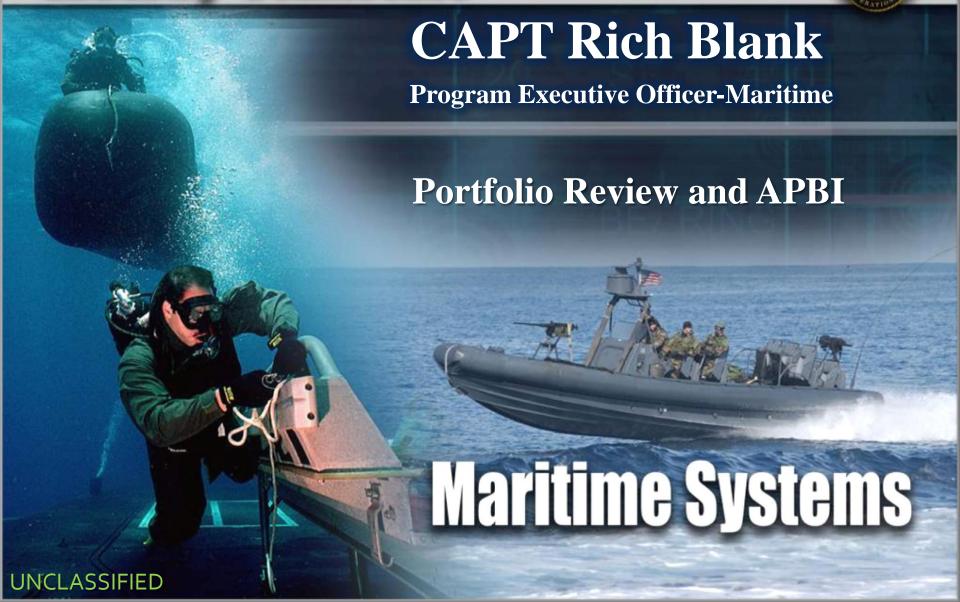
# **Special Operations Forces Industry Conference**





# Undersea Mobility Systems



Hydrographic Mapping
Unit (HMU)



Semi-Autonomous Hydrographic Reconnaissance Vehicle (SAHRV)



Swimmer ransport Device



SEAL Delivery Vehicle
(SDV)



Shallow Water Combat Submersible (SWCS)





Dry Deck Shelter (DDS) Host Submarine SSN/SSGN

Dry Combat Submersible Medium (DCSM)

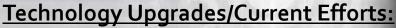




# SEAL Delivery Vehicle (SDV MK8)

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



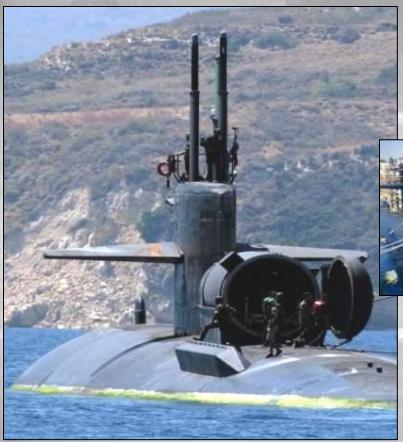


- Improved Onboard Computer Systems
- Increase Sonar Capability
- Increased Battery Endurance
- Diver Thermal Protection





# 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





- -15 Year Service Life Extension Study
- Next-Generation DDS Study
- Improved Track and Cradle System
- Modifications to Support Shallow
   Water Combat Submersible (SWCS)





# Surface Mobility Systems



Combat Rubber Raiding Craft (CRRC)



Naval Special Warfare Rigid Inflatable Boat (NSW RIB)



MK V Special Operations Craft (MK V SOC)





Special Operations
Craft Riverine (SOCR)



**Combatant Craft Medium** 



Non-gasoline Burning Outboard Engine (NBOE)



