# N957 - Navy Expeditionary Combat Presentation





Brief to 17<sup>th</sup> NDIA Expeditionary Warfare Conference

Commander Robert DeBuse
13 September 2012



# Agenda



- NECC Force Overview
  - Naval Construction
  - Explosive Ordnance Disposal
  - Coastal Riverine
- Acquisition Principles and Challenges
- Success Stories
- Summary

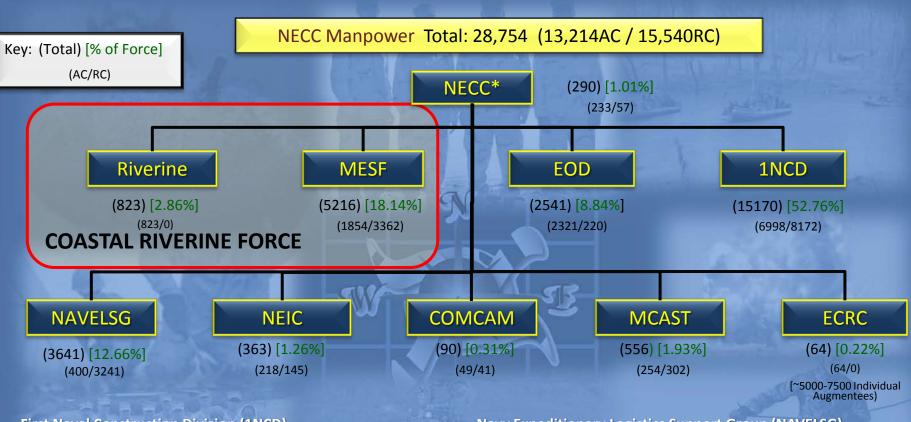
# Navy Expeditionary Combat Command

- NECC forces are made up of Sailors who are rapidly deployable, self-sustainable, adaptive to mission requirements, scalable and agile.
- NECC forces are well suited for conducting hybrid warfare.
- NECC is an essential part of the Navy team to deliver core capability -- whether through ships, submarines, aircraft or our expeditionary forces.
- NECC forces work in the seams between the maritime and land component commanders.
- NECC forces rely on an "operational reserve" force construct to complete missions.



# **NECC Forces FY 2017**





First Naval Construction Division (1NCD)

**Explosive Ordnance Disposal (EOD)** 

**Maritime Expeditionary Security Force (MESF)** 

**Navy Expeditionary Intelligence Command (NEIC)** 

**Combat Camera (COMCAMLANT)** 

Navy Expeditionary Logistics Support Group (NAVELSG)

Intelligence Support Element (GTMO)

Maritime Civil Affairs and Security Training Command (MCAST)

**Expeditionary Combat Readiness Center (ECRC)** 



# Navy Expeditionary Combat Command All Key Enablers



Explosive Ordnance Disposal: Renders safe explosive hazards to include improvised explosive devices (IED), undersea mines, and weapons of mass destruction (WMD), often simultaneously engaging enemy forces

Seabees: Support operating forces through construction of roads, bridges, bunkers, airfields and logistics bases and complete civic action projects that complement nation-building programs and worldwide humanitarian efforts.

Maritime Expeditionary Security Force: Provides harbor and homeland defense, coastal surveillance and special missions. Will merge with Riverine to form new Coastal Riverine Force.

Riverine: Combats enemy riverine forces with direct fires or supporting fires in maritime security operations (MSO) and security force assistance (SFA) roles. Will merge with Riverine to form new Coastal Riverine Force.

Expeditionary Logistics: Provides expeditionary logistics within the maritime domain of the littorals and conducts surface and air cargo handling missions, cargo terminal and warehouse operations, fuels distribution, postal services, customs inspections, ordnance reporting and handling, and expeditionary communications

Expeditionary Intelligence: Provides tactical force protection/indications and warning intelligence collection, enabling Navy commanders to conduct missions across the full spectrum of expeditionary operations.

Maritime Civil Affairs and Security Training Command: Prepares regionally aligned planners, teams, specialists and trainers to be effective, flexible and responsive in support of the Navy Component and Joint Task Force Commanders' security cooperation plans

Expeditionary Combat Readiness Command: Assists IA Sailors by supervising the Continental United States (CONUS) portion of IA processing.

