

Current References and Resources 2021

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Readability:

*Enjoyable read, specific techniques provided

**Academic focus, research based, some application or techniques

*** For the deep thinker and experienced practitioner—requires reader to create applications or techniques—heavy on philosophy and principles

Title/Author	Primary Points and Content/Additional Format(s)	Readability
Culture and Organization		
How Could This Happen Managing Error in Organizations: Hagen, Jan 2018	Featuring specific error reduction practices from various industries including medical, pharma, aviation and manufacturing. Various experts define the difference between error and violations, how to create and manage a Safety Culture and the pitfalls and perils associated with mismanaging error at the individual and corporate level. Like Reason’s Human Error and Dekker’s Just Culture, this is a must read for all managers, leaders and project professionals. Video Link	**
Loonshots, Bahcall, Safi, St Martins Press, 2019	Author Daniel Kahneman sums it up best when stating: “This book has everything: new ideas, bold insights, entertaining history and convincing analysis”. Packed with diverse origin stories about Pixar, Bush-Vail scientific frontiers and Newtonian physics, Bahcall delivers several practical take aways following each chapter how we’ve arrived at the future few predicted. Thought there are several important lessons, a key concept regarding human performance is that there are two types of questions organizations need to ask about success and failure: outcome based questions and strategy questions. Like an average chess player, too many companies stick to single focused outcome based steps—‘moving my pawn to take the bishop was not a good idea—I won’t do that again’, whereas Grand chess masters ask strategy based questions like: “what decision making process did I use to move my pawn to take the bishop?”. Another concept written in great detail reveals that too many companies allow the ‘return on (internal) politics’ to diminish the ‘return on projects’. Excellent read for executives and practitioners alike. Video Link	**
Outward Mindset, Arbinger Institute, 2016	Unknowingly, too many of us operate from an inward mindset—a narrow-minded focus on self-centered goals and objectives. When faced with personal ineffectiveness or lagging organizational performance, most of us instinctively look for quick-fix behavioral band-aids, not recognizing the underlying mindset at the heart of our most persistent challenges. Through true stories and simple yet profound guidance and tools, <i>The Outward Mindset</i> enables individuals and organizations to make the one change that most dramatically improves performance, sparks collaboration, and accelerates innovation—a shift to an outward mindset. Video Link	*
The Culture Code, Coyle, Daniel, 2018	The author goes inside some of the world’s most successful organizations—including the U.S. Navy’s SEAL Team Six, IDEO, and the San Antonio Spurs—and reveals what makes them tick. He demystifies the culture-building process by	*



