

Monday, May 21st

Posters will be available for viewing from Monday 8:00 a.m. to Wednesday 2:30 p.m.

| Time | Session | Speaker | Presentation/Title |
|-----------------|-----------------|--|--|
| 8:15-8:30 a.m. | Introduction | Daved van Stralen | The Fifth International HRO Conference |
| 8:30-9:15 a.m. | Keynote Address | Mark R. Chassin | The Joint Commission's efforts to accelerate High Reliability |
| 9:15-10:30 a.m. | Keynote Panel | Peter Angood (moderator) John Chessare William Munier Steve Kreiser | From experience: Moving hospitals to higher reliability, the conundrum continues |

This presentation set discusses healthcare as an exemplar for the public demand to change toward safety and reliability since the US Institute of Medicine report on patient safety over 10 years ago. Yet major changes have not occurred. How can we build on small wins to move healthcare forward? What can other industries offer as insight? The future is not bleak, it is just not here yet.

10:30-10:45 a.m. Break

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| 10:45-12:00 p.m. | Parallel Panel 1 | Tom Mercer (moderator) Jim Conway Geoff Webster Gary Provensal | Change at the level of Executive, Management, and Line Employees |
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This panel discusses leadership for change at various levels with focus on change in leaders. Moving toward High Reliability commonly focuses on the change needed in programs, policies, and lower ranking personnel. Left out of this discussion is the importance of modeling and mentoring by leaders, that is, what must leaders change in themselves, the importance of self-awareness, to become effective models and mentors of High Reliability?

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| 10:45-12:00 p.m. | Parallel Panel 2 | Marc Otten (moderator) Bert Slagmolen Ton Diepeveen Robert Taen | Assessing your own assumptions and behaviors |
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This panel uses mindful organizing as a metaphor for reinventing local government and making safety cultures more mature. Also discussed are the methods an individual, or an organization, uses to start assessing their own assumptions and behaviour. The SABIC Chemical Process Industry case will be discussed.

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| 10:45-12:00 p.m. | Abstract Session 1 | Moderator (TBD) | Oral presentations of primary HRO research or primary HRO experience. |
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Monday, May 21st

12:00-1:00 p.m. Lunch

| Time | Session | Speaker | Presentation/Title |
|----------------|------------------|---|---|
| 1:00-2:15 p.m. | Parallel Panel 3 | Tom Mercer (moderator) Marc Otten, David Christenson Bert Slagmolen, James Pappas Peter Angood, Pattie Sokol | The USS Carl Vinson revisited |

HRO has its roots in aviation, nuclear power, and aircraft carrier operations. Tom Mercer, RAdm, USN, (ret.), as Captain of the aircraft carrier USS Carl Vinson (1983-86), invited academics from the University of California, Berkeley, to study his command and crew toward improving their performance. Instead, the academics codified his command philosophy and modern leadership styles and techniques aboard aircraft carriers into High Reliability Organizing (HRO). Recently, the Captain of the USS Carl Vinson invited a group of High Reliability practitioners, under the guidance of RAdm. Mercer, to embark on the ship for several days to study HRO as currently practiced on the ship where it began. These practitioners will share their observations and discuss with the audience what they have learned.

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| 1:00-2:15 p.m. | Parallel Panel 4 | Randy Cadieux (moderator) David Gaba (medical) Yalda Khashe (railroad) Steven Predmore (aviation) | Simulation to measure and teach High Reliability methods |
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Simulation in “laboratory” type simulators, that is, mock ups of the working environment, have become more common to teach behavioral procedures used in seeking High Reliability. What is the fidelity of simulation to an environment with hazards and working in a dynamic state? Healthcare is beginning to use “in-situ simulation” taking place in the actual worksite (things like unannounced mock codes, rapid response team, other ‘calls’, and other unannounced or even surreptitious simulations). This is similar to “red shirt drills” used in some public swimming areas to test lifeguards, who must immediately rescue the swimmer wearing the red shirt.