- Amphibious Ships

- Maritime Support Vessel
- Joint High Speed Vessel
- Littoral Combat Ship

ROSAM





CCFLIR





# 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

- Shock Mitigation Technology
- Navigation Computer Upgrades
- Rover IV Remote Operated Video
   Enhanced Receiver Integration





### 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:**

-Integration of Improvements to Combatant Craft Forward Looking Infrared







# **Special Operations Craft Riverine**



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

- -Advanced Lightweight Armor Protection
- Integration of Improvements to Combatant
   Craft Forward Looking Infrared







### 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 Aviation Fuels





- Block 1 55 HP Multi-Fuel Engine
- Block 2 30 HP Multi-Fuel Engine
- Block 3 30 HP, Light Weight,
   Submersible, Multi-Fuel Engine



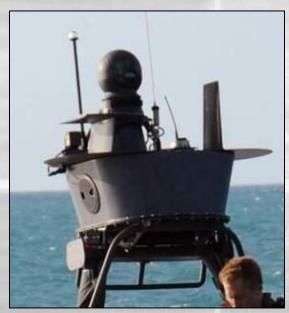


# **Combatant Craft Forward Looking Infrared**



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

- Software Upgrades to Reduce Display Clutter/ Enable all Output Protocols/Improved Tracker Function
- Implementation of Joy Stick Control Unit (All NSW Craft)
- R&D Efforts: 360 Degree Situational Awareness/Larger Focal Plane Arrays/Multispectral Arrays
- Integration with ROSAM to Improve User Interface







# **Competitive Acquisitions**

#### **Near Term:**

- Dry Combat Submersibles
  - Fill the Requirement for a Dry, One Atmosphere, Diver Lock-Out Submersible
- Shallow Water Combat Submersible (SWCS)
  - Replacement for SEAL Delivery Vehicle
- Dry Deck Shelter Extension
  - Supports Future Dry Combat Submersible Effort
- Combatant Craft Medium (CCM)
  - Partial Replacement for Naval Special Warfare Rigid Inflatable Boat and MK V SOC

#### **Mid-Term:**

- Special Operations Craft Riverine Replacement
  - Replaces Existing Riverine Craft
- Combatant Craft Forward Looking Infrared (CCFLIR) System
  - Replaces Existing CCFLIR System
- Security Forces Assistance (SFA) Craft







## Dry Combat Submersibles (DCS)

- Manned, Dry Combat Submersibles that Provide a Clandestine Mobility Platform for SOF
- Will Leverage Proven Sub-Systems and Equipment from ASDS, SDV, and SWCS
- Rapid Competitive Prototyping to Refine Technical Requirements and Reduce Risk

#### **Acquisition Strategy**

- BAA for Rapid Prototyping
- Multiple Contract Awards
- BAA Release Planned for 4<sup>th</sup> Qtr FY11

#### **Period of Performance**

■ FY-11-FY14

#### Milestones

- Milestone A in 3<sup>rd</sup> Otr FY11
- Milestone B in 2<sup>nd</sup> Qtr FY14

#### Point of Contact

USSOCOM PM Undersea Systems 813.826.3193

#### **Funding**

**TBD** 

#### **Current Contract/OEM**

**TBD** 



### 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

#### **Acquisition Strategy**

- Full and Open Competition
- RFP Released Mar 2010
- Two Phase 1 Contracts Awarded Oct 2010
- Down-select Contract Award in 3rd Qtr FY11

#### **Period of Performance**

FY11 through FY16

#### Milestones

- Milestone B in 4<sup>th</sup> Qtr FY10
- Milestone C in 1st Qtr FY14

#### **Point of Contact**

- NAVSEA PMS-NSW, Washington Navy Yard, DC
- USSOCOM PEO-Maritime 813.826.9509

#### **Funding**

TBD

#### **Current Contract/OEM**

- Teledyne-Brown Engineering
- The Columbia Group



# Dry Deck Shelter Extension (DDS)

The Dry Deck Shelter Extension (DDSX) is an ~ 50 Inch
 Extension Modification to the Current DDS System with a
 Additional Design Modifications to Accommodate the
 SWCS Block 2 Dry Submersible Also Known as the Dry
 Combat Submersible Light.

