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Overall Brief is: UNCLASSIFIED

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Navy Expeditionary Combat Forces

- We are in an **AUSTERE** budget environment
- New Capabilities MUST:
  - Balance technology between current warfighter demand AND the future threat
  - Provide faster response to deter and/or respond to enemy action
  - Increase boat lethality, survivability, speed and weapon capability
  - Reduce maintenance – increase operational availability
  - Improve automation – provide more time for operator thought
  - Increase commonality, affordability, interoperability, flexibility

New capabilities we can afford and operate with reduced manpower
NECC Capabilities

Coastal Riverine

Explosive Ordnance Disposal

Naval Construction (Seabees)

Expeditionary Intelligence

Combat Camera

Expeditionary Logistics

Maritime Civil Affairs & Security Training

Mobile Diving and Salvage Unit
Right Force to Respond

C-IED/Ordnance
Mine Countermeasures
SOF Support
Humanitarian Assistance
Harbor Clearance/Salvage
Demining
Port Security

Explosive Ordnance Disposal
Combat Camera
Expeditionary Intel
Naval Construction (Seabees)
Mobile Diving & Salvage Unit
Maritime Civil Affairs & Security Training
Coastal Riverine

Afloat Staging Base
Joint High Speed Vessel
Land
Small Craft
Air

Adaptive Force Package
Insertion Points
Mission Execution

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NECE Top S&T Objectives

• Protection/Mitigation
  – Improved Protection for Individuals
  – RPG Defense for Watercraft and Vehicles
  – Reduced Weight Ballistic Protection of Watercraft

• Force Application
  – Advanced Lethal Weapons for Use against small fast watercraft & vehicles
  – Stand off detection of explosive hazards (underwater/land)
  – Advanced non-lethal waterborne platform stopping/repelling capability
  – Swimmer Defeat

• Battlespace Awareness
  – Advanced expeditionary sensor networks
  – Advanced expeditionary tactical sensors

• Net Centric Net Management
  – Converged Service Networks with Assured Robust Communications linking all echelons

We link maritime and land domains across challenging littorals, effectively enabling support of joint operations ashore from the maritime commons.
### General Capabilities We Need

**Flexible, Responsive, Modular, Ready-for-Use Systems**

- Common architecture (C2)
- Deployable & configured for immediate use. “Plug and play” compatibility for unique requirements Robust “reachback”
- Platform and equipment commonality
- Solutions leverage COTS/GOTS
- Reduce maintenance requirements
- Scalable

**Consistently faster than enemy displayed intent & action**

- Improved sensors, lethality, survivability
- Autonomous, task-driven systems
- Quickly detect & predict threats (UW, littorals)
- Persistent COP
- Joint, Interagency, Multilateral interoperability
- Open architecture (time and cost savings)
- Multi-mission applicability
Desires

- **Mk VI Boat**: Improve weapon lethality, survivability & speed
- **UUV/AUV**: Remotely detect, classify, raise, tow and beach buried, proud, and moored mines. Automate underwater inspections & remotely conduct light salvage
- **Force Protection**: Reduce protective equipment weight & increase level of protection. Link personnel to sensors to improve awareness.
- **Increase Automation**: Reduce required manpower. Give operators time to think. Increase speed of maneuver. Reduce maintenance.
Specific Capabilities in Development

Non-Lethal Effects

• Stand off vessel & vehicle stopping
• Reduced size, weight, and cost of directed energy systems
• Increased range of fielded systems

Unmanned Programs
(Air and Surface)

• Modular Unmanned Surface Craft Littoral
• Nighthawk/Seahawk
• Advanced EOD Robotic System
• Advanced Composite Riverine Craft

UMCM UUV Programs

• Mine detect / classify from surf zone to high-water mark
• Organic MCM Without Cued ISR
• Limpet Removal Tool
• U/W Explosive Object Recovery
Summary

• NECC forces will continue to operate in countries on all six continents providing core Navy presence with a scalable, economical and non-invasive footprint ashore.

• We must have systems with common architecture, modular components, standardized interfaces, and intuitive human controls.

• Increased requirements with reduction in funding:
  • Coordinated, combined acquisition
  • We need to reduce cost
  • Very competitive business environment

Reduced manning. Reduced maintenance. Increased automation.
Questions?