/C to customers, before the TC process is completed**;

- This can happen under the umbrella of FC/PtF.

- Not more than 5 A/C for each on going TC, will be accepted for this process;

- A precondition for this FC/PtF approval is that a certification process is in place and it must be at a very **mature level**.

- The principles is that at the end of the process, the A/C shall be able to be brought to a regular CofA and be operated in the environment of part 21.

Scope of the presentation

- A Procedure for the accomplishment of this process will be produced by EASA. This will cover:
  - The Approval of Flight Conditions,
  - The CAW during the FC/PtF.

- At the moment only guidelines are available. The EASA internal coordination with other areas (Rulemaking, AD Section, Maintenance Section etc.) of this topic is not finished yet.

- Input from EASA/NAA and Industry is welcomed.

Summary

- Responsibility of the Applicant/DOA/POA
- Certification and Design aspect for approval of FC
- CAW, Service and Maintenance
- Pilots syllabus and handover criteria
- Return of these A/C to CofA

Responsibilities of the Applicant DOA/POA

1. The full responsibility of the 5 A/C **stays with the Applicant/DOA** until these A/C will be eligible to have a regular CofA (Form 52, issued by the POA);

2. The applicant **DOA is the holder** of the **FC approval and PtF** (even when the owner is somebody else).

3. The FC should cover the PtF's for: **production conformity** (of the PtF'd A/C done under the control of the DOA; no FORM 52 applicable), **ferry flights** and "**handover**" **to customer**.

4. Initial (e.g. X Fh) flights have to be performed by company Test pilot. The minimum FH has to be proposed by the applicant and accepted by EASA.

5. Only the HoD may release the aircraft for costumer use.

Responsibilities of the Applicant

6. Proper coordination for the issuing of the above mentioned PtF has to occur between the **NAA of the country where the A/C will be registered and the NAA of the country of manufacturing**. It is responsibility of the applicant that this occurs in time;

7. Any applications for renewals of FC approvals (EASA Form 37 together with 18b) have to be made by applicant DOA to EASA;

Certification and Design aspect for approval of FC

8. **The certification process must be at a very mature phase** (even if this cannot be quantified, some key guidelines will be provided);

9. **The applicant for FC approval has to prepare a compliance checklist** against the applicable requirements.

10. For all the requirements where compliance demonstration is not completed yet, the applicant has to satisfy EASA that the **level of safety is managed at an acceptable level**. This can be done via **mitigating factors, limitations**, or any other means to support that the aircraft has no features and characteristics making it unsafe for the intended operation under the identified conditions and restrictions;

Certification and Design aspect for approval of FC

11. **The process of the extension of the scope of DOA and POA of the applicant must be to an acceptable level** (i.e. in case new procedures/processes need to be put in place, their implementation in the DOA /POA, must satisfy EASA/NAA). **Coordination with DOATL and POATL is necessary**. (Example Composite, different technologies, engine type).

12. **The configuration of the A/C, for which Approval of FC is requested, must be clearly identified** (including drawings, material specifications and manufacturing processes).

Certification and Design aspect for approval of FC

13. **Conformity to the CFG** for the PtF'd A/C will have to be **stated by applicant DOA**. For this scope an adequate mean should be inserted in the DOA Handbook.

13. **Any deviation/concessions will have to be assessed** for its effect on airworthiness and/or environmental protection and if regarded as significant has to be agreed with EASA.

CAW, Service and Maintenance

15. The **maintenance** of the 5 A/C has to be done under the **control of the applicant DOA/POA** in accordance to an EASA "accepted" Maintenance Manual or an adequate Maintenance regime (e.g. Airworthiness Limitations must be established and approved as preliminary data).

15. An **appropriate Part 145/MF** and the **related persons** can be authorized by the applicant DOA/POA through an **interface agreement** to do Maintenance on their behalf;

CAW, Service and Maintenance

17. The **release to Flight, after Maintenance** has been performed, has to be done:
    - in accordance with the applicant **DOA/POA procedures** and
    - under DOA supervision and responsibility (**interface agreement** shall state proper procedure for verification and authorisation to fly by the DOA following a performed Maintenance.

18. Costumers are not allowed to make any **design changes** to the aircraft, propeller or engine, incl. parts and appliances.

19. Any **design Changes** or **repairs** must be designed by the **Applicants DOA** and installed under the control of the DOA/POA unless otherwise agreed by EASA. The changes must be agreed/accepted by EASA (or in some cases by the Applicants DOA as agreed with EASA);

CAW, Service and Maintenance

21. **occurrences** will be provided by the customer to the applicant DOA;

22. an **adequate reporting system** has to by established; this must be clarified in written agreement between the A/C owner and applicant DOA;

23. The FC will contain a limitation imposing the applicability of all **AD's for the engine, propeller or any other equipment** holding its own approval. According to 21.A.713(a), AD to engine/propeller/equipment is a change and needs to be assessed at aircraft level to verify if the FC approval is still valid;

24. The **FC will be limited in time** (approximately: not later then 12 month after FC approval is issued and 6 months after TC issuance)

Pilots syllabus and handover criteria

24. **Pilots**: A procedure shall define the **syllabus**, the minimum requirements of competence and experience and the **handover criteria**. Each costumer pilot has to be "**Checked Out**" individually by the Applicants DOA. A list of qualified Pilots shall be kept and recorded and made available to EASA on request.

25. **A procedure** must be provided to cover all these points. It **must be accepted by EASA (DO related issues)** and the NAA assigned for the oversight of the POA **(PO related issues)** as part of approval for DO&PO significant changes;

Return to CofA

26. The applicant DOA has to describe (through the procedure) how the A/C will be **transferred from FC/PtF to a regular CofA**;

27. Before issuance of Form 52, the applicant POA must ensure that the **A/C conforms with the certified design standard** as defined in the TCDS. In case that during the certification process the approved design became different from the certified Type Design, an adequate retrofit has to be developed by the applicant DOA and installed by applicant POA (to be included in the procedure);

28. In case, for any reason, an A/C cannot be brought into conformity with the TCDS, it will be grounded. Affected S/N have to be excluded from the TCDS. Unless an alternative way to bring the A/C to an airworthy condition is proposed by the DOA and accepted with EASA.

Thank you

Questions ??