	identifying three key skills that generate cohesion and cooperation, and explains how diverse groups learn to function with a single mind. Drawing on a wide range of examples Coyle offers specific strategies that trigger learning, spark collaboration, build trust, and drive positive change.(New York Times Review)	
	Human Performance Improvement/Resilience Engineering	
Safety I and Safety II: Past and Future of Safety Management, (Hollnagel, Eric)	Title emphasizes Safety but this book is far broader, explaining the difference between the way we used to do business and the way business needs to be done in the 21 st Century. Excellent examples of failed and traditional ‘risk aversion’ approaches to work versus performance-enhancing ‘risk competency’. Resilience Engineering Must Read. Video Link	**
Lean Human Performance Improvement, Harbour, Jerry, 2015, Taylor and Francis Group	The author does an indepth review of various principles, practices and tools used to improve organization and individual performance. Each chapter contains specific take aways for identifying and managing the inevitable error likely situations and challenges created in complex, high hazard industries. If particular note, is the HEART analysis used to predict and prevent error precursors and flawed defenses early in task or project planning. Must read for those involved in Lean and HPI practices within the organization.	***
Safety II in Practice: Developing the Resilience Potentials, Hollnagel, Eric, 2017	“The measurement problem (in safety) is simply that an <i>increase</i> in safety is presented by a <i>decrease</i> in what is measured, so a lower number of reported accidents or other unwanted outcomes is seen as representing a higher level of safety. This produces a <i>regulator paradox</i> where the absence of feedback ultimately leads to a loss of control as the task of the regulator (control, safety system) is to eliminate variation –but this variation is the ultimate source of information about how well the regulator works”. Hollnagel challenges the traditional ‘safety by the numbers’ and ‘linear causation beliefs’ throughout this insightful book. Using examples from a variety of industries, he creates a case for the Risk Competent mindset he first discussed in Safety I and II, highlighting the four Potentials of HRO’s: Potential to Respond, Monitor, Learn and Anticipate.	***
Risk Based Thinking, Mushara, Tony, 2018	Generally, HPI provides a risk-based approach to managing human performance in operations. But, specifically, risk-based thinking enables foresight and flexibility—even when surprised—to do what is necessary to protect assets from harm while achieving mission success despite ongoing stresses or shocks to the operation. Although you cannot prepare for every adverse scenario, you can be ready for almost anything. When risk-based thinking is integrated into the DNA of an organization’s way of doing business, people will be ready for most unexpected situations. Eventually, safety becomes a core value, not a priority to be negotiated with others depending on circumstances. (Amazon Review)	**
Conduct of Operations and Operational Discipline, (Chemical Process Safety Society)	Written as a College Textbook, focuses on Conduct of Operations and Human Performance Improvement techniques for industrial processes and complex systems. Provides a comprehensive understanding of the systematic approach to Operational Discipline. Sample: http://download.e-bookshelf.de/download/0000/5886/31/L-G-0000588631-0002362171.pdf	**
Human Error, Ashgaste Press, 2013 Reason, James	Foundational companion book to Safety Differently, Reason adds dimension to Dekker’s explanation of human error using examples from a variety of events and near misses. Explains the three performance modes and provides error reduction techniques for each. Video Link	**

Field Guide to Understanding Human Error Investigation (Dekker)	<p>Foundational book for managers, workers and practitioners. Examines counterfactuals (easily-bought-into but wrong reasons) why accidents happen, and the real reasons people err. Detailed accounts of mistakes and errors made in various industries with detailed explanation on how to apply an HPI perspective to the event.</p> <p>Video Link</p>	**
Safety Myths 101: Musings on Myths, Misunderstandings and More, Busche, Carston, 2017	<p>The Safety Profession has a problem. Over the past decade, it has been a fertile feeding ground for Myths, Misconceptions and Misunderstandings. Pyramids, dominos, ratios, certification, zeros, absolutes, rules, audits, positive mind-set, culture change, observation schemes, checklists, best practices, slogans, Safety First, errors, root causes and risk matrices. You name it, and someone will probably have twisted it into something that it should not be, through mechanisms like: visions-turned-goals, tools out of context, black and white thinking, means-becoming-the-goal, rituals without proper understanding, correlation instead of causation or belief in Silver Bullets.</p>	*
Safety at the Sharp End: A Guide to Non-Technical Skills, (Rhona Flin and Paul O'Connor)	<p>Authors review the five key non-technical skills leaders need to employ to keep an operational incident from becoming a crisis. Supports with new and different examples Dekker and Reasons books on the subject. Very readable, detailed and research driven.</p> <p>Video Link</p>	**
Workplace Fatalities: Failure to Predict, Todd Conklin, 2017	<p>In his comfortable, conversational writing style, Todd is going to make many people uncomfortable while sparking many conversations. No one, especially in senior management, human resources and safety wants to hear ‘not all accidents are preventable’ or that “focusing on prevention was the problem, not a solution”. In what is bound to challenge a lot of conventional accident prevention thought processes and posters, there are many important themes discussed in this book worth considering, including the harmful impact of ZERO target programs and relying on the myth of the Heinrich Safety Pyramid in preventing the next fatality.</p> <p>https://preaccidentpodcast.podbean.com/</p>	**
Why We Make Mistakes, (Hallinan, Joseph)	<p>Easy to read and follow explanations of human error and tools and techniques (though a bit light on these) for managing them. Primary lesson of book is to drive the reader beyond the easy to explain reasons why we error and examine the more complex processes or causes.</p> <p>Video Link</p>	*
Sleights of Mind, (Macknik and Conde) (3)	<p>Well crafted stories and research explaining why magicians are masters of mistakes and using what they know about our flawed mental processes—occlusion, illusion and the lingering affect are explored from an error-proofing perspective. <i>HPI Takeaway: Why any manager or organization would be surprised at how someone can make a mistake obviously has never been to a magic show or thinks magic really exists. Magicians expect the human mind to be flawed otherwise magic tricks wouldn't exist. Wise organizations take into account the mental mistakes we are bound to make rather than being surprised by them.</i></p> <p>Video Link</p>	**
Leadership and Management		
Leaders Eat Last: Why Some Teams Pull Together and	<p>The author does an effective job tying the neurochemical activity in our brains to the positive and negative, rewarding and consequential results we experience in the work place. In detail, he describes the effect the ‘selfless’ and ‘selfish’ chemicals flowing through our brains produce in our decisions and actions, Sinek provides real world examples on how to better manage these mental reactions in order to create a safer, more reliable and productive</p>	**

