SIB

GENERAL DYNAMICS
Electric Boat

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In This Issue...

Please let us know what you think about this newsletter!

Send questions about any article, content suggestions and comments to Supply Chain Communications Team email EBSIB@gdeb.com or supplychaincomms@gdeb.com.

LETTER TO THE SUPPLIERS

Dear Valued Supplier,

On August 6th and 7th, 2025, Electric Boat Non-Destructive Testing (NDT) Engineering hosted an in-person conference for our supply base with a focus on Radiographic Standard Shooting Sketches (RSSS). The purpose of this conference was to provide support and help improve supplier-casting manufacturing in the midst of increases in shipbuilding demand.

The two-day conference focused on first time quality and contractual compliance, the end-to-end casting process, areas of improvement for NDT RSSS submissions, and Examiner roles and responsibilities in regards to their NDT program. The conference drew 36 representatives across 22 of Electric Boat's suppliers and their sub-tier suppliers. Attendees of the conference were very receptive to the in-person dynamic and the content that was presented and asked many questions that prompted fruitful discussions among the attendees and presenters. The open dialogue during the conference allowed for clarification on requirements and for content within the presentation to be expanded upon for additional clarity. The Electric Boat NDT Engineering team and the attendees were also able to capitalize on the opportunity to highlight and articulate case studies with examples of the challenges that are being faced in the quality of the Radiographic Test (RT) techniques being submitted to Electric Boat. Based on the feedback received during and after the conference, the Electric Boat NDT Engineering team has elected to host another in-person conference on the same topic for those who were not able to attend. Electric Boat strongly encourages any suppliers involved in castings and/or the associated radiography of castings to attend this next conference scheduled for November 12th and 13th in Groton, Connecticut.

This conference is one example of the ways Electric Boat Welding and NDT Engineering has continuously worked to provide greater support to the supply base. Other steps the team has taken include conducting In-depth Supplier Assessments, distributing supplier bulletins, hosting virtual supplier conferences, virtual lunch and learn sessions, and now returning to hosting in-person conferences. This continuous effort aids Electric Boat in identifying areas where both Electric Boat and the Supply base can improve together to construct and deliver quality submarines to protect our nation and bring sailors home safely.

Enjoy the upcoming holiday season and thanks for continuing to deliver the advantage that protects our sailors, our families, and our freedom!

Sincerely,

Electric Boat Non-Destructive Testing Engineering

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Best Practices

Problem Resolution Corner: Bounding

This portion of the *Supplier Information Bulletin* (SIB) has been reserved to discuss topics related to problem resolution, such as the basics of Electric Boat's SCAR process, useful quality tools, common misconceptions, lessons learned, and responses to supplier questions. *Remember, this is your corner!* Let us know what problem resolution tips would be helpful to your company by writing to supplychaincomms@gdeb.com with the subject line "Problem Resolution Corner."

This article continues the series by providing helpful tips while bounding issues documented in Supplier Corrective Action Reports (SCARs) or Letters of Advisement (LOAs). Additional bounding information specific to Non-Destructive Test (NDT) can be found in this NDT Supplier Bulletin.

Proper bounding of problems is crucial for your company, Electric Boat, and the NAVY! Bounding is the process of defining the scope of the material impacted by the problem. In order to say that bounding is complete, all potentially impacted material must be identified. It is not unusual for the bounding to change as the investigation develops and additional information is acquired. As part of initial bounding, where-else questions need to be asked for each problem statement and root cause. The initial bounding will likely include suspect populations identified by where-else questions. Bounding may be an iterative process as assumptions are validated and potentially refuted. Since new information is obtained throughout the investigation, the scope of a non-conforming condition may increase beyond the initial bounding identified.

Electric Boat expects your company to effectively bound problems – whether the problem is identified by internal or external audits, on an LOA, on a SCAR, or elsewhere by other customers. These bounding expectations are communicated in various ways, including Electric Boat Specification 2678 and the SCAR response template. To bound a problem, Electric Boat recommends following three rules:

1. Follow the facts.
    - Identify the issue: The problem needs to be clearly identified including its characteristics and potential impacts.

