



13th

NDIA Expeditionary Warfare Conference



EXPEDITIONARY
WARFARE
DIRECTORATE

N857

Navy Expeditionary Combat Branch

Supporting Navy Expeditionary Combat Command,
Non-Lethal Weapons, Joint Explosive Ordnance Disposal,
and Counter Radio-controlled IED Electronic Warfare



Partnering with Industry to Support the Force

CAPT Barry Coceano

Navy Expeditionary Combat Branch Head



Expeditionary Combat Responsibilities



Requirements and Action Office for Expeditionary Warfare supporting:

- All Navy Expeditionary Combat Command (NECC) forces
- Joint Service Explosive Ordnance Disposal
- Joint Counter Radio-Controlled Improvised Explosive Device Electronic Warfare (JCREW)
- Joint Non-Lethal Weapons (JNLW)

Recognition of asymmetric threats to maritime security

- National Strategy for Maritime Security
- 2006 Quadrennial Defense Review Report
- Naval Operations Concept
- 2006 Navy Strategic Plan (NSP)
- 2008 Center for Naval Analysis C-IED Study

Unique Capabilities to Face the Asymmetric Threat



Where does NECC need your help?



Sensor Technology

- Unmanned Systems (UAV/USV/UUV)
 - More capability in a smaller package in more varied operational environments
 - User friendly design to capture the skills of technology generation
 - Inter-operable
 - Knowledge, not data
- Standoff Detection
 - ISR applications
 - Fixed-site, Force Protection, Proliferation Security Initiative, EOD
 - Counter IED and Chemical, Nuclear, Biological

Integrated armor

- Layered and adaptive protection across spectrum to defeat multiple threats without significant increase to personnel and platform footprint
- Ground vehicles, green water-borne platforms, work sites
- Plug and play, able to shed armor when not needed

Adaptive, Deployable Networks

- Incorporate wireless technology for the battlefield
- Optimize logistic footprint
- Interoperability with the Intra-Agency, local governments, NGO's

Non-Lethal Weapons



Where does JSEOD need your help?



- **Unmanned Systems**
 - UUV/UAV/Ground Robotics communications enhancement
 - Underwater vehicle sensor and neutralization technology
 - Ground Robotics advancements
 - Reduce time-on-target
 - Enhance manipulation capability
 - Extend operation life with advancements in power generation/supply

- **Standoff Detection and Disruption**
 - Determine the threat before going into harms way
 - Enhance survivability
 - Defeat the Network*
 - Spectrum of Effects: Non-kinetic, low-order, high-order neutralization

- **Forensics**
 - Radiographic systems
 - Post Blast investigation
 - Wireless transmission/reception*



Where does JCREW need your help?



Growing the JCREW Industrial Base

– **BAA N00024-08-R-6323 released May 2008**

New BAA modified to focus on Critical Technology Elements for JCREW 3.3.
Available at: <https://bids.acqcenter.com/jjeddo/Portal.nsf/Start?ReadForm>

Purpose:

- ... develop and demonstrate technologies to improve virtually all aspects of performance related to next generation CREW equipment.
- Seeking proposals that address hardware, software, technique, or technology developments

Specific areas of interest:

- Antennas And Amplifiers
- Receivers/Processing/Modulators/Integration
- Modeling And Simulation
- Common Timing And Electromagnetic Compatibility
- Additional Technology, Information, Recommendations

BAA POCs: Mary Ann Keyser – maryann.keyser@navy.mil
Margaret Booth, (301) 744-5124, margaret.booth@navy.mil
bidshelp@acqcenter.com

Technology and test reports on JCREW Share Point for government review



Where does Navy NLW need your help?



- Stand off vessel stopping
- Stand off vehicle stopping
- Reducing the size and weight and cost of directed energy systems
- Integration of directed energy systems into shipboard platforms as part of their self defense systems
- Determining contact intent



Questions?





Backups



Where does JCREW need your help?



- **Interoperability**
 - Decrease Blue Force interference and fratricide across spectrum of electronic non-kinetic weapons
- **Environmental**
 - Operational Temperatures
 - Humidity
 - Maritime
- **Applications**
 - Terrain considerations
 - Unmanned system coverage
 - Get out ahead emerging communications technology



Where does JCREW need your help?



CREW S&T GOALS

- Develop individual Critical Technology Elements (CTEs) needed to achieve Technology Readiness Levels for CREW 3.3
- Grow industry base for CREW components
- Collaborate with industry on ability to develop components for open architecture system
- Demonstrate the capabilities and limitations of a CREW open architecture system



Where does JCREW need your help?

BAA Overview

Total Proposals – 71 Round 1 / 83 Round 2/ 22 Round 3/ 55 Round 4 (\$50414K)

Antennas and Amplifiers (\$11975K)

5/22 Amplifiers (\$8153K)

6/25 Mounted antennas (\$2382K)

3/8 Dismounted antennas (\$1439K)

Receivers/Processing/Modulators/Systems Integration (\$28130K)

7/41 Transceivers (\$8664K)

5/20 Processor (\$6414K)

1/13 Direction finding (\$929K)

1/3 Next Generation Tactical Test Bed (\$2950K)

2/9 Signal Assessment (\$1347K)

1/2 Automated threat analysis (\$4863K)

3/5 Anti-Tamper (\$2958K)

Modeling and Simulation (\$7154K)

3/11 Modeling Techniques (\$1684K)

1/2 Instrumented human surrogate (\$942K)

1/3 Improved environmental characterization (\$878K)

3/8 Modeling near earth propagation (\$3650K)

Common Timing and Electromagnetic Compatibility (\$3155K)

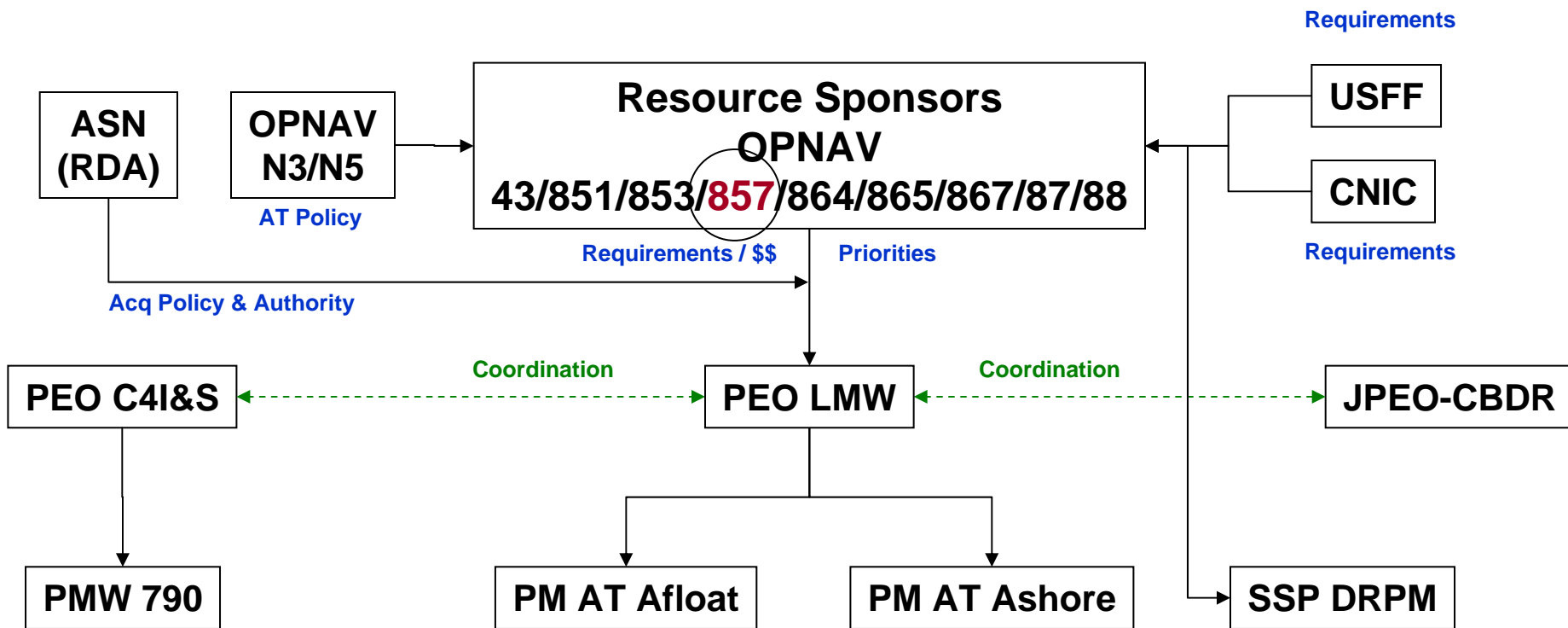
5/20 Compatibility (\$2904K)

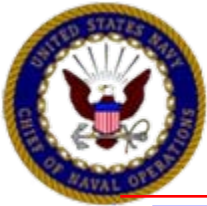
1/12 Network Enabled (\$251K)

Note: Other large and small business contracts also being awarded by I2WD and NEOD to support internal gov'n't R&D



Where is N857?





Who is N857?



USN



USCG



USNR (ADSW)



CONTRACTOR



NAVSEA

HEAD, NAVY EXPEDITIONARY COMBAT
BRANCH (N857)
CAPT BARRY COCEANO

PORT SECURITY LIAISON
(N857C1)/ DEPUTY N857
CDR BILL BURNS, USCG

MESF/NCW RQMTS
(N857C)
LCDR M. JON REAGAN
(IA until Jun '07)

MESF/NCW RQMTS
(N857C3)
MR. CRAIG STEVENS
(CACI)

BUDGET/POMCO
(N857X)
MR "BEEF" WILLIAMS
(GS-13)

EOD/MDSU RQMTS
(N857F)
LCDR GARETH HEALY

EOD/MDSU RQMTS
(N857F2)
MR. ED EBINGER
(EDO)

NON-LETHAL WEAPONS
RQMTS (N857E)
MRS COREY NOEL
-

NON-LETHAL WEAPONS
RQMTS (N857E1)
MS ALTHEA HOLMES
(ARA, Inc)

MCAG/ETC RQMTS
(N857G)
MR MIKE POLIDORO

JCREW RQMTS (N857F1)
MR JOHN STANSBURY
(L3 Communications)

JCREW RQMTS
(N857F3)
CDR RICH ROBBINS

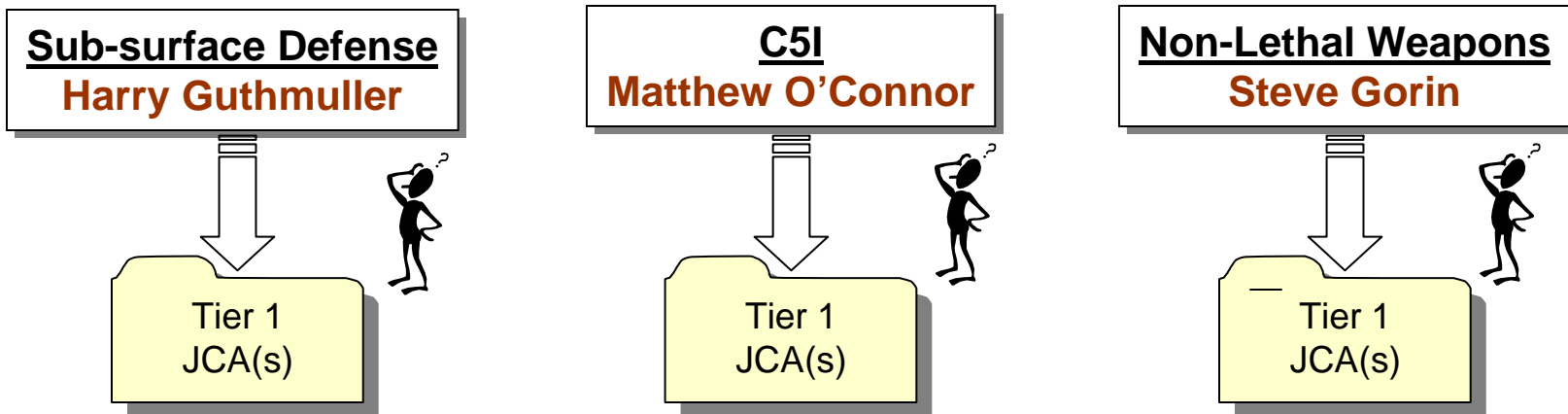


Capability Sponsors

Realignment of Capability Sponsor roles to Capability Portfolio Manager roles is being considered

Helps align N857 to the capability development and resource management approach mandated by DoD Directive 7045.20

N857/PMS 480 Capability Sponsors





Points of Contact



NECC capability development:

MESF requirements	LCDR Reagan	michael.j.reagan@navy.mil
C5I requirements	Matthew O'Connor	matthew.oconnor@navy.mil
	Mike Polidoro	michael.polidoro@navy.mil
Sub-surface Defense	Harry Guthmuller	harry.guthmullwe@navy.mil

JCREW/JSEOD capability development:

	LCDR Gareth Healy	gareth.healy@navy.mil
	Ed Ebinger	edwin.ebinger.ctr@navy.mil
	John Stansbury	john.stansbury@navy.mil

Capability Sponsors



Points of Contact



Non-lethal Weapons capability development:

Navy Central Action Officer	Corey Noel	corey.noel@navy.mil
	Steve Gorin	steve.gorin@navy.mil

Capability Sponsors