

Bartlett Maritime Corporation

Restoring Submarine Industrial Base Capacity & Capability

*Remarks to Cleveland Engineering Society
Leadership Breakfast Series*

December 6, 2023



Bartlett Maritime Corporation

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The SSN Maintenance Crisis

- 37% of our SSNs are not available
- We have 8 “Missing SSNs”

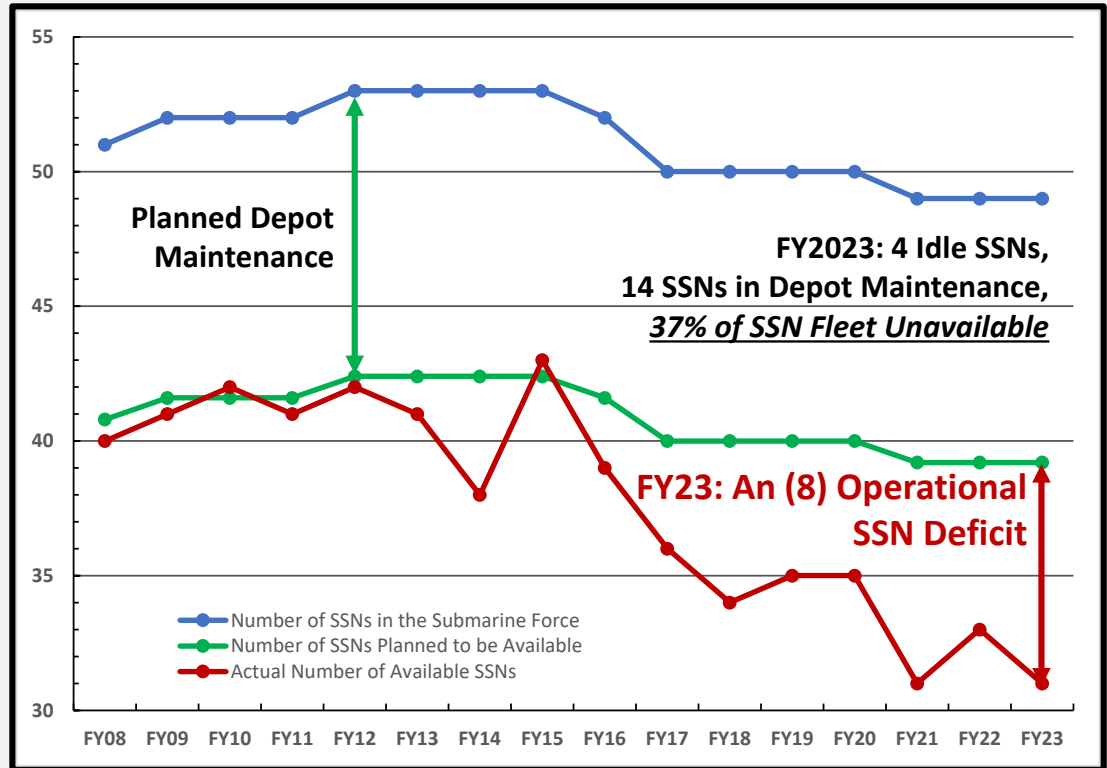


Chart Derived from Table 1 in *Navy Virginia (SSN-774) Class Attack Submarine Procurement: Background and Issues for Congress*, dated June 22, 2023, Congressional Research Service



The Situation is Unacceptable and Getting Worse

No Drydock for Overhaul Start

- USS *Toledo* started overhaul on schedule (1/21/21), but cannot enter drydock because the drydock is being rebuilt
- This completely upsets the normal overhaul process, extending the schedule and increasing cost. We now expect this “24-month job” to be 19-20 months late in completion



NAVSEA NAVAL SEA SYSTEMS COMMAND
THE FORCE BEHIND THE FLEET

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USS Toledo (SSN 769) arrives at Norfolk Naval Shipyard for Engineered Overhaul

By Michael Brayshaw, NNSY Lead Public Affairs Specialist | Jan. 29, 2021

NORFOLK NAVAL SHIPYARD, Portsmouth, Va. — Norfolk Naval Shipyard (NNSY) welcomed the Los Angeles-class submarine USS Toledo (SSN 769) Jan. 21 for an Engineered Overhaul.

Approximately 437,000 workdays are required to replace, repair and overhaul components throughout the boat. This will mark NNSY’s third Engineering Overhaul and first in several years, following USS Newport News (SSN 750) and USS Albany (SSN 753).

