



EASA

European Aviation Safety Agency

Product Certification and Design Organisation Approval Workshop

22nd – 23rd November 2017

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TE.GEN.00409-001



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European Aviation Safety Agency

Input from Side Meeting Group 2 General Aviation

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Summary

- Feedback from Certification and Surveillance Activity
- Part 21 proportionality
- LOI for GA companies
- CS 23 Amdt 5
- Conclusion





Feedback from Certification and Surveillance Activity

➤ **Type Design Data: border line between Design and Production data**



- The Type Design definition level (drawings, specifications, processes etc) shall be flexible and based on criticality assessment.
- Minimum data for definition of form / fit / function shall be provided to POA (too much details can have the side effect of many production deviations to be processed);
- Production Engineering, in turn, could develop its own Production Data.



Feedback from Certification and Surveillance Activity (cont'd)



► **Type Design Data: border line between Design and Production data**

The Type Design definition level (drawings, specifications, processes etc) shall be flexible and based on criticality assessment.

► If required by the showing of compliance, inspection criteria for Production and procedures shall be also defined (for instance this applies to composite material, whose process is part of the Type Design).



Feedback from Certification and Surveillance Activity (cont'd)

► Lack of support from engines TCHs

Aircraft manufactures have experienced problems to be supported by engine TCHs for the engine installation certification.



Recommendations:

- CS-E to require TCHs for providing detailed installation manuals to show compliance with CS-23 requirements.
- Part 21 to require engine TCHs to provide all needed information to support airframe manufacturers for the showing of compliance at aircraft level (e.g. CS 23-1309, HIRF and Lightning requirements).



Feedback from Certification and Surveillance Activity (cont'd)

- **Use of items approved as part of Type Design**
(COTS and non ETSO)
- Design Organization could issue a technical specification for not qualified items (often developed by design subcontractors), identifying the main features (i.e. performance, dimensions, interfaces, configuration etc) and the required incoming inspection requirements against which POA can declare conformity and release Form 1.
- The function criticality assessment, supported by FHA, should drive the depth of inspections and the level of supplier oversight.



Feedback from Certification and Surveillance Activity (cont'd)

➤ **MMEL for CS 23 aircraft (ELA1 & ELA2)**

In Europe, for ELA 1 & ELA 2 airplanes, there is no requirement for a MMEL as a separate document for operation according with CS GEN MMEL.

- The POH/AFM (*) is sufficient even for commercial operated ELA 1 and ELA2 airplanes.
- However, during TC validation processes, the foreign validation authorities normally ask for a separate MMEL.

Harmonization on MMEL requirements for ELA1 & ELA 2 is expected.

(*) + list of equipment as specified in the TCDS and in combination with equipment required for the flight by the associated implementing rules.



Part 21 Proportionality

- **Cultural change: product oriented oversight**
(looking at end result!)

Challenges:

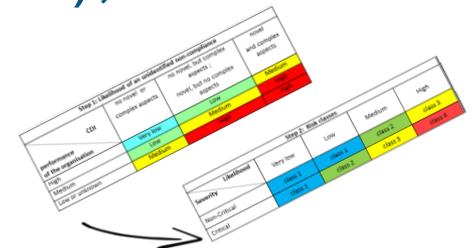
- How to achieve competent oversight with one team.
- Who is going to ensure the proper level of proportionality for the intended product and how this is going to be captured in the Company Manual?
- How can experience from pilot projects be used to educate all stakeholders?





LOI for GA Companies

- **LOI will be a “must” for all DOAs starting 2019;**
- As proactive approach, DOAs are welcomed to join advanced projects initiative, in order to get familiar with the system before the amended PART 21 goes live;
- CDI is a different from a CRI and it requires a less administrative exchange with the Agency;
- GA companies should get a real benefit from LOI (due to the lower risk compared to large aeroplanes)
- CM on EASA website is out of date (issue 1);
Draft issue 3 is better adapted to GA needs





CS 23 Amendment 5

- ▶ CS-23 Amdt. 5 is appreciated by Industry; but it is not a revolutionary change. It is a chance for experienced applicants to explore new possibilities of product certification;
- ▶ Published since August 2017 with no AMC/guidance material;
- ▶ A lot of movement and uncertainties within EASA with respect to the “translation table” and official “gap analysis”;





CS 23 Amendment 5 (cont'd)

- Proposal of any AMC possible by applicant on project level (currently only solution if CS-23 Amdt.5 is selected as Airworthiness Code);
- Delay caused by highest aim for FAA harmonization;
- Difficulties expected for STC on such aeroplanes as for different use of AMC on CS-23 Amdt. 5 by STC Applicants;
- Training required for CVEs, for relevance of their signature and verification procedure/level;
- New compliance reporting procedure and forms required.



Conclusions

- Most of discussion was about LOI implementation as tailored to GA-companies;
- Part-21 proportionality was also very actively debated especially in relation to the combined DOA+POA and the involvement of NAAs in both domains; harmonisation/standardisation issues were put forward as the biggest challenge in pursuing this approach;
- Several questions have been raised on the practical application of CS23 Amdt. 5.





Conclusions (cont'd)

- GA community thanks EASA for the organisation of side meeting;
- Everybody in the group had a very active role;
- Questions raised during the event are expected to be properly followed up by EASA;
- It would be valuable to get, in the frame of this event, additional DOAs volunteering for showing practical cases of processes implementation, as done by Tecnam.



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