

System Reliability Theory, 2nd ed. : Marvin Rausand, Arnljot Hoyland, Wiley Interscience, 111 River Street, 4th floor, Hoboken, NJ 07030, 2003. ISBN 047147133X. 636 pages; Listed \$99.95.

There are two aspects of Reliability Theory. One area is focus on how to build a reliable system, and the other, is how to evaluate, measure, and predict the reliability of the system. This book is to deal with the topics in the latter areas. None the less in order to build a reliable system it requires the understanding of the subjects addressed in this book as the prerequisite.

The book provides a comprehensive review of the failure models and qualitative system analysis, which includes the basic and useful failure distributions plus FTA, as a special case of event tree analysis. The system reliability can be built up as a function of components or subsystem reliability. The logical representation of the system can be used to estimate the system reliability.

This book covers topics beyond the basic and leading into the more advanced topics of the reliability in the dependent failures, Markov processes, and repairable systems.

This book can be used as a reference or as an advanced reliability text book. If this book can supplement with a survey of current available reliability software and with more real world case studies, this book will be perfect for engineers in the design , process, and quality to understand and apply in their areas to build a more robust product or process.

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