Others Don't, Sinek, Simon, 2017	working culture. Key reading for new and seasoned leaders. Video Link	
Leading the Unleadable: How to Manage Mavericks, Cynics, Divas and other Difficult People, (Willet, Alan, 2016)	The control-freak, the narcissist, the slacker, the cynic... Difficult people are the worst part of a manager's job. Whether it comes from direct reports or people above, outbursts, irrational demands, griping, and other disruptions need to be dealt with—and it's your responsibility to do it. (Amazon Review). Chapters 3-5 provide excellent 'self-examination' questions for managers who need to be forced to ask--as Bob Nelms of Failsafe continues to rightly remind us—"As the leader what role have I played in the issues and conditions creating this event". Great resource if you manage or coach highly independent and highly skilled craft and professionals Wise managers and leaders ascend the accountability ladder to the 'what role have I had in this event or these conditions' rather than continually blaming their people first. Video Link	*
Insight: Why We Are Not As Self Aware As We Think, Eurich, Dr. Tasha, Crown Business Books, 2017	Having worked with hundreds of CEOs, senior executives and first line managers, Dr. Eurich shares specific examples of the challenges leaders (and their employees) face in failing to understand how people see themselves versus the way people see them. She makes a strong case that the self-aware will always succeed where the self-delusional will always struggle. Provides further support and illustrations on why a Growth Mindset will deliver far better, sustainable outcomes than the fixed mindset so prevalent in homes and offices across the country today—and what you can do about it as a manager to increase your own self-awareness to the benefit of your organization and family.	*
The First 90 Days: Proven Strategies for Getting up to Speed Fazster and Smarter; Watkins, Michael, 2013, HRB Press	Many managers don't always 'achieve' their first position, it is thrust upon them or they accidentally stumble into it. And almost non one has the training necessary to handle the instant impact they are expected to make, and not make the mistakes they are bound to make, withing the first 90 days. Watkins provides a step by step guide on specific techniques and conversational tools needed to develop the managerial skills needed to 'hit the ground running' rather than crashing head long into the pavement.	*
Inviting Disasters: Inside Look at Catastrophes and Why They Happen, Chiles, James, Harper Collins E Books	Like a cold case investigator, Chiles dives deep underneath the veneer of popular (and several not so famous) disasters to reveal the 'real reason the accident happened'. Beyond the conventional from the press following a disaster where real investigative journalism is replaced too often with subjective, biased conjecture, the author provides a fresh look at past and present disasters, highlighting Blind Spot Bias, Tunnel Vision, Red Line Running and Robbing the Pillar. Take away: organizations that focus solely on the individual's culpability and actions following an event while ensure they keep having them.	**
Behavior Economics/Decision Science		
The Undoing Project, Lewis, Michael, 2018	The talented author who wrote Moneyball, provides a behind the scenes historical perspective of the relationships between Daniel Kahneman and AmosTversky, Nobel Prize winners for their work captured in Thinking Slow and Fast. Those familiar with the biases explored in their best seller will be fascinated with the economists, managers and business leaders used to think in order to develop strategic and tactical plans and how these two colorful intellectually intense individuals reshaped our thinking. Lewis's storytelling style lifts the pictures off the page in a way that is hard to put the book down. And every time you do, you'll have learned something about history, our world and the reasons we do, the things we do, which might surprise most of us.	**



