

# Special Operations Forces Industry Conference



## Steve Armstrong

Deputy Program Executive Officer-Maritime



# Maritime Systems

# Undersea Mobility Systems



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



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



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



DDS



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



Shallow Water Combat Submersible (SWCS)

Conceptual



Joint Multi-Mission Submersible (JMMS)

Conceptual

# 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

# Maritime Systems



# Surface Mobility Systems



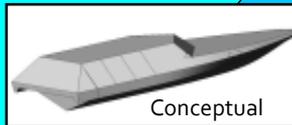
Combat Rubber Raiding  
Craft (CRRC)  
<60 nm  
4-6 Pax



Special Operations Craft Riverine (SOCR)  
195 nm  
4 Crew, 8 Pax



Naval Special Warfare  
Rigid Inflatable Boat  
(NSW RIB)  
200 nm  
3 Crew, 8 Pax



Conceptual  
Combatant Craft  
Medium-Mk-1



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

# Maritime Systems



# 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



# Maritime Systems



# Combatant Craft Forward Looking Infrared



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



## Technology Upgrades/Current Efforts:

- Software Upgrades to Reduce Display Clutter/ Enable all Output Protocols/Improve 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

# Maritime Systems



# 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)**



**Maritime Systems**



# 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 3<sup>rd</sup>Qtr 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 4<sup>th</sup> Qtr FY10

## Milestones

- Milestone B in 4<sup>th</sup> Qtr FY10
- Milestone C in 1<sup>st</sup> 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

## Acquisition Strategy

- Commercial-Off-the-Shelf (Non-Development Item)

## Period of Performance

- FY10 through FY14

## Milestones

Not Applicable – Commodity Procurement

## Point of Contact

- USSOCOM, SORDAC, Program Manager Combatant Craft Program Management Office

## Funding

- TBD

## Current Contract/OEM

TBD

# PEO M Breakout Sessions:

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

## Technology/Capability Areas of Interest:

- Undersea Vehicle Energy Storage Systems
- High Speed Communications
- Advanced Surface Craft Power Systems
- Dynamic Ride Impact Mitigation
- Combat Swimmer Thermal Protection Systems
- Lightweight, Small Volume, CO<sub>2</sub> 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



# Maritime Systems

