

# RISK ANALYSIS

## METHODS & APPLICATIONS



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FRANK G. BERCHA

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### CONTENTS

#### THEORY

- Fundamentals of risk analysis
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- Summary of point and linear risk analyses

#### APPLICATIONS

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- Offshore oil and gas facilities
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- Road transportation
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- Multimodal transportation systems
- Human performance analysis and modeling
- Escape, evacuation, and rescue
- Risk communication

### WHY THIS BOOK?

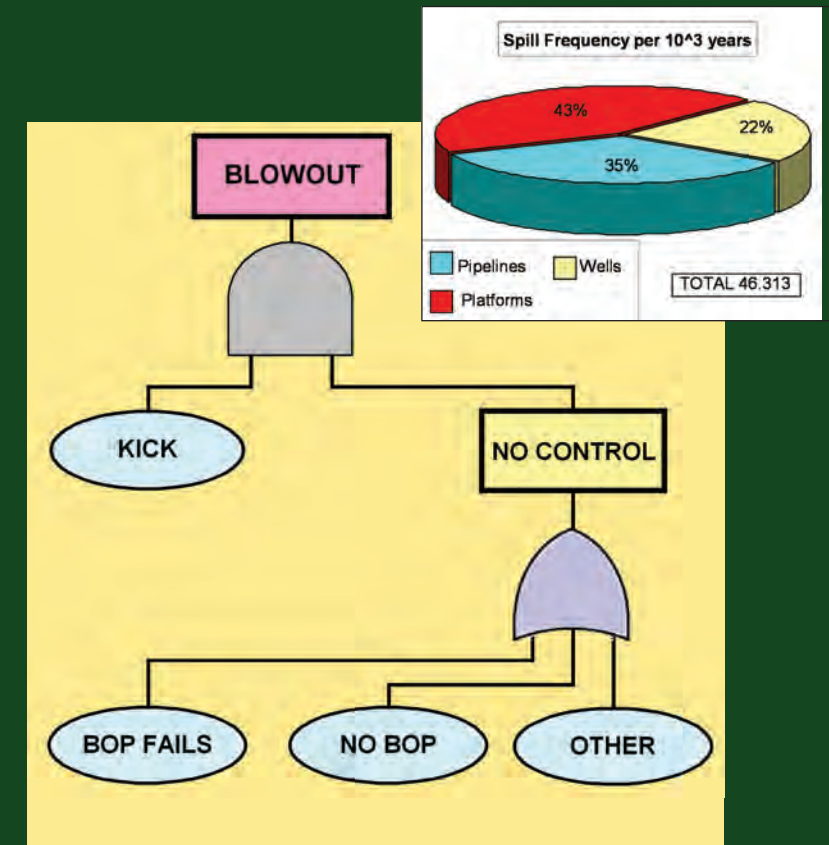
This book encapsulates Dr. Bercha's unique expertise gained throughout his professional career which spans over 40 years. The book will benefit anyone working in the field of risk analysis, including engineers, architects, lawyers, managers, land use planners, and operators. Part 1 lays out a detailed methodology for solving acute risk analysis problems. Part 2 presents practical applications of this methodology to industrial, transportation, and human performance situations.

### THE AUTHOR



Frank G. Bercha obtained his Bachelor's Degree in 1963 and his PhD in Engineering in 1972. His general background includes industrial and frontier regions engineering experience along with project management, design, resident engineering, research, university and industrial course teaching and technology transfer, and provision of expert testimony and attendance at provincial, national, and international tribunals.

Over the last 40 years, he has specialized in risk analysis, and directed over 400 such projects for the public and private sectors. He serves on numerous national and international associations and committees, and has authored hundreds of technical reports on risk and reliability analysis and refereed numerous papers on the subjects of risk analysis, industrial safety, frontier engineering, and other applications of risk and reliability.



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