Amstat News asked three review editors to rate their top five favorite books in the September 2003 issue. Statistical Methods for Reliability Data was among those chosen.

Bringing statistical methods for reliability testing in line with the computer age This volume presents state-of-the-art, computer-based statistical methods for reliability data analysis and test planning for industrial products. Statistical Methods for Reliability Data updates and improves established techniques as it demonstrates how to apply the new graphical, numerical, or simulation-based methods to a broad range of models encountered in reliability data analysis. It includes methods for planning reliability studies and analyzing degradation data, simulation methods used to complement large-sample asymptotic theory, general likelihood-based methods of handling arbitrarily censored data and truncated data, and more. In this book, engineers and statisticians in industry and academia will find:

- A wealth of information and procedures developed to give products a competitive edge

- Simple examples of data analysis computed with the S-PLUS system—for which a suite of functions and commands is available over the Internet

- End-of-chapter, real-data exercise sets

- Hundreds of computer graphics illustrating data, results of analyses, and technical concepts
An essential resource for practitioners involved in product reliability and design decisions, Statistical Methods for Reliability Data is also an excellent textbook for on-the-job training courses, and for university courses on applied reliability data analysis at the graduate level.

An Instructor's Manual presenting detailed solutions to all the problems in the book is available upon request from the Wiley editorial department.

---

**ABOUT THE AUTHOR**

WILLIAM Q. MEEKER, PhD, is Professor of Statistics and Distinguished Professor of Liberal Arts and Sciences at Iowa State University. He is a Fellow of the American Statistical Association and an elected member of the International Statistics Institute. Among his many awards and honors are the Youdan Prize and two Wilcoxon Prizes as well as two awards for outstanding teaching at Iowa State. He is coauthor of Statistical Intervals: A Guide for Practitioners (Wiley) and of numerous book chapters and publications in the engineering and statistical literature. A former editor of Technometrics and coeditor of Selected Tables in Mathematical Statistics, he is currently Associate Editor for International Statistical Review.

LUIS A. ESCOBAR, PhD, is a Professor in the Department of Experimental Statistics at Louisiana State University. His research and consulting interests include statistical analysis of reliability data, accelerated testing, survival analysis, and nonlinear models. An Associate Editor for Technometrics and the IIE Transactions of Quality and Reliability Engineering, Professor Escobar is a Fellow of the American Statistical Association and elected member of the International Statistics Institute. He is the author of several book chapters, and his publications have appeared in the engineering and statistical literature.

---

**RELATED RESOURCES**

Instructor

View Instructor Companion Site

---

**SERIES**

Wiley Series in Probability and Statistics
For additional product details, please visit https://www.wiley.com/en-us