Steve Armstrong
Deputy Program Executive Officer-Maritime
Undersea Mobility Systems

Advanced SEAL Delivery System (ASDS)
Classified Range
Classified Endurance
2 Pilots, Class Pax

Dry Deck Shelter (DDS)
Host Submarine SSN/SSGN
Unlimited range
90+ days
36+ Pax

Swimmer Transport Device (STD)
5 nm
2 hrs
2 Pax

SEAL Delivery Vehicle (SDV)
Classified Range
Classified Endurance
Classified Pax

Conceptual

Shallow Water Combat Submersible (SWCS)

Conceptual

Joint Multi-Mission Submersible (JMMS)
SEAL Delivery Vehicle (SDV MK8)

Wet Submersible Capable of Clandestine Operations and Insertion/Extraction of 6 SEALS and Mission Equipment in a Hostile and/or Denied Environment

Technology Upgrades/Current Efforts:
- Improved Onboard Computer Systems
- Increase Sonar Capability
- Increased Battery Endurance
- Diver Thermal Protection

Maritime Systems
Dry Deck Shelter (DDS)

Certified Diving System That Attaches to Modified Host Submarines and Supports SDV, Combat Rubber Raiding Craft and Mass Diver Lock In/Out Operations While Submerged

Technology Upgrades/Current Efforts:
– 15 Year Service Life Extension Study
– Next-Generation DDS Study
– Improved Track and Cradle System
– Modifications to Support Shallow Water Combat Submersible (SWCS)
– SSGN Vertical Launch Joint Prototyping

Maritime Systems
Non-Gasoline Burning Outboard Engine (NBOE)

Non-Gasoline Burning Outboard Engine for SOF Combat Rubber Raiding Craft (CRRC) Operations. Capable of Being Launched from Submerged Submarines and Able to Burn a Variety of Diesel and Aviation Fuels

Technology Upgrades/Current Efforts:
- Block 1 – 55 HP Multi-Fuel Engine
- Block 2 – 30 HP Multi-Fuel Engine
- Block 3 – 30 HP, Light Weight, Submersible, Multi-Fuel Engine
Surface Mobility Systems

- Combat Rubber Raiding Craft (CRRC) <60 nm 4-6 Pax
- Naval Special Warfare Rigid Inflatable Boat (NSW RIB) 200 nm 3 Crew, 8 Pax
- Combatant Craft Medium-Mk-1 Conceptual
- Special Operations Craft Riverine (SOCR) 195 nm 4 Crew, 8 Pax
- MK V Special Operations Craft (MK V SOC) 600 nm 5 Crew, 16 Pax
- Amphibious Ships
- Maritime Support Vessel
- Joint High Speed Vessel
- Littoral Combat Ship 30+ Pax
MK V Special Operations Craft (MK V SOC)

Medium Range Insertion and Extraction of SOF in Low to Medium Threat Environment. Also Supports Limited Coastal Patrol and Interdiction Missions

Technology Upgrades/Current Efforts:
- Shock Mitigation Technology
- Navigation Computer Upgrades
- Rover IV – Remote Operated Video Enhanced Receiver Integration
- Integration of CCFLIR with ROSAM to Enhance Fire Control
Naval Special Warfare Rigid Inflatable Boat (NSW RIB)

Short Range, Ship-to-Shore Insertion/Extraction of SOF Personnel in a Low to Medium Threat Environment

Technology Upgrades/Current Efforts:
- Integrations of Shock Mitigation Technology
- Integration of Improvements to Combatant Craft Forward Looking Infrared

Maritime Systems
Special Operations Craft Riverine

Short Range Insertion and Extraction of SOF and Waterborne Special Reconnaissance in a Riverine and/or Littoral Environment

Technology Upgrades/Current Efforts:
- Advanced Lightweight Armor Protection
- Integration of Improvements to Combatant Craft Forward Looking Infrared
Technology Upgrades/Current Efforts:
– Software Upgrades to Reduce Display Clutter/ Enable all Output Protocols/Improver Tracker Function
– Implementation of Joy Stick Control Unit (All NSW Craft)
– R&D Efforts: 360 Degree Situational Awareness/Larger Focal Plan Arrays/Multispectral Arrays
– Integration with ROSAM to Improve User Interface

