

NNS Achieves Additive Manufacturing Milestone

A team at Newport News Shipbuilding has successfully installed the first valve manifold assembly created by additive manufacturing technology on a new construction aircraft carrier.

NNS continues to integrate additive manufacturing, also known as 3D printing, into the shipbuilding process. The use of certified 3D-printed parts has the potential to accelerate construction and delivery of vessels to the U.S. Navy by cutting lead times and improving manufacturing quality for critical components.

The valve manifold assembly, a specialized assembly that allows distribution of a single source of fluid to multiple points on the ship, is installed in a pump room on Enterprise (CVN 80). The assembly, which is approximately 5 feet long and 1,000 pounds, reflects the shipyard's pursuit of all opportunities to support construction using additive manufacturing. NNS collaborated with DM3D Technology to manufacture the manifold body.

This latest advancement in the development and deployment of additive manufacturing builds on NNS' prior certification and approval as a supplier for additive manufacturing components on Naval Sea Systems (NAVSEA) platforms. To date, the shipyard has created more than 55 additively manufactured parts installed on both new construction vessels and those currently in the fleet, with plans to install more than 200 additional parts this year.



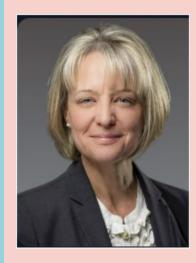


March 2025

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President's Corner



The Board of Directors elected Kari Wilkinson to serve as president of the company's Newport News Shipbuilding (NNS) division, effective Jan. 1, 2025. She succeed Jennifer Boykin, who retired from her position after 37 years with the company.

The president of NNS, which is HII's largest division, oversees more than 26,000 shipbuilders who design, build, and maintain the world's most complex ships: nuclear-powered aircraft carriers and nuclear-powered submarines.

Wilkinson becomes the 21st president of NNS, which was founded in 1886. She has served as president of HII's Ingalls Shipbuilding division since 2021, where she has overseen the U.S. Navy's amphibious assault and surface combatant ship programs, and the division's 11,000 shipbuilders. The two shipyards make HII the largest industrial employer in both Virginia and Mississippi.

Kari's leadership has steered Ingalls Shipbuilding into its next phase of growth, having secured serial production contracts for both the destroyer and amphibious ship programs. She is a tremendous leader and now brings her great energy and expertise to Newport News.

Under Wilkinson's leadership Ingalls Shipbuilding secured the recent \$9.6 billion multi-ship procurement contract for construction of three San Antonio-class (LPD 17) amphibious ships, and contract modification for the next America-class (LHA 6) large-deck amphibious ship.



HII CHRISTENS VIRGINIA-CLASS ATTACK SUBMARINE ARKANSAS (SSN 800)



Photo caption: HII christened Virginia-class submarine Arkansas (SSN 800) at the company's Newport News Shipbuilding (NNS) division Saturday, Dec. 7, 2024 (Photo by Chris Rose/HII).

Newport News Shipbuilding christened Virginia-class submarine Arkansas (SSN 800) on Saturday, Dec. 7, 2024.

The tradition of christening a naval vessel goes back centuries. Today, it has evolved into a ceremony that honors the individuality of the ship and the life ahead of her. During the christening ceremony, the ship's sponsor proclaims, "In the name of the United States I christen thee..." and shatters a ceremonial bottle of American sparkling wine against the bow of the new ship.

The ship's sponsors are the six women of the historic group known as the Little Rock Nine, the first African American students to attend all-white Central High School in Little Rock, Arkansas during desegregation. NNS honored all nine members during the ceremony.

The Little Rock Nine made history in 1957 with their response to the U.S. Supreme Court ruling in Brown v. Board of Education, declaring racial segregation in public schools unconstitutional. Faced with shouting mobs, threats of violence and hostile state leaders who blocked their way, the teenagers were escorted into the school by federal troops at the direction of President Dwight D. Eisenhower.

Arkansas is the 27th Virginia-class submarine and the 13th to be delivered by NNS.

NNS is one of only two shipyards capable of designing and building nuclear-powered submarines for the U.S. Navy. The advanced capabilities of *Virginia*-class submarines increase firepower, maneuverability and stealth over previous classes of submarines.



