

## **SCHEDULING OF ACTIONS AND RELIANCE ON WARNINGS IN A SIMULATED CONTROL TASK**

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### ***Abstract***

Operators of complex systems respond to external signals and events that guide their actions, but they also initiate and schedule the performance of various acts. An experiment was conducted in which the interdependence of scheduling and responding was studied. Participants had to monitor three stations that required different rates of interventions. The experimental conditions differed in the parameters of a warning system that indicated a possible malfunction in a station. The results showed that participants adjusted the frequencies of inspection in accordance with the required frequencies, but the adjustment was much smaller than was actually required. The settings of the warning's sensitivity and criterion threshold affected different aspects of the reliance on the warning system, and a distinction between reliance on warnings and obedience to warnings is suggested. The implications of these findings for the modeling of user actions in complex systems are discussed.