

Enabling Our Future

Since 2012, the Groton and Quonset shipyards have been evaluating existing shipbuilding capabilities and defining the gaps associated with moving into a two-plus-one-year production rate of the Virginia Variant (VPM) and Columbia Class (CLB) ships. The Facilities Master Plan (FMP) team and the Facilities team, along with multiple Electric Boat stakeholders, have progressed through numerous integrated concepts taking into consideration all aspects of ship construction: fabrication, transportation, material handling, final assembly test and launch. The plan resulted in the detail design and construction of several infrastructure projects totaling over \$1.8B in capital improvements across the Quonset Point and Groton Facilities. I would like to highlight the projects and process changes as they relate to transportation, final assembly, test and launch of the Columbia Class submarine.

Our new ocean transport barge, HOLLAND, will move Columbia and VPM modules between the Quonset Point, Newport News and Groton Shipyards. The HOLLAND was delivered to the Groton Shipyard in November 2021 and has been undergoing testing and training and grooming efforts to support its upcoming first use in November of this year. The new barge has a payload capacity of 5500 tons and will conduct load and off-load operations differently than we have operated in the past with our legacy, Sea Shuttle. The HOLLAND is a self-ballasting barge, meaning for every ton of ship module weight that rolls on/off the barge, a ton of water is pumped on/off simultaneously, unlike the Sea Shuttle which jacks up on underwater pads and becomes a rigid platform. This change was driven primarily by capacity limitations with jacking style barges. When modules arrive in Groton via the HOLLAND, they will be off loaded using new 60-ton-per-axle, self-propelled, modular transporters (SPMT). The transporters purchased in the program are an upgrade in capacity from our existing 40-ton-per-axle units.

Final assembly and test of the transported Columbia modules will take place in our new South Yard Assembly Building (SYAB) which is due to complete in February of 2023. The SYAB was designed and developed around the CLB build strategy and many improvements and lessons learned have been applied from the evolution of Building 260. When Building 260 was constructed in the 1970's, it was "purpose built" to support the Trident Program and predated the modular construction process. Since then, many improvements have been made to Building 260 to

maximize Virginia Class modular construction production. These improvements, as well others, were integrated into the SYAB from the ground up. The SYABs overall dimensions are 624 feet x 313 feet, it contains three heated bays - two final assembly bays and one module build bay in the middle. The SYAB was designed with uniform floor-load capacity capable of the highest loads associated with CLB module construction. Adjacent to each final assembly bay, there are heated and cooled office spaces on two mezzanines with additional levels for production equipment. The SYAB has a clear span across all bays and has two 100-ton cranes and one 170-ton crane.

Additionally, there are two 40-ton cranes to support the mezzanine levels. There is an attached utility building that will provide support services, including a land based steam system, a pure water facility, incoming power distribution center and compressed air generation and distribution.

Roll out and launch of the CLB submarine from the SYAB will be significantly different from past operations. The SYAB has been arranged to allow straight out-of-the-bay roll out; unlike Building 260, which requires up to two direction changes. This design allows us to eliminate the cross-over rails, as seen in Building 260, which is a significant savings on building maintenance. The SYAB includes newly designed and constructed transfer cars with advanced controls and a 400-ton capacity - allowing us to carry the Columbia loads with only two cars per strongback.

Also, unlike the Building 260 graving dock, CLB will roll out and launch using the new floating dry dock ATLAS. ATLAS is under construction and due to arrive at the Groton Shipyard in August of 2024. ATLAS is similar to the ocean transport barge, HOLLAND, in that it is self-ballasting to compensate for weight as the CLB rolls onto the dock. The dock will travel along the south face of the SYAB and can align to either of the assembly bays.

ATLAS will translate west of the SYAB to a sinking basin that will require an approximately 900,000 cubic yard dredge scheduled to occur in the 2024-2025 dredge season.

We look forward to the turnover, training and first use to the Electric Boat workforce (beginning the 1st quarter of 2023) and seeing the world's finest shipbuilder's breathe life into the Columbia Class submarine - ensuring our nation's defense for decades to come.

Devin Xenelis

Director of Real Estate & Project Planning



Continuous Improvement

"We cannot solve our problems with the same thinking we used when we created them. " *-Albert Einstein*

8000 Problem Solvers

There are right around 8000 employees working at the Quonset Point facility. We work in different areas, trades and specializations. We come from a range of backgrounds. Some of us have decades of experience and others may only have days. What we all have in common is being problem solvers. Without doubt, every single one of us has solved a litany of problems throughout our lives and careers.



Think about that for a minute. 8000 people with the ability to positively affect our business every day. That is a force to be reckoned with. Embracing this force is at the core of EB's continuous improvement culture. This is because all of us, each an expert in our respective field, are capable of improving the way we work.

The average American spends a staggering 90,000 hours or 13 years of their life at their place of occupation. We should strive to make the most of our time here and provide ourselves and our fellow shipbuilders the greatest opportunity for success.

You know that frustrating process you may be going through boat after boat, every week, or even every day? Frustration at work is often the perception of a problem. We must challenge the need for such frustrations by working together to solve the problems we encounter. This won't always come easy. However, by not accepting the continuity of that frustration we will reap the rewards of our efforts for thousands of hours to come.

Interesting EB Trivia:

What was the name of the first Submarine built entirely in Groton for the US Navy?



Answer: Cuttlefish

Have a process improvement idea, or simply just want a board to bounce ideas off? Discuss your idea with your supervisor. If additional resources are required for implementation, your supervisor can contact Process Engineering.