Algorithms to Live By: The Computer Science of Human Decisions, Christian and Griffiths, Holt Company E Books, 2018	<p>Using research lab analysis and anecdotes from daily life, the authors illustrate the predictable and not so predictable nature of human decision making. A single quote sums up the insights and information found in the book: “...the mistakes made by people often say more about the intrinsic difficulties of the problem than the falliability of human brains”. Problems exist and will continue to exist in a constantly changing, complex world—blaming human beings for their shortcomings rather than being intrgiured by our perservance and persistence in the face of such uncertainty and complexity is a major shortcoming in itself.</p>	<p>***</p>
Predictable Surprises, (Bazerman, Max)	<p>A must read for senior and C-suite executives. In addition to exploring in detail the precursors and silent warnings of contemporary events, Bazerman outlines specific challenges and interventions for preventing the same mental and institutionally flawed decisions organizations regrettably and routinely make.</p> <p>Video Link</p>	<p>**</p>
Pre-Suasion-Revolutionary Way to Influence and Persuade, (Cialdini, 2016)	<p>Author of the revolutionary Best Selling INFLUENCE, Cialdini provides a myriad of examples using research collected over the past 15 years, to explain the six key fundamental techniques useful in persuading and influencing others. It can be especially of interest to those involved in culture change, developing corrective actions or designing incentive programs.</p> <p>Video Link</p>	<p>**</p>
Brain Rules: Twelve Principles for Thriving at Work, Home and School (Dr. John Medina)	<p>Most of us have no idea what’s really going on inside our heads. Yet brain scientists have uncovered details every business leader, parent, and teacher should know—like the need for physical activity to get your brain working its best.How do we learn? What exactly do sleep and stress do to our brains? Why is multi-tasking a myth? Why is it so easy to forget—and so important to repeat new knowledge? Is it true that men and women have different brains? Dr. Medina, a molecular biologist, shares his lifelong interest in how the brain sciences might influence the way we teach our children and the way we work.</p> <p>Video Link</p>	<p>*</p>
Everything is Obvious Once You Know the Answer, (Watts, Duncan)	<p>From the financial crisis to 911 terrorist attacks, Watts describes the often-misleading manner by which the same people who could not predict an event before it happens, somehow know how to prevent the next one, once they happen. Good analysis and illustration of various cognitive biases and decision making errors that lead to undesirable events.</p> <p>Video Link</p>	<p>*</p>
Set Phasers on Stun, Casey, Steven	<p>Most disasters are caused by incompatibilities between the way things are designed and the way people perceive, think, and act. Structurally sound aircraft plummet to the earth, supertankers run aground in calm weather, and the machines of medical science maim unsuspecting patients - - all because designers sometimes fail to reflect the characteristics of the user in their designs. Designers and the public alike are realizing that many human' errors are more aptly named designed-induced' errors.</p> <p>Sample</p>	<p>*</p>