#### **Acquisition Strategy**

- Full and Open Competition for 4 Systems
- Draft RFP to be Released Jul 2011
- RFP to be Released Oct 2011
- Down-select Contract Award in 4th Qtr FY12

#### **Period of Performance**

FY11 through FY16

#### Milestones

- Milestone B in 2nd Qtr FY12
- Milestone C in 4th Qtr FY14

#### **Point of Contact**

- NAVSEA PMS-399, Washington Navy Yard, DC
- USSOCOM PEO-Maritime 813.826.1975

#### **Funding**

**TBD** 

#### **Current Contract/OEM**

Oceaneering International Inc.

### MARITIME



### Combatant Craft Medium (CCM)

- Multi-Role Surface Combatant Craft with the Primary Mission to Insert and Extract SOF in Medium Threat Environment
- USAF C-17 Transportable, Crew of 4 and Capable of Transporting 14-19 Passengers
- Partially Replaces Naval Special Warfare Rigid Inflatable Boat Capabilities and Approaches the Payload and Range of MK V Special Operations Craft

#### **Acquisition Strategy**

- Full and Open Competition
- Requirement for 30 craft

#### **Period of Performance**

 Contract Award in FY11 with a 10 Year Period of Performance

#### Milestones

TBD

#### **Point of Contact**

 USSOCOM SORDAC, Combatant Craft Medium Program Management Office 813.282.8795

#### **Funding**

TBD

#### **Current Contract/OEM**

N/A



# Special Operations Craft Riverine Replacement (SOCR)

- Riverine Surface Craft with the Primary Mission to Insert and Extract SOF Forces
- Secondary Mission of Reconnaissance and Surveillance
- SOCR Replacement will Use Present Technology in Terms of Hull Structure, Power Train, On-Board/Off-Board Sensors, and Armor to Increase Current Capabilities

#### **Acquisition Strategy**

- Full and Open Competition
- Projected Requirement for 24 Systems

#### **Period of Performance**

FY14 through FY19

#### Milestones

■ TBD

#### **Point of Contact**

 USSOCOM SORDAC, Combatant Craft Medium Program Management Office 813.826.3193

#### **Funding**

TBD

#### **Current Contract/OEM**

United States Marine, Inc.



# Combatant Craft Forward Looking Infrared Replacement

- Situational Awareness System That Will Expand on the Capabilities of the Current CCFLIR by Using Additional Sensors to Provide Better Situational Picture
- CCFLIR Replacement Will Be Used on All SOF Family of Mobility Systems Including the MK V SOC, CCM, and SOCR Next

#### **Acquisition Strategy**

- Full and Open Competition
- Requirement for All Combatant Craft

#### **Period of Performance**

FY13 through FY19

#### Milestones

TBD

#### **Point of Contact**

 USSOCOM SORDAC, Combatant Craft Medium Program Management Office 813.826.3193

#### **Funding**

TBD

#### **Current Contract/OEM**

FLIR Systems Boston



# Security Forces Assistance Craft (SFA)

- SFA 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)
- Requirement for 12 SFA Light and 5 SFA Patrol Coastal Variant

#### Period of Performance

FY 10-FY14

#### Milestones

Not Applicable - Commodity Procurement

#### **Point of Contact**

USSOCOM, SORDAC, Program Manager Combatant Craft Program Management Office 813.826.3193

#### **Funding**

■ \$2M - \$5M

#### **Current Contract/OEM**

TBD

## 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
- High Speed Communications
- Low-Cost Dry Submersible Hull, Mechanical & Electrical Technology
- Dynamic Ride Impact Mitigation



