# PROFESSIONAL READING LIST

The Defense Acquisition Professional Reading List is intended to enrich the knowledge and understanding of the civilian, military, contractor, and industrial workforce who participate in the entire defense acquisition enterprise. These book recommendations are designed to complement the education and training vital to developing essential competencies and skills of the acquisition workforce. Each issue of the *Defense Acquisition Research Journal* will include one or more reviews of suggested books, with more available on our Website http://dau.edu/library.

We encourage our readers to submit book reviews they believe should be required reading for the defense acquisition professional. The books themselves should be in print or generally available to a wide audience; address subjects and themes that have broad applicability to defense acquisition professionals; and provide context for the reader, not prescriptive practices. Book reviews should be 450 words or fewer, describe the book and its major ideas, and explain its relevancy to defense acquisition. Please send your reviews to the managing editor, *Defense Acquisition Research Journal* at *DefenseARJ@dau.edu*.context for the reader, not prescriptive practices explain its relevancy to defense acquisition. Please send your reviews to the managing editor, *Defense Acquisition Research Journal* at ***DefenseARJ@dau.edu.***

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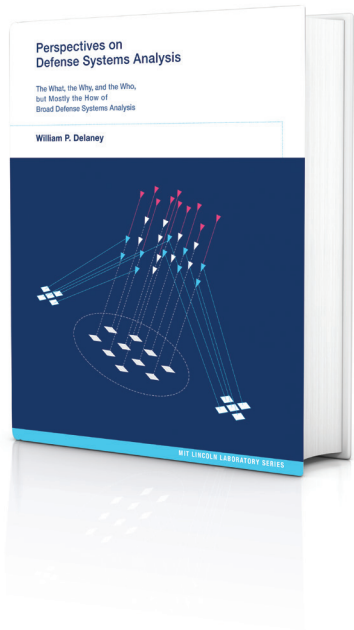
## Featured Books

### *Perspectives on Defense Systems Analysis: The What, the Why, and the Who, but Mostly the How of Broad Defense Systems Analysis*




**Author:** William P. Delaney, with Robert G. Atkins, Alan D. Bernard, Don M. Boroson, David J. Ebel, Aryeh Feder, Jack G. Fleischman, Michael P. Shatz, Robert Stein, and Stephen D. Weiner
**Publisher:** The MIT Press
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**Hard/Softcover/Digital:** Hardcover, 288 pages
**ISBN-10:** 0262029359
**ISBN-13:** 978-0262029353
**Reviewed by:** Kevin Garrison, Research Staff Member, Institute for Defense Analyses

**Review:**
This is a deeply interesting and occasionally very technical book that covers the history and practice of defense systems analysis.

It consists of three sections. The first (by Delaney) is an overview of Defense Systems Analysis, which covers what is meant by the term and how such analysis is done. It provides a few examples from the early days of the Defense Science Board, as well as details about the founding of Lincoln Laboratories.

Section two consists of four chapters that provide a variety of views about Defense Systems Analysis. The chapters include a historical and practice review (by Stein), red teaming (by Feder), blue teaming (by Atkins), and some ruminations on truth and uncertainty (by Bernard).

The third section covers specific subject areas: air defense; ballistic missile defense; air, space, and cyberspace; bioterrorism; and communications to and from Mars. These chapters are very technical and detailed, and include, for example, two separate derivations of the radar range equation.

The book's target audience is "analysts and engineers in industry, government, and research." It describes issues in systems analysis, in order to provide a roadmap to a solution and an understanding of alternative solutions' relative value.

The authors are all veterans in the field, with 20–40 years of experience, which comes through clearly in their individual discussions of the challenges involved in applying systems analysis practices to often ill-informed problems.

The first five chapters give an excellent history of defense systems analysis, how to organize and manage Defense Science Board studies, and how to think about complex problems. The remaining chapters are more narrowly focused on specific subjects. While interesting, they are very domain-specific and can be quite technical.

The book is well written and organized, and a reader will come away with a great appreciation for the application of science and systems analysis to defense problems. Defense systems analysis, however, is focused on the prerequirements phase of defense acquisition and, while providing fascinating and illuminating anecdotes about systems analysis, the book is mainly useful only to acquisition professionals involved in systems engineering.