Determining the Impact of Haptic Peripheral Displays for UAV Operators

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Multimodal displays may potentially free UAV operators' visual attention resources for parallel tasks with high visual load, such as imagery analysis. We describe a preliminary evaluation (currently in-progress) of haptic display enhancements for a multi-vehicle supervisory control task. This work, expanding upon auditory display research described at last year's workshop, compares the utility of continuous "tactifications" of mission data to threshold-based tactic alerts. Dependent variables include mission performance, secondary task performance, and subjective workload. Findings should indicate whether the continuous tactic representation of information provides potential benefit over more traditional, threshold alerting strategies in a representative multi-vehicle supervisory control environment.