



- Supports VIRGINIA Class Block III and later
- Provides “ship-like” mechanical and electrical functionality/interface
- Provides for cost-effective payload integration
- Provides unprecedented shore-based End to End (E2E) system testing and mission experimentation
- Facilitates support operations and maintenance training



*For further information or to arrange a tour of this facility,*

Contact:

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or email

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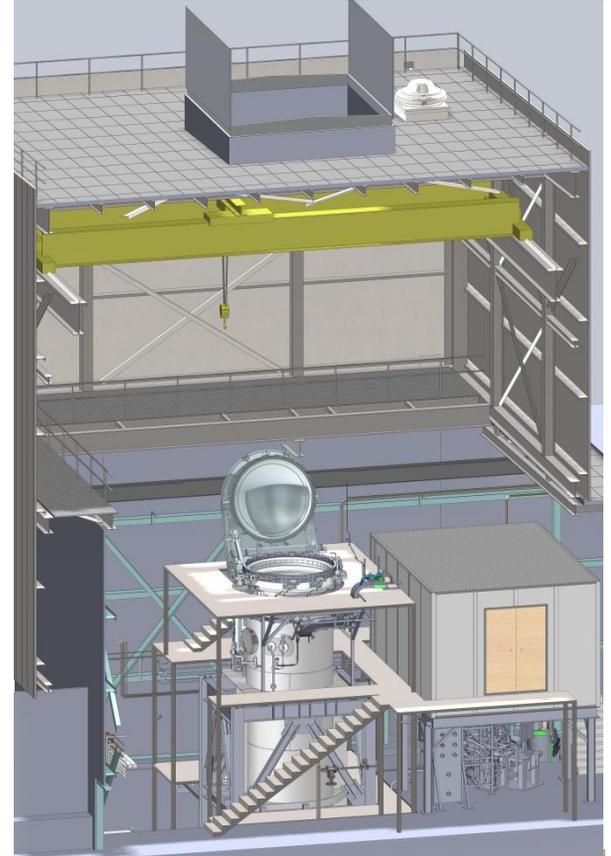
Distribution Statement A: Approved for public release; distribution is unlimited

## VIRGINIA Payload System Integration

Making Each Hull More Capable

## VIRGINIA Payload Tube Facility (VPTF)

*World Class Payload Integration*



## In-Service Engineering

### Replication of Ship Functionality

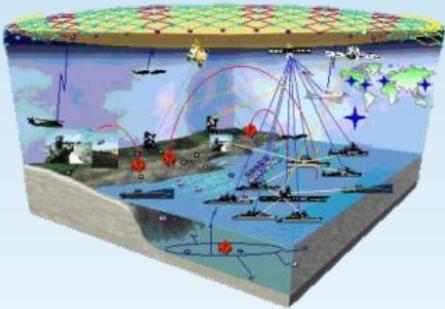
- 87" clear bore tactical tube
- Hatch and Mechanicals
- Electrical cabling
- Valves and System Piping

### Distance Support

- Rapid problem resolution
- Troubleshooting Casualties
- Initiating corrective action
- Modernization/Upgrade/Alteration

### Support Operational Activities

- Simulated Launch Analysis (TTF prep)
- End-to-End compatibility testing
- VPT alignment (missile) confidence test



### Procedural Proof of Concept

- Ship Alterations (SHIPALT)
- Temporary Alterations (TEMPALT)
- MRC's/IMA Procedures

## Payload Integration

### Interfaces

- Weapon/Payload control
- Configured for VPT, adaptable to VPM
- End-to-End connectivity with NUWC's Virtual Submarine network
- VIRGINIA Class Payload System Interface Control Document (PS-ICD)



### Large Diameter Tube

- Payload Integration Handbook (PIH)
- Supports current VPT configuration
- Bottom of tube accessibility (360 deg access)
- Tactically representative

### Support Payload Development

- Cost Effectively Supports Advanced Payload Integration
- Procedural verification/qualification
- Mission Experimentation via Virtual Submarine Network
- Capable of supporting Large Displacement Unmanned Undersea Vehicle (LDUUV) launch and recovery concepts, i.e. ULRM

## Training

### Provide a tactical alternative for

- Fleet operational training
- CONOP Development
- I and O-Level Maintenance Training

### NUWC Virtual Submarine Network