2. If you're going to collect data, know what you're going to do with it.
    - Once defined, gather all relevant data including frequency of occurrence, affected components, included employees, and work centers.
    - The methodology of determining the impacted teams may evolve as you work through the process. Ensure that new information is validated prior to inclusion and that potential additional areas are investigated.
    - Data analysis: Review the results of the collected data to understand how many items are impacted, how long the condition existed for, and which other items share resources.

3. Re-inspections should be based on facts.
    - Define the bounds: Upper bounds represent the worst case scenario while the lower bound represents the minimum, known impact of the issue. Left hand bounding captures the start of the problem while right hand bounding captures the moment all issues are resolved.

There are numerous effective root cause analysis methodologies that will provide a suitable starting point for bounding. These include SIPOC Diagrams (Suppliers, Inputs, Process, Outputs, and Customers), Fishbone/Ishikawa Diagram, 5 Whys Analysis, FMEA (Failure Modes and Effects Analysis), Pareto Charts and more. If you are unfamiliar with any of these, ask your Supplier Quality Engineer for a demonstration.

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Best Practices

Problem Resolution Corner: Bounding (continued)

Without effectively bounding and containing a problem, your company may be delivering nonconforming material. If a systemic problem has been discovered, material produced under the deficient system may be considered nonconforming and may require approval by Electric Boat prior to delivery. Nonconformances are not limited to fit, form, or function. Material produced in noncompliance to technical requirements such as welding or NDT, regardless of physical impact to the material, is considered nonconforming. You should work with your Electric Boat team to communicate your bounding actions and results to understand how to avoid delivering nonconforming material and rejected deliveries. Please be reminded that an LOA is required if previously delivered material is discovered to be nonconforming.

ISO 9001:2015 captures bounding actions in section 8.7, Control of Nonconforming Outputs. The organization shall ensure that outputs that do not conform to their requirements are identified and controlled to prevent their unintended use or delivery. Bounding actions captured in section 8.7.1.b include: segregation, containment, and return or suspension of provision of products and services.

Following the above approaches leads to focused based problem solving; by understanding the scope of the issue, teams can prioritize efforts on the most critical areas for improvement. This leads to efficient resource allocation, improved decision making, and better risk management.

Your Electric Boat team is here to help! If you encounter hurdles or otherwise get stuck while trying to properly bound an issue, reach out. Your Purchasing and Supplier Quality contacts are able to assist and point you in the right direction.

Is There an Article About….?

The most recent issue of the *Supplier Information Bulletin* highlighted the addition of article topics to the *Previous Supplier Information Bulletins* page of gdeb.com.

While it is our expectation that every article within an issue of the *Supplier Information Bulletin* contains important information to help our supply base meet Electric Boat requirements or provide awareness about available resources, the Electric Boat Supply Chain Communications team are linking a few articles and bulletins that we believe will increase interest in other available content:

- Electric Boat Corporation Specification 2678 (EB-2678) requirements from earlier this year as nearly every Electric Boat Purchase Order has EB-2678 invoked.
- *The Importance of Calibration* article from 2024 discusses aspects of a healthy calibration program.
- The Electric Boat Non-Destructive Test Engineering team recommend their bulletins from April and May 2024, SNB-0012 and SNB-0013 as part of getting acquainted with the *Supplier NDT Bulletins* page on gdeb.com. There are currently 26 bulletins that provide valuable information to support your NDT program.
- Electric Boat Welding Engineering currently have 42 bulletins available on the *Supplier Welding Bulletins* page of gdeb.com and have been presenting Lunch and Learn programs since June 2022.

Take a moment to look back at previous issues and feel free to contact us at supplychaincomms@gdeb.com with article topics that you would like to see in a future issue.

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Supplier Engagement

Rising Tides CT Event Brings Together Suppliers

From Electric Boat Workforce Development,

On August 7th, 2025, General Dynamics Electric Boat, the Maritime Industrial Base, BlueForge Alliance, and the CT Office of Workforce Strategy jointly hosted Rising Tides CT, an engaging new event that united over 100 suppliers and resource partners from state, local, and federal organizations. This collaborative gathering focused on enhancing relationships, sharing valuable resources, and expanding professional networks.

