

RFI: Submarine and Defense Industrial Base Manufacturing Technology Improvement Opportunities

RFI Title:	BFA-RFI-23-001 - Submarine and Defense Industrial Base Manufacturing Technology Improvement Opportunities
Release Date:	8/25/23
Due Date:	10/15/23
Purpose:	Identify technology-based needs and opportunities to enhance the capabilities of suppliers in the SIB and DIB.
Audience:	<ul style="list-style-type: none">• Current SIB / DIB suppliers• Prospective suppliers in adjacent markets• Relevant technology providers

REQUEST FOR INFORMATION/SOURCES SOUGHT (RFI) BFA/SIB

RFI/Sources Sought Announcement

BFA-RFI-23-001 - Submarine and Defense Industrial Base Manufacturing Technology Improvement Opportunities

APPLICABLE DATES

Original Posting: 25 AUGUST 2023

Original Response Deadline: 15 OCTOBER 2023 by 5pm CDT

1 DISCLOSURE

This is a Request for Information (RFI) notice only and is issued in accordance with 52.215-3. This is not a Request for Proposals (RFP) and a formal solicitation is not available at this time. This request does not constitute a commitment by BlueForge Alliance or the U.S. Government to issue an RFP, contract, or order.

This RFI is for informational planning purposes and is not to be construed as a commitment by BlueForge Alliance or the Government for the actual procurement of any items or services. Neither BlueForge Alliance or the Government will pay for any effort expended or any material provided in response to this RFI. All costs associated with responding to this RFI are solely at the responding party's expense.

Respondents are solely responsible for properly marking and clearly identifying any proprietary information or trade secrets contained within their response. BlueForge Alliance and the Government will not be liable for, or pay any consequential damages stemming from, the release of any proprietary information not properly marked and clearly identified.

Proprietary information received in response to this RFI will be safeguarded and handled in accordance with applicable Government regulations. Proprietary information received should be UNCLASSIFIED. Responses to this RFI are not offers and will not be accepted by BlueForge Alliance or the Government to form a binding contract or agreement, nor will BlueForge Alliance or the Government be obligated to pursue any particular acquisition strategy or alternative because of responses to this RFI.

Responses to the RFI will not be returned. No party will be excluded from participating in any future solicitation, should one be issued, because that party did not respond to this RFI. Additionally, no party will be bound by their responses to this RFI in forthcoming solicitations, should a solicitation be issued.

2 BACKGROUND

BlueForge Alliance (BFA) is a registered not-for-profit organization formed to support the U.S. Navy's Submarine Industrial Base (SIB) by focusing on the urgent technology and workforce needs to build and sustain America's next generation of undersea platforms. BFA partners with the Navy and members of its more than 16,000 suppliers in support of the ambitious goal to build three nuclear-powered submarines (one Columbia-class and two Virginia-class) each year for the next decade. BFA serves as a convening, technical, and contracting partner, bringing together the best resources in the nation in support of the journey to recapitalize this nation's sea-based deterrent and warfighting capabilities.

3 CURRENT ENVIRONMENT

As the conditions of threats and warfare have continued to evolve so has the shape of the defense industry. Decades of deindustrialization in the United States has left our Nation vulnerable, and now is the time to find solutions to secure our nation's supply chain and security.

Rapid expansion of Navy shipbuilding activities has placed an increased burden on U.S. manufacturing capacity, particularly in related manufacturing supply chains. This need is particularly evident as manufacturers scale up to satisfy production requirements for the 1+2 (1 Columbia Class + 2 Virginia Class) submarine production target. With manufacturing infrastructure and skilled workforce capacity at historic lows, technology-based solutions offer potential to narrow the gap between desired production outputs and current levels of production. Solutions that offer production output increases of more than 50% will be of particular interest.

When considering technology-based opportunities, it must be acknowledged that there are some unique practical constraints on SIB / DIB manufacturing. For example, most designs were created based on mature processes at the time of platform design and contracting, which may be several decades ago. Similarly, governing policies and procedures for qualification and certification were also based on industry best practices from the same period. Solutions that can be applied to current component designs and that can meet existing manufacturing and inspection standards, without modification, are preferred. Though, in rare cases where extraordinary productivity improvements are expected, component redesign might be considered.

It must also be noted that shipbuilding production is measured in single-digit units per year. Total production volumes for most components and assemblies will be proportionally low, with complete orders spread out over a decade or more. With those low production volumes, traditional automation strategies are seldom advantageous. Technology solutions that offer substantial benefits for one-off and low-volume production applications are of specific interest.

