

SACRIFICE DECISION WORKSHOP

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Abstract

We often work in the space of degraded conditions (anomalies are omnipresent) but we need to notice when to back-off or slow down as conditions are increasingly degraded. In this workshop, we will explore generalizable principles and patterns of resilience and trade-offs using a NASA Space Station event role play simulation. Learn practices to improve response to the unexpected including noticing weak signals and making decisions under uncertainty. Apply Safety II and Resilience Engineering to your safety organization to increase their contribution to managing significant emergent risk.

Explore patterns of resilience and trade-offs using a NASA Space Station event role play simulation.

- How do systems become brittle (hint: production pressure plays a role)?
- How do people discount emerging evidence that trouble lies just ahead?
- How is safety created in fundamentally ‘messy’ systems (Hint: people turn out to be essential)?
- What builds resilience in human-technological systems — and what undermines resilience (Hint: Tempo matters everywhere)?

These questions become real in the decisions participants will have to make acting as astronauts, flight directors and NASA safety managers, as they need to ‘get stuff done’ despite emerging problems on space station. Provocation: Engineering can build more robust systems; only people can provide the capability for resilient performance. Are people essential if a system is to be capable of resilient performance?