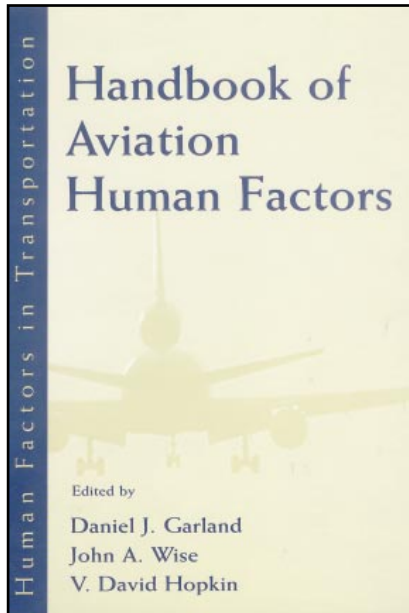


Handbook of Aviation Human Factors

Daniel J. Garland, John A. Wise, V. David Hopkin 1999



ALTHOUGH THIS TEXT OFFERS summaries of the main areas of human factors, it is not a book for beginners. With complex coverage of most issues, and an academic approach, the *Handbook of Aviation Human Factors* seems targeted towards university students and professionals.

Even then, some chapters will challenge all but those who are already well-versed in the subject matter.

The handbook could serve as a useful starting point for more in-depth research on specific areas within aviation human factors. The comprehensive lists of reference material outlined at the end of most chapters are also useful for those requiring access to primary sources.

The editors of the handbook have done well in their coverage of topics, and especially in their use of specialists from the field.

On the down side, an academic text such as this takes a long time to compile, and most of the references in the *Handbook of Aviation Human Factors* are prior to 1996. While this is of little concern for subjects of a more static nature, such as situation awareness, it presents problems for rapidly evolving areas such as automation or air traffic control, where the research needs to be as current as the technology.

However, the authors will deliver regular updates, which should alleviate this problem.

The layout of the *Handbook of Aviation Human Factors* leaves room for improvement. Once you're past the cover, visual presentation begins to suffer, with graphs and illustrations appearing only sporadically. But these niggling points shouldn't discount the fact that the *Handbook of Aviation Human Factors* is making a significant contribution to this area of aviation.

It should find a comfortable place on the aviation professional's bookshelf.

Mike Rodgers, manager human factors and system safety, CASA.

Piloting at Night

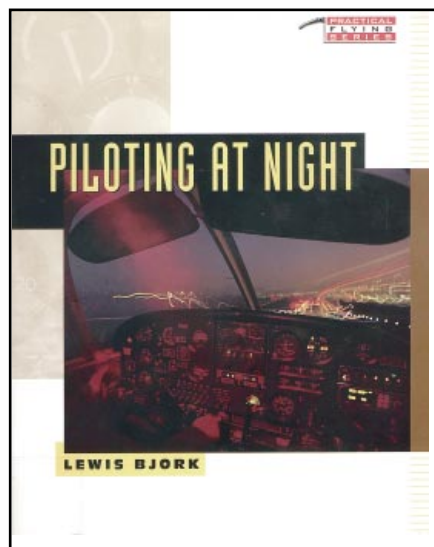
Lewis Bjork, 1998

THIS IS A PRACTICAL GUIDE TO MANY of the issues confronting pilots flying at night. The text includes some compelling case studies (accident and incident report extracts) as well as a wealth of practical techniques from which any pilot can benefit.

Piloting at Night includes a very readable chapter on physiology with clever analogies to aid the reader's understanding of the often complex mechanisms of human performance.

Bjork also outlines many common sense "rules-of-thumb" and practical techniques which night pilots can implement to improve both safety and efficiency, including details of how the pros cope with low visibility, vertigo, fatigue, landings, weather and more.

He has also provided concise explanations for many human factors aspects of night operations. However, it should not be considered an complete coverage. Two



significant topics, black hole approaches and the somatogravic illusion (false climb) have not been covered – the latter has been cited as a contributing factor to at least one aircraft accident involving multiple fatalities here in Australia.

As with many aviation texts, this is written by an American, for Americans. Consequently, one of the several chapters is devoted to the Federal Aviation Regulations (FARs) is largely irrelevant to Australian pilots.

The first few pages offer several melodramatic examples to convey some of the hazards associated with night flying. Similar accounts appear throughout the text.

205 pages. Published by McGraw-Hill, New York. ISBN 0-07-006698-1 (hc)

Reviewed by Scott Taylor, a lecturer and flight instructor at the Department of Aviation Studies, University of Western Sydney, Macarthur.

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