

Buying the Big Jets: Fleet Planning for Airlines

By Paul Clark

Buying a new fleet of jetliners must surely be the most daunting task any airline executive may face. Paul Clark shows us the countless aspects that need to be taken into consideration in the aircraft acquisition process. He does so without taking away the mystery of what it takes to handle the many intangibles.

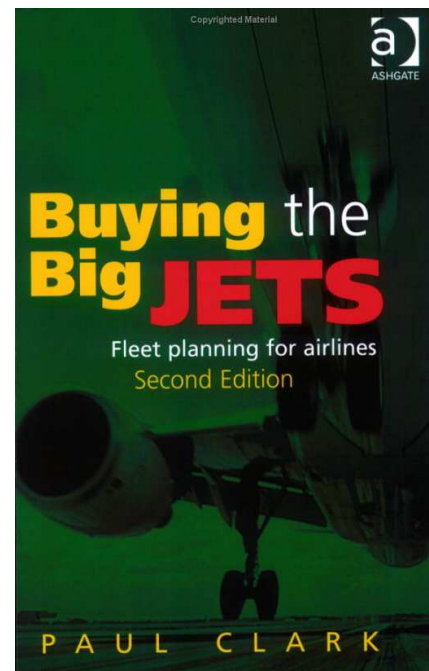
A Book Review by Hans Heerkens

The Book

When reading about aircraft orders from airlines, most of us will first want to know what type of aircraft has been bought. The main ‘big jets’ builders, Boeing and Airbus, however, offer broadly similar products. So the most difficult part of the acquisition process may well be assessing which routes the aircraft is to fly, what the frequencies should be, and how a competitive advantage can be obtained by, for example, a well thought-out cabin layout. This message sticks after having read Professor Clark’s book. Clark’s approach is a broad one: he covers the basics of subjects, such as assessing future passenger demand, calculating optimal load factors, and using aircraft with different capacities on a certain route during a flying day. He also addresses the influence of the business cycle that can bedevil an airline’s capacity planning, the relevance of commonality and of passengers’ preferences for certain aircraft, and much more. The book starts by establishing the place of the fleet acquisition organization within an airline, and the role of fleet planning in airline strategy. This is followed by the market assessment, where the author manages to reduce this hugely complex puzzle of demand and supply to the essentials of a few relatively simple heuristics. He does this without oversimplifying; but the book remains an introduction, where the broad overview is paramount. This sometimes reveals that depth is lacking a bit. For example, the system

behind the many listings of relevant aspects in the various phases of the fleet acquisition process is not always clear, and the empirical validation of the importance of the aircraft selection criteria for various types of airlines is lacking somewhat. But that is a small price to pay for conciseness and readability.

Remarkably, the cabin configuration is discussed prior to the – in itself excellent – explanation payload-range capability and other engineering and economic aspects, like the calculation of the various cost and revenue components. This reviewer would give ‘not ending up in mid-ocean’ a higher priority than ‘a few extra inches of seat pitch’. But perhaps this sequence reflects the relative maturity of the technical and economic assessment of aircraft; the real headaches may as well lie more in marketing, financials and the like, than in the engineering side of things. But herein also lies the only weakness of the book. Little is conveyed of the mental challenge fleet acquisition decisions must present for those who make them. While the book abounds with ‘real-life’ facts and figures, they are just that – facts and not experiences. This reviewer would have liked a few cases that show, for example, a controversial acquisition that turns out to be justified years later, or an apparent ‘no-brainer’, which leaves an airline with the wrong equipment. Decision theory has a lot to say about the way



people make choices – rationally or otherwise. A few of those insights applied to fleet acquisition would make a valuable addition to the book.

All in All

This book gives an overview that is broad, thorough, accessible and endowed with many interesting facts and figures: this is a recommended book for aviation students and non-specialized professionals alike who want to get acquainted with the more technical aspects of fleet acquisition such as engineering, planning and marketing aspects.

About the Author

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About the Reviewer

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Book Information

Buying the big jets: fleet planning for airlines, 2nd Edition (2007).
 Publisher: Ashgate Publishing Limited, England,
 UK. ISBN: 978-0-7546-7091-9.
 Ashgate website: <http://www.ashgate.com>