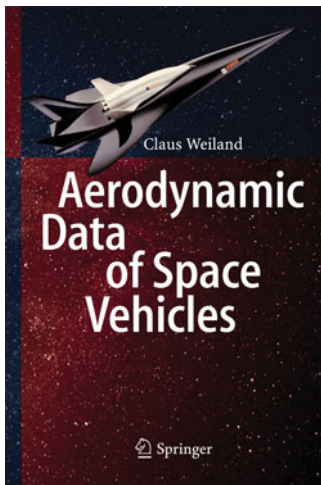


manufacturing constraints are completely ignored.

The book may be useful to some undergraduate programmes, but its usefulness in postgraduate and engineering practice may be limited.

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Aerodynamic Data of Space Vehicles

C. Weiland

Springer. 2014. 355pp. Illustrated. £115.50.
ISBN 978-3-6425-4167-4.

Another good technical book in this series published by Springer. This book will be of particular interest of those who are involved or interested in high-performance space vehicles, re-entry systems and re-useable launch vehicles. Contained

within this book is a technical review of a number of these vehicles: Apollo, Soyuz, cone-derived re-entry vehicles and vehicle concepts such as the X-34, X-33 and Hermes. These vehicle concepts are presented and discussed and are divided into three categories with explanations and definitions given for each type – non-winged (capsules, probes, cones and biconics), winged re-entry and finally cruise/acceleration configurations.

The context of the high-speed nature of the vehicles under consideration is included and is combined with an example derivation of an aerodynamic model and the subsequent generation of aerodynamic databases. The aerodynamic data is presented in both graphical form and includes results from Computational Fluid Dynamics (CFD), coefficient plots, along with well-presented Computer Aided Design (CAD) images.

The reference lists at the end of each chapter are extensive and provide the reader with ample opportunity to explore each vehicle further if needed.

One non-technical comment to be made is that apart from three brief references to HOTOL in the main text of the book the UK contribution is practically neglected. From someone who has an active interest in high-speed space vehicle design, this is a little disappointing. However, this may not be the fault of the author. This issue aside this book would make a useful addition to any technical library being a useful source for vehicle design and for the validation and verification of high-speed CFD simulations.

Dr Malcolm Claus, MRAeS