In a first for one of NNSY’s Engineered Overhauls, the boat will be pierside for an extended period before heading into dry dock. The boat’s hosting dry dock is currently undergoing maintenance upgrading its caisson, flood wall and piping. NNSY’s submarine dry dock upgrades are part of the Shipyard Infrastructure Optimization Program (SIOP), a 20-year, \$21 billion program dedicated to completely refurbishing the nation’s four public shipyards by modernizing equipment, improving workflow and upgrading dry docks and facilities. “Due to the construction timeline on having Dry Dock 2 ready for us to dock, we decided to build a plan to get as much work finished as possible pierside prior to docking,” said Waldroup.



Norfolk Naval Shipyard (NNSY) welcomed the Los Angeles-class submarine USS Toledo (SSN 769) Jan. 21 for an Engineered Overhaul.

SIOP Work Competes with Overdue Ship Overhaul Work, Yet in 20+ Years When SIOP is Complete, Naval Shipyard Capacity will Still be Inadequate

The Existing Naval Shipyards are Overbooked But Require Urgent Rehabilitation; Toledo’s Overhaul is Running 80% Over Schedule



US Policy – 66 Attack Submarines

- The Navy released its Force Structure Goal of 355 Manned Ships, including 66 attack submarines, on December 15, 2016
- Congress, in the FY2018 National Defense Authorization Act, adopted this 355 ship/66 attack submarine Force Structure Goal as National Policy



Figure 1. Navy Table Summarizing Studies on Future Navy Force-Level Goal

As shown in Navy's FY2023 30-Year Shipbuilding Plan

Table 1. Previous Analytic Efforts Completed

Platforms	2016 FSA	2020 INFSA	FNFS FFA Ranges	PB22 Jun 2021 Ranges
Time Frame	Post 2030	Post 2030	2045	2045
Aircraft Carrier	12	12	8-11 ¹	9-11
CVL	0	0	0-6 ²	0
LHA/LHD	12	10	6-10	8-9
Amphibious Warfare Ships (less LHA/LHD)	26	41 ³	30-43 ³	40-54 ³
Large Surface Combatant	104	96	72-80	63-65
Small Surface Combatant	52	56	47-60	40-45
Attack Submarines / Large Payload Submarine	66	66	58-70	66-72
Ballistic Missile Submarines	12	12	12	12
Combat Logistics Force	32	45 ⁴	51-85 ⁴	56-75
Support Vessels	39	52	27-51	27-29
Unmanned Surface	0	27	81-153 ⁵	59-89
Unmanned Subsurface	0	18	18-50 ⁵	18-51
Battle Force	355	390 ⁸	337-404 ⁶	321-372 ⁷
Battle Force + Unmanned Surface	-	417	382-454 ⁶	380-461
Battle Force + Unmanned Surface + Unmanned Subsurface	-	435	440-540 ⁶	398-512

