# Contents

1 Management Summary ........................................ 1  
   Andreas Wittmer

Part I Introduction

2 Essential Basics and Limitations of Safety and Risk Management ... 7  
   Roland Müller and Christopher Drax

Part II Theoretical Background of Risk and Safety Management

3 Necessity and Development of Risk Management ............... 21  
   Roland Müller and Christopher Drax

4 Internal Control System (ICS) ............................... 39  
   Roland Müller and Christopher Drax

5 Fundamentals and Structure of Safety Management Systems  
   in Aviation ...................................................... 45  
   Roland Müller and Christopher Drax

6 Costs and Benefits of Risk Management ..................... 57  
   Andreas Wittmer

7 Operational Risk Management as an Integrated Part of Safety  
   Management Systems .......................................... 73  
   Roland Müller and Christopher Drax

8 Management Implications ..................................... 77  
   Roland Müller and Christopher Drax
Part III  Practical Implications of Risk and Safety Management

9  Study of the Level of Risk and Safety Management System Implementation in Practice ........................................ 85
   Andreas Wittmer and Christopher Drax

10 Risk Management in Air Traffic Control “Operator’s Risk – Back to Basics” ......................................................... 95
    Heinz Wipf

11 Importance of Fatigue Risk Management ........................................ 115
    Stefan Becker and Ernst Kohler

12 Aircraft Accident Investigations ........................................ 139
    Roland Müller and Christopher Drax

Part IV  Implementation and Optimization of Risk and Safety Management

13 General Remarks and Overview ........................................ 151
    Roland Müller and Christopher Drax

14 Organizational Challenges and Phases of Implementation and Optimization ......................................................... 153
    Roland Müller and Christopher Drax
Aviation Risk and Safety Management
Methods and Applications in Aviation Organizations
Müller, R.; Wittmer, A.; Drax, C. (Eds.)
2014, XIII, 213 p. 65 illus., Hardcover
ISBN: 978-3-319-02779-1