Thinking through Crisis

Bridging the gap between theory and practice, this strikingly original analysis of the complex dynamics of high-risk fields demonstrates that teamwork is more important than technical prowess in averting disasters. *Thinking through Crisis* narrates critical incidents from initiation to resolution in five elegantly constructed case studies: the USS Greeneville collision, the Hillsborough football crush, the American Airline flight 587 in-flight breakup, the Bristol Hospital pediatric fatalities, and the US Airways flight 1549 Hudson River landing. Drawing on a variety of theoretical and real-world perspectives, this vivid, well-documented book provides innovative ways to understand risk management, develop new models of crisis decision making, enhance socially responsible leadership, and encourage deep questioning of the behavior of individuals and groups in complex systems. Its insights will resonate with professionals in a wide range of fields and with a general audience interested in understanding crises in complex systems.

Dr. Amy L. Fraher is Associate Professor and Chief Pilot of the Aviation Operations Program and director of the International Team Training Center at San Diego Miramar College. She is a retired U.S. Navy Commander, Naval Aviator, and former United Airlines pilot with 6,000 mishap-free flight hours in four jet airliners, five military aircraft, and several types of civilian airplanes. A crisis management expert with almost thirty years of leadership experience in high-risk fields, she is a member of the *Washington Post* Leadership Panel. As principal consultant of Paradox and Company and qualified Lean Six Sigma Yellow Belt, she consults internationally with a broad range of organizations. Her focus is on improving team performance in high-risk organizations by helping people understand how group dynamics can debilitate operations. She is the author of *Group Dynamics for High-Risk Teams* (2005) and *A History of Group Study and Psychodynamic Organizations* (2004). Her essays have appeared in journals such as *History of Psychology, Human Relations, Socio-Analysis*, and *Organisational and Social Dynamics*. 
Thinking through Crisis

IMPROVING TEAMWORK AND LEADERSHIP IN HIGH-RISK FIELDS

Amy L. Fraher
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For Kathy
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Preface and Acknowledgment

In the fall of 1979, I was the starting right halfback on Old Saybrook High School’s varsity field hockey team. The year before had been a season of high expectations but ultimately low achievement for our team, and in the spring most of the starters graduated, moving on to other places. In response, the ’79 season was dubbed a ‘rebuilding year’ by our small-town newspaper, as nearly the entire varsity team was replaced by our less-experienced junior varsity members. Admittedly, we were a pretty motley crew: jocks, hippies, preppies, and nerds. No one player really excelled; we were all about equal in skill. Yet, what we lacked in the flashy talent of the previous year’s team, we made up for in sheer grit and determination. A mongrel team of underdogs, motivated by what we felt was a general ‘dis’ to our potential. Of course this never got articulated; it simply got enacted.

In the end, our motley crew turned a ‘rebuilding year’ into the best school record ever achieved, including winning the Connecticut State Championship. I graduated that spring and moved on myself, participating in college athletics and then years later, the All-Navy basketball team. Although I often played with much better individuals on those teams, I never played on a better team than that high school hockey squad. What was different in the team chemistry of that group that allowed us to achieve so much with so little? And what caused subsequent teams with more talent and potential to ultimately fall short?

I wondered, are teams good because they have chemistry, or do they have chemistry because they are good? I have been intrigued by
this question for thirty years. Over that time, I continued to work in teams: first as an enlisted U.S. Marine, then as a Naval Officer and Naval Aviator, commercial airline pilot, and now, college professor and organizational consultant. Over the course of this career, I was exposed to numerous leadership theories, team-building strategies, and training programs, leading me to develop my own Team Resource Management (TRM) model.

This book is a by-product of my exploration to understand better the influence of team chemistry, the role of team learning in organizational errors and their prevention, and the impact of the environment on team performance during the critical period in which a disaster unfolds. Understanding these dynamics is important for everyone who is interested in working more effectively in teams and organizations. But, it is essential for those of us in high-risk fields.

As with any project of this magnitude, many people and organizations have been influential in its creation. Some, such as colleagues at the International Society for the Psychoanalytic Study of Organizations (ISPSO) provided me with intellectual stimulation and a forum to exchange ideas and test my theories through scholarly activities. Others such as the Parliamentary Archives and The Stationery Office (TSO) in the UK, U.S. Navy and COMPACFLT Public Affairs Office, National Air and Space Museum, National Transportation Safety Board, and U.S. Department of Transportation provided invaluable research materials. I would like to thank them all for their contributions to this book.

I would also like to thank Dougie Brimson, Benjamin Chesluk, Matthieu Daum, Phil Edwards, Kathleen B. Jones, Sarah H. Kagan, Susan Long, Will McMahon, Ian Poynton, Phil Scranton, my editors Ed Parsons and Simina Calin, and the anonymous reviewers at Cambridge University Press for their feedback, suggestions, support, and encouragement. Thanks also to my friends and family, Coach Splain and the 1979 hockey team, and students and colleagues at San Diego Miramar College. Finally, thanks to my fellow yogis at Ginseng Yoga for the reminder to breathe every once in a while. Namaste.
# Acronyms and Abbreviations

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<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AAMP</td>
<td>Advanced Aircraft Maneuvering Program</td>
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<td>BRI</td>
<td>Bristol Royal Infirmary</td>
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<td>CO</td>
<td>Commanding Officer</td>
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<td>COI</td>
<td>Court of Inquiry</td>
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<td>CRM</td>
<td>Crew Resource Management</td>
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<td>FAA</td>
<td>Federal Aviation Administration</td>
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<td>MBPS</td>
<td>Munchausen-By-Proxy Syndrome</td>
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<td>NASA</td>
<td>National Aeronautics and Space Administration</td>
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<td>NDM</td>
<td>Naturalistic Decision Making</td>
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<td>NHS</td>
<td>National Health Service</td>
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<td>NTSB</td>
<td>National Transportation Safety Board</td>
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<tr>
<td>OMBP</td>
<td>Organizational-Munchausen-By-Proxy</td>
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<td>OOD</td>
<td>Officer of the Deck</td>
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<td>ORM</td>
<td>Operational Risk Management</td>
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<td>PCU</td>
<td>Pediatric Cardiology Unit</td>
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<td>TEM</td>
<td>Threat and Error Management</td>
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<td>TET</td>
<td>Tribal Engagement Teams</td>
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<td>TGA</td>
<td>Transposition of the Great Arteries</td>
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<td>TMI</td>
<td>Three Mile Island</td>
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<td>TRM</td>
<td>Team Resource Management</td>
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<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>US</td>
<td>United States of America</td>
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<tr>
<td>USS</td>
<td>United States Ship</td>
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<tr>
<td>XO</td>
<td>Executive Officer</td>
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