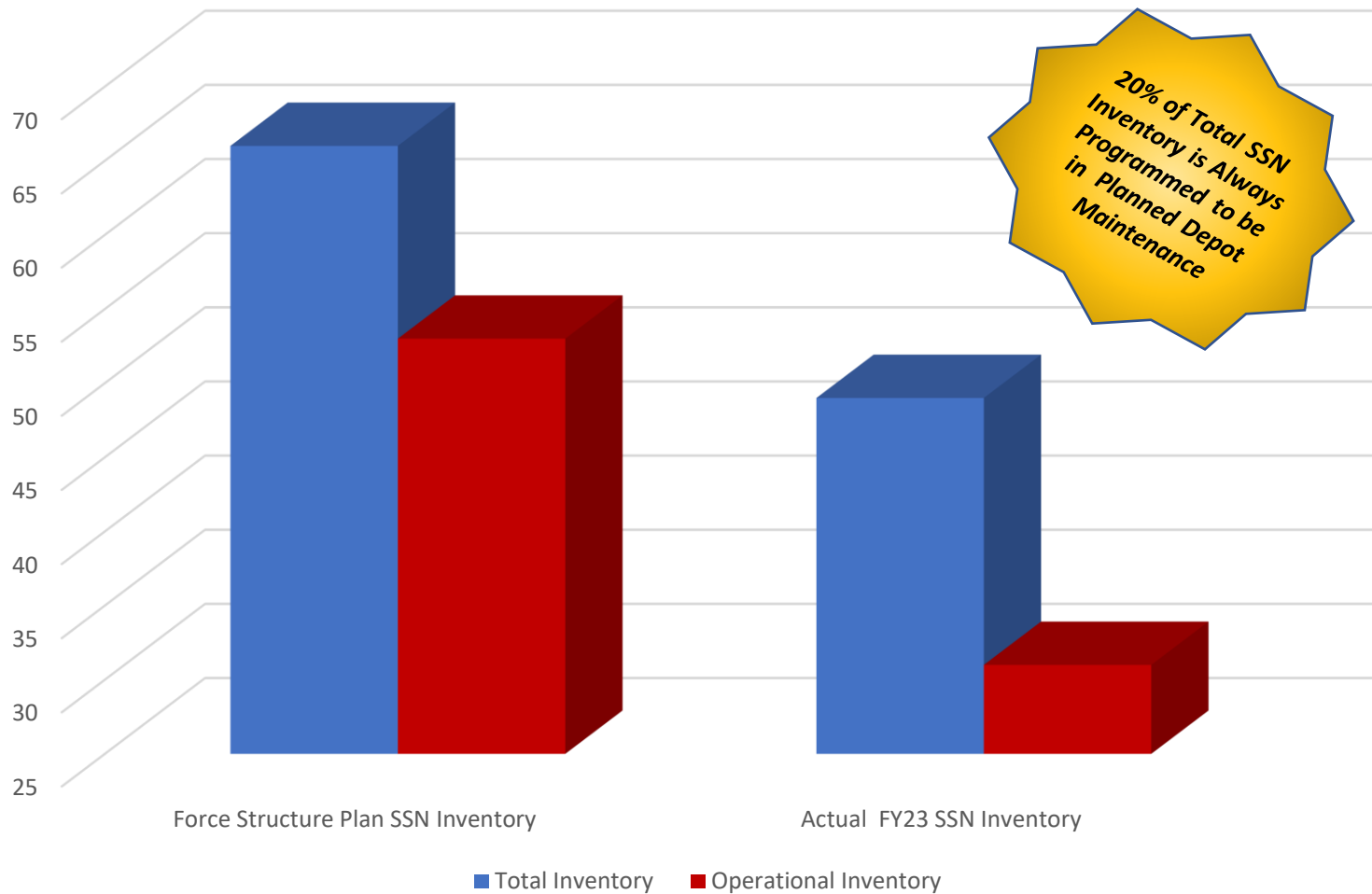
1. Lower range may be enabled by acquisition of cost-effective CVL.
2. Cost-effective CVL capabilities and capacity study would be required.
3. Includes future Light Amphibious Warships (LAW).
4. Includes Next Generation Logistics Ships (NGLS).
5. UAV require follow-on analysis of future objectives.
6. FNFS FFA force mix ranges are not the sum of low and high platform ranges listed above. FNFS ranges were derived from previous campaign analysis, however the ranges represented no real budget growth.
7. The PB22 shipbuilding ranges were the sum of the low and high platform ranges possible in 2045, which were derived from FNFS, and updated with analytic insights.
8. The INFSA reflects the most recent full campaign analysis and force structure assessment completed by the Department of the Navy.

Source: U.S. Navy, *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2023*, April 2022 (released April 20, 2022), p. 4.

Notes: INFSA = Integrated Naval Force Structure Assessment. FNFS = Future Naval Force Study. FFA = Future Fleet Architecture.

***The US Navy is not 8 Operational SSNs short –
but is actually 22 Operational SSNs Short***

22 Missing Submarines - 42 % Less Than the Congressionally Approved Force Structure Operational SSN Fleet



There are 31 Operationally Available SSNs when the Congressionally Approved Force Structure Plan is to Have 53 Operationally Available SSNs



The First Battle of the Next War

Wargaming a Chinese Invasion of Taiwan

A Report of the CSIS International Security Program

AUTHORS

Mark F. Cancian
Matthew Cancian
Eric Heginbotham

“Prioritize submarines and other undersea platforms. Submarines were able to enter the Chinese defensive zone and wreak havoc with the Chinese fleet, but numbers were inadequate.”



Top Submarine Priorities

- **Columbia Class** is the nation's highest military priority.
- **AUKUS**, provides 3-5 Virginia Class boats to Australia.