Better Questions, Dr. Todd Conklin	Sequel to Pre Accident Investigation, great companion piece which covers questioning strategies in detail. Examples of what an effective learning team should and should not do are illustrated in easy to understand fashion. Podcast Link	**
Barriers and Accident Prevention, Hollnagel, Eric, Ashgate, 2004	Accidents are preventable, but only if they are correctly evaluated and understood. Since the mid-1980s accidents have been viewed as the consequence of complex interactions rather than simple threads of causes and effects. Yet progress in accident models has not been matched by advances in methods. The author's work in several fields (aviation, manufacturing, power production, traffic safety, healthcare) made it clear that there is a practical need for constructive methods and this book presents those experiences and the state-of-the-art. The focus of the book is on accident prevention rather than accident analysis and unlike other books, has a proactive rather than reactive approach. Video Link	**
Managing the Risks of Organizational Accidents, (Reason, James)	Using the Swiss Cheese Barrier Model, Reason defines the deeper confluence of conditions and decisions that create unmanaged risks and techniques for error reduction in different situations. Foundational book for safety and risk management professionals. Video Link	**
Motivation and Ability: Improving Performance		
Why Motivating People Doesn't Work and What Does, (Fowler, Susan)	Using a proprietary technique, author explains why traditional approaches to motivating people don't work—mainly because they are challenged with an ability, not a motivational issue, and if you improperly diagnose that, you won't get anything beyond it right. Though written to promote the business or consultancy, still useful in terms of supporting basic HPI principles at a management level. Video Link	*
Switch: How to Change Things When Change is Hard (Heath)	Comparative reports of different ways to solve problems created by errors and mistakes. Authors provide anecdotal stories about Shaping the Path rather than reigning in human logic and attempting to control emotions when remediating undesirable conditions that lead to unwanted events. Video Link	**
Checklist Manifesto, Gawande, Atul	Explains the importance of using the correct change intervention technique—memory activators, checklists, procedures, peer review—and the do's and don'ts of implementing them. Chapters 5-8 provide sound advice for selecting the appropriate error reduction technique for reducing the frequency and severity of error.	**
Beyond Blame: Learning from Successes and Failures, David Zwieback, O'Reilly Press, 2018	Written as a business fable, the author uses a disciplinary action following a network outage to illustrate what typically happens in too many organizations and what should happen instead. Especially appropriate at a time when the public demands a visit to the gallows in the town square for any company creating an undesirable event rather than coming together to learn from the 'gift of failure' these events offer.	*
Inside the Nudge Unit: How small changes can make big differences, Halpern, David, "Telegraph Press, 2015	Behavioral scientist Dr. David Halpern heads up the UK government's "Nudge Unit," the world's first government institution that uses behavioral economics to examine and influence human behavior, to "nudge" us into making better decisions. Seemingly small and subtle solutions have led to huge improvements across tax, healthcare, pensions, employment, crime reduction, energy conservation, and economic growth. <i>HPI</i>	*

