

Title / Titel

## **DO-178C TECHNOLOGY-SPECIFIC SUPPLEMENTS**

**The DO-178C Supplements - Considerations for applying model-based design, object oriented technology and formal methods in software for airborne systems**

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Speaker(s) / Referent(s)

Jan-Hendrik Boelens

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Skill Level / Wissensniveau

Intermediate

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To whom is the presentation addressed? / An wen richtet sich der Beitrag?

Software Managers, Software Engineers, QA-Managers, Project Managers, Test Managers, Test engineers

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Keywords / Stichwörter

DO-178C supplements, object-oriented technology, model-based design, formal methods, tool qualification, OOTiA

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Abstract / Zusammenfassung

The future DO-178C standard (Software Considerations in Airborne Systems) is intended to address several areas of concern that are not covered in the current DO-178B standard. These areas include model-based design, object-oriented technology, formal methods, and tool qualification. Each of these areas is addressed in a separate supplement to the standard.

In this presentation, the following issues are discussed:

- The key points contained in the following DO-178C supplements are introduced: object-oriented technology, model-based design, formal methods, tool qualification.
  - The implications for development teams currently using DO-178B are summarized.
  - The relation between the DO-178C core document and the supplements is explained.
  - The relation between the supplements and other documents like OOTiA and CRI is explained.
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Biography / Biografie

**Jan-Hendrik Boelens**

- Mr. Boelens is currently working as a team leader for software requirements engineering in avionics systems at Eurocopter in Munich.
  - In addition, Mr. Boelens is a co-chairman of the RTCA/EUROCAE SC-205/WG-71 subgroup developing the DO-178C supplement on object-oriented technology.
  - Previously, while working at EADS Corporate Research, Mr. Boelens was engaged in research activities regarding software technologies for integrated modular avionics systems.
  - He studied Software & Systems Engineering at the University of Groningen in The Netherlands, where he specialized in software architecture.
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**Contact information / Kontaktinformationen**

**Jan-Hendrik Boelens**

Eurocopter Deutschland GmbH  
Systems Engineering & Integration  
81663 Munich, Germany

tel: +49 89 607-28220

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