2025 CSA-8: THE IMPORTANCE OF IEP

The Integrated Enterprise Plan (IEP) kicked off the eighth annual Critical Supplier Assessment, formally known as "Wave", in January 2025. The NNS team along with other stakeholders (internal and external) are currently gathering information, mapping out on-site visits and preparing to evaluate suppliers overall readiness. The Critical Supplier Assessment-8 will conclude third quarter of 2025. The CSA-8 period will allow stakeholders to jointly evaluate readiness and engage with critical suppliers. Critical suppliers with noted deficiencies will work in parallel with IEP stakeholders to create a plan of actions and milestones (POAM). The Maritime Industrial Base (MIB) is currently overseeing the IEP program and the results gathered from the assessments are presented to our leaders in Congress. The IEP program is a high visibility initiative and we are looking forward to working with our suppliers to drive success and strengthen working relationships.

Suppliers identified as critical to CLB, VCS and CVN (New Construction) are assessed annually to evaluate their capacity, capability and readiness to meet current and future Shipbuilding demand.

What is a Critical Supplier

The list of suppliers is refreshed annually and selection criteria may include, but are not limited to:

Critical and Complex Material

Complex Process

Single-/Sole-Source

Construction Critical Path

SUBSAFE/Level I

Nuclear.



NEWPORT NEWS SHIPBUILDING INTERNATIONAL SUPPLIERS NETWORK (ISN) REQUIREMENTS

Subject: Action Required: Newport News Shipbuilding ISN Requirement

Dear Newport News Shipbuilding Contractor,

This is a final reminder to become subscribers to ISNetworld.

If you have an active direct / subcontracted Purchase Order (PO) with NNS in which contains a scope of work and level of risk to NNS (Production Work) on NNS owned / leased property, then your company is required to become EH&S qualified through ISN for future work

If your company is new to ISNetworld: There is an annual fee for this service, NNS believes the benefits to both parties will far exceed any associated costs. Please reach out to ISN Customer Service Contact Us | ISN to setup an account or Sign-Up Here. Sign Up | ISNetworld

If your company is a current subscriber to ISNetworld: There is no additional fee; however, please ensure your company has completed the below NNS requirements in your ISNetworld account:

- Company Profile
- Questionnaires

Health, Safety and Environmental (HSE) Environmental, Social and Governance (ESG)

- HSE Programs Desktop Review & Implementation Assessment
- Document Submittal: OSHA Forms and Experience Modifier

If you need further assistance, please reference the Help Center within your company's ISNetworld account or contact ISN Customer Service Team Contact US | ISN.

In order to be considered by NNS during the contractor selection process for future purchase orders or forthcoming work, your company's subscription must be in place and all required data must be posted before a Purchase Order is awarded.

Completion of these requirements will ensure your company's ability to work for NNS is not compromised. Thank you for your cooperation.



NEWPORT NEWS SHIPBUILDING ISN FAQs

Does this apply to current contractors?

Upon establishing a new Purchase Order (PO's) contract (4300 / 4500 / 4600 series) on or after 2/1/2025 that requires EH&S approval IAW Coded Notes S-1012, Contractor Management, will have an ISN EH&S requirement. All existing PO's will not have an ISN requirement.

Does this apply to new subcontractors we may need in the future?

Yes. Effective 2/1/2025, this requirement applies to all new subcontractors determined based on their scope of work and level of risk posed to NNS. This will be communicated during the onboarding and pre bid process, with the expectation of an ISNetworld account and acceptable grade prior to work being commenced.

Why am I as a contractor required to subscribe?

Contractor requirements are determined based on their scope of work and the level of risk posed to NNS. All contractors included in the communications have been identified through the implementation team's review. If a contractor determines they do not meet the requirements to participate or do not wish to enroll in ISN, the NNS POC should send an email to **safety@hii-nns.com** for determination.

What is the level of risk that would deem my contractor to require a subscription?

If the contractor is to perform production work on NNS-owned /- leased property, then the ISN requirement would be required. NNS's definition of production work is as follows; Operations including warranty work which involve hazards to personnel, this includes but is not limited to: construction, demolition, hot work, confined spaces, blasting, painting, material handling, crane operations, working with hazardous materials or equipment, control of hazardous energy, various production support functions, and other similar operations. NNS-owned /- leased property is anywhere inside the shipyard gates as well as any of our outside location.

How often does a contractor have to update their information?

Update frequency varies based on the type of information being requested:

Quarterly – Questionnaire

Annually – OSHA forms are submitted for the previous year at the beginning of each year, and EMR letters are resubmitted upon renewal or as required.

As Needed – Dashboard, contact information, work types, RAVS safety programs, training documents, online training and qualification records. These updates are dependent on regulations or NNS requirements.

Where/how the requirement is invoked?

This requirement can be found in the Contractor EH&S Resource Manual found on the HII Supplier Page.

How do we contact ISN?