	<p><i>Takeaway: Several intervention and corrective action processes are discussed in the book, usually aimed at a large scale government or corporate effort to influence behavior. However, understanding the EASY intervention process, just like the SMART process for developing corrective actions is worth the read.</i></p>	
<p>When: The Scientific Secrets of Perfect Timing, Pink, Daniel Riverhead Books, 2018</p>	<p>Are you an owl, a lark or a third bird? When do you do your best work? According to Pink, it depends upon the type of work we are talking about. The well-documented, equally well-written summaries of research in this new book outlines the difference between when we are at our best cognitively and when we are at our best creatively. Performance implications abound throughout the book on how to get the best results from kids, co-workers and the rest of us based upon a more perfect timing that is in synch with our natural human tendencies, rather than at odds with them. HPI Takeaway: If we really want to improve human performance, we cannot ignore the ‘human’ part of the equation. Planning and acting as if everyone should perform at the same peak levels during the same peak times of the day is a guarantee for disaster.</p>	*
<p>Think! Why Crucial Decisions Can't Be Made in the Blink of an Eye, LeGault, Michael, 2015</p>	<p>The response to Malcolm Gladwell's Blink-How to Think without Thinking best-selling book on the wisdom of using intuition and thin-slicing decision making. LeGault makes a strong case, using a combination of research and anecdotal evidence. HPI Takeaway: Socrates and the ancient rational thinkers may have more to offer us in terms of understanding and planning for human behavior than the 1960's ‘free to be me’ movement offers—the main problem with many contemporary change intervention processes is that they are focused on helping us ‘feel; our way through a situation rather than think are way through it. Intuition may not be the best friend Gladwell insists it is in Blink.</p> <p>Video Link</p>	*
<p>Misbehaving: the Making of Behavioral Economics, Thaler, Richard, 2016</p>	<p>For those responsible for preventative and corrective action planning, who believe putting rational action items in place will somehow lead to reasonable responses from those being targeted to improve their performance. Traditional economics (as well as safety and quality planning) assumes rational actors. Early in his research, Thaler realized these Spock-like automatons were nothing like real people. Whether buying a clock radio, selling basketball tickets, or applying for a mortgage, we all succumb to biases and make decisions that deviate from the standards of rationality assumed by economists. In other words, we misbehave. More importantly, our misbehavior has serious consequences. Dismissed at first by economists as an amusing sideshow, the study of human miscalculations and their effects on work and society now drives efforts to make better decisions in our lives, our businesses, and our governments. HPI takeaway: Performance improvement initiatives fail to deliver the desired outcomes not due to a lack of effort but do to a failure to recognize what the intended target population WILL do rather than what you would LIKE them to do.</p> <p>Video Link</p>	**
<p>Sway: The Irresistible Pull of Irrational Behavior, (Brafman, Ori and Rom)</p>	<p>Practical explanations and examples of human fallibility and why economists, airlines and medical operations fail to consider irrationality in their work planning and execution. Offers advice on how to avoid ‘fairness sway’ errors in planning and management. HPI Takeaway: Plans that call for human rationality to eliminate mistakes and error likely situations are failed in design because they ignore human nature rather than trying to work with it.</p> <p>Video Link</p>	*

Designing with the Mind in Mind, (Johnson, Jeff, 2013)	<p>“Simple guide to understanding User Interface Design” is the subtitle to the book which campflagues the real importance and value of some of the chapters. Though written for design and system engineers, with ‘in the weeds’ details on why a toggle switch is better than a selector switch on some control panels and how large a button should be (even on a digital screen) to reduce human error. <i>HPI Takeaway: Chapters 2-5 provide a wealth of HPI-supportive discussions, including “Why Reading is Unnatural”, “Attention, Focus and Perception”, “New Research on short-term, working and long-term memory”.</i></p> <p>Video Link</p>	<p>**</p>
The Idiot Brain, Harper Collins, 2020 Burnett, Dean	<p>Why do we suffer from motion sickness, can’t remember names and proceed headlong into danger when we’re told to STOP and think about our actions before we regret the consequences? The answers from neuroscientist Burnett may surprise you. If you’ve read Thinking Slow and Fast or any of ther other dives into the mind related to Kahneman and Tversky’s work on bias and effects, some of the research and conclusions may not surprise you....but the author, a comic on stage as well as a scientist, does a unique job of storytelling about this ‘energy efficient tool’ that is both equally idiotic as it is brilliant. For trainers and HPI practiioners, book does a great job of explaining the myths and realities of the short term, long term and working memories and how it relates to planning and performing tasks and projects and how we retain and ‘regularly flush’ important information.</p>	<p>*</p>
The Shallows: What the Internet is Doing to Our Brains, Morton Press, 2019, Carr, Nicholas	<p>“Everything that human beings are doing to make it easier to operate computer networks is at the same time but for different reasons making it easier for computer networks to operate human beings”. George Dyson told a Googelplex audience in 1997 The founders of Google thought it was a laudable, appropriate goal...others were shocked or terrified. Carr uses centuries old stories, from Plato’s arguments with Scrotes, Nathaniel Hawthorne and Shakespeare and contemparies like Brin and Page (Google) to illustrate with emphasis, the onging battle between those who design and develop technologies to ‘replace human thiking and memory” with a more reliable system, and those who believe no artificial system can replace the brilliance (and irrationality) of the human mind. Excellent discussion about ‘what is intelligence, memory and cognition?’ and how does it play into the mistakes we never ‘see coming’. The detailed analysis of what a memory is biologically-speaking and how the internet is altering the structure of our brains, not just the way we ‘search’ for information is well worth the read.</p>	<p>*</p>
Millenials, Goldfish and Other Training Misconceptions, Quin, Clark, ATD Press, 2020	<p>The author describes, provides evidence and the differing views on over 30 ‘learning and teaching’ myths. The format is easy to navigate as Quinn provides the supporting and opposing sides of an arugment—‘for instance, ‘do learning styles exist?’—then describes the reseach plan used to support the conclusion. From a huma performance improvement perspective, there are great nuggets including ‘the myth of erro free learning’ and the difficulty of ‘unlearning’ something. However, the one criticism might be the definition of ‘learning’ which appears to be how will someone does on a test or exam. The 70-20-10 model, Kirikpatrick evaluation model and Learning Preferences (which the author and his allies denigrate mercilessly) use test scores and retention as the primary means an idea is measured. As Richard Garner might state from his Multiple Intelligence perspective: ‘these comments are accurate for 2 of the 7 different intelligences measured, but certainly not for the other 5 in which using and accessing information cannot be evaluated by a ‘test or exam’. Simply, some great insights but read with caution.</p>	<p>**</p>