A special thank you to U.S. Representative Joe Courtney (CT-2) for his attendance and unwavering support for our workforce and supplier community. His leadership and advocacy are crucial in fortifying the region's maritime industry.

We extend sincere appreciation to our esteemed guests and partners who contributed their insights at the event:

- Sean Morrone - Manager of Operations Hiring and Community Engagement, GDEB
- Lieutenant Commander (LCDR) Joelle Schmitz - U.S. Navy
- Kelli-Marie Vallieres, PhD - State of CT Chief Workforce Officer
- Michelle Fuhrman - Connecticut Center for Advanced Technology (CCAT)
- Denise Orsini - Supplier Development Group Manager, GDEB
- Cody Jones - Senior Cyber Security Manager, Cybersecurity Maturity Model Certification (CMMC)
- Josh Cramer - Associate Vice President, Workforce Development, BlueForge Alliance

We are grateful for the partnerships and meaningful conversations that emerged during this event. We eagerly anticipate continuing our efforts on a national scale to support the workforce needs of all Maritime Industrial Base Suppliers as we navigate the path ahead.

Pictured:

U.S. Rep. Joe Courtney, LCDR Joelle Schmitz and attendees from the Maritime Industrial Base, BlueForge Alliance, Electric Boat, and Connecticut Suppliers.

Photo:

Electric Boat Workforce Development

Supplier Resources

Advancing Suppliers. Strengthening the Fleet.

CONNECTICUT CENTER FOR ADVANCED TECHNOLOGY

As Navy demand grows, Connecticut Center for Advanced Technology (CCAT) is here to help manufacturers throughout the Northeast and beyond to improve efficiency, reduce costs, and scale with confidence. As a designated and trusted partner to the Maritime Industrial Base Program, CCAT provides suppliers across the Navy's supply chain with free or subsidized services to adopt advanced technologies and deliver with confidence.

Advancing maritime defense takes more than new tools - it takes an integrated approach that combines training, workflows, and adoption strategies. By aligning implementation teams with the right technologies, we strengthen resilience, build momentum, and accelerate capacity across the maritime industrial base.

Representatives from the Maritime Industrial Base and General Dynamics Electric Boat at CCAT's Additive Workflows Lab, East Hartford, Connecticut

Advancing Manufacturers' Operations

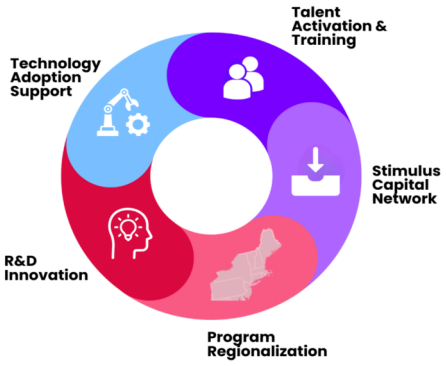
CCAT is an applied technology center dedicated to helping suppliers adopt advanced manufacturing solutions and achieve measurable results. CCAT works side by side with manufacturers to:

- **Optimize operations** with assessments, recommendations, validation, and integration support
- **Improve efficiency and quality** with automated workflows for design, manufacturing, and inspection
- **Upskill your workforce** with hands-on, technical training in additive and digital manufacturing, machining optimization, model-based design, and non-destructive testing
- **Reduce costs** with access to funding programs to support training and technology purchases

An Integrated, End-to-End Approach

CCAT's supplier-centric integrated model combines technology adoption, workforce training, funding, and collaborative innovation and R&D. This approach helps suppliers strengthen operations, raise quality, reduce costs, and build resilience across the supply chain.

Contact **Michelle Scerbin at** mscerbin@ccat.us to explore training, funding, and technology tailored to your needs.



Supplier Resources

Building Skills, Securing Futures: Why Suppliers Must Invest in Education

The strength of America's maritime industrial base — and by extension, our national security — depends on a skilled, motivated, and innovative workforce. The U.S. Navy's Maritime Industrial Base (MIB) Program partners with schools, educators, and suppliers nationwide to ensure the next generation is ready to meet that challenge.