The findings of this request will inform possible future investments to enhance proliferation of impactful technologies into the SIB through targeted programs, which may include: technology adoption / deployment assistance for current and prospective SIB suppliers, technology development initiatives to support evolution of technologies to better meet the needs of SIB manufacturing, and workforce training initiatives to ensure that SIB suppliers have access to adequate and appropriately trained workforce resources. This RFI is intended to give voice to perspectives from critical stakeholders. These include current SIB/DIB suppliers, whose needs, challenges, and opportunities for technology adoption must be clearly understood. It also includes prospective manufacturing suppliers who may wish to expand their customer base to include SIB/DIB production and whose commercial production experience may show gaps between best practices in current SIB/DIB production relative to commercial applications. Finally, it should include perspectives from technology providers whose offerings may solve, in whole or in part, identified challenges for the SIB/DIB manufacturing community.

Respondents to this RFI who agree to follow-on contact may be contacted with further opportunities to share their expertise and with information regarding possible follow-on opportunities (RFP, RFQ, etc.) that may be of interest.

4 AREAS OF FOCUS

While perspectives on all aspects of SIB production are welcomed, particular interest will be focused on responses that address technology needs and opportunities that are impactful to: additive manufacturing, workforce development, welding, quality, casting, forging, plate forming, materials production, finishing, and non-destructive testing and evaluation (NDT&E).

5 ANTICIPATED AWARDS

Although multiple awards are possible, no awards will be made as a result of this RFI. If a formal solicitation is generated later, a request for proposal will be published.

6 TECHNICAL POINT OF CONTACT

Questions of a technical nature regarding this RFI may be sent to the following Technical Point of Contact:

Darrell R. Wallace, Ph.D.
Manufacturing Technical Fellow
BlueForge Alliance
3891 South Traditions Drive, Bryan, TX 77807
dwallace@blueforgealliance.us

7 ELIGIBLE PARTICIPANTS

At this time, responses are preferentially sought from:

- 1) current manufacturing suppliers to the SIB / DIB
- 2) prospective manufacturing suppliers from adjacent markets with complementary capabilities (e.g. oil and gas, structural fabrication, commercial maritime) who may wish to expand their customer base, and
- 3) relevant technology providers.

All responsible sources capable of satisfying the objectives of this RFI are encouraged to reply in accordance with the instructions specified herein, to include historically traditional partners and non-traditional potential partners that may be interested in doing business with the Government. Historically Black Colleges and Universities (HBCUs), Small Businesses, Small Disadvantaged Businesses and Minority Institutions (MI) are encouraged to submit ideas for consideration. At the present time, it is not envisioned that any portion of a future solicitation announcement will be specifically reserved or set aside for exclusive competition among these entities. However, if a Government capability/need area more specifically identifies innovation targets of opportunity that might be best fulfilled by this class of participants, the Government may maximize engagement with this list of interested parties, to include targeted engagement with these parties.

* Note: As a reminder, interested parties do not have to meet all requirements listed in this RFI to submit a response.

In the event a future solicitation for an RFP is posted, parties submitting proposals must be registered in the System for Award Management prior to submission. Registration is not required for responses to this RFI.

8 SUBMISSION INSTRUCTIONS AND FORMATTING RECOMMENDATIONS

- a) All responses should be **unclassified**. If there are compelling reasons that a respondent may wish to include controlled information, please contact the Technical Point of Contact for directions on submission of any sensitive or classified information.
- b) All responses should be in PDF format and emailed to: submission@blueforgealliance.us
- c) The subject line of the email should read as follows “RFI: SIB Supply Chain Capability and Resiliency.”
- d) All information received in response to this RFI that is marked proprietary will be handled accordingly. Responses to this notice will not be returned.
- e) Responses should not exceed 10 pages and should be typed in 12- point Times New Roman font, single spaced, with 1-inch margins. All sections are included within the 10-page limit.

Suggested submission organization:

1. Cover Sheet – RFI number and name, Company/Organization address, UEI and/or DUNS number, CAGE code, company’s technical point of contact, with printed name, title, email address and date.
2. Table of Contents with page numbers
3. Organization Overview (contact information, industry segment, relevant capabilities)
4. Submission narrative (responses to Section 4 questions)
5. Other Pertinent Information

9 OTHER INFORMATION

BlueForge Alliance works in conjunction with various technical advisors, and Government reviewers that may have access to information submitted in response to this RFI. BlueForge Alliance ensures that all personnel have Non-Disclosure Agreements on file or are under contract where protection of proprietary information is strictly enforced.