

# Periscope and Flight Deck

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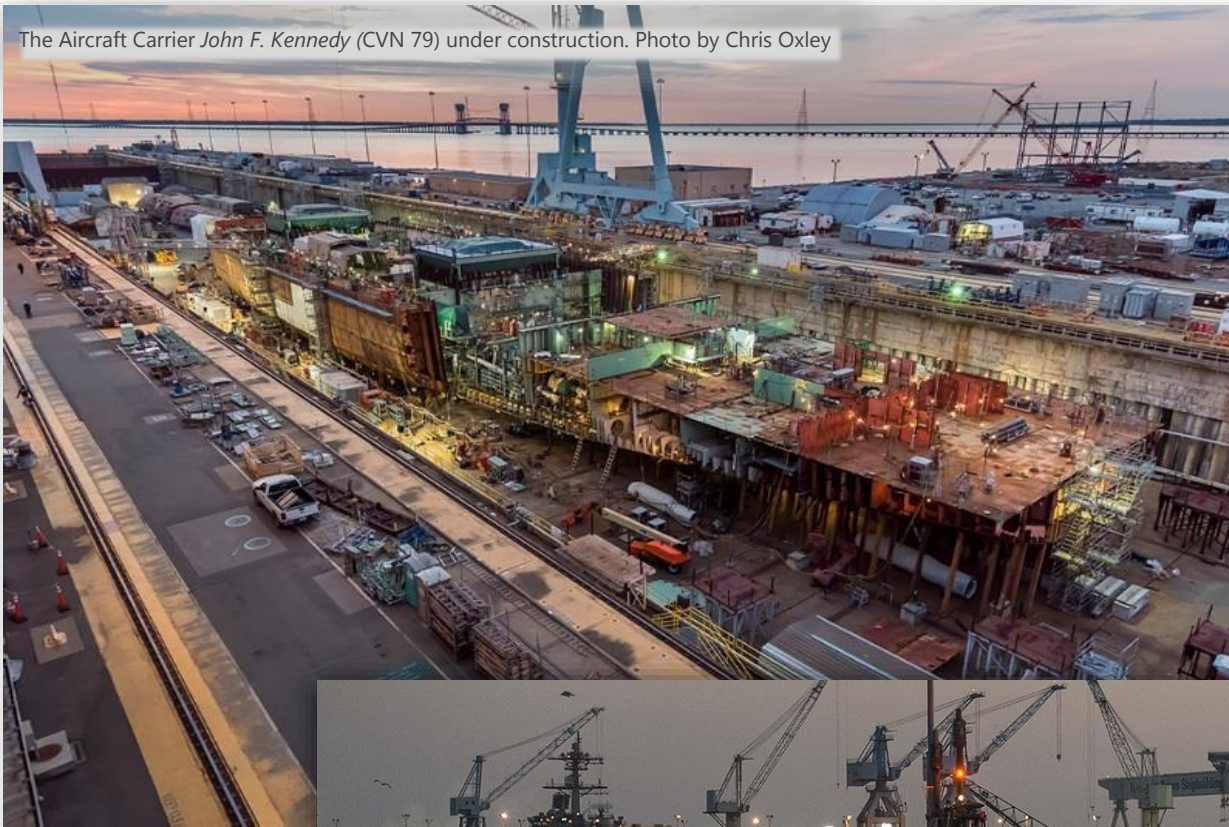


# Latest Activities @ Newport News Shipbuilding

Please click the links below to view the full article.

- [NNS Completed USS \*John Warner\* \(SSN 785\) Submarine Post-Shakedown Availability](#)
- [NNS Awarded \\$52 Million Modernization Contract for USS \*Harry S. Truman\* \(CVN 75\)](#)
- [NNS Awarded Planning Contract for USS \*Helena\* \(SSN 725\) Maintenance](#)
- [Huntington Ingalls Industries Awarded Planning Contract for USS \*Dwight D. Eisenhower\* \(CVN 69\)](#)

The Aircraft Carrier *John F. Kennedy* (CVN 79) under construction. Photo by Chris Oxley



USS *John Warner* (SSN 785) departs for sea trials. Photo by John Whalen

Cover page: USS *Dwight D. Eisenhower* (CVN 69)

## Free Shipping!

Reminder that NNS pays for the freight for shipments to NNS. We have preferred carriers that we have contracted. Information on all aspects of shipping material to NNS can be found in the NNS Freight Routing Guide at [http://supplier.huntingtoningalls.com/sourcing/res\\_shipping.html](http://supplier.huntingtoningalls.com/sourcing/res_shipping.html) . Non-approved freight providers should only be used when previously authorized by the NNS Traffic office. Reminder: All shipped material must be bar-coded. Information on the bar-coding can be found in the guide. The traffic office can be contacted at [NNSTrafficOffice@hii-nns.com](mailto:NNSTrafficOffice@hii-nns.com) . Please make sure that your shipping department has a copy of the NNS Freight Routing Guide.



