

# MARINE CORPS WARFIGHTING LABORATORY

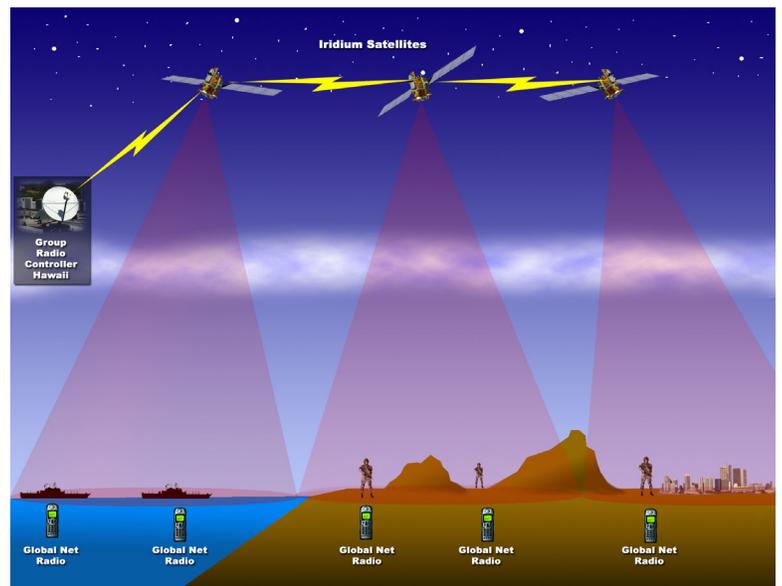
The purpose of the **Expeditionary Tactical Communications System (ETCS)** is to provide voice and data, over-the-horizon (OTH), on-the-move (OTM) communications to the mounted and dismounted tactical warfighter. ETCS will enable true Ship-to-Objective Maneuver (STOM) experimentation in the Sea Viking 2004 Advanced Warfighting Experiment (SV04 AWE).

**Background:** The Marine Corps Combat Development Command (MCCDC) identified the need for an OTH tactical communications capability to support Expeditionary Maneuver Warfare (EMW) that is not currently met by any other Program of Record. This requirement is to enable STOM at the tactical level over a 200 nautical-mile area with minimum ground infrastructure. It must provide an assured OTM capability to dismounted tactical maneuver units, fires and logistic assets operating in complex terrain. After review of the Universal Needs Statement, the commanding general of MCCDC directed the Lab investigate capabilities for experimentation in the SV04 AWE.

**Description:** ETCS is a modified version of the Iridium system that will provide netted (one-to-many) push-to-talk communications vice the current point-to-point, dial-up capability. The system will be based upon a modified Motorola 9505 handset with an integrated Global Positioning System and a Group Radio Controller to manage the voice/data traffic and the individual nets. ETCS will be fitted aboard ship, in an OTM combat operations center, a CH-53 helicopter and a landing craft air cushion. It will integrate with current Marine Corps systems such as the Intelligence Operations Workstation (IOW) and Data Automated Communications Terminal (DACT) to provide extended netted communications over greater distances than the required 200 nautical miles without ground infrastructure. With the Lab's

## EXPEDITIONARY TACTICAL COMMUNICATIONS SYSTEM

### *fact sheet*



Command and Control Integration project, ETCS will support the distribution of the Common Tactical Database that includes friendly-force position location information throughout the whole area of expeditionary operations.

**Deliverable Product:** A system of 60 Global Net Radios integrated with Marine Corps systems such as IOW and DACT that will enable STOM experimentation. This experimentation will provide recommendations for the development and transition of an OTH/OTM communications capability to a future Marine air-ground task force.

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