#### **BU1 Jason Fletcher**



Name: BU1(SWC) Jason H. Fletcher Command: CTG 56.10 (EOD - AFG) Yrs of Svc: 9 years 9 months Marital Status: Married, 3 kids # of deployments: 5(2 to CENTCOM) Accomplishments:

- Hand-selected as Detachment NAVCENT Assistant OIC for 13 Seabees completing over 700 mandays of mishap free construction on Sheik Isa Air Base; and reconstruction of Naval Special Warfare Group ONE's compound located at Kuwaiti Naval Base.
- Assigned as OIC for a nine person detachment supporting Exercise EAGER LION-12 in Jordan which provided engineering support to 24 MEU by constructing a tank range. This exercise hosted 17 different countries the largest joint exercise in the CENTCOM AO to date.

# **Naval Construction**

#### <u>Capabilities:</u>

- Constructing and repairing aircraft runways and parking aprons
- Constructing munitions storage areas and large scale camp sites
- Erecting bridges and constructing roads
- Renovating schools, medical clinics and municipal facilities
- Repairing piers and wharves, underwater and above
- Constructing border outposts, expeditionary camps, community outreach centers, medical clinics and community clean-up

"The Navy Seabees are playing a critical role in the world today in both military and humanitarian missions. Whether building facilities for our troops in Afghanistan, helping residents recover from natural disasters, or building clinics and schools in underdeveloped areas, Seabees with their 'Can Do' work ethic are key players in the Navy's global force for good."



Rear Admiral Mark A. Handley
Commander, 1NCD

### **EOD1 Jake Hystad**





Name: EOD1 Jake J Hystad Command: CTG 56.10 (EOD - AFG) Yrs of Svc: 8 years 6 months Marital Status: Single, no kids # of deployments: First Accomplishments:

#### • Senior EOD technician

- Conducted 39 EOD missions to defeat AFG IED Networks
- Supported US, Coalition, and Special Operations Forces' missions enabled freedom of movement for maneuver forces, Village Stability operations, vehicle recovery, and site exploitation.
- Performed render-safe procedures and disposal of more than 1,400 explosive items totaling 2,100lbs net explosive weight.

# **Explosive Ordnance Disposal**

#### <u>Capabilities:</u>

- Highly trained, skilled technicians who are experts in explosives, diving and parachuting.
- Render safe all types of ordnance, including conventional, improvised, chemical, biological and nuclear.
- Conduct clandestine operations either independently, or as part of a larger combatant force.
- Support the most elite units of U.S. Special Operations Command (USSOCOM), including Direct Action support of Navy SEALs and Army Special Forces.
- Conduct demolition of hazardous munitions, pyrotechnics, and retrograde explosives using detonation and burning techniques.
- Support military and civilian law enforcement agencies by analyzing and handling foreign and domestic explosives.
- Work with the U.S. Secret Service and the U.S. State Department, helping to protect the president, vice president and other state, foreign officials and dignitaries.
- Support the U.S. Department of Homeland Security, U.S. Customs Office, and the FBI as well as state and local authorities.

#### Navy EOD Vietnam 1966



"[EOD is] an elite cadre of Sailors that deploy, operate around the globe, build partnerships and help to increase partner navies' capacity and capability to promote peace and prevent war."

Capt. Edward Edison,
Commander, Explosive Ordnance Disposal Group 1

#### **EN2 Bradley Bruns**



Name: EN2(EXW) Bradley T. Bruns Command: CTG 56.10 (EOD - AFG) Yrs of Svc: 6 years, 10 months Marital Status: Married, 2 kids # of deployments: Five Accomplishments:

- Leading Patrol Leader for Seaward Security completing 16 HVA escorts and multiple missions at the same time.
- Handpicked to augment CTG 56.7 as the Aircraft Security Team (AST) Mission Commander ISO of VADM Fox travel to Beirut,
  Lebanon.

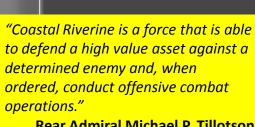
# **Coastal Riverine**

#### <u>Capabilities:</u>

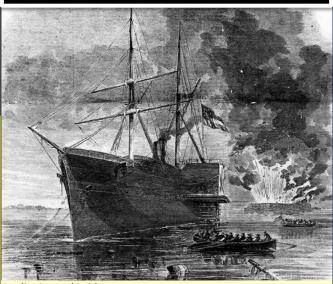
- Conduct maritime security operations across all phases of military operations Operates in harbors, rivers, bays, across the littorals and ashore.
- Able to operate in the green water to shore areas in conjunction with Amphibious Readiness Groups, Expeditionary Strike Groups, Carrier Strike Groups, Global Partnership Stations, and Military Sealift Command ships.
- Operate ashore in support of ground operations, protection of critical maritime infrastructure, and Theater Security Cooperation missions.
- CRF is comprised of units manned, trained, and equipped to conduct, port and harbor security, high-value unit security and escort, surveillance and reconnaissance, insertion and extraction of small units, and command and

control for supporting and assigned units.