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| 1:00-2:15 p.m. | Abstract Session 2 | Moderator (TBD) | Oral presentations of primary HRO research or primary HRO experience. |
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2:15-2:30 p.m. Break

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| 2:30-3:15 p.m. | Plenary Address | Daved van Stralen | Attitudes: The basis of sensemaking and reliability |
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| 3:15-4:30 p.m. | Plenary Panel | Bert Slagmolen (moderator) Tom Mercer Randy Cadieux | Attitudes and behavior: Which creates which? |
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This presentation sets forth the idea that High Reliability can best be described as, and implemented by, the use of attitudes. High Reliability emerges from the basic attitude toward reliability and the five necessary and sufficient attitudes described as principles to manage the unexpected by Weick and Sutcliffe. Further, discussion will include the constellation of attitudes found in Highly Reliable Organizations such as duty and empathy. Confounding the effect attitudes have on behaviors is the effect behaviors have on attitudes.

Tuesday, May 22nd

| <u>Time</u> | <u>Session</u> | <u>Speaker</u> | <u>Presentation/Title</u> |
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| 8:30-9:15 a.m. | Plenary Address | Kathleen Sutcliffe | Safety-Efficiency Tradeoffs: Lessons from HROs |
| 9:15-10:30 a.m. | Plenary Panel | Tom Mercer (moderator) Todd Conklin Najm Meshkati Joe Martin | Safety, Efficiency, and Productivity: Conflict or cooperative? |

This presentation set uses High Reliability Organizing as a template to discuss safety/cost/efficiency tradeoffs. Safety culture and practices that influence learning are the crucial threads that hold the potential to address these concerns. Key organizing processes can simultaneously enhance safety and produce efficiency gains. Discussed will be the science and practice of seeking High Reliability while ensuring safety and increasing productivity.

10:30-10:45 a.m. Break

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| 10:45-12:00 p.m. | Parallel Panel 5 | Rick Hartley (moderator) Janice Tolk Tim Matis Joshua Cunningham | Organizational Learning through seminars, assessment, analysis, and system mapping paradigms (B&W Pantex) |
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The Pantex Plant supports the maintenance of the nation's nuclear weapons stockpile by assembling, disassembling, and inspecting nuclear weapons. Accidents that must be avoided can be thought of as "pinnacle events." The Pantex Plant has well established and highly reliable formal processes to identify and provide controls at the "shop floor" to prevent pinnacle events. However, an increased level of sustained assurance can be achieved by explicitly considering the challenges presented by organizational behavior to the entire infrastructure that supports the work on the shop floor.

Discussed will be developing a strong foundation through training, developing tools to help people see the gaps between how work is planned versus how it is actually done, learning from organizational events and culture assessments. Progress in Pantex's HRO journey will be shared.

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| 10:45-12:00 p.m. | Parallel Panel 6 | Randy Cadieux (moderator) John Carroll Tom Mercer Hank Christen | The context of operations goes beyond the immediate environment |
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This presentation discusses the importance of context, including several different kinds of context. The specific industry is one form of context, but there are also elements of context from organizational maturity, regulatory activity, and so forth. Outlined will be some features of context and why they are important. For example, transferring lessons learned across contexts can be challenging.

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| 10:45-12:00 p.m. | Abstract Session 3 | Moderator (TBD) | Oral presentations of primary HRO research or primary HRO experience. |
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Tuesday, May 22nd

12:00-1:00 p.m. Lunch

| Time | Session | Speaker | Presentation/Title |
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| 1:00-2:15p.m. | Parallel Panel 7 | Bert Slagmolen (moderator) Marc Otten Bert van Dalen | Examples from the real world: self-assessment, change towards mindfulness, strategy for collective learning in change, and your tools for rehearsing and coaching |

These panelists work with various industries and organizations that must change, not just appear to have changed. Discussed will be effective methods for changing attitudes and behaviour using *in situ* team coaching and action learning. Also discussed will be new tools for training and coaching teams in collective mindfulness – the European Football Association case.

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| 1:00-2:15 p.m. | Parallel Panel 8 | Mark Griffon (moderator) Tony Ciavarelli Earl Carnes David Gaba | Safety culture assessments |
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There are key organizational factors that often influence the likelihood of an accident or organizational failure. Included in the concept of a high-reliability organization (HRO) are factors related to the safety or risk culture of the organization. Dealing specifically with HRO as described by Weick - Sutcliffe and Roberts – Libuser, HRO models can serve as potential frameworks for metrics and assessment. Experience from studying the safety climate of naval aviation, hospital operating rooms, nuclear facilities, and NASA Flight Centers will be presented.

