19th NDIA Expeditionary Operations Conference

19 November 2014

CAPT Timothy Rudderow, USN
Expeditionary Warfare Division (N95)
Branch Head, Navy Expeditionary Combat Branch
OPNAV N957

Overall Brief is: UNCLASSIFIED
NECC Capabilities

- Coastal Riverine
- Explosive Ordnance Disposal
- Naval Construction (Seabees)
- Combat Camera
- Expeditionary Logistics
- Expeditionary Intelligence
- Mobile Diving and Salvage Unit
Resourcing NECC for Today and Tomorrow

• We are in a **CHALLENGING** budget environment
• COCOM requirements continue to grow
• Force structure historically tied to OPLAN requirements
• NECC manpower is ~50% of its post-9/11 peak and smaller than pre-9/11 level
  • Remains heavily dependent on OCO funding
• Must ensure future programs and force structure are enduring and affordable
Navy Expeditionary Combat Forces

- Increase productivity in defense spending to deliver better value to the taxpayer and warfighter
- Committed to DoD Better Buying Power initiative
  - Achieve affordable programs
  - Control costs throughout the product lifecycle
  - Incentivize productivity and innovation in industry and government
  - Eliminate unproductive processes and bureaucracy
  - Promote effective competition
  - Improve tradecraft in acquisition of contracted services
  - Improve the professionalism of the total acquisition workforce

New capabilities we can afford and operate with reduced manpower
NECE Top S&T Objectives

• CRF/EOD Boats
  – Multi-Fuel Outboard Engine
  – Advanced Waterjet Technology
  – Reduced Weight Ballistic Protection of Watercraft

• Information Transport
  – Improved Situational Awareness for Distributed Expeditionary Forces
  – Self-Deployed Communications Relay

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

• Synthetic Training
  – Hydrodynamic Watercraft Simulator for Training Multi-Boat Tactics
  – Naval Construction Force Simulation

We link maritime and land domains across challenging littorals, effectively enabling support of joint operations ashore from the maritime commons.
<table>
<thead>
<tr>
<th>Flexible, Responsive, Modular, Ready-for-Use Systems</th>
<th>Consistently faster than enemy displayed intent &amp; action</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Common architecture (C2)</td>
<td>• Improved sensors, lethality, survivability</td>
</tr>
<tr>
<td>• Deployable &amp; configured for immediate use.</td>
<td>• Autonomous, task-driven systems</td>
</tr>
<tr>
<td>“Plug and play” compatibility for unique</td>
<td>• Quickly detect &amp; predict threats (UW, littorals)</td>
</tr>
<tr>
<td>requirements Robust “reachback”</td>
<td>• Persistent COP</td>
</tr>
<tr>
<td>• Platform and equipment commonality</td>
<td>• Joint, Interagency, Multilateral interoperability</td>
</tr>
<tr>
<td>• Solutions leverage COTS/GOTS</td>
<td>• Open architecture (time and cost savings)</td>
</tr>
<tr>
<td>• Reduce maintenance requirements</td>
<td>• Multi-mission applicability</td>
</tr>
<tr>
<td>• Scalable</td>
<td></td>
</tr>
</tbody>
</table>
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
Opportunities for Industry

• NECC boat inventory reaching end of life. CRF requires and economical solution to provide multi purpose, capable maritime security around the globe.

• Table of Allowance Management and common equipment across NECC forces. Providing systems with common architecture, modular components, standardized interfaces, and intuitive human controls.

• CREW and AEODRS developed with open architecture capability; provide interface to grow capability.

• Leveraging Humanitarian Mine Action for foreign partner nation capacity building.

Reduced manning. Reduced maintenance. Increased automation.
Questions?

Expeditionary Warfare Division (N95)
CAPT Timothy Rudderow, USN
Navy Expeditionary Combat Branch Head (OPNAV N957)