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From: Deputy Commandant for Combat Development and Integration
To: Distribution List

Subj: EXPERIMENTAL FORWARD OPERATING BASE (ExFOB) CHARTER

Ref: (a) Marine Corps Expeditionary Energy Strategy and
Implementation Plan

Encl: (1) Glossary of Acronyms

1. Situation. Over the past ten years of combat, we have become increasingly dependent on fossil fuels to support kinetic and non-kinetic operations. Our growing demand for bulk fuel and water comes at a price not only in terms of money, but also in terms of placing Marines at risk against the enemy threat.

2. Background.

a. In March 2010, the Marine Corps established its first ExFOB at Quantico, Virginia. The ExFOB established a venue to provide industry with an opportunity to demonstrate its latest capabilities to enhance the Marine Corps' self-sufficiency and reduce its need for bulk fuel and water logistics. In less than a year, technology testing demonstrated deployable systems that could go into combat, guided the development of new requirements documents, and informed Marine Corps investment decisions.

b. In August 2010, the second ExFOB was conducted at the Marine Corps Air Ground Combat Center (MCAGCC) Twentynine Palms, California. Like the first ExFOB, industry displayed its technologies for reducing bulk fuel and water demands on the battlefield. These technologies include hybrid photovoltaic (PV) solar-generator-battery systems, solar powered direct current (DC) air conditioners, and solar powered DC coolers.

c. 3rd Bn, 5th Mar was the first unit that deployed with energy efficient systems to Afghanistan. Its success of human and systems integration of Solar Power Adaptors for Communication Equipment (SPACES) and other energy systems confirmed that increased self sufficiency and reduction of

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logistics demand at the small unit level allowed Marines to operate for extended periods without resupply.

3. Mission. The ExFOB Executive Integrated Planning Team (EIPT) will conduct a semi-annual field demonstration to identify, evaluate, and accelerate material solutions to fulfill identified capability gaps and increase energy efficiency as established in the reference.

4. Execution.

a. Commander's Intent. Reduce the MAGTF logistics requirement while enhancing individual and unit self-sustainment. Each semi-annual event will be executed on alternating coasts in order to evaluate technologies in varying operational environments and conditions.

b. Concept of Operations

(1) The ExFOB team will conduct a field evaluation of technologies approved by the ExFOB EIPT. The intent is to allow industry the opportunity to demonstrate, in a realistic environment, its approach(s) to reduce the MAGTF's need for bulk fuel and water, while increasing the efficiency of batteries and fielded power systems.

(2) The Marine Corps Expeditionary Energy Office (E2O) will coordinate, manage, and fund the operations, maintenance and follow on evaluation of capabilities to achieve the mission of ExFOB. It will execute its duties under the guidance of the ExFOB EIPT, chaired by the Marine Corps Warfighting Laboratory (MCWL).

(3) Under the guidance of the EIPT, ExFOB will leverage ONR bi-annual technological challenges to industry, academia, and government research laboratories to accelerate development of technology in critical areas.

(4) The EIPT will review capability gaps as outlined in the Expeditionary Energy, Water, and Waste Initial Capabilities Document and choose up to two gaps that each ExFOB will focus on, subject to DC CD&I approval.

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c. Tasks

(1) Marine Corps Warfighting Laboratory (MCWL)

- (a) Chair the ExFOB EIPT.
- (b) Provide representatives to the ExFOB Operational Planning Team (OPT).
- (c) Provide representatives to the RFI Evaluation Board.
- (d) Submit Feasibility of Support (FOS) paperwork used to identify Marine Corps units for Extended User Evaluation (EUE).
- (e) Coordinate and release the ExFOB RFI's.
- (f) Provide contracting support, including bailment agreements, as required to support follow on evaluations.

(2) Capabilities Development Directorate (CDD)

- (a) Provide a member to the ExFOB EIPT.
- (b) Provide representatives to the ExFOB OPT.
- (c) Provide representatives to the RFI Evaluation Board.
- (d) Provide Subject Matter Experts (SME) as required.
- (e) Coordinate with E20, the Office of Naval Research (ONR), MCWL, Training and Education Command (TECOM), and Marine Corps Systems Command (MCSC) on materiel and non-materiel implementation strategy and transition that may occur because of mature ExFOB demonstrations and evaluations.

(3) Training and Education Command (TECOM)

- (a) Provide a member to the ExFOB EIPT.
- (b) Provide representatives to the ExFOB OPT.

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(c) Coordinate with E2O, ONR, MCWL, and MCSC on materiel and non-materiel implementation strategy that may occur because of ExFOB demonstrations and evaluations.

d. Support Requested

(1) Marine Corps Systems Command (MCSC)

(a) Provide a member to the ExFOB EIPT.