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| 1:00-2:15 p.m. | Abstract Session 4 | Moderator (TBD) | Oral presentations of primary HRO research or primary HRO experience. |
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2:15-2:30 p.m. Break

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| 2:30-3:15 p.m. | Plenary Speaker | John Carroll | Comprehensive safety management: Strategic design, politics, and cultural features |
| 3:15-4:30 p.m. | Plenary Panel | Kevin Bauman (moderator) Mark Griffon Earl Carnes Chuck Mowll | Comprehensive approach to HRO: Role of the regulators |

This presentation set looks at various approaches to safety management through the "lenses" of Strategic Design, Political, and Cultural features of organizations. We need to keep in mind the more comprehensive analysis and design aspects by including all three. For example, classic HRO tends to have an emphasis on cultural features, whereas typical barrier models and engineering approaches are primarily strategic design. Discussed will be why a more comprehensive approach is important.

Wednesday, May 23rd

| Time | Session | Speaker | Presentation/Title |
|-----------------|-----------------|--|--|
| 8:30-9:15 a.m. | Plenary Address | David Gaba | Issues of measuring & intervening in safety culture for high reliability |
| 9:15-10:30 a.m. | Plenary Panel | Daved van Stralen (moderator) Racquel Calderon Geoff Webster, Chris Hart | Safety culture: How do we know there is a there there? |

This presentation set discusses how we can intervene in an organization and produce results that can be measured for the purposes of replicating the experience within the organization, the same industry, and in other industries.

10:30-10:45 a.m. Break

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| 10:45-12:00 p.m. | Parallel Panel 9 | James Eck (moderator) David Christenson Joe Martin Daved van Stralen | High Reliability: Teaching or Learning |
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This presentation discusses the question of whether we teach High Reliability or do we learn it? Educational programs include the cognitive and behavioral domains of knowledge leaving the affective domain for practitioners to develop. How do field practitioners help the novice or rookie learn to become Highly Reliable?

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| 10:45-12:00 p.m. | Parallel Panel 10 | Rick Hartley (moderator) Bruce Becker Tim Matis Amanda Baty | Applied research and development collaborations: Texas Tech University, healthcare |
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Pantex has developed university collaborations to further understand and develop the practical application of high reliability in other work environments and the applicability of Pantex's lessons to other organizations. Progress in Pantex's HRO journey will be shared.

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| 10:45-12:00 p.m. | Poster Session 1 | Moderator (TBD) | An expert in High Reliability will visit posters for a short presentation |
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12:00-1:00 p.m. Lunch

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| 1:00-2:15 p.m. | Parallel Panel 11 | Kevin Bauman (moderator) Jeff Dudley Darrell Callander Brian Metcalfe | Enterprise reliability: From dream to operational priority |
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It is intuitive to begin development of High Reliability where there is the highest risk and most obvious hazards. However, one effective approach is to start in a section where failure is possible but not immediately deadly. The Dow Chemical Company took "Enterprise Reliability" from a dream to a company priority. They will describe organizational engagement, practical examples, and how maintenance has influenced the Dow Organization.

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| 1:00-2:15 p.m. | Parallel Panel 12 | Gary Provansal (moderator) Febra Johnson (dietetics) Pattie Sokol (ballet) Brian Turner (food service) | I can see clearly now: Looking for safe in all the wrong places |
| <p>In the dynamics and melodrama of trauma resuscitations, fires, and other high risk situations people have some difficulty identifying what works and what hurts. Typically, “What I do helps and what you do hurts.” However, High Reliability contributes to success whenever uncertainty influences performance. This panel will discuss how the principles of High Reliability can improve performance and protect people in dietetics, ballet, and food services.</p> | | | |
| 1:00-2:15 p.m. | Poster Session 2 | Moderator (TBD) | An expert in High Reliability will visit posters for a short presentation |
| 2:15-2:30 p.m. | Break | | |
| 2:30-3:15 p.m. | Plenary Speaker | Tim Autry (TBD) | Failure at the Sharp End: Minimizing Human Error at the Point of Execution |

Notes: