Synopsis
Has any technical book, radar or otherwise, presented the fundamentals and applications of a topic with such clarity and interest as George Stimson™s masterpiece has? Over 50,000 happy Stimson owners would say, ñNot likely!ñ Now a skilled and respected team of radar and EW engineers, working closely with a community of radar advisors and the publisher™s editors, have fully modernized coverage and maintained the unique Stimson look and feel. Even the ñtimeless principlesñ and core fundamentals of general radar have been updated in wording and new graphics, while the more advanced concepts and applications in airborne radar have been brought into the digital age of radar signal processing and solid state electronics. Stimson™s is written specifically as an overview without going overboard on the math. Virtually anybody with a knowledge of high school algebra, trigonometry, and physics will be able to read and absorb the vast majority of the material. Living up to its moniker of ñIntroduction,ñ Stimson™s contains extensive fundamental materials and practical applications, using visual system exemplars to aid explanations. The unique full color layout is enhanced with an immense number of illustrations, figures, tables, and color photographs. Chapter exercises are an important addition for training and undergraduate academic courses.

KEY FEATURES
* Completely covers the wide range of techniques employed in modern airborne and space born radars.
* Fulfills the needs of those who want to learn about radar, regardless of their technical background.
* Fundamentals are applicable to ground-based radar as well.
* Clear, understandable writing supplemented by extensive graphic illustration of concepts and offset boxes taking those concepts to higher levels.
* All chapters have been modified, some heavily, to remove legacy material and include modern radar techniques.
* Two new sections have been added, covering electronic warfare, and special/advanced topics.

Click here to view a sample chapter and Table of Contents.

Book Information
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Stimson has been for years the best introductory Radar book in circulation. The unparalleled strength of this book is its discursive explanation of most topics in Radar, promoting non-mathematical understandings of the key concepts. Despite its simplicity, Stimson is still addressing the most challenging aspects in Radar with clarity and enthusiasm, oftentimes offering viewpoints and examples not found in any other Radar book. I was skeptical that a third edition was able to improve the already perfect second edition: I thought that there could be two possible outcomes 1) the new book present only minor changes, or 2) the new book is overly re-edited so that it lost its "Stimson" style. Instead, I was completely wrong, and none of these outcomes are true. The new book uses the same layman language of the original Stimson: some concepts appear to be even better explained than in the older version. At the same time, there is plenty of additional material: basically one third of the book covers entirely new topics. The new book also covers the most recent trends in Radar, while still preserving non-technical descriptions. Despite being the perfect textbook for an introductory course in Radar, I also find this book suitable for a non-technical audience, such as engineers/scientists from different disciplines interested in learning more about Radar, or managers/directors dealing with projects involving radars. For those technical, radar-oriented people already possessing the second edition, upgrading to the third edition is highly recommended, since the amount of novelty and new topics covered justifies the investment. This book is a masterpiece in the Radar community and virtually flawless: the new authors made an impressive effort in keeping the new edition as "Stimson's style". Unless surprises, this book may remain the best introductory Radar textbook for a long time.

I have relied on the earlier versions of Introduction to Airborne Radar as a valuable supplement to the engineering courses I have taught as well as a useful tool in my own radar work. The dynamic nature of radar development has not waned, so updates are needed to keep any reference relevant. Without the valuable assistance of the late George Stimson, these authors have done a magnificent job of bringing the subjects up to date and still retained the clear and understandable delivery. The mathematical models used in this book allow the reader to gain a full appreciation for the total
system operation. That is a valuable perspective; it can be more useful than detailed development of complex formulas which may or may not contain all the variables necessary on a given Tuesday at a particular location. I am using this book as the central reference for a graduate-level engineering course, as I feel the students can achieve more understanding of how systems must work in the real installations and environments. Disclosure: I reviewed several chapters while the book was being developed.

This classic has been overhauled and re-issued. This third edition has retained the flavor of the earlier editions. The authors have done a tremendous job and should be congratulated! I strongly recommend this book to anyone interested in learning not just airborne radars, but all types of radars, since this book has addressed many issues from basics to advanced topics, which cover most types of radars. The treatment of complex topics has been simply explained so that even a non-engineer can understand it! This is a tremendous achievement!

For those not already familiar with Stimson’s “Introduction to Airborne Radar”, this book is legendary inside the radar community for its cogent, clear presentation in a simple, but not simplistic, language. The numerous skillful explanations masterfully explain complex concepts with clarity that is exceedingly rare for many technical books. The reader will appreciate the numerous enhancements done to this latest edition, giving a timeless classic a timely update.

This is THE book on radar. Seriously, when everybody talks about radar books, Stimson is the name that always comes up first. The newer edition includes a lot more information on new and emerging technologies. The illustrations are nicely done and the math is easy to follow. Highly recommend for radar engineers and students at all levels.

Great book that covers a wide range of topics from basic radar principles to AESA design, EA concepts, to stealth design. You will not find a better book at providing great visuals that help you understand the topics. I have read a long list of books on the subject and they do not compare to quality put into this book. It even has sections written by additional authors that are subject matter experts in the specific radar domains, including Adamy who wrote the EW 100 series. This is a great book for beginners and a good reference for those that need a refresh on the topics.

I’ve been using Stimson’s text in my Intro to RADAR Flight Test Courses for the past 18 years. This
latest update is significant in that it has truly been updated with current technology. I was particularly impressed with the inclusion of an Electronic Warfare Section which I will also use in the course of my presentations. An excellent job!

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