Maritime Expeditionary Security
Civil War 1862



Rear Admiral Michael P. Tillotson Commander, Navy Expeditionary Combat Command



Credit: CoastalGuide.com

# Means: Overarching Acquisition Principles

- Balance technology between current warfighter demand AND the future threat
  - Warfighter demand alone doesn't define the effort
  - OEF/OIF/OND Must get inside the enemy's OODA Loop
- A streamlined RDT&E process that enables acquisition of future programs that are
  - Strong
  - Defendable
  - Responsive
  - Affordable
- Absolutely vital that the S&T process 'feed, complement, and accelerate' our acquisition process
- Identify 'common' joint systems and leverage current and projected acquisition POR initiatives

10/12/2011

# General Capabilities We Need

Flexible, Responsive, Modular, Ready for Use Systems

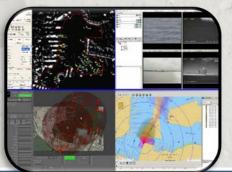
- ➤ Common architecture (C2)
- "Plug and play" compatibility for unique requirements
- ➤ Robust "reachback" capability
- ➤ Deployable equipment
- ➤ Stock configured for immediate use
- Platform and equipment commonality
- ➤ Solutions leverage COTS/GOTS

Consistently more rapid than the enemy's OODA-loop

- >Improved sensors
- ➤ Autonomous, task-driven systems
- ➤ Detect & predict threats (UW, littorals)
- ➤ Provide persistent COP
- ➤ Joint interoperability
- ➤ Open architecture (time and cost savings)
- ➤ Multi-mission applicability







# 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

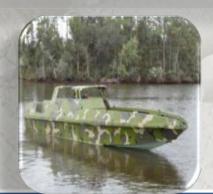
Unmanned Programs (Air and Surface)

- 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 Mine Removal Tool
- U/W Explosive Object Recovery









# **Advanced EOD Robotic System (AEODRS)**





# **UMCM** Background



- Counter naval mines and other underwater explosives threats in near shore areas that "traditional MCM" assets do not yet address.
- UMCM Environment: Historically, those areas relegated to Navy EOD divers and combat swimmers to include:
  - Pre-assault/Advance Force VSW
     MCM ISO Amphibious Warfare missions
  - Underwater Explosives Threat response in Maritime Homeland Defense and other confined area scenarios.
- UUVs are applied today, wherever suitable/effective in these missions and are tactically integrated with Navy EOD diver and MMS until unmanned solutions can perform the full range of Detect-to-Engage tasks.



A tool bag approach to execute VSW MCM and M-HLD mission sets



# MK 18 Family of Systems (FoS) Missions Types

## Bottom Underwater Localization Systems (BULS)



The MK 18 Mod 1 Swordfish system autonomously conducts BULS missions to provide rapid object localization for confined areas (inlets, berthing areas, between piers and pilings, confined channels and rivers) and open areas in the VSW zone (10-40 feet of sea water (FSW))

Search-Classify-Map (S-C-M)

Both the MK 18 MOD 1 Swordfish and the MK 18 MOD 2 Kingfish systems are capable of autonomously conducting S-C-M missions which provide localization of bottom and tethered mine-like objects in specific lanes through the VSW zone (mowing the lawn). Reacquire-Identify (R-I)



The MK 18 Mod 1 Swordfish autonomously conducts follow-on R-I missions to complement S-C-M missions. Dynamic search patterns are conducted in the area of previously determined mine-like objects to reacquire and further classify and identify mine-like objects.



# **Summary**



- •EOD must have systems with common architecture, modular components, standardized interfaces, and intuitive human controls
- Recent conflicts driving requirements and funding
- Coordinated, combined acquisition needed to reduce cost
- Contractor and Government business environments very competitive
- •EOD is and will continue to be a large user of robotics





# Questions

