

MOCOVE-The Key to Enhancing Soldier Performance in  
Environments of Sensory Conflict

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**ABSTRACT:**

Motion sickness has been identified as a common problem for soldiers operating in Command and Control vehicles. Soldiers experience several symptoms, including nausea, fatigue, and disorientation, that have detrimental effects on overall performance. The purpose of this study was to determine if a Motion Coupled Visual Environment (MOCOVE) would help alleviate this problem. The hypothesis was that the MOCOVE system is more effective than the uncoupled system in reducing or eliminating symptoms of motion sickness in command and control vehicles; thus enhancing overall soldier performance. Participants were given cognitive and psychomotor tasks to complete in both a coupled and uncoupled visual-vestibular environments, while riding in a simulated C2V. In most cases, participants experienced fewer symptoms of MS in the MOCOVE environment as opposed to the uncoupled.

**KEYWORDS:** uncoupled system, coupled and uncoupled visual-vestibular environments, enhance soldier performance

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