JOINT
Business Technologies and Planning, Production Processes & Facilities Panels

NSRP
NATIONAL SHIPBUILDING RESEARCH PROGRAM™
Taking Shipbuilding and Repair to the Next Level

ABS

SAFER SHIPS.
STRONGER YARDS.
BRIGHTER TOMORROW.

ABS Smart Shipyard Pilots

for Accelerated 3D Model-Based Class Approval and Production Package Readiness

CONNECTING DESIGN, SUPPLY CHAIN AND PRODUCTION

PROJECT INFORMATION

Prime/Lead
American Bureau of Shipping

Team Members
Austal USA, GD–NASSCO, GD-BIW, Fincantieri Marinette Marine, Naval Architecture Package, SSI USA, Surface Forces Logistics Center, United States Naval Academy

Duration
12 Months

TRL
3 to 7

OBJECTIVE

The project will demonstrate transferable Smart Shipyard methods to improve workflow continuity, modular outfitting readiness, and schedule confidence in production relevant shipyard settings.

- IMPROVE WORKFLOW CONTINUITY
- ENABLE MODULAR OUTFITTING READINESS
- INCREASE SCHEDULE CONFIDENCE

DELIVERABLES / BENEFITS / ROI

Deliverables
ABS Smart Shipyard 3D Model-Based Approval Reference Architecture and Pilot Technology Definition Package, Pilot Demonstration Package, NSRP Implementation Toolkit and Technology Transfer Package, Final Report with Deployment Roadmap.

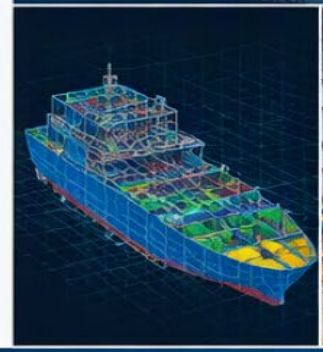
- Improve information continuity.
- Reduce coordination burden.
- Create clearer production packages.
- Higher package quality.
- Better digital revision governance and traceability.

FINANCIAL

Program Funds:	**$199.9K**
Cost Share:	**$227.4K**

A SMART INVESTMENT IN A MORE PRODUCTIVE MARITIME INDUSTRY.







IMPROVE EFFICIENCY REDUCE COST.

ENABLE THE WORKFORCE OF TOMORROW.

STRENGTHEN THE MARITIME INDUSTRIAL BASE.

DELIVER FLEET READINESS FOR TOMORROW.

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DIGITAL YARDS.
REAL PROGRESS.
LASTING IMPACT.

1 THE CHALLENGE
PERSISTENT COST AND SCHEDULE PRESSURE

- **Fragmented digital workflows** and delayed design-to-production handoffs
- **Labor-intensive outfitting** and incomplete visibility into critical package inputs
- **Approval delays and incomplete work packages** lead to avoidable rework
- **Inefficient execution and reduced confidence in production schedules** for new construction and repair

2 THE APPROACH
FOCUS ON TRANSFERABLE SOLUTIONS

- **Demonstrate transferable Smart Shipyard methods** to improve workflow continuity, modular outfitting readiness, and schedule confidence.
- **Leverage existing, widely adopted platforms (NAPA & ShipConstructor)** and focus on a small number of practical, high-impact pilot use cases.
- **Develop transfer-ready assets** that can be packaged for broader industry adoption (including NSRP).

3 KEY GOALS
REDUCE BURDEN. ACCELERATE APPROVALS.

- **Reduce shipyard and designer burden**
- **Increase ABS preliminary design approval throughput**
- **Maintain rule-check quality**
- **Shorten class approval timelines from 3–6 months to as little as 10 weeks**

4 TARGET OUTCOMES
MEASURABLE IMPROVEMENTS

- **20% – 30%** Reduction in pilot cycle time and review turnaround
- **15% – 25%** Reduction in rework
- **10% – 20%** First-pass quality gain
- **25% – 40%** Improvement in supplier lead-time and delivery-risk visibility

PILOT TODAY.
WIDER ADOPTION TOMORROW.

PRACTICAL PILOTS.
TRANSFERABLE SOLUTIONS.
A STRONGER MARITIME INDUSTRY.



ROI EXPECTED
from pilot gains and broader NSRP adoption of transfer-ready assets.

IMPROVE EFFICIENCY.
REDUCE COST.

ENABLE THE WORKFORCE
OF TOMORROW.

STRENGTHEN THE
MARITIME INDUSTRIAL BASE.

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