

Welcome to the ADSE Airworthiness Newsletter

Another month. Another newsletter. Another development of the world of Airworthiness.
This month I want to talk about the lifecycle of an electric aircraft. These are often presented as part of a cleaner future for aviation. However… this “new” technology tends to bring new challenges, sometimes in places we do not immediately think of.
Last month, the UK Air Accidents Investigation Branch (AAIB) drew attention to the hazards that high-voltage batteries can pose to accident investigators! A damaged battery may not catch fire immediately, but could enter thermal runaway later, potentially while investigators are examining the wreckage. Unlike conventional fuel, a large battery cannot simply be drained and made safe. The same thing you see with accidents of Formula one cars… To warn the marshals about the hazard of a potential shock, there are certain LED lights on the car (see requirement C5.17.3). Besides these warnings, the marshals also have thick rubber gloves for isolation purposes.

It got me thinking: when we assess the certification of a new technology, do we focus too much on its intended operation? Certification quite rightly considers what happens when systems fail during the operation, but the consequences of those failures can extend well beyond the operation itself. Rescue crews, maintenance personnel and accident investigators may all face risks that did not exist, or were less significant, with the technology being replaced. Perhaps we can draw lessons from the existing Formula one rules?

As always: Keep innovating and airworthy!

Eelco Bakker

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EASA

- EASA published its **Annual Safety Review 2026**, providing an analysis of aviation safety in Europe during 2025 and comparing the results with the previous ten years. Focusing on initial and continuing airworthiness, I found two topics particularly interesting:
    - System/component failures: System/component failure or malfunction (non-powerplant) was the most frequent occurrence category for commercial air transport with complex aeroplanes in 2025 (see Figure 2.5), continuing the trend observed in previous years. Fire, smoke and pressurisation-related occurrences also feature prominently in the risk assessment.
    - Certification and oversight: Safety concerns identified by EASA through its standardisation activities with National Aviation Authorities mainly relate to initial certification/approval and continued oversight/surveillance. These areas accounted for 76% of Class D findings in 2025, confirming the continued safety impact of weaknesses in certification and oversight processes (see page 119). Some of the issues I find interesting include:
        - Regulatory workload associated with amendments and new requirements, including SMS and Part-IS implementation.
        - Ineffective oversight by National Aviation Authorities, with cases of organisational non-compliance going undetected.
        - An increasing workload for authorities, including the challenge of addressing overdue findings and maintaining sufficient inspector capacity and specialist expertise.
- EASA started a consultation regarding the **deactivation means for ATTCS** (Automatic Take-off Thrust Control System) function. Closing date of consultation: 04/11/2026.
- EASA started a consultation regarding Engine Core Zone Firewalls, making use of a **firewall made of composite material**. Closing date of consultation: 17/11/2026
- EASA updated **CS-E** (now at amendment 9). Amongst others, the engine control system development assurance requirement has been updated (CS-E 50). It addresses now more explicitly any development errors in engine control systems, software and airborne electronic hardware, including the use of development assurance.
- EASA published amendment 17 of the Easy Access Rules for **CS-ETSO**. This latest EASA publication now includes the ED Decision 2022/018/R of 2022 (!). Although the Easy Access Rules initiative from EASA is a great initiative, this shows that sometimes the info in those EASA publications are 4 years (!) after the official publications. Always be aware of that, when using those Easy Access Rules.
- EASA published issue 4 of their Easy Access Rules for **CS-MMEL**. It incorporates ED Decision 2025/021/R of December 2025 (!), regarding a regular update of the CS-MMEL.
- EASA published issue 3 of their Easy Access Rules for **CS-GEN-MMEL.** It incorporates ED Decision 2025/021/R of December 2025 (!), regarding a regular update of the CS-GEN-MMEL.
- EASA updated their Guidance for Organisations Using the **EASA Organisation Approval Tool** by replacing their Youtube series with a PDF regarding this subject.