Contractors – contact ISN Customer Service Team at (800) 976-1303, Contact Us | ISN Contact Us, or Chat



Exostar User(s) Clean-up

NNS Supplier Compliance is requesting <u>Organizational and Application Administrators</u> to review and validate the user(s) listed in the Supply Chain Platform and Information Manager applications in Exostar. Application Admins must periodically validate users; take time today to review all users to determine need for Supply Chain Platform. Users no longer needing the applications should have their access <u>revoked</u>. If a user is no longer with your company their account will need to be <u>deleted</u>.

Remove access to application

Login

Administration

Search for the users account

Select their User ID to open their account information

Under Application Settings, Application Access – In the action column select Delete on the application you wish to remove access

How to delete a user account

Login

Administration

Search for the users account

Select their User ID to open their account information

Under Application Settings, select the Delete User button

Please direct any questions to exostar@hii-nns.com.



Training Center Grows Next Generation of Defense Manufacturers

The Accelerated Training in Defense Manufacturing (ATDM) program, launched in 2021, has graduated more than 777 students from 45 states, Guam, Puerto Rico, and Australia. About 25% of participants are veterans, and the program boasts a 90% job placement rate within the defense industrial base.

"This facility helps address our immediate workforce needs," said Frederick Stefany, the Direct Reporting Program manager for the Maritime Industrial Base (MIB) Program. "It advances our efforts to restore our industrial base and ensure our industry partners have the skilled workforce they need to build and maintain the Navy's fleet."

The Navy's shipbuilding plans include the construction of Columbia-class and Virginia-class submarines and more than 10 different classes of surface ships, including aircraft carriers.

ATDM's intensive training program provides students with 600 hours of hands-on experience in one of five trades critical to maritime manufacturing: welding, CNC machining, additive manufacturing, quality assurance, and non-destructive testing. Training runs on three shifts, mirroring the 24/7 operations of the defense industry.

MIB Program leads the Navy's workforce development initiatives while advancing shipbuilding and repair capabilities through industrial base development, supply chain resilience, and advanced manufacturing technologies. With the U.S. manufacturing base having shrunk to a third of its size from 30 years ago, the program must overcome major challenges. One of these pressing challenges involves recruiting and training 140,000 new workers over the next decade for submarine production and sustainment, with an additional 110,000 workers needed for surface vessel construction and maintenance.

"The decline in American manufacturing has created a critical skills gap," said Erica Logan, Workforce Director for the MIB Program. "But we're not just filling jobs—we're rebuilding America's maritime manufacturing capability and offering meaningful careers for the next generation of workers. Every graduate represents another step toward restoring our nation's industrial strength."

The IALR campus hosts the National Training Center and another key MIB Program initiative: the Navy's Additive Manufacturing Center of Excellence. This co-location creates a hub for maritime manufacturing innovation.

For more information about ATDM and its programs, visit www.atdm.org.



Accelerated Training In Defense Manufacturing

Students Available for Hire: 03/14/2025

Additive Manufacturing: 4

CNC Machining: 18

NDT: Testing: 10

Welding: 22

Student resumes will be available to view on www.Buildsubmarines.com* and by request of the ATDM Industry Engagement & Outreach team.

*To view resumes, you must register your company for a profile on Buildsubmarines.com.

Program Information

- Accelerated training designed to prepare students for entry-level positions in the Defense Manufacturing industry.
- 600 hours of instruction, equivalent to a one-year certificate program at community college
- With input from the Maritime Industrial Base (MIB), the curriculum is designed to meet the needs of the industry and graduates receive industry-recognized certifications
- Program specific certifications aligned with national, industry-recognized, certifications and credentials.



Accelerated Training In Defense Manufacturing Certifications

Additive Manufacturing:

- Certified Associate in CAD for Mechanical Design- Autodesk
- Lean Six Sigma Yellow Belt
- HAAS Mill Operator HAAS Automation
- National Institute of Metal Working Skills (NIMS)
 CNC Mill Operator
- Milling: Programming, Setup, and Operation Lv.1

CNC Machining:

• HAAS Automation

HAAS Mill Operator

HAAS Lathe Operator

• National Institute of Metal Working Skills (NIMS)

CNC Mill Operator

Milling: Programming, Setup, and Operation Lv.1

CNC Lathe Operator

Turning: Programming, Setup, and Operation Lv.1

Non-Destructive Testing:

• Courses written in accordance with:

General Industry Standard NAS-410

ASNT SNT-TC-1A

ASNT CP-105

• Course content derived from:

ASNT NDT Handbooks

ASTM Standards

NDT Personnel qualification standards

Material Processing Handbooks

NAVSEA NDT related Standards

• Methods covered:

