

Lessons learned

Presentation by:

Laurent PINSARD
Chief Expert - Airframe

Emily LEWIS
Senior Expert – Structure, GA/VTOL

Rotorcraft Structures Workshop
18-19 February 2025

Your safety is our mission.

Disclaimer

The content of this presentation is for information purposes only. All information provided is of a general nature only and is not intended to address the circumstances of any particular project, individual or entity. Any time there is a conflict or discrepancy between the information provided in this presentation and information in an official regulation or EASA document, the latter prevails.

Despite every effort to ensure the accuracy of the information provided, it may contain occasional inadvertent inaccuracies or typographical errors. Any error brought to our attention (vtol@easa.europa.eu) will be promptly corrected. In no event shall EASA be liable for any incidental or consequential damages, even if EASA has been informed of the possibility thereof.

The content may be subject to changes at any time without prior notice. To the maximum extent permitted by law, EASA is not liable (whether in contract, negligence or otherwise) for any loss or damage arising from the use of these materials. The information contained in this presentation should not be construed as legal advice.

All presentation material and other information provided by or on behalf of EASA are furnished on an "as-is" basis, without warranty of any kind, whether express, implied, statutory or otherwise especially as to its quality, reliability, currency, accuracy or fitness for purpose.

Ownership of all copyright and other intellectual property rights contained within the EASA presentation material, including any documentation, data, technical information and know-how provided as part of the presentation, remain vested in EASA. Reproduction is authorised, provided the source is acknowledged, except where otherwise stated. All logos, copyrights, trademarks and registered trademarks in these presentations are the property of their respective owners.

easa.europa.eu/connect



Rotorcraft Structures Workshop 18-19 February 2025

Your safety is our mission.

An Agency of the European Union 

Contents

- PART 26 implementation
- Use of the CMs
- CIVP & CRFS & Bird retroactive application
- Safety Recommendation
- Material qualification
 - Titanium,
 - EAC...
- Best working practices

Lessons learned - PART 26 implementation

Article 1 Subject matter and scope

1. Additional airworthiness specifications related to the continuing airworthiness and safety improvements of aircraft.
2. This Regulation applies to:
 - a) operators
 - b) Holders of a TC
 - c) Applicants Ageing Aircraft Experience



Communication between EASA (including NAAs), Applicants and TCHs, operators through

Lessons learned

Use of the CMs

- Do not constitute any legal obligation
- Provide complementary information and/or acceptable MOC for compliance demonstration
- Alternative MoC possible but can request more time and energy

CM-S-005 Bonding repair size limit



EASA CM No.: CM-S-005 Issue 01

Certification Memorandum

Bonded Repair Size Limits
in accordance with CS-23, CS-25, CS-27, CS-29
and AMC 20-29

EASA CM No.: CM-S-005 Issue 01 issued 11 September 2011

Regulatory requirements: CS-23, CS-25, CS-27, CS-29

EASA Certification Memoranda clarify the European Aviation Safety Agency's general course of action in specific certification items. They are intended to provide guidance on a particular subject and, as non-binding material, may provide complementary information and guidance for compliance demonstration with current standards. Certification Memoranda are provided for information purposes only and must not be misinterpreted as formally adopted Acceptable Means of Compliance (AMCs) or as Guidance Material (GMs). Certification Memoranda are not intended to introduce new certification requirements or to modify existing certification requirements and do not constitute any legal obligation.

EASA Certification Memoranda are living documents into which either additional criteria or additional issues can be incorporated as soon as a need is identified by EASA.

Lessons learned

Safety Recommendations

Significant pressure to provide action following accident investigation.