New Build Authority and Deckplate Assistance Resource Page

A new [Build Authority \(BA\) and Deckplate Assistance Resource Page](#) is now available and provides Build Authority and Deckplate Stakeholders access to high-level Integrated Product Development Environment (IPDE) guidance materials, training information, and resources specific to the implementation of IPDE tools and processes at our Groton and Quonset Point Shipyards.

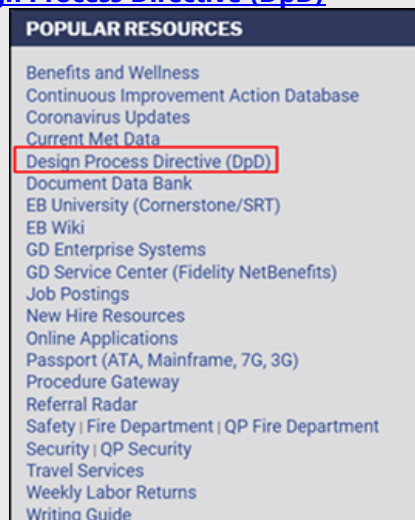


The new resource page contains IPDE BA and Deckplate specific information including:

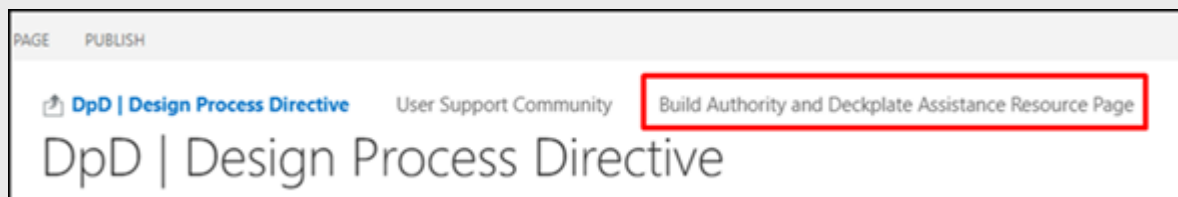
- BA/Deckplate IPDE Communications, News, and Events
- Deckplate Resources
- IPDE General Overview Material
- IPDE Deckplate Supervisors Toolkit
- IPDE Deckplate Tools and Support Information
- Tablet and Cart usage expectations, maintenance and guidance and self-help troubleshooting information
- Deckplate Specific IPDE Frequently Asked Questions and Talking Points
- Deckplate Training Information (Cornerstone Courses, Training Resources, and IPDE Vision Videos)
- Super Module 5 (SM5) Deckplate Project Page and Team Points of Contact
- **COMING SOON:** Users will have the ability to submit a comment / feedback

To access the resource page, please follow the below navigation steps:

[Homeport](#) > [Popular Resources](#) > [Design Process Directive \(DpD\)](#)



Once in the DpD, click "[Build Authority \(BA\) and Deckplate Assistance Resource Page](#)" link at the top of the page



For questions please contact [Chris Bragg](#) or [Stephanie Rice](#).



- Classic, comfortable EB Logo sweatpants starting at \$32
- GDEB 100% cotton long sleeve t-shirt available now!
- Cool, windy days are no match for our EB logo windshirt!
- Going fast! SSN 571 Nautilus Coins!

Hours of Operation

Bldg 4: 9:30am to 4pm
 Bldg 104: 8am to 4pm
 New London: 7am to 2pm (T&W)
 7am to 1:30pm (Th)



Weekly Safety Briefing
 WK - 41 10/09/22 – 10/15/22

GENERAL DYNAMICS
Electric Boat



JOB HAZARD ANALYSIS

Basic steps in conducting a JHA are:

1. Conduct a Job Hazard Analysis at the beginning of the shift and throughout the job
2. Break the job down into a sequence of steps
3. Identify potential hazards and unsafe conditions
4. Determine preventive measures to overcome these hazards



IMMINENT DANGER -
 Secure the area and report the unsafe condition to your supervisor

GENERAL DYNAMICS
Electric Boat

How do I identify potential hazards?

- ☑ Can any body parts get caught in or between objects?
- ☑ Do tools, machines, or equipment present any hazards?
- ☑ Can the worker make harmful contact with moving objects or rotating equipment?
- ☑ Can the worker slip, trip or fall?
- ☑ Can the worker suffer a strain from lifting, pushing, or pulling?
- ☑ Is the worker exposed to extreme heat or cold?
- ☑ Is excessive noise or vibration a problem?
- ☑ Is there a danger from falling objects?
- ☑ Is lighting a problem?
- ☑ Can weather conditions affect safety?
- ☑ Can contact be made with hot, toxic, or caustic substances?
- ☑ Are there harmful dust, fumes, mist or vapors that will be produced from the task?
- ☑ Is the work area clean and organized?

Read, Ask and Understand, before starting a job.

EBP 02852: Electric Boat Corporation has established Occupational Health and Safety as the Company's Number One Priority.

Flu Shots and COVID Bivalent Boosters Available Through EB Family Wellness Center & Pharmacy

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www.EBLanding.com

DIRECTORY

When calling from an outside line, remember to dial 433 and the last four digits of the numbers below.

EMERGENCY	3-3333
Ambulance.....	3-3344
Fire Department.....	3-3617
EEO Officer.....	3-4167
Benefits.....	3-4201
Employment.....	3-7386
Environmental.....	3-2791
Ethics Hotline.....	1-800-433-8442
Payroll.....	3-3702
Safety.....	3-2811
Security.....	3-5530
Van Tran.....	3-7603
Timekeeping.....	3-6604
Training.....	3-0591
Yard Hospital.....	3-3470
Rad Con.....	3-5019