

# Experimental Forward Operating Base ExFOB

*Inform Requirements / Mitigate Investment Risk  
/Build Confidence*



As the leading edge of the larger Marine Corps Expeditionary Energy effort, ExFOB is identifying and evaluating energy efficient capabilities that can reduce risks to Marines and increase our combat effectiveness. Created in 2009, ExFOB brings together stakeholders from across the Marine Corps' requirements, acquisitions, and technology development communities in a dynamic process to quickly evaluate and deploy technologies to reduce our need for "liquid logistics" today and to establish requirements for tomorrow.

The ExFOB Executive Integrated Planning Team (EIPT) is chaired by the Marine Corps Warfighting Lab, and supported by the Marine Corps Expeditionary Energy Office (E<sup>2</sup>O), Marine Corps Systems Command, CD&I's Combat Development Division, Training and Education Command, and the Office of Naval Research. E<sup>2</sup>O coordinates, manages, and funds the operations, maintenance, and follow on evaluations of ExFOB capabilities.

## ExFOB 2010

In less than a year, technologies demonstrated at the first ExFOB were deployed to combat, guided the development of new requirements documents, and informed Marine Corps investment decisions.

In July of that year, India Company 3<sup>rd</sup> Battalion, 5<sup>th</sup> Marine Regiment trained on renewable energy technology, and deployed to Afghanistan in Fall 2010 for further evaluation, with promising results:

- Two patrol bases operating entirely on renewable energy
- 90% reduction in fuel required at a third base
- Three-week foot patrol executed without battery resupply, reducing load on Marines by 700 lbs.

## ExFOB 2011

In May 2011, ExFOB will evaluate a set of systems to power and cool a battalion command operations center that could save the Marine Corps over \$1M per year in fossil fuel. It will take advantage of renewable energy, energy efficiency, and demand reduction.

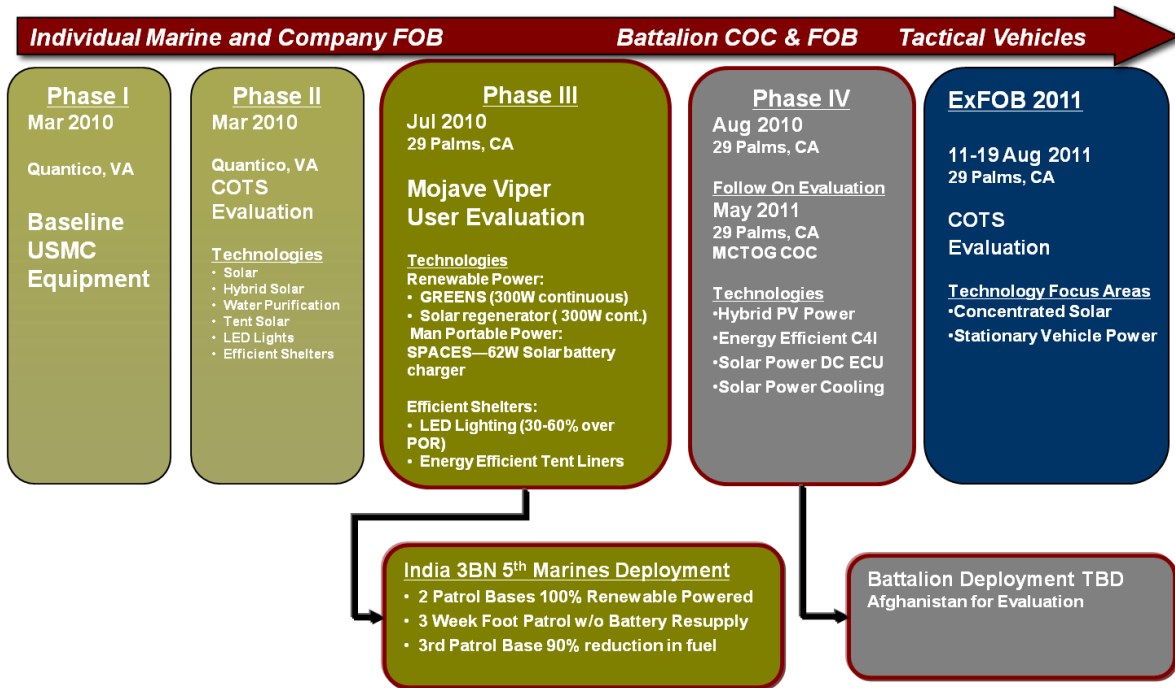
In August 2011, ExFOB will focus on concentrated solar and tactical vehicle fuel efficiency. (See link below to RFI on FedBizOps)



*"Our generators typically use more than 20 gallons of fuel a day. We are down to 2.5 gallons a day," said Doty, 3rd Squad Leader, with 1st Platoon, 'I' Company, and Fulton, Mo., native. "The system works amazing. By saving fuel for generators, it has cut back on the number of convoys, meaning less opportunity for one of our vehicles to hit an IED."*

# ExFOB Process

*Informs Requirements / Mitigates Investment Risks / Builds Confidence*



## ExFOB: BRIDGING THE GAP

The ExFOB team recognizes that the last thing our Marines need is a piece of equipment that doesn't work, or isn't supported. As such, ExFOB follows a deliberate process that starts with identifying a capability, testing, and then evaluating it with real Marines in combat environments. We take the solutions that make it through this gauntlet, and the lessons learned, to build the bridge to program of record capabilities by informing requirements documents and our R&D efforts.

## ANNOUNCEMENTS

[ExFOB 2011 RFI - Concentrated Solar Harvesting Technology & Tactical Vehicle Fuel Efficiency](#)

Mar 14, 2011

Solicitation Number: M00264-11-I-0209

## RELATED MEDIA

Article: [Renewable energy vital to Marines success in Afghanistan](#)

Video: [SPACES in Afghanistan.wmv](#)

## ExFOB CONTACTS

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