- Overreact
- Add conservatism
- Duplication of the requirement

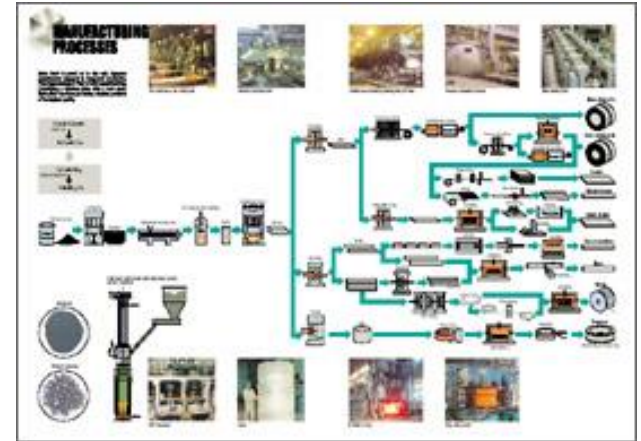
Lessons learned

Material qualification & selection

- EAC Embedded stress generated by interference & chemical reaction
- Titanium. process & traceability

Can generate significant

- commercial & economical impact
- Impact in CAW

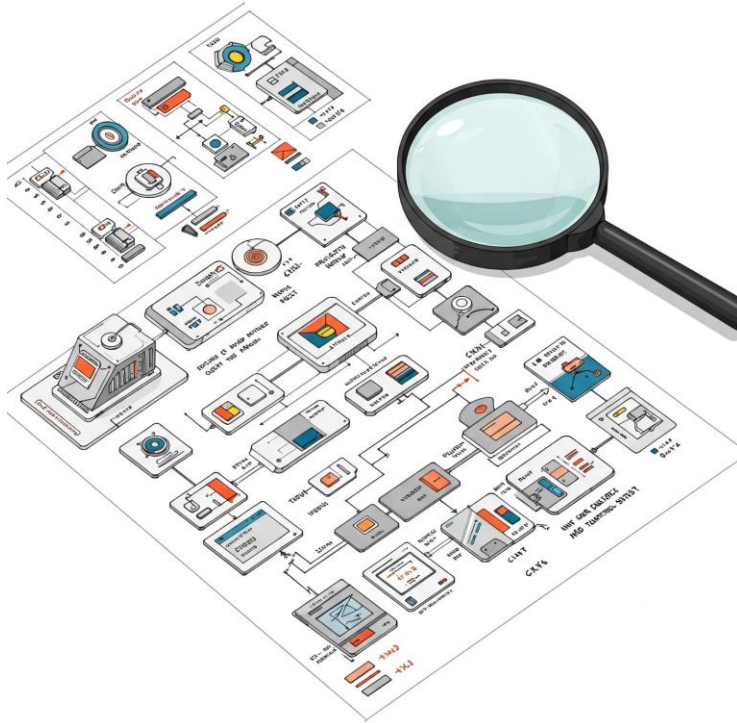


Titanium Manufacturing process

Robust & well approved solution recommended

Best Working Practices

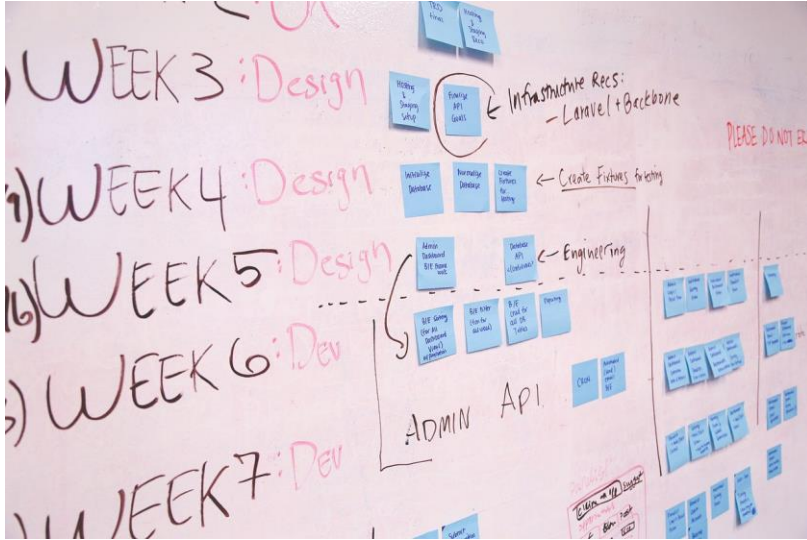
Technical Familiarisation



- ✓ Not just for Expert familiarisation
- ✓ Useful to clarify expectations at the start
- ✓ Initial questions/comments can be resolved
- ✓ Early engagement may save time over the project