Foundations of Safety Science, Dekker, Sidney, others, CRC Press, 2020	<p>Several authors contribute a very detailed analysis of the past 120 years in Safety Science, decade by decade. It's a monumental effort, featuring who believed what and why during a period of our civilizations's industrial history. From the lasting detrimental effects of 'bad character causes all error' which workplace psychologists used to 'weed out the bad apples' in the 1910s through Taylorism's ever present influence today on the 'dumb worker, brilliant planner and manager' perspective, the authors use case studies, diasasters and the fortune turn of events to highlight the continued need for a new, accurate understanding of human nature and safety. The final two chapters provide best practices used today in a variety of industries from avaiation th health care that emphasize the realities of imperfect human beings operating in imperfect systems and the persistent need to develop and implement sustainable error prevention and recovery tools. Provides a very descriptive comparison of the Model 1 and Model 2 view of written instructions and written work plans, and how each can lead to error rather than mitigate it.</p>	<p>*</p>
Resilience Engineering, Concepts and Precepts, Hollnagel, Woods, Levenson, CRC Press 2006	<p>Loaded with a variety of research projects and case studies, the authors describe a systems approach to reliability and improved operations known as Resilience Engineering. Thjose familiar with Safety I and Safety II (Hollnagel) will add to their knowledge given the insights shared in each chapter. Of particular note are the detailed points of interest between tasks that are successful and those that end in unintended, often unexpected, outcomes. During a 10 year study of various industries, it was noted that 1 out of 13 tasks resulted in an unwanted outcome. The various causes were identified as 'workarounds, deviaitons, short cuts, supervisory inadequacies...and yet, fixing these in piecemeal fashion did not influence the outcomes. The research switched to focusing on the 12 out of 13 jobs that went well. Surprisingly, these also were 'contaminated' by the same 10 things that negative outcomes had in common. However, there were any number of things present that were not present during failures. Included in these: 'risk conversations continued well beyond the pre job meeting", people knew the limitations of their own experiences and sought help from experts when facing uncertainty and work teams were unified in ourpose, diversified in perspective—active dissent was sought to ensure a variety of premortem possibilities were discussed during the planning of work. College textbook, difficult at times to 'enjoy', but well worth the effort.</p>	<p>**</p>