

## **STS 2025 Technical Sessions**

*Theme: Lethality Today and Innovation for Tomorrow*

### **Session I: Understanding Tomorrow's Threat Today**

Chair: Dianne Egnor, MITRE

Assistant Chair: Brendan Gotowka, JHU/APL

- IC projections of the technology threat landscape 15-20 years out
- Emerging adversary technologies
- Evolutions in adversary operations (tactics and procedures), influence to/from technologies
- Adversary rapprochement
- Adversary war plans and decision making
- AUS & UK intel perspectives

### **Session II: Posturing for the Future**

Chair: Owen Brooks, JHU/APL

Assistant Chair: Dr. Jermaine Kennedy, NSWCD PCD

- AxV/UxV and Counter AxV/UxV technologies
- AI/ML
- Cross-domain C2 and collaboration
- C2/Communications solutions, comms at speed and depth
- Kill-chain enabling new technologies / Multi-domain kill chains / Novel kill webs
- Non-kinetic weapons / weapons other than torpedoes
- SSW and Space-based technologies
- Improving survivability
- Whole ship signature
- Decision/Engagement Superiority
- Nuclear power and propulsion
- Tactical oceanography
- Naval engineering & Digital engineering
- Counter-mine technologies

### **Session III: Answering the Call to Readiness**

Chair: Charles Montalbano, GD-EB

Assistant Chair: RADM Matt Zirkle, USN (Ret), Serco

- Modular/novel construction techniques
- Workforce modernization
- Construction using advanced manufacturing
- Technologies spanning submarine classes
- New technologies for COLUMBIA and SSN(X)
- Thoughts toward SSGN(X)
- Initiatives to drive cost out of new construction and maintenance
- Designing to mitigate threats from mines

### **Session IV: Sustaining the Fleet into the Future**

Chair: Brian Elkowitz, NGC

Assistant Chair: Melanie Campbell, SPA

- Maintenance through advanced manufacturing
- Modernization beyond the TI/APB model
- Digital engineering to drive agility
- Ao challenges, supply chain, material readiness
- Improving Ao / new approaches to submarine maintenance
- Strategies for maintaining multiple classes of submarines
- Automation in manufacturing and maintenance
- Increasing/improving throughput and capacity
- Engineering submarines for operations in mined waters

### **Session V: Unleashing Lethality through Interchangeability**

Chair: Marie Bussiere, NUWCDIVNWPT

Assistant Chair: Michael Belisle, NGC-MS

- AUKUS Pillar 1 update
- AUKUS Pillar 2 challenges and barriers
- Maintenance commonality
- Common weapon/payload improvements
- Allied TUSW
  - Integrated warfighting: water-space management, communications
  - Shared lethality / collaborative targeting
  - Allied view of the battlespace
  - Interoperability