USMC Expeditionary Energy

E2S2 Brief
May 11

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Expeditionary Energy Office (E²O)
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"The Marine Corps Expeditionary Energy Office will analyze, develop, and direct the Marine Corps’ energy strategy in order to optimize expeditionary capabilities across all Warfighting functions."

"E\textsuperscript{2}O is the functional advocate for USMC expeditionary energy and serves as the Senior Official for operational energy IAW NDAA 2009."
USMC Organizational Construct

- Marine Air Ground Task Force (MAGTF)
  - Special Purpose MAGTF
    - ~150 Marines
    - 72 hours sustainment
  - Marine Expeditionary Unit (MEU)
    - ~1500 – 3 K Marines
    - 15 days of supply
  - Marine Expeditionary Brigade (MEB)
    - ~3K – 20K Marines
    - 30 days of supply
  - Marine Expeditionary Force (MEF)
    - 20K – 90K Marines

- MAGTFs are self-contained and self-sufficient
  - “Plug and Play” into Joint Force
  - Operate from the Sea and at Sea
  - Sustained Operations Ashore
  - Humanitarian Relief

“Middle Weight Force in Readiness”
Today’s MAGTF Challenge
Distributed Operations

- 250% Increase in Radios
- 300% Increase in IT/Computers
- 200% Increase in # of Vehicles
- 75% Increase in Vehicle WGT
- 30% Decrease in MPG

150 Marines conducting operations that 1,000 Marines plus conducted 10 years ago!
Marines in Afghanistan

Power Generation:
- 60,000 gal/day
- $154M/yr

Fuel Distribution:
- 200,000 gal/day
- $7.05/gal

#1 Threat:
Improvised Explosive Device

Wounded:
- 1 Marine per 50 Fuel/Water Convoys

Unclassified
USMC OEF Logistics Causalities
24 Mar 10 – 30 Jun 10

- 299 Fuel/Water Convoys (98 Days)
- 6 Marines WIA hauling Fuel/Water
- 1 Marine WIA per 50 Fuel/Water Convoys
Marine Corps Energy Strategy

Mandate:
Enhance warfighting capability by requiring 50% less fuel by 2025
Change Ethos + Increase Energy Efficiency + Renewable Energy = Increase Combat Effectiveness

Today                Feb 11         Apr 11              2011                        2025

Strategy
and Supporting Requirements
Documents Being Written in Parallel

Future Capability
Require Mobility Fuels Only
50% From Alternatives

Current Status:  CMC signature 23 Feb 11
E2W2 ICD / CBA in staffing