USS John Warner (SSN 785) on sea trials. Photo by Chris Oxley

## Integrated Digital Shipbuilding - Supplier Interface and Collaboration

Newport News Shipbuilding (NNS) is seeking to revolutionize naval shipbuilding and maintenance services by exploiting digital technologies to improve cost, quality, and schedule. Integrated Digital Shipbuilding (iDS) is a major company initiative focused on integrating digital data into every aspect of the business. Our vision is to create a digitally connected shipyard with a mobile workforce empowered with easy and secure access to information. NNS has devoted significant resources to this program and set aggressive goals for implementation. The expectation is that CVN 80 and Ohio Class Replacement submarines will be drawing-less ships as NNS transitions into a Model Based Enterprise (3D modeling) rather than relying on 2D hard copy drawings. Current paper-based work packages will be converted to visual work instructions to show only relevant information for each specific job. Our iDS efforts to date have been concentrated on improving internal operations by focusing on the needs of our craftsmen.

The next logical step is to look at how to apply iDS to the thousands of suppliers providing material, components, and equipment needed to build aircraft carriers and submarines. Incorporating our supply base into the company's iDS strategy is necessary to achieve our goal of drawing independence and presents an opportunity to dramatically improve our material acquisition process. NNS' suppliers face many of the same challenges experienced by our craftsmen. These challenges include an overabundance of paperwork/instructions, complex technical requirements, and reliance on 2D build-to-print drawings.

Therefore, we seek to leverage iDS technology and process improvements to improve our external material procurement. Our initial focus will be in three key areas:

1. Simplify our Technical Ordering Data to make sure the requirements and instructions we provide are clear, concise, and unambiguous.
2. Establish secure communication to enable efficient two-way transmittal of digital information between NNS and suppliers.
3. Provide 3D design modeling data where applicable.

To be successful and maximize the efficiency of our interactions, we need our supplier's input and recommendations. The success of our supply base is critical to our success and ultimately the success of the Navy. As we define the future of our iDS Supplier Interface and Collaboration initiative, we want our suppliers to play a significant role in helping shape that vision. We will reach out to select suppliers to participate in pilot projects after the details are established. We look forward to collaborate with suppliers and together we will fully realize the benefits of iDS. Please contact us at [SupplierSuggestionBox@hii-nns.com](mailto:SupplierSuggestionBox@hii-nns.com) for any question regarding iDS.



USS Hampton (SSN 767). Photo by Navy

# Common Supplier Welding Oops!

## General deficiencies:

- Inadequate “**flow down**” of the requirements to personnel in charge of welding, who often do not have copies of, or are not familiar with applicable specifications. Sometimes, they are unaware of Appendix K (for CVN) or EB Standard Clauses 60-77 (for VCS).
- Suppliers are unaware of interpretations of specification requirements which have been invoked on NNS by Navy “clarification” letters or by withholding of qualification approvals. These de-facto requirements often differ between NNS and EB **SUPSHIP**.
- Missing attributes from **procedures** include certification statement, the designated NDT Level III Examiners’ approval “wording” and “signature”, and detailed acceptance criteria in the applicable NDT procedure (i.e., procedure “references” only the specification number and paragraph).
- Inadequate **calibration** of NDT equipment to the six month calibration cycle.
- Personnel do not possess all the required VT **gages** (e.g., Fillet Weld Size, Undercut, Weld Reinforcement, Pipe Socket Weld, six inch scale, etc.) to perform the required VT inspection measurements.

## NDT personnel performance deficiencies:

### Visual

- Inadequate use of adequate lighting and inadequate use of fillet weld gages
- Missing undercut gages
- Utilize “calibrated eyeballs and fingernails” vice utilization of calibrated and/or verified VT gages
- Inadequate measurement of “T” X “1-3/4 T” dimension on pipe socket welds

### Liquid Penetrant

- Improper pre-cleaning, inadequate penetrant coverage of inspection surface area.
- Removal of excess penetrant that includes using dirty or contaminated rags to remove penetrant and excessive cleaner on rag or flushing surface directly with the cleaner.
- Application of developer; too heavy, too thin or missing on surfaces.
- Meeting the required time frequencies (i.e., minimum and maximum times) as pertaining to pre-cleaning, application of penetrant, removal of penetrant, and application of developer.
- PT “Kits” are not adequately kept cleaned and the applicable PT material identification numbers are not adequately traceable to approve cleaner, penetrant and developer material numbers, including expiration dates.

### Magnetic Particle

- Inadequate “backspacing” (i.e., one inch overlap) of the MT Yoke legs and inadequate side coverage when utilizing the MT Yoke.

*Please see resources (checklists, NAVWELD and NAVNDT) we’ve developed to help suppliers create NDT and welding procedures in the link below.*

[https://supplier.huntingtoningalls.com/sourcing/document\\_submittal\\_checklists.html](https://supplier.huntingtoningalls.com/sourcing/document_submittal_checklists.html)

Please email the **Supplier Engineering Advocate (SEA)** group for assistance in resolving material engineering issues at [SupplEngAdvocate@hii-nns.com](mailto:SupplEngAdvocate@hii-nns.com) More SEA information can be found in the link below. We look forward to working with suppliers!

[http://supplier.huntingtoningalls.com/sourcing/docs/Document\\_Submittal\\_Checklists/SEA\\_Contact\\_Info\\_MAR\\_2016.docx](http://supplier.huntingtoningalls.com/sourcing/docs/Document_Submittal_Checklists/SEA_Contact_Info_MAR_2016.docx)

### General Contact Information

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