Organizing for Reliable Work
Summary of Key Ideas #1

High reliability systems are attentive to failures, simplifications, operations, resilience, and distributed expertise. The five processes can be thought of as hard-won lessons in the continuing "struggle for alertness" that high reliability organizations face every day.

1. **Preoccupation with failure:** Systems with higher reliability worry chronically that analytic errors are embedded in ongoing activities and that unexpected failure modes and limitations of foresight may amplify those analytic errors. The people who operate and manage high reliability organizations "assume that each day will be a bad day and at accordingly. but this is not an easy state to sustain, particularly when the thing about which one is uneasy has either not happened, or has happened a long time ago, and perhaps to another organization" (Reason, 1997, p. 37). These systems have been characterized as consisting of "collective bonds among suspicious individuals: and as systems that institutionalize disappointment. To institutionalize disappointment means, in the words of the head of Pediatric Critical Care at Loma Linda Childrens' Hospital, "to constantly entertain the thought that we have missed something."

2. **Reluctance to simplify interpretations:** All organizations have to ignore most of what they see in order to get work done. The crucial issue is whether their simplified diagnoses force them to ignore key sources of unexpected difficulties. Mindful of the importance of this tradeoff, systems with higher reliability restrain their temptations to simplify. They do so through such means as diverse checks and balances, adversarial reviews, and cultivation of multiple perspectives. At the Diablo Canyon nuclear power plant people preserve complexity in their interpretations by reminding themselves of two things: (1) we have not yet experienced all potential failure modes that could occur here; (2) we have not yet deduced all potential failure modes that could occur here.

Organizing for Reliable Work
Summary of Key Ideas #2

3. **Sensitivity to operations:** People in systems with higher reliability tend to pay close attention to operations. Everyone, no matter what his or her level, values organizing to maintain situational awareness. Resources are deployed so that people can see what is happening, can comprehend what it means, and can project into the near future what these understandings predict will happen. In medical care settings sensitivity to operations often means that the system is organized to support the bedside caregiver.

4. **Cultivation of resilience:** Most systems try to *anticipate* trouble spots, but the higher reliability systems also pay close attention to their capability to improvise and act without knowing in advance what will happen. Reliable systems spend time improving their capacity to do a quick study, to develop swift trust, to engage in just-in-time learning, to simulate mentally, and to work with fragments of potentiall relevant past experience.

5. **Willingness to organize around expertise:** Reliable systems let decisions "migrate" to those with the expertise to make them. Adherence to rigid hierarchies is loosened, especially during high tempo periods, so that there is a better matching of experience with problems.

—adapted from Karl E. Weick & Kathleen M. Sutcliffe, "Managing the Unexpected," Jossey-Bass, 2001