



### 18th NDIA Expeditionary Operations Conference 31 October 2013

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Overall Brief is: UNCLASSIFIED
UNCLASSIFIED



### 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

INSERTION POINTS

ADAPTIVE FORCE PACKAGE

MISSION EXECUTION

MISSIONS



## 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

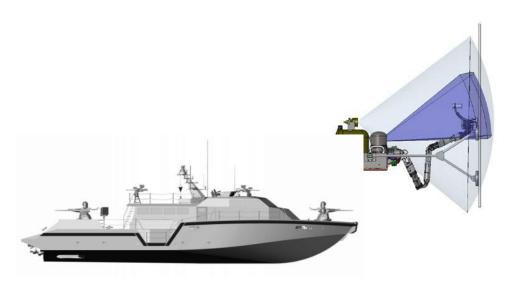
## Consistently faster than enemy displayed intent & action

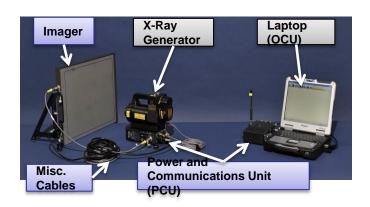
- Improved sensors, lethality, survivability
- Autonomous, task-driven systems
- Quickly detect & predict threats (UW, littorals)
- Persistent COP
- Joint, Interagency, Multilateral interoperability
- Open architecture (time and cost savings)
- Multi-mission applicability



### 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.
- <u>Increase Automation</u>: Reduce required manpower. Give operators time to think. Increase speed of maneuver. Reduce maintenance.







## Specific Capabilities in Development

#### **Non-Lethal Effects**

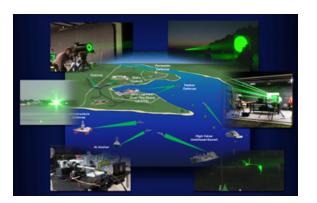
- Stand off vessel & vehicle stopping
- Reduced size, weight, and cost of directed energy systems
- Increased range of fielded systems

# 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 highwater 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 maintenance. Increased automation.



## Questions?







