

2024 Combined Naval Event

Dominating in the Undersea Domain



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Commander, Allied Submarine Command



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Common Challenges



- **Submarines are hard to find**
- **Mines are hard to detect and neutralize**
- **The ocean environment can make or break an operation**
- **We rely on our seabed infrastructure...and it's hard to defend**
- **Building submarines is expensive and takes a healthy industrial base**
- **Maintaining submarines is difficult and expensive**
- **Command and Control of multinational forces is hard**
- **GPS may not be there when we need it**
- **Autonomy isn't easy, and it relies on good sensing**
- **We have to be able to rescue submarines in distress**



Commander's Priorities

Warfighting and Warfighters

Warfighting



- Get Ships out of Maintenance
- Increase Weapon Production
- Combat System Upgrades
- Maintain Undersea Overmatch

People



- Recruit and Keep Best Talent
- Provide World Class Training
- Care for Sailors and Families
- Improve Sailor Quality of Life & Service

Safety



- Improved Navigation System
- Better Periscope Sensors
- Restore Sub Rescue Systems
- Prevent:
 - Collision & Grounding
 - Avail/Shipyard Hazards



Sub Shipyards, AUKUS, & Posture for the Future

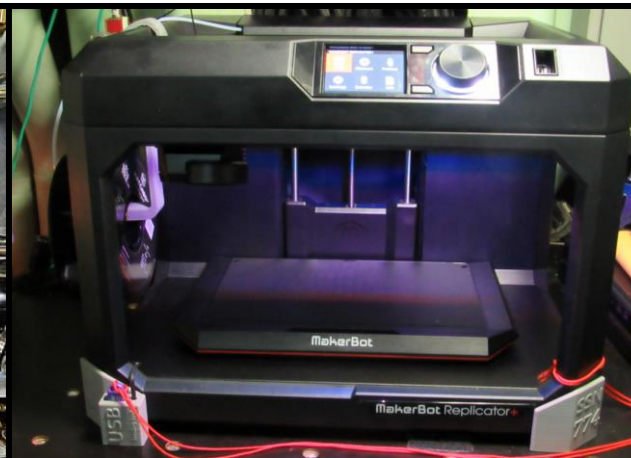
Foundation

Posture for the Future



Unmanned & Hybrid

- Unmanned deployments
- Defend the Seabed
- Attack the Seabed
- More exercises & development



Additive Manufacturing

- In use today
- Clear Requirements
- Build repository of component models



AI/ML

- Auto-detection Algorithm
- Data Strategy
- Reduce admin with Large Language Models



Cross Domain C2

- Project Overmatch
- Buoys and Gliders
- Expand Underwater Communications

“We must think, act, and operate differently, leveraging wargaming and experimentation to integrate conventional capability with hybrid, unmanned, and disruptive technologies.” – ADM Franchetti, CNO



Questions



Apex Predators!



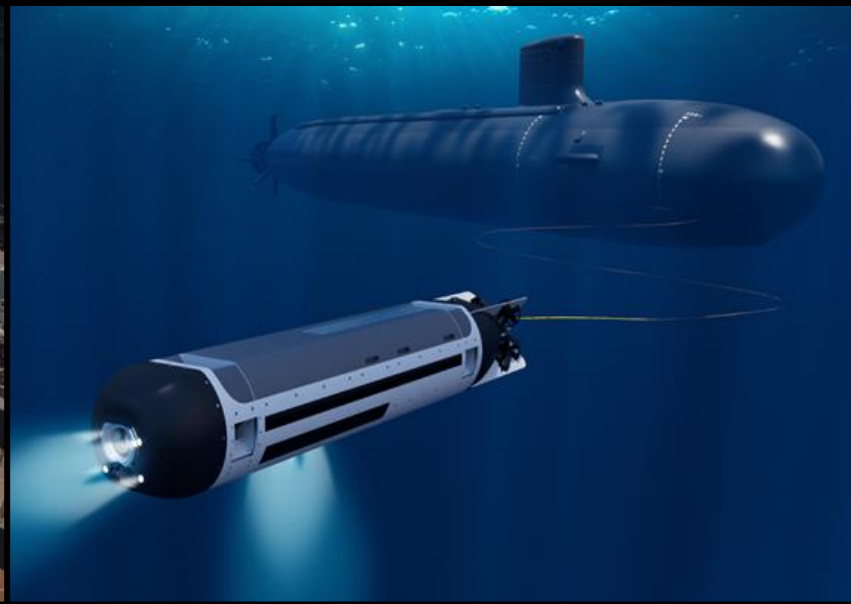
Priorities Around the World

Availability



- Increasing Players on the Field
- Challenges of Submarine Industrial Base
- Looking at Industry for additional improvements

Unmanned/Hybrid



- Deliver on time and on cost
- Continuously Deploy UUVs
- Increase payload options and effectors

Future Capability



- COLUMBIA Class and SSN(X)
- AUKUS
- VPM
- Mines



Submarine (SSN/SSGN) Force Overview

Pacific SSNs / SSGNs
Operational: 16
IDLE/Major Avail: 7
*** 22% IDLE / MAJOR AVAIL**

Atlantic SSNs / SSGNs
Operational: 16
IDLE/Major Avail: 12
*** 43% IDLE / MAJOR AVAIL**

BANGOR, WA.
 SSNs/SSGNs OPERATIONAL: 2
 SSNs IDLE/MAJOR AVAIL: 1

GROTON, CT.
 OPERATIONAL: 8
 IDLE/MAJOR AVAIL: 6

NORFOLK, VA.
 OPERATIONAL: 6
 IDLE/MAJOR AVAIL: 6

PEARL HARBOR, HI.
 OPERATIONAL: 6
 IDLE/MAJOR AVAIL: 4

SAN DIEGO, CA.
 OPERATIONAL: 4
 IDLE/MAJOR AVAIL: 1

KINGS BAY, GA.
 SSNs/SSGNs OPERATIONAL: 2
 IDLE/MAJOR AVAIL: 0

GUAM
 SSNs OPERATIONAL: 4
 SSNs IDLE/MAJOR AVAIL: 0

Strategic Deterrence



Strike



ASUW



ISR



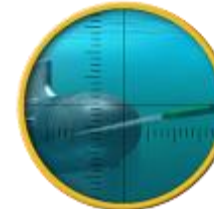
Mine Warfare



SSW



ASW



SPECOPS





AUKUS Overview

Embeds and Industrial Workforce
(From 2023)

Increasing Port Visits (2023)

SRF-West
(As early as 2027)



Australian Virginia Class Submarines
(Early 2030s)



Australian Shipyard
Design and Construction
(From 2023)

Construction of SSN-AUKUS
(2020s)



UK's First SSN-AUKUS
(Late 2030s)



Australia's First SSN-AUKUS
(Early 2040s)



Collins Class Capability



Stewardship Pathway