

## **Mobile Modular Command Center (M2C2): Advanced Training Technologies for an Advanced Vehicle**

Keith Molina

Akimeka, LLC

Research Supervisor: Ryan Harris

*Home Institution: Massachusetts Institute of Technology*

The Mobile Modular Command Center (M2C2) U.S. Marine Corps operated vehicle, equipped with the most advanced computer and networking systems and coupled with a state-of-the-art multifunctional antenna, is one of the many technologically advanced machines being developed by today's military. The M2C2 requires a new class of Marine radio operator who can maximize the vehicle's performance and therefore boost Joint Early Entry Package (JEEP) efficiency through increased command and control. This project focused on filling in the gaps in current training protocol for a radio operator of the U.S. Marine Corps so that they may pilot M2C2 operations. An additional goal of the project was to discover new and innovative ways of training Marines to operate in the M2C2 cockpit. From these findings, a proposal was created outlining our methods and ideas. Various methods were used to complete this project. First, the team conducted an analysis of the current education and training programs of a Marine radio operator along with gap identification and mapping. Then they performed research and analysis of various training opportunities and methods that are available to military and commercial markets. The team then compiled the collected data, which led to the conclusion that immersive training by means of interactive role-playing video games and simulations are the most effective means of military training for combat readiness. Finally, the team determined that a combination of these methods through an advanced interactive simulation portal equipped on every M2C2 vehicle will help Marine radio operators close gaps in their current U.S. Marine Corps training. This portal will enable *go-anywhere* and *just-in-time* learning that will greatly improve efficiency and reliability on any battlefield.