(b) Identify possible technologies to evaluate at ExFOBs.

(c) Provide representatives to the ExFOB OPT.

(d) Provide Subject Matter Experts (SME) as required.

(e) Provide USMC equipment as required for evaluations.

(f) Support ExFOB outreach events at Modern Day Marine, Marine West, etc.

(g) Coordinate with E2O, ONR, MCWL, TECOM, and CDD on materiel and non-materiel implementation strategy that may occur because of ExFOB demonstrations and evaluations.

(2) Office of Naval Research (ONR)

(a) Provide a member to the ExFOB EIPT.

(b) Provide representatives to the ExFOB OPT.

(c) Provide representative to the RFI Evaluation Board.

(d) Provide Subject Matter Experts (SME) as required.

(e) Coordinate and propose challenges to industry, academia, and government research laboratories every two years.

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(3) USMC Expeditionary Energy Office (E20)

- (a) Provide a member to the ExFOB EIPT.
- (b) Coordinate and synchronize all ExFOB efforts.
- (c) Maintain comprehensive documentation of all ExFOB results, posted all results on the USMC Expeditionary Energy Office "SharePoint" site.
- (d) Develop and track ExFOB POA&M execution.
- (e) Coordinate ExFOB logistics support as required.
- (f) Coordinate the ExFOB RFI release with the MCWL.
- (g) Coordinate with Plans, Policies, and Operations as necessary.
- (h) Coordinate with Marine Forces Command (MARFORCOM) and MCWL to identify units for follow on evaluations of ExFOB equipment. Be prepared to support MCWL led FOS.
- (i) Provide operations and maintenance funding for ExFOB.
- (j) Provide funding for follow-on evaluations and development of ExFOB capabilities.
- (k) Coordinate experts to analyze and produce briefs explaining results of various ExFOB evaluations.
- (l) Coordinate with MCSC, ONR, MCWL, TECOM, and CDD on materiel and non-materiel implementation strategy that may occur because of ExFOB demonstrations and evaluations.

(4) Office of the Counsel of the Commandant

- (a) Provide legal review with field counsel.
- (b) Coordinate legal review of materiel implementation strategy.

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(5) Deputy Commandant, Plans, Policies, and Operations (DC, PP&O)

(a) Provide tasking orders as necessary to supporting organizations.

(b) Provide SME support as required.

(6) Deputy Commandant, Installations and Logistics (DC, I&L): Provide SME support as required.

e. Coordinating Instructions

(1) Industry partners participating in ExFOB technology demonstrations and evaluations will do so at no cost to the government.

(2) Bailment agreements may be required for industry participants.

(3) Industry participants in the ExFOB will do so at their own risk. Industry participants must supply their own equipment, personnel, and security.

(4) If water is used, it must be within a closed-loop system.

(5) All sites used are for demonstration purposes only; once vacated they shall be returned to their original state.

(5) Industry participation in ExFOB activities does not suggest or imply that the Marine Corps will procure or purchase equipment.

(6) Commands/Vendors tasked with providing equipment will also provide all necessary instruction to operate subject equipment.

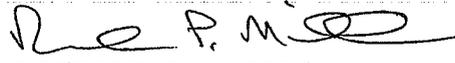
5. Administration/Logistics

a. Commands are responsible for their own travel and per-diem funding to support ExFOB activities.

b. The USMC E2O will provide ExFOB administrative support.

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6. Command and Signal. The ExFOB EIPT is responsible for all ExFOB efforts.


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Distribution: A

Glossary of Acronyms

CG	Commanding General
CONOPS	Concept of Operations
CDD	Combat Capability Directorate
COP	Combat Outpost
E2O	Expeditionary Energy Office
ExFOB	Experimental Forward Operating Base
EIPT	Executive Integrated Planning Team
EUE	End-User Evaluation
FOB	Forward Operating Base
JCIDS System	Joint Capabilities Integration Development System
JUON	Joint Urgent Operational Need
LTA	Limited Technical Assessment
MAGTF	Marine Air Ground Task Force
MCAGCC	Marine Corps Air Ground Combat Center
MCBQ	Marine Corps Base, Quantico
MCCDC	Marine Corps Combat Development Command
MCWL	Marine Corps Warfighting Laboratory
MSCS	Marine Corps Systems Command
RFI	Request for Information
SME	Subject Matter Expert
TA	Training Area
OIF	Operation Iraqi Freedom
OEF	Operation Enduring Freedom
ONR	Office of Naval Research
OPT	Operations Planning Team
UON	Urgent Operational Need