Strategic Approach to Managing Human Performance (Hu) Risk

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The Certified Performance Technologist (CPT) designation is awarded by the International Society for Performance Improvement (ISPI) to experienced practitioners in the field of organizational performance improvement whose work meets both the performance-based Standards of Performance Technology and application requirements. For more information, visit www.certifiedpt.org

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Strategic Approach: Risk-Based*

Safety is what you **DO** to ensure the integrity of **assets**:

1. **Control**: at **Critical Steps**

2. **Learn**: Land Mines and Latent System Weaknesses

*Woods, D. et al. (2010), *Behind Human Error* (2nd ed.), Ashgate, pp.38-39, 244-246

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99.9\% is good enough most of the time.
Let’s Align Our Beliefs*

1. To err is human.
2. To drift is human.
3. Risk is everywhere and dynamic.
4. Safety is a value and adaptive.
5. Systems govern results.

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To Err is Human

3 to 4 errors per hour*


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Video: To Drift is Human
Video: Risk is Dynamic
Safety is a Value*

Safety is NOT the absence of accidents.

Safety is the *presence* of defenses in your processes, procedures, facilities, methods, and practices.

Safety is what you *DO* to ensure the integrity of *assets* using a variety of controls, barriers, and safeguards.


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System Accidents: Systems Govern Results*

Defenses (LOP)

Losses (assets)

Land Mines

Active Error

Error Traps:
(conditions people work in that tend to provoke error)

Latent System Weaknesses:
Management Systems | Processes | Plans
Hardware | Design | Leadership | Culture

* Adapted from Reason, J. (1998), Managing the Risks of Organizational Accidents; p.16-18.
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Touching = Risk
A human interaction with an asset that changes the state of that asset through work

Initiates a transfer of energy, mass, or information
Risk-Based Practices*

- **Anticipate** – *know* what to expect
- **Monitor** – *know* what to pay attention to
- **Respond** – *know* what to do
- **Learn** – *know*:
  - what has happened
  - what is happening
  - what to change

Touching = Risk

Operations: Work Execution Process

Positive Control!

Preparation → Execution (work behavior) → Learning

Error Traps → Land Mines

Real-time Performance: Sharp End
Organization: Blunt End

Assets (work output)

CRITICAL STEP SM

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If 99% was Good Enough

37%
Trolltunga
Odda, Norway

Is 99.9% good enough here?
Any human action that will trigger immediate, irreversible, intolerable harm to an asset (if that action or a preceding action is performed improperly)
1. Pre-Job Briefing
2. Take a Minute
3. Self-Checking (STAR)
4. Stop When Unsure
5. Peer-Checking
6. Three-Part communication
7. Procedure Use & Adherence | Placekeeping
8. Conservative Decision-Making
9. After Action Review | Reporting
1. Review Task Purpose / Accomplishments.
2. Identify Asset(s) to Protect:
   - Recognize assets to protect and related hazards
   - Understand lessons learned from experience
   - Summarize critical steps and related risk-important actions
   - Anticipate errors traps and errors for each critical step
   - Foresee consequences of errors at each critical step
   - Evaluate Hu Tools, defenses, contingencies, and STOP work criteria
3. State “End of Briefing.”
Mindfulness toward **assets**:  
1) one’s capacity to err, i.e., error traps  
2) the presence of hidden threats, i.e., land mines  

The Oz Principle

1. Acknowledge human fallibility (hazard).
2. Know and understand the technology.
3. Know the assets to protect – the Business.
4. Know CRITICAL STEPS\textsuperscript{SM} – Positive Control!
5. Be wary of error traps and land mines.
6. Stop when Unsure – Get the Facts!
7. Avoid unsafe and at-risk practices.
8. Ask for and give feedback – Don’t know what …
Managing Drift and Accumulation*

Expectations: Work as Imagined
Normal Practice: Work as Done

Hidden Conditions: hazards, threats, unusual conditions, & land mines

Real Margin for Error

Error Mgmt

Drift

“Normal” Practice

Risk Mgmt

Accumulation
Inconspicuous and seemingly harmless buildup of unusual conditions, hazards, threats, at-risk priorities, etc., without warning

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Managers’ Role – Learn

1. Manage – integrate AMRL into systems; align around proactive accountability* (assets)

2. Lead – inculcate key beliefs into the culture; create reinforcing experiences

3. Organizational – minimize accumulation of LSWs / land mines; integrity of defenses

4. Operational – control: avoid active errors at critical steps; minimize drift

5. Oversight – monitor: eliminate gaps between work as imagined and work as done

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“You cannot manage what you do not understand.”

-- Elliot Jacques,

The Requisite Organization

Human performance is not common sense.
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