FAA

- The FAA published AC 33-13 regarding **Sample Size Considerations** for Comparative Test and Analysis for Turbine Aircraft Engine and Auxiliary Power Unit (APU), Parts Manufacturer Approval (PMA), and Third-Party Repair Parts
- The FAA published Change 1 of AC 145-5 regarding the design and implementation of an **Internal Evaluation Program** (IEP) for Part 145 approved repair stations.
- The FAA published issue A of AC 20-184A regarding Guidance on Testing and Installation of **Rechargeable Lithium Battery** and Battery Systems on Aircraft
- The FAA published issue A of AC 39-8 regarding Continued Airworthiness Assessment Methodologies of **Powerplant and Auxiliary Power Unit Installations** on Transport Category Airplanes
- The FAA published issue B of AC 120-77 regarding **Performance Rules**: Provisions Contained in an Operator Manual Under § 43.13(c).
- The FAA published issue B of AC 120-97 regarding the Incorporation of **Fuel Tank System Instructions** for Continued Airworthiness into Operator Maintenance and/or Inspection Programs
- The FAA published issue B of AC 20-164 regarding Designing and Demonstrating Aircraft Tolerance to **Portable Electronic Devices**
- The FAA published issue M of Order 8130.2M regarding **Airworthiness Certification of Aircraft** for representatives of the FAA
- The FAA published issue B of Order 8100.18B regarding **Aircraft Certification Service** Organizational Realignment and Refinement References
- The FAA published issue G of Order 8110.37 regarding **Designated Engineering Representative** (DER) Handbook.
- The FAA published issue E of Order 8000.95E regarding **Designee Management Policy**
- The FAA published an **interesting Airworthiness Directive** (AD 2026-20-16). It addresses a potential cross-engine debris hazard: in the event of an uncontained failure of the **left** engine, debris could damage critical oil lines and a sense line on the **right** engine, potentially resulting in a dual-engine shutdown. I find this AD interesting because the chances of debris of the left engine reaching the right chances are (very) low. However, in theory, not zero.

Upcoming EASA events (red=new)

- 2026 Oct 27-28 Hybrid event: **Innovative Air Mobility** Implementation Forum

- 2026 Nov 04 Online event: EASA 6th **Ground Handling** Implementation Webinar
- 2026 Nov 09 Online event: **Hydrogen** Technologies International Working Group overview of on-going work
- 2026 Nov 18-19 On-site event: EASA Annual **Safety Conference 2026**
- 2026 Nov 30-Dec 3 On-site event: EASA **Rotorcraft Symposium** and European Rotors (Lyon) (agenda updated)
- 2027 Jan 27-28 On-site event: EASA **Business Jets Workshop** 2027
- 2027 April 20-21 On-site event: EASA 2027 **Certification Workshop** & Conference (Cologne)

BREXIT

- The CAA-UK and EASA have signed Revision 1 of their **mutual Technical Implementation Procedures** (TIP) for Airworthiness and Environmental Certification. Main changes:
  - The CAA-UK and EASA have assigned contact points responsible for organising and monitoring periodic evaluation activities;
  - The CAA-UK now accepts design data developed for a repair or design change in compliance with EASA Part-26;
  - A new explanation how the UK and Europe can accept not validated/approved design data has been added;
  - A new explanation how to export parts without a CAA or EASA Form 1 has been added;
  - A new explanation how to Export Prototype Parts with a CAA Form 1 or EASA Form 1 has been added.

Other News

- The CAA-UK published episode 9 of their Podcast series “Safety Files”. Episode 9 is about “**Reporting for safer skies**”, where it is discussed how reporting safety events and applying a just culture approach have helped the aviation industry learn lessons, identify trends and improve safety.
- The CAA-UK released CAP3304 regarding Managing **Noise from Emerging Aviation** Technology
- The CAA-UK released CAP3319 regarding a guidance for industry about **Dual-Use UAS Development, Testing and Evaluation**.

- The Dutch Safety Board released their Semi-Annual Report (2026H1) regarding Aviation accidents and incidents (this was a quarterly report). Interesting case:
    - Page 16: **Broken rudder cable** of a Diamond DA40 D after a modification from non-stainless steel flight control cables were replaced with stainless steel cables 8 years prior.
- The Dutch Ministry of Transport published a consultation on the **change in tariffs for transport sectors** on 1 January 2027. For the aviation sector, the following tariffs will be changed:
    - Application for the issuance of an aircraft airworthiness certificate > 5700 kg;
    - Extension of the issue of an aircraft airworthiness certificate = < 2000 kg;
    - Application for issue of certificate of registration aircraft =<2000kg or change/cancellation of the registration;

Want to receive the next edition?

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"In theory, there is no difference between theory and practice."