VIRGINIA Class Submarine Program Perspective

Mr. Joe VanAllman – Program Manager, SWFTS (PEO SUB-S)
Ms. Lindsay Webster – VIRGINIA Class Procurement Manager (PMS450)
Why The VIRGINIA Class?

Mission:
Develop and deploy a more affordable, nuclear-powered attack submarine with multi-mission capability and enhanced capabilities for performance in littoral areas. VIRGINIA Class submarines support five of the six Navy core maritime capabilities:

- Anti-Submarine Warfare (ASW)
- Anti-Surface Ship Warfare (SUW)
- Strike Warfare (STK)
- Covert Mine Warfare (MIW)
- Intelligence Surveillance and Reconnaissance (ISR), Intelligence and Warning (I&W) and Electronic Warfare (EW)
- Naval Special Warfare (NSW)
- Battlegroup Operations (BGO)

Maritime Strategy at a Glance:
“A Cooperative Strategy for 21st Century Seapower” recognizes the economic links of the global system and how any disruption due to regional crises – man-made or natural – can adversely impact the U.S. economy and quality of life. This strategy charts a course for the Navy, Coast Guard, and Marine Corps to work collectively with each other and international partners to prevent these crises from occurring or reacting quickly should one occur to avoid negative impacts to the U.S.
Shipbuilder Teaming
Co-Production at Three Facilities

General Dynamics – Electric Boat (GDEB) (Prime Contractor) shares work with Huntington Ingalls Industries – Newport News Shipbuilding (HII-NNS)

- Each contractor repetitively builds designated sections and modules
- Contractors alternate final assembly, outfitting, and delivery

GDEB, Groton, CT
Assembly, Test and Delivery

GDEB, Quonset Point, RI
Manufacturing

HII-NNS, VA
Assembly, Test and Delivery

Ship for Assembly
The VIRGINIA Class
The Right Submarine for Today with Flexibility for the Future

Blocks I (FY98–08)
Quantum leap in platform capability

Block III (FY09–13)
Design for Affordability (2 VA per year)

Block IV (SSNs FY14–18)
RTOC enables increased $A_\circ$ per hull

Block V and later (VPM)
Dramatically increase undersea influence effects

10 Ships Delivered
8 Ships – 5 Delivered, 3 Under Construction
10 Ships – 9 Under Construction, 1 Under Contract
In Design Phase, FY19 Construction Start
PEO SUB: >$1.5B in Phase III contracts!

Cardinal Engineering / Weidlinger
Weidlinger Associates
Shock Analysis
WWW Technologies
Ship Control Architecture

CCSM
Planning Systems Inc
GCCS Development & COTS Applications

DSR
Advanced Information Systems Software Migration Legacy Trainer Photonics Mast Workstation

Rite Solutions
Mission/engagement planning s/w Combat System of Future

Progeny
Audio Signals Active Emissions Information Assurance AN/WLR-1 AI&R Manning Reduction

Trident Systems
Mobile Computing for Submarine Applications

TCNi
OA Concepts

MIKEL
Combat System of the Future planning Mobile Range
Chesapeake Science Corp.
TSMS Telemetry
Jackpine Technologies
Common Submarine Radio Room Software

3-Phoenix
Periscope image processing Sea trial periscope

AUXILIARY MACHINERY ROOM
METSS
Synthetic Lubricating & Hydraulic Oil

HULL
Compudrive Electromechanical Actuators
Seeman Composites Non-Autoclave Composite Systems and fairings
AAC Acoustic sensors

WEAPON LAUNCH, STOWAGE & HANDLING
Progeny
Tools for VME Interactive Acoustic Analysis Process
Multi Tube Weapon Simulator
Common Weapon Launcher
TRI
Composite Torpedo Room Temp Berthing and weapon handling cradles

STERN / PROPULSION
Towed Array Improvement Fiber Tow cables Fiber slip rings Heading sensors telemetry
Chesapeake Sciences Corp

IDT Auto Testing