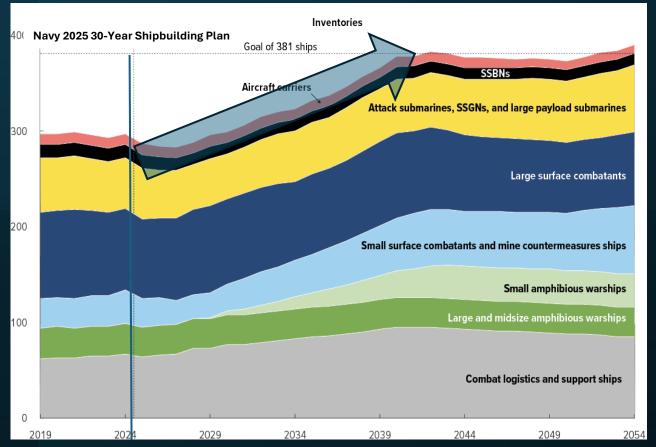


## The Challenge





- Navy's 2023 Battle Force Ship Assessment and Requirement report calls for 381 Battle Force Ships
- U.S. Navy currently has 296 Battle Force Ships
- Over half of U.S. Navy ships are more than 20 years old
- The Navy's 45-Day Shipbuilding Study highlighted significant industrial base challenges in building ships
- The Navy's shipbuilding programs must accelerate to support U.S. Maritime Security objectives

### Generational Demand on Maritime Industrial Base

## **DRPM-MIB Charter**



Single, accountable Program Manager to assess, develop, integrate, and manage enterprise maritime industrial base efforts for the Department of the Navy



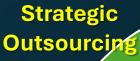
#### **Tasking**

- Refine the Navy's approach to industrial base improvements in infrastructure, strategic outsourcing, suppler development, advanced manufacturing, and workforce development
- Accelerate the Navy's trajectory toward delivering submarines and surface ships in accordance with current and future Navy shipbuilding acquisition and sustainment plans

## **DRPM-MIB**

**Lines of Effort** 











Advanced facturing





**Supply Chain** 



## Department of the Navy Advanced Manufacturing (DoN AdvM) Strategy

### **3 Lines of Effort**

Harness Cutting-Edge Commercial Capabilities for Strategic Advancement



Organic

Modernize Organic Depots and Strengthen Intermediate Capabilities

Warfighter

**5 CROSS-CUTTING ENABLERS** 

Governance

Manufacturing Technology Maturity

**Standards** 

Digital Architecture

Workforce Development

**Strengthen Warfighter Capacity and Self-Sufficiency for Mission Success** 



### **Coordinated Approach – Operationalizing Advanced Manufacturing**

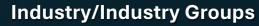


DRPM MIB Approach leverages Operational Enablers to Operationalize Advanced Manufacturing across all DON LOEs



# **DRPM-MIB Our Partnerships**

Federal, State and Local Govts











**OSD and Navy Stakeholders** 





































International





#### **Academia to include K-12**



# DRPM-MIB Additive Manufacturing – Already Making an Impact!



USS Halsey (DDG-97) Heko Hanger Bracket









U.S. Navy Additive Manufacturing Center of Excellence Danville, VA







USS Michigan (SSGN 727)
Trim and Drain Valves



USS Wasp (LHD-1)
Aircraft Elevator High Pressure Air Reducing Manifold



- Printed 184+ submarine/ship parts
- Qualified Alloy and built modality combinations to scale AM across industrial base
- Qualified 4 x AM Industry Partners scaling to qualify additional partners
- Leveraging new AM technology to produce "Moon shot" components for HSLA and HY steels
- Close coordination with Naval
  Reactors and NAVSA technical
  warrant holders to qualify parts for
  installation

Material properties have shown to meet or exceed casting/forging baseline

# DRPM-MIB Supporting the Development of the Maritime Workforce



- MIB requires ~250K skilled maritime trades personnel over next decade
- To meet workforce demand, Navy MIB has:
  - Established a world class Accelerated Training in Defense
     Manufacturing Course of Instruction in Danville, VA
    - 16-Week COI focused on Welding, NDT, Additive MFG, Quality Control (Metrology), and CNC Machining
  - Partnering with Universities and Colleges to reinvigorate Naval Architecture and Manufacturing Engineering degrees
  - Established 7 Regional and 1 National Talent Pipeline Program
    - Collaboration with Industry, State/Local Governments, and Academia
  - Supporting National advertising campaign focused on attracting the next generation Maritime workforce









# DRPM-MIB How Can You Help Us?







#### **Communicate Issues & Ideas**

Engage with MIB to identify and resolve problems, discuss workload issues and opportunities, propose investments to add capability/capacity, and/or suggest improvements early on.

#### **Collaborate through MIB programs**

Participate in MIB's workforce development programs, send workers to ATDM to be upskilled, partner on additive manufacturing, pilot other manufacturing technology initiatives, illuminate supply chain concerns.

## Retain workers through career paths, engagement, and trust

Offer competitive career opportunities, foster employee engagement, and build trust to help MIB accelerate the vital maritime industrial base.

By communicating, collaborating, and retaining a skilled workforce, manufacturers will play a crucial role in strengthening the submarine industrial base in the interest of our global stability.

Contact MIB Leadership at MIB-Inbox@us.navy.mil