

Commercial Aircraft Projects: Managing the Development of Highly Complex Projects

By H-H Altfeld

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A useful book for students of aerospace engineering management and practitioners in the field who wish to improve their understanding of the main activities of, and challenges for, prime contractors.

Drawing upon both US and European sources, the author has tried to explain why commercial aircraft development is special, due to a high level of complexity requiring a high level of integration. The thrust of the book is how to develop such integrative approaches, particularly the use of the concept of 'architecture' to link product, process and resources. Part I covers the Basics of Project Managing Aircraft Development, Part II Integrative People Management, Part III Managing Requirements and Risks, Part IV Integrative Project Architectures and Part V Using Integrative Project Architectures. Appendices cover The Business Case, Desirable Behaviours of Multi-Functional Project Teams, and an Architecture Integration example.

Each part is an easy-to-read comprehensive explanation of what currently happens in aircraft development, with figures and footnotes to clarify. Examples are used with good effect to illustrate points. There is good use of referencing to support

statements made. Each chapter has a conclusion, although it does not always identify all of the key issues raised in a chapter.

Reading the book, it is easy to understand the complexity of managing aircraft projects and why there are so many opportunities for the failure that has been the project track record for most modern aircraft programmes. It may well be that if three of the elements mentioned in the book were more given more focus in aerospace projects (actually applying basic project management 'best practice', integrating customers and suppliers fully into the architecture, and applying 'best practice' risk management throughout the customer/prime/supplier chain) there would be improved success for future projects.

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