Ruggedized, Marinized, Light Weight, Gyro Stabilized, Cryogenically Cooled, Color & Infrared Camera, Laser Range Finder & Pointer
Competitive Acquisitions

- Joint Multi-Mission Submersible (JMMS)
  - Replacement for Advanced SEAL Delivery System
- Shallow Water Combat Submersible (SWCS)
  - Replacement for SEAL Delivery Vehicle
- Combatant Craft Medium (CCM MK 1)
  - Replacement for Naval Special Warfare Rigid Inflatable Boat
- Security Forces Assistance Craft (SFA)
Joint Multi-Mission Submersible (JMMS)

• Manned, Dry Combatant Submersible that Provides a Clandestine Mobility Platform for SOF
• Will Leverage Proven Design and Technologies from ASDS with New Technologies to Reduce Risk
• Competitive Acquisition Strategy for Pre-Design with Down Select to One Contractor

Acquisition Strategy
- Full and Open Competition
- Requirement for up to 3 systems

Period of Performance
- FY-11-FY16
- Contract Award FY11

Milestones
- Milestone A in 4Qtr FY10
- Milestone B in 4Qtr FY11
- RFP Release Planned for 3rdQtr FY10

Point of Contact
- NAVSEA PMS-399, Washington Navy Yard, DC
- USSOCOM PEO-Maritime

Funding
- TBD

Current Contract/OEM
- In Competition
# Shallow Water Combat Submersible (SWCS)

- **Family of Manned Submersibles with an Evolutionary Acquisition Approach with Enhanced Capabilities to Conduct SOF Insertion and Extraction in Hostile and/or Denied Environments**
- **SWCS Block 1** is a Wet Combat Submersible that will replace the SEAL Delivery Vehicle Mk VIII Mod 1
- **SWCS Block 2** is planned to be a Dry Submersible

### Acquisition Strategy
- Full and Open Competition

### Period of Performance
- FY10 through FY16
- Contract Award in 4th Qtr FY10

### Milestones
- Milestone B in 4th Qtr FY10
- Milestone C in 1st Qtr FY14
- RFP Released March 2010

### Point of Contact
- NAVSEA PMS-NSW, Washington Navy Yard, DC
- USSOCOM PEO-Maritime

### Funding
- TBD

### Current Contract/OEM
- In Competition
## Combatant Craft Medium (CCM MK 1)

- Multi-Role Surface Combatant Craft with the Primary Mission to Insert and Extract SOF in Medium Threat Environment
- Combatant Craft Medium (CCM) is a Family of Craft that Includes CCM MK1 and Security Force Assistance Craft of Various Types

### Acquisition Strategy
- Full and Open Competition
- Requirement for 36 craft

### Period of Performance
- FY10 through FY16

### Milestones
- TBD

### Point of Contact
- USSOCOM SORDAC, Combatant Craft Medium Program Management Office

### Funding
- TBD

### Current Contract/OEM
- TBD
Security Forces Assistance Craft (CCS)

- SFA Craft will be Used in a Low and Permissive Threat Environment
- Used for Joint Training with Partner Nations
- Commercial-Off-The-Shelf Procurement

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<th>Acquisition Strategy</th>
<th>Period of Performance</th>
<th>Milestones</th>
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<td>- Commercial-Off-the-Shelf (Non-Development Item)</td>
<td>- FY10 through FY14</td>
<td>Not Applicable – Commodity Procurement</td>
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<td>- TBD</td>
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Technology/Capability Areas of Interest:

- Undersea Vehicle Energy Storage Systems
- Advanced Surface Craft Power Systems
- Combat Swimmer Thermal Protection Systems
- Lightweight, Small Volume, CO₂ Removal Technology for Underwater Breathing Apparatus and Undersea Platforms
- Lightweight, Submersible, Multi-Fuel Outboard Engine
- Secure Wireless Intercom System
- Low-Cost Dry Submersible Hull, Mechanical & Electrical Technology

High Speed Communications
- Dynamic Ride Impact Mitigation

PEO M Breakout Sessions:

Wednesday, June 16, 0900-0945 • Thursday, June 17, 1300-1345