GDESIGN FAILURE MODE & EFFECTS ANALYSIS

AS13100 & RM13004 Key Requirements for DESIGN FMEA WEBINAR

June 22nd & 23rd 2022



RM13004 Defect Prevention Quality Tools to Support APQP & PPAP



An AESQ Reference Manual Supporting SAE AS13100[™] Standard

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RM13004 DESIGN FMEA Webinars

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AS13100 & RM13004 DESIGN FMEA - Understanding the Requirements

Led by Rob Farndon of Rolls-Royce and Andrea Neumann of MTU, these interactive webinars are designed to describe the intent of the AESQ AS13100 requirements for Design FMEAs and how they link to the effective deployment of Advanced Product Quality Planning (APQP) and a Zero-Defect Strategy.

These webinars shall explain how AS13100 Design FMEA can be developed, maintained and improved using real examples of best practice from across the industry.

SESSION 1 AS13100 DFMEA Requirements and Overview (June 22 nd 14.00 – 16.00 UK Time)	SESSION 2 Key Care Points when Creating the Design FMEA (June 23 rd 14.00 – 16.00 UK Time)
Overview of the requirements for Design FMEA in Chapter C of AS13100 and their link to the APQP / PPAP process	A closer look at some of the key steps when creating Design FMEAs to illustrate the intent of the AS13100 requirements, including; a) Requirements & Potential Failure Modes
Explanation of the intent of each requirement and what success looks like	b) Potential Effects & Severity Ratingc) Potential Causes
Overview of the Design FMEA approach aligned to the RM13004 Reference Manual	 d) Prevention Controls & Occurrence Rating e) Detection Controls & Detection Rating f) Calculating the Risk Priority Number (RPN) g) Prioritizing Improvements
Links to further help and guidance Questions & Answers	Questions & Answers

Rob Farndon Introduction

- Worked for Rolls-Royce for 33 years.
- Career including Design Practitioner, Manager and Specialist roles in Civil Aerospace.
- Currently Chief of Mechanical Systems Capability .
- Design Process Specialist, and Subject Matter Expert for APQP/PPAP and Defect Prevention toolset including DFMEA.
- Led creation of design processes as part of RR Civil Aerospace APQP/PPAP transformation.
- Lead Design Coach for Civil Large Engines.
- Led authoring team for RM13004 and AS13100 DFMEA content.
- Deputy Team Leader for RM13004 Subject Matter Interest Group.





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Andrea Neumann Introduction

- Worked for MTU Aero Engines AG for 2 years
- Career including Type Inspector for Propulsion Systems at German Military Airworthiness Authority
- Currently Safety and Certification Engineer at Airworthiness Department MTU
- System Safety Assessment Specialist
- Subject Matter Expert for DFMEA
- Led process definition of interfaces between DFMEA and System Safety Process
- Supported definition of Design Failure Mode and Effect Analysis Process at MTU







RM13004 DESIGN FMEA Webinars



Webinar also supported by Subject matter Experts from GE and Safran





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Steven W. Finup Consulting Engineer GE Aviation **Stéphan DAUX** APQP Leader & Master Safran Aircraft Engines Download your free copy of RM13004 at <u>https://aesq.sae-itc.com/supplemental-material</u>