

AWE

Advanced Warfighting Experiment

TECHNOLOGIES



GUSS - AITV

Ground Unmanned Support Surrogate
Autonomous Internally Transportable Vehicle

... is a multi-purpose support vehicle
equipped with sensors and vehicle controls
to allow operation with or without a driver

... can be operated conventionally, via
remote control or semi-autonomously



... has successfully completed rigorous developmental testing and completed experimentation as part of the Enhanced MAGTF Operations campaign



STS

Shock Trauma Section

... is a mobile system including vehicles, shelters, medical devices, blood storage, and power to enable life saving resuscitative care at the tactical edge

... can be carried internally in Marine Corps assault support aircraft and provides trauma care



... is being developed to improve casualty care for widely distributed Marine forces



ME-L

Marine Air Ground Task Force Enabler - Light

... is a Command and Control suite with radios including DTCS, NGC2, and Ku SatCom and workstations mounted in an internally transportable vehicle



... serves as Point of Presence that connects tactical networks to the Global Information Grid with Over-The-Horizon communications and serves as the Combat Operations Center for Company Landing Teams

... has successfully completed developmental testing and experimentation as part of the EMO campaign



LS3

Legged Squad Support System

... is a concept-demonstrator that can navigate rugged terrain using semi-autonomous navigation

... is intended to lighten the load of dismounted infantry by carrying up to 400 lbs of equipment

... has successfully completed rigorous developmental testing and participated in experimentation as part of the Enhanced MAGTF Operations campaign



HEIT

Hybrid Energy Internally
Transportable Vehicle (ITV) Trailer

... is a concept-demonstrator that combines proven technologies in a novel way to create, scavenge, condition, store, manage, and distribute power using conventional fossil fuels, batteries, solar panels, and a variety of other sources



... provides a Company Landing Team with a highly mobile, MV-22 transportable electric power solution that is matched to energy demands and provides the flexibility to operate with a variety of energy sources

... is undergoing extensive research and development



TACTICAL TELE-MEDICINE

... is a ruggedized man-portable patient monitor that provides vital signs and video and audio over tactical networks



... pushes high quality medical care to the tactical edge

... has undergone extensive testing



TRC

Tactical Robotic Controller

... is a lightweight, wearable controller that allows a Marine to control a variety of unmanned systems and unattended ground sensors

... reduces the number of unique robotic control units and training required for the operation of a combat formation's unmanned assets



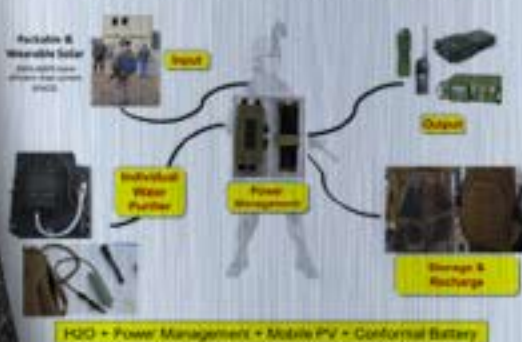
... has been through extensive development and experimentation



FMC

Foot Mobile Charger

... is a modular and wearable capability to harvest, manage, store, and distribute electrical power for equipment commonly worn or carried at the individual and squad level during dismounted operations



... lightens the load by reducing the number of batteries required while extending the operational time of carried electronic equipment

... multiple variants have been evaluated in previous MCWL field experiments . The latest variant, Marine Austere Patrolling System which includes personal water purification and storage capability will be used in the AWE



SUWP

Small Unit Water Purification System

... is a man-portable system that produces potable water from sources of opportunity

... reduces logistics demand by reducing the requirement for water resupply



... versions have been extensively tested and employed in operational environments



NMS

Network Management System

... is a software system that displays network information and provides the ability to remotely manage and configure Mobile Ad Hoc Networks (MANET)

... it gives trained Marines at the tactical level the ability to monitor, understand, and manage a MANET



... has been demonstrated in previous MCWL field experiments and new functionality is added for the AWE



DTCS

Distributed Tactical Communications System

... is a handheld satellite based
**Over the Horizon/
On the Move**
communications system



... provides voice, data, and Position
Location Information for dis-
mounted forces

... has been widely tested and
is in operational use by
deployed forces



NGC2

Next Generation Command and Control

... is a family of radios that provide voice, data, and Position Location Information via a Mobile Ad Hoc Network

... provides greater situational awareness and command and control for widely distributed dismounted units



... has undergone extensive development and experimentation and includes an airborne relay capability



ICA

Integrated Capabilities Application

... is a LAN-based server with radio interface that provides a service oriented architecture in a virtual environment that is scalable and tailorable to user needs and network capabilities



... links legacy and stand-alone C2 systems and provides a common operating picture and increased situational awareness

... has been demonstrated in previous MCWL field experiments and additional functionality has been incorporated for use in the AWE

HART

Heterogeneous Aerial Reconnaissance Team

... is an IP-based Net-Centric Service Oriented Architecture that links MAGTF UAS assets and users at all levels. It provides dynamic mission tasking and airspace coordination, UAV locations, and sensor footprints to the Common Operating Picture, archiving, and on-demand retrieval of UAS products



... provides more efficient and effective aerial reconnaissance and greater access to products by disadvantaged users at the tactical edge

... has been demonstrated in previous MCWL field experiments and incorporated into Raven, Stalker, and Scan Eagle Unmanned Aircraft Systems



UHAC

Ultra Heavy-lift Amphibious Connector

... is a concept-demonstrator with a unique track system that provides mobility on water and over difficult terrain at the critical junction between land and sea



... is intended to investigate new techniques and technologies for ship-to-shore movement and littoral mobility

... several smaller variants have been built and tested. This model represents additional technology maturation and increased scale

