The use of operational procedures in emergency response organizations

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Keywords: emergency response, work as imagined versus work as done, resilience engineering.

Emergency response organizations need to be resilient to cope with escalating events resulting from dynamic, unexpected, or complex situations. In Brazil, Firefighter Corps are military hierarchal organizations with a culture based on fixed structures, well defined norms and procedures. These push against innovations necessary to be resilient.

Designing resilient systems requires deep understanding of work processes and analysis focused on describing work as it is actually carried out, rather than work as usually described in operating procedures, standards, and static models [1].

In complex domains (e.g., nuclear power plants, aviation, offshore oil industry, hospital emergency care, and emergency response services), the value of knowing what (and how) things are being done is crucial for the success and safety of the activities. In these cases, monitoring and understanding the gap between prescription and practice, and reconciling work as imagined and work as performed through reflection on it especially important for design purposes [2] (CARVALHO et al., 2016).

This research describes how firefighter captains in the 30-35 year age range managed an emergency response escalation in light of the Standard Operational Procedures (SOPs) during a training exercise.

The study used ethnographic methods to find and discuss gaps between the instructions and the activities carried out during the exercise, highlighting the differences between the work as done (WAD), and work as imagined (WAI) as it was instantiated in the SOP prescriptions [3], as indicated in the timeline of figure 1.

The aim was to produce reflections between WAI and WAD as a way to raise awareness of the need for a cultural change towards resilience in the firefighter organization.

This was achieved through firefighter engagement with a comprehensive visualization of the analysis

results which afforded easy interaction between the experts, the data, and the researchers.

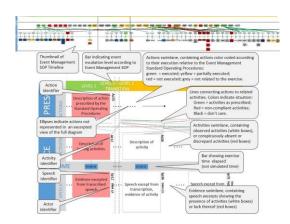


Figure 1. The Event Management SOP TimeLine – EMSTL

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