



Resilience Engineering Perspectives

Volume 1: Remaining Sensitive to the Possibility of Failure

Edited by Erik Hollnagel, *École des Mines de Paris, France*, Christopher P. Nemeth, *University of Chicago, USA* and Sidney Dekker, *Griffith University, Australia*

Ashgate Studies in Resilience Engineering



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Resilience Engineering Perspectives, Volume 1
Remaining Sensitive to the Possibility of Failure

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In the resilience engineering approach to safety, failures and successes are seen as two different outcomes of the same underlying process, namely how people and organizations cope with complex, underspecified and therefore partly unpredictable work environments. Therefore safety can no longer be ensured by constraining performance and eliminating risks. Instead, it is necessary to actively manage how people and organizations adjust what they do to meet the current conditions of the workplace, by trading off efficiency and thoroughness and by making sacrificing decisions.

The Ashgate Studies in Resilience Engineering series promulgates new methods, principles and experiences that can complement established safety management approaches, providing invaluable insights and guidance for practitioners and researchers alike in all safety-critical domains. While the Studies pertain to all complex systems they are of particular interest to high hazard sectors such as aviation, ground transportation, the military, energy production and distribution, and healthcare.

Published periodically within this series will be edited volumes titled Resilience Engineering Perspectives. The first volume, *Remaining Sensitive to the Possibility of Failure*, presents a collection of 20 chapters from international experts. This collection deals with important issues such as measurements and models, the use of procedures to ensure safety, the relation between resilience and robustness, safety management, and the use of risk analysis. The final six chapters utilise the report from a serious medical accident to illustrate more concretely how resilience engineering can make a difference, both to the understanding of how accidents happen and to what an organisation can do to become more resilient.

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About the Editor

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