By working together through collaboration, mentorship, and partnership, suppliers and educators can spark student interest in maritime careers, strengthen the workforce, and foster community pride. This is not just good citizenship — it's a business and a national defense imperative.

Inspiring Students, Building Pathways

The MIB Program integrates advanced manufacturing and shipbuilding career awareness throughout a student's K–12 journey, making careers like welding, machining, engineering, additive manufacturing and much more inspiring and accessible to students across America.

- Career Literacy Resources – At BuildSubmarines.com/education, lesson plans, videos, and activity kits connect STEM learning to naval defense. Tools like Learning Blade's *Beneath the Waves* module and the STEM+M course help students explore maritime pathways.
- Hands-On Experiences – Programs such as *Production Instruction* (welding and machining kits) and *Boats for Explorers* (Sea Perch robotics) let students work with real materials, drawings, and designs.

The Supplier's Role

As a supplier, you are at the heart of this mission. By engaging with education, you will:

- Secure the Workforce – Guest speaking, tours, and mentorship introduce students to careers they may not otherwise consider, creating a strong local hiring pipeline.
- Strengthen the Industrial Base – Curriculum input, equipment donations, and apprenticeships align classroom learning with industry needs, improving productivity and readiness.
- Enhance Community Ties – Supporting schools demonstrates civic commitment, builds goodwill, and attracts future talent.
- Drive Innovation – Mentorship fosters fresh thinking, cross-generational collaboration, and stronger leadership within companies.

Support National Security – Every submarine, ship, and platform depend on a resilient industrial base backed by a skilled workforce.

Finding Your Teacher Champion: Unlocking Classroom Connections

Educators are the bridge between today's classrooms and tomorrow's workforce. By engaging teachers, suppliers extend their impact from a few students to entire classrooms year after year. Through programs like the Battelle Teacher Academy, the MIB Program connects educators with suppliers and advanced manufacturing, giving them real-world knowledge to share with students.

Suppliers can support teachers by hosting facility tours, serving on curriculum boards, offering guest lectures, donating resources, or providing externships. These partnerships equip educators to bring back authentic insights and career inspiration, ensuring students are prepared, motivated, and excited about maritime careers.

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Supplier Resources

Invest in Education (continued)

A National Impact

In all 50 states, the MIB Program and its supplier network are addressing the urgent need for over 250,000 skilled workers in the coming decade. Through K–12 outreach, educator development, and supplier partnerships, we are building a pipeline that ensures America's maritime workforce remains resilient, innovative, and mission-ready.

Take Action Today

Suppliers: the future of our industry — and our nation's security — depends on you. Visit BuildSubmarines.com/education to access resources, lesson plans, and outreach tools that make it easy to start a school partnership.

For more information or assistance, contact Dr. Carrie Curtis, Education Lead for the MIB Program Workforce Development, at usn.ncr.drpm-mib.workforce@us.navy.mil. Together, we can build skills, shape futures, and secure America's maritime strength.

PCU Wisconsin (SSBN 827) Keel Laying

From Electric Boat Communications,

On August 27, the keel laying ceremony for the submarine Wisconsin (SSBN 827) took place at the General Dynamics Electric Boat Quonset Point facility in North Kingstown, Rhode Island. The event commemorates that ceremonial birth of the ship during which the ship's sponsor welds her initials onto a plate that will later be affixed to the submarine.

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The Wisconsin is the second ship in the new Columbia-class of ballistic missile submarines (SSBNs) being built for the U.S. Navy by Electric Boat.

The keel laying ceremony occurred on her "hull number date," August 27 (8/27). The governor of Wisconsin made a proclamation declaring August 27th "USS Wisconsin (SSBN 827) Keel Laying Day." Construction of the Wisconsin is under way at Electric Boat's Quonset Point facility with the support of more than 3,000 suppliers from around the country, including principal subcontractor Newport News Shipbuilding, and 300 suppliers from Wisconsin.

Electric Boat President Mark Rayha and PCU Wisconsin's Ship Sponsor Dr. Kelly Geurts
Photo: EB Communications