



High Reliability Organization (HRO) Principles

Reference Sheet

Source: Managing the Unexpected, by Karl Weick and Kathleen Sutcliffe

To deal with the unexpected, HROs create a <u>mindfulness infrastructure</u>. Mindfulness is a rich awareness and a capacity for action that jointly facilitate the capability to discover and manage unexpected events before they escalate into crises and catastrophes. Failure of an organization to develop a mindfulness infrastructure risks magnifying the damage produced by unexpected events and impairs the organization's ability to perform reliably when such events occur. The five HRO principles that make up the mindfulness infrastructure are outlined below in no particular order as all five are interconnected and critical.

HRO Principle 1: PREOCCUPATION WITH FAILURE

Definition: Regarding small, inconsequential errors as a symptom that something is wrong; finding the half event.

In practice, this means:

- We focus more on our failures than our successes.
- We regard close calls and near misses as a kind of failure that reveals potential danger rather than as evidence of our success and ability to avoid disaster.
- We treat near misses and errors as information about the health of our system and try to learn from them.
- We often update our procedures after experiencing a close call or near miss to incorporate our new experience and enriched understanding.
- We make it hard for people to hide mistakes of any kind.
- People are inclined to report mistakes that have significant consequences even if nobody notices.
- Managers seek out and encourage bad news.
- People feel free to talk to superiors about problems.
- People are rewarded if they spot problems, mistakes, errors, or failures.

HRO Principle 2: **SENSITIVITY TO OPERATIONS**

Definition: Paying attention to what's happening on the front-line.

In practice, this means:

- On a day-to-day basis, someone is paying attention to what is happening and is readily available for consultation if something unexpected arises.
- Should problems occur, someone with the authority to act is always accessible and available, especially to people on the front lines.
- Supervisors readily pitch in whenever necessary.
- During an average day, people interact enough with each other to build a clear picture of the current situation.
- People are always looking for feedback about things that aren't going right.
- People are familiar with operations beyond one's own job.
- People have access to resources if unexpected surprises crop up.
- Managers constantly monitor workloads and are able to obtain additional resources if the workload starts to become
 excessive.

HRO Principle 3: RELUCTANCE TO SIMPLIFY INTERPRETATIONS

Definition: Encouraging diversity in experience, perspective, and opinion.

In practice, this means:

- People around here take nothing for granted.
- Questioning is encouraged.
- We strive to challenge the status quo.
- People feel free to bring up problems and tough issues.
- People generally deepen their analyses to better grasp the nature of the problems that arise.
- People are encouraged to express different views of the world.
- People listen carefully, and it is rare that someone's view goes unheard.
- People are not attacked when they report information that could interrupt operations.
- When something unexpected happens, people spend more time analyzing than advocating for their view.
- Skeptics are highly valued.
- People trust each other.
- People show considerable respect for one another.

HRO Principle 4: **COMMITMENT TO RESILIENCE**

Definition: Developing capabilities to detect, contain, and bounce-back from events that do occur.

In practice, this means:

- Resources are continually devoted to training and retraining people to operate the technical system.
- People have more than enough training and experience for the kind of work they do.
- This organization is actively concerned with developing people's skills and knowledge.
- This organization encourages challenging "stretch" assignments.
- People are known for their ability to use their knowledge in novel ways.
- There is a concern with building people's competence and response repertoires.
- People have a number of informal contacts that they sometimes use to solve problems.
- People want to learn and do learn from mistakes.
- People rely on one another.
- Most people have the skills to act on the unexpected problems that arise.
- Asking "what if...?" is a normal part of work.

HRO Principle 5: **DEFERENCE TO EXPERTISE**

Definition: Pushing decision making down and around to the person with the most related knowledge and expertise.

In practice, this means:

- People are committed to doing their job well.
- People respect the nature of one another's job activities.
- If something out of the ordinary happens, people know who has the expertise to respond.
- People in this organization value expertise and experience over hierarchical rank.
- In this organization, the people most qualified to make decisions make them.
- If something unexpected occurs, the most highly qualified people, regardless of rank, make the decision.
- People typically "own" a problem until it is resolved.
- It is generally easy to obtain expert assistance when something unprecedented occurs that we don't know how to handle.