VT (Visual Testing)

PT (Dye Penetrant Testing)

MT (Magnetic Particle Testing)

UT (Ultrasonic Testing)

RT (Radiographic Testing)

• Courses meet or exceed required Level 1 and Level 2 classroom

hours

Accelerated Training In Defense Manufacturing Certifications

Quality Control (Metrology):

- Lean Six Sigma Yellow Belt
- National Institute of Metal Working Skills (NIMS)
 Materials and Safety
 Inspector
- Mitutoyo MCOSMOS C1 & C2

Welding:

• American Welding Society (AWS) D1.1

FCAW (2G, 3G, 4G)

GMAW (2G, 3G, 4G)

GTAW (2G, 3G, 4G)

SMAW (2G, 3G, 4G)

Please email **partners@atdm.org** if you are interested in receiving student resumes.

Karen Hardy, ATDM Assistant Director of Career Services Karen.Hardy@ialr.org | 434-766-6621

Dr. Corey Williams, ATDM Career Services Coordinator Corey.Williams@ialr.org | 434-766-6693

Rodrica Clark, ATDM Senior Support Specialist:

Rodrica.Clark@ialr.org | 434-766-6784

If you are interested in learning more about ATDM, please email Justin Scarce or Joel Nester.

Justin Scarce, ATDM Industry Engagement Manager

<u>Justin.Scarce@ialr.org</u> | 434-766-6779

Joel Nester, ATDM Industry Engagement Coordinator

<u>Joel.Nester@ialr.org</u> | 434-483-6739



Supplier Technical Assessment and Validation (STAV) Program

The Supplier Technical Assessment and Validation (STAV) group per forms in-depth Supplier Assessments, Technical Assessments, and Capability Assessments around current and future orders. From July 2024 through December 2024 the assessment team has performed a total of ten In-Depth Supplier Assessments, one Technical Assessment, and one Capability Assessment, identified 76 risks, and 48 significant weaknesses. These major findings are spread across multiple manufacturing and quality management, as illustrated in the graph, below. However, two areas continue to exhibit significant weakness: welding and NDT. A deep-dive into the NDT findings indicates that inspector qualification and performance evaluations are top concerns that the supply-base needs to address.

Of the NDT Specification Deviations/Violations, all of them were considered potentially material impacting and required bounding. 40% of these findings are issues invalidating the Qualification of personnel, and 35% are related to issues discovered during Technical Performance Evaluations (TPE). Examples of common issues are as follows;

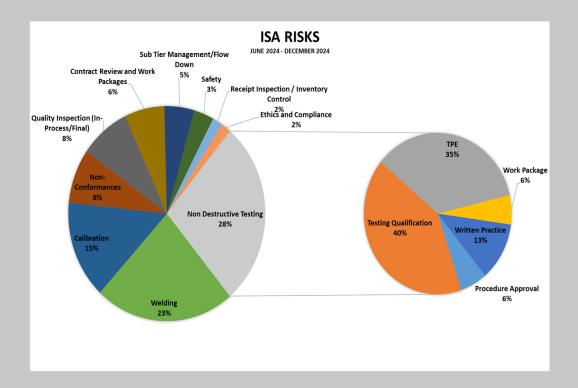
The Level III Examiner having not taken a Specific Exam that is created by the supplier.

The Level III Examiner being re-certified by points (commercial allowance) and not by exam (TP-271 requirement).

The Level III Examiner "Coaching" during the TPE by either correcting the Inspector or completely stopping the TPE once one error is made.

Level II Inspector records not containing required information (e.g. experience hours, education history, etc.) or being accessible for validation upon request.

Inspector's not having adequate knowledge of their procedures, and, therefore, performing the incorrect processes, e.g. penetrant dwell time.





Capital Solutions Survey for Suppliers

As a trusted supplier to Newport News Shipbuilding, we value the partnership we share and are always looking for ways to better serve and engage with our network. To support industry to invest in new infrastructure, process technologies, increased labor salaries, and operational efficiencies to meet historic shipbuilding demand, we're exploring the idea of offering resources and educational opportunities about available capital solutions and the potential benefits for businesses like yours. We would greatly appreciate your feedback & insight through the use of this brief survey:

Newport News Shipbuilding 2025 Supplier Survey



Supplier Ideas for Next Newsletter

We are looking for ideas for our next newsletter. What would you like to know or see. Please provide your ideas to E-mail address:

Aronya.Fuller@hii-nns.com



Send All News Articles to: Aronya.Fuller@hii-nns.com