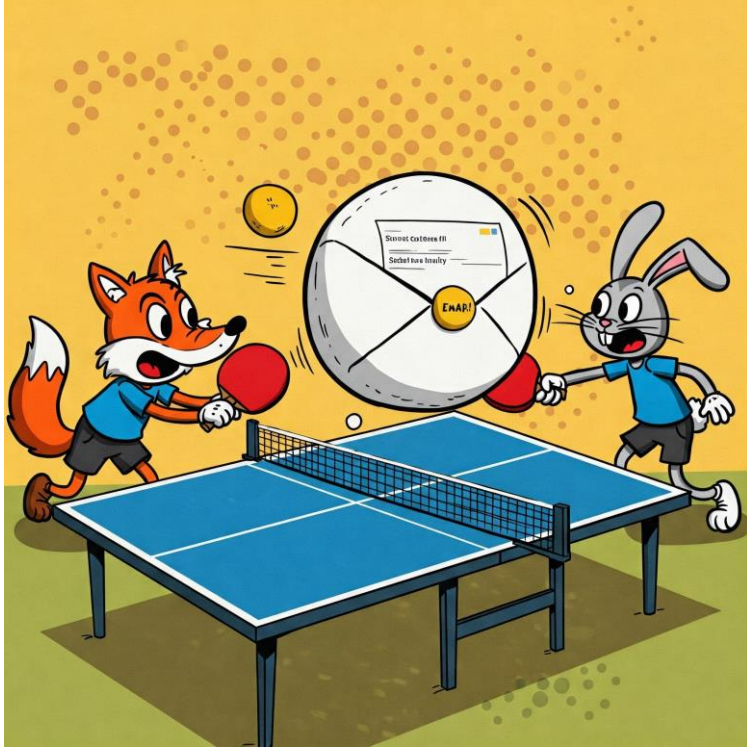
→ Tech Fam is not always necessary

Planning!



- ✓ Cert Basis / Cert Plan first
- ✓ Please allow sufficient time for Expert review
- ✓ For complex projects, please provide realistic planning.
- ✗ Please try to avoid extended breaks in the project → continuity saves time

Avoid long email/discussion back-and-forth



- ✓ Break the chain with a phone call / WebEx
- ✓ Check Expert availability first!

Clear and Complete Compliance Information



- ✓ Please tell the story:
document the design change
and compliance
- ✗ Do not assume we know the
design and compliance
history as well as you do!

Problem Solving Mentality / Open Mind



- ✓ Every project is unique
- ✓ Rotorcraft are complex
- ✓ We need a problem solving mindset
- ✓ Listen and learn from each other
- ✓ Open to revise position when unnecessarily conservative or restrictive

Escalation Process



- ✓ If stuck on a technical issue, please inform the PCM and Expert first.
- ✓ Escalation steps:
 1. Senior Expert and Product Section Manager,
 2. Then, Chief Expert and Head of Department, if necessary
- ✗ Please do not start escalation from the top!

Conclusion

- Good Communication is key
- Transparency
- Listen and learn from each other
- Good planning
- Open to change



Join at
slido.com
#RSW2025



easa.europa.eu/connect



Rotorcraft Structures Workshop 18-19
February 2025

Your safety is our mission.

An Agency of the European Union 

Thank you for your attention!

easa.europa.eu/connect



Rotorcraft Structures Workshop 18-19 February 2025

Your safety is our mission.

An Agency of the European Union 