BOOK REVIEW

Selection of books for review is based on the editor's opinions regarding possible reader interest and on the availability of the book to the editor. Occasional selections may include books on topics somewhat peripheral to the subject matter ordinarily considered acceptable.

Introduction to Reliability Engineering

Author E. E. Lewis

Publisher John Wiley & Sons, Inc., New Jersey (1987)

Pages 400

Price $55.00

Reviewer Dimitri Kececioglu

This book is an excellent introduction to reliability and maintainability engineering with emphasis on reliability in engineering design, reliability testing, and the impact of redundancy on equipment and system reliability, maintainability and availability, and safety. This book would be of value to American Nuclear Society members because of its chapters on "Loads, Capacity and Reliability" (Chap. 6); "Maintained Systems" (Chap. 8); and "System Safety Analysis" (Chap. 10), which covers human error, failure modes and effects analysis, and fault trees.

The book is a good compendium of available information in the field of reliability engineering; however, it does not cover a significant amount of new material. What is presented is not too mathematical and is easy to understand.

Dimitri Kececioglu, professor of aerospace and mechanical engineering and Fulbright Scholar, is the professor-in-charge and originator of the Master's Degree in Reliability Engineering Program at The University of Arizona, Tucson, Arizona.

Dr. Kececioglu has conducted more than 232 short courses and seminars in the United States and abroad, has more than 111 publication credits, has contributed to 6 books, is working on books on reliability and maintainability, and has been granted 5 patents. In addition, he has consulted internationally for over 54 top corporations and government agencies, and has conducted extensive experimental and theoretical research on mechanical reliability.