18th NDIA Expeditionary Operations Conference
31 October 2013

CAPT Travis Schweizer, USN
Expeditionary Warfare Division (N95)
Branch Head, Naval Special Warfare Branch
OPNAV N951

Overall Brief is: UNCLASSIFIED
Naval Special Warfare
Chain of Command
Naval Special Warfare

What We Do

- Counter Terrorism
- Counter Proliferation
- Special Recon (SR)
- Direct Action (DA)
- Unconventional Warfare
- Psychological / Information Operations
- Security Force Assistance & Civil Affairs
Service common support to NSW

Unmanned Aircraft Systems
  - Scan Eagle UAS
  - Small Tactical Unmanned Aircraft System (STUAS)

NSW capability integration in Navy Platforms
  - Mobile Landing Platform (MLP) / Afloat Forward Staging Base (AFSB)
  - JHSV
  - LCS
  - Future platforms

Precision Engagement
N951 Naval Special Warfare Branch

Focus

Interoperability
- Communications
- Mobility

Endurance/Reach
Connectivity
Minimize collateral damage
Dissemination

FIND

EXPLOIT

FINISH

NAVY

ANALYZE

SOF
Mission:
- Identify and assess mature technologies for Expeditionary Warfare to meet urgent needs of the warfighter

Goals:
- Identify material solutions
- Integrate & test existing unique or related capabilities
- Demonstrate capabilities in operational environment, preferably during Fleet exercises or deployments

Requirements Documents:
- COCOM Integrated Priority Lists, JUONS
- Navy Fleet IPCL, UON, unfunded gap/shortfalls, ROC
- Navy S&T/R&D guides, Lessons Learned

FY-14 Broad Agency Announcement:
- Project proposals for FY14 efforts that support Expeditionary Warfare Capabilities
- Near-term (< 2 yrs.) solutions
- Less than $1M
- Open through July 2014
N951 POC: CAPT Travis Schweizer  (703) 614-2107
Scan Eagle UAV

**MISSION**
Procured in response to NSW and Joint SOF Urgent Needs, the Scan Eagle UAS provides full-motion video (FMV) intelligence, surveillance, reconnaissance, and targeting support to tactical users.

Operational Overview
- IOC: Nov 08 (OIF), Aug 09 (OEF):
  - 30,000 Hrs.
  - 6,000 sorties
- Rapid Development Deployment (RDD) – Special Payload Efforts

Operational Employment:
- 9 Navy-owned systems: 6 x Operational, 2 x training, 1 x Op
- Spare hub & spoke operations (300 hrs./month)
  - Spoke (forward control station) ~100km

Equipment:
- Scan Eagle UAS (12 air vehicles per site)
- Ground control stations, launch/ recovery, pack-up & maintenance

Scan Eagle UAS is an interim capability until fielding of STUAS Program of Record ~4Q FY13
MLP/ AFSB

MLP CCS Variant
Increment One Addendum

- Stowage for 10 TEUs (5x2 high)
- 25,000 sq ft Raised Vehicle Deck (RVD)
- Vehicle Transfer Ramp (VTR)
- 3 LCAC lanes and Services Catwalk
- Ramp from raised vehicle deck to mission deck
- 1 m high bulwark
## STUAS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Length</td>
<td>7.2 feet</td>
</tr>
<tr>
<td>Weight</td>
<td>Design gross take-off: 125 lbs.</td>
</tr>
<tr>
<td>Airspeed</td>
<td>80 knots</td>
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<tr>
<td>Ceiling</td>
<td>15,000 ft.</td>
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<tr>
<td>Range</td>
<td>50 nm</td>
</tr>
<tr>
<td>Payload</td>
<td>Electro-optical/ infrared, comm relay, AIS, LRF, IR Pointer</td>
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</table>
Naval Special Warfare (NSW)

**Capability Description**

- Naval Special Warfare (NSW) forces conduct special operations in support of Joint Force and Navy commanders. Examples include, but aren’t limited to:
  - Direct Action
  - Special Reconnaissance
  - Foreign Internal Defense
  - Counter-terrorist Operations

- NSW Forces have been deployed to OEF since 2001 and were deployed to OIF from 2003-2011.

- Navy is responsible for providing resources to support NSW service common capabilities/sustainment.

- Categorization: Navy - only program (SOCOM interest)
  - N95 - Principal resource sponsor; responsible for (most) NSW service common procurements/sustainment (OMN, OPN, WPN).
  - N96 - Responsible for resourcing NSW service common Chemical, Biological, Radiological Decontamination Equipment (CBRDE).
United States Special Operations Command (USSOCOM) has service-like responsibilities to plan, program, budget and execute resources for Special Operations (SO) – peculiar support, services and equipment.

Military Departments have support responsibilities to plan, program, budget and execute resources for service common capabilities for Special Operations Forces (SOF). Principal guidance is provided by:
- Title 10, United States Code, Sections 165, 167.
- DOD Directive 5100.01; Functions of the Department of Defense and Its Major Components.
- Memorandum of Agreement – Department of the Navy and USSOCOM.

N95 is OPNAV’s principal advocate and resource sponsor for the Navy component of USSOCOM - Naval Special Warfare (NSW) Command.
- Other NSW (resource) sponsors on the OPNAV staff include:
  - N96 – Chem/Bio equipment, Small Tactical Unmanned Aircraft System (STUAS), SOF support attributes on future surface combattants.
  - N98 – Navy helicopter flight hours in support of NSW.
  - N97 – SOF support attributes onboard Navy submarines.

During each POM and PR cycle, N95 considers requests submitted by Commander, Naval Special Warfare Command for sustained and/or increased service common resourcing support.
# Riverine Assault Boat (RAB)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Details</th>
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<tbody>
<tr>
<td>Hull Type</td>
<td>High-grade Aluminum Rigid</td>
</tr>
<tr>
<td>Length</td>
<td>33 ft</td>
</tr>
<tr>
<td>Beam</td>
<td>9 ft</td>
</tr>
<tr>
<td>Draft</td>
<td>2 ft</td>
</tr>
<tr>
<td>Crew</td>
<td>7</td>
</tr>
<tr>
<td>Passengers</td>
<td>-</td>
</tr>
<tr>
<td>Twin Diesels w/Water Jets</td>
<td>Yes</td>
</tr>
<tr>
<td>Top Speed: full load</td>
<td>30 knots - cruise&lt;br&gt;40 knots - sprint</td>
</tr>
<tr>
<td>Range</td>
<td>250 nm</td>
</tr>
<tr>
<td>Fuel Capacity</td>
<td>250 gallons</td>
</tr>
<tr>
<td>C-130 Transportability</td>
<td>No</td>
</tr>
<tr>
<td>Combat Load</td>
<td>20, 500 lbs.</td>
</tr>
<tr>
<td>Bow Door/Ramp</td>
<td>No</td>
</tr>
<tr>
<td>Weapons Foundations</td>
<td>Multiple</td>
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*Unclassified*
# Riverine Patrol Boat (RPB)

## Characteristics

<table>
<thead>
<tr>
<th>Hull Type</th>
<th>High-grade Aluminum Rigid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>39 ft</td>
</tr>
<tr>
<td>Beam</td>
<td>10 ft – 2 in</td>
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<tr>
<td>Draft</td>
<td>2 ft</td>
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<tr>
<td>Crew</td>
<td>5</td>
</tr>
<tr>
<td>Passengers</td>
<td>8</td>
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<tr>
<td>Twin Diesels w/Water Jets</td>
<td>Yes</td>
</tr>
<tr>
<td>Top Speed: full load</td>
<td>35 knots - cruise</td>
</tr>
<tr>
<td></td>
<td>38 knots - sprint</td>
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<tr>
<td>Range</td>
<td>275 nm</td>
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<tr>
<td>Fuel Capacity</td>
<td>300 gallons</td>
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<td>C-130 Transportability</td>
<td>No</td>
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<tr>
<td>Combat Load</td>
<td>22, 800 lbs.</td>
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<tr>
<td>Bow Door/Ramp</td>
<td>Yes</td>
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<td>Weapons Foundations</td>
<td>Multiple</td>
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Riverine Command Boat (RCB)

<table>
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<tr>
<th>Characteristics</th>
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<tbody>
<tr>
<td>Hull Type</td>
<td>High-grade Aluminum Rigid</td>
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<tr>
<td>Length</td>
<td>49 ft</td>
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<tr>
<td>Beam</td>
<td>12 ft – 5 in</td>
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<tr>
<td>Draft</td>
<td>3 ft</td>
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<tr>
<td>Crew</td>
<td>4</td>
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<tr>
<td>Passengers</td>
<td>26</td>
</tr>
<tr>
<td>Twin Diesels w/Water Jets</td>
<td>Yes</td>
</tr>
<tr>
<td>Top Speed: full load</td>
<td>40 knots - cruise</td>
</tr>
<tr>
<td></td>
<td>45 knots - sprint</td>
</tr>
<tr>
<td>Range</td>
<td>&gt;320 nm</td>
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<tr>
<td>Fuel Capacity</td>
<td>300 gallons</td>
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<tr>
<td>C-130 Transportability</td>
<td>No</td>
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<tr>
<td>Combat Load</td>
<td>40,000 lbs.</td>
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<tr>
<td>Bow Door/Ramp</td>
<td>Yes</td>
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<tr>
<td>Weapons Foundations</td>
<td>Multiple</td>
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</tbody>
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Unclassified
Riverine Vehicles

MK 25 MTVR W/ MAS ARMOR KIT

UPARMORED HMMWV

CAT I

CAT II

MRAP (Mine Resistant Ambush Protected)
AWESUM provides 3rd Party Targeting HVTs, Submarine Defense, and SOF ISR Support in A2AD environments through a submarine launched AUS. Already demonstrated from a 6” launch tube, this project will provide a launch canister from a 3” flare tube with delayed UAV deployment.

**System Capability**
- Re-packaging UAV for submarine 3-inch countermeasure launcher
- Militarily useful UAV endurance (stretch fuselage and add batteries)
- Timed-release launch following deployment of the UAV from sub
- Sub-to-UAV comms via new mast antenna prototype
- Digital and encrypted transmissions
- JREAP-C (Link 16 over IP) on the sub for OTH targeting
- Weaponized version (inert demos) as a close-in and littoral self-defense option

**Description**
- **Warfighter Gap Alignment**: The Warfighter lacks the ability to discretely and quickly identify and defeat time-sensitive mobile targets in an anti-access area denial (A2AD) environment. This shortfall presents unique and compelling challenges to the Joint Force Commander (JFC) that the subsurface platform has the opportunity to resolve from a forward position.

**Specifics**
- **Requirements Basis**: SOC3, SOC8, PC3, CC6
- **Major Customers**: SOCOM/PACOM/CENTCOM
- **Legacy Systems**: N/A
Remote Aquatic Directed Energy System (RADES)

**System Capability**

- Demonstrate that RADES can successfully stop specific outboard boat motors at standoff range
- Intend to demonstrate on a 7 meter RHIB, deployable from Navy Ships, in Trident Warrior 2014 exercise

**Description**

- Develop and demonstrate an Unmanned Surface Vessel (USV)-mounted, compact High Power Microwave (HPM) payload against a simulated swarm of Fast Attack Craft (FAC)
- The USV and HPM source will be remotely controlled from a ship with Command and Control (C2) capabilities

**Specifics**

- **Warfighter Gap Alignment:** Answers Integrated Prioritized Capability (IPCL) and Integrated Priority List (IPL) requirements for non-lethal force protections
- **Requirements Basis:** CC6, NC10, SOC10
- **Major Customers:** CENTCOM/NORTHCOM/SOCOM
Naval Undersea Tactical Interrogation and Covert Assessment System

(NAUTICAS)

Description

• Develop, create, and test a covert, compact underwater active interrogation system that can non-invasively determine if explosives, special nuclear material (SNM), and/or other materials of interest are present inside a maritime vessel.

System Capability

• Active non-invasive underwater interrogation
  • Special nuclear materials
  • Explosives
  • Other
• Applicable in anti smuggling and MIW warfare areas

Specifics

• Warfighter Gap Alignment: This is the first technology to provide a capability the military currently does not have: the ability to interrogate underwater through water, shielding, and structural components (fiberglass, steel, aluminum, etc.) to examine maritime vessel contents non-invasively.
• Requirements Basis: CC2, CC8,
• Major Customers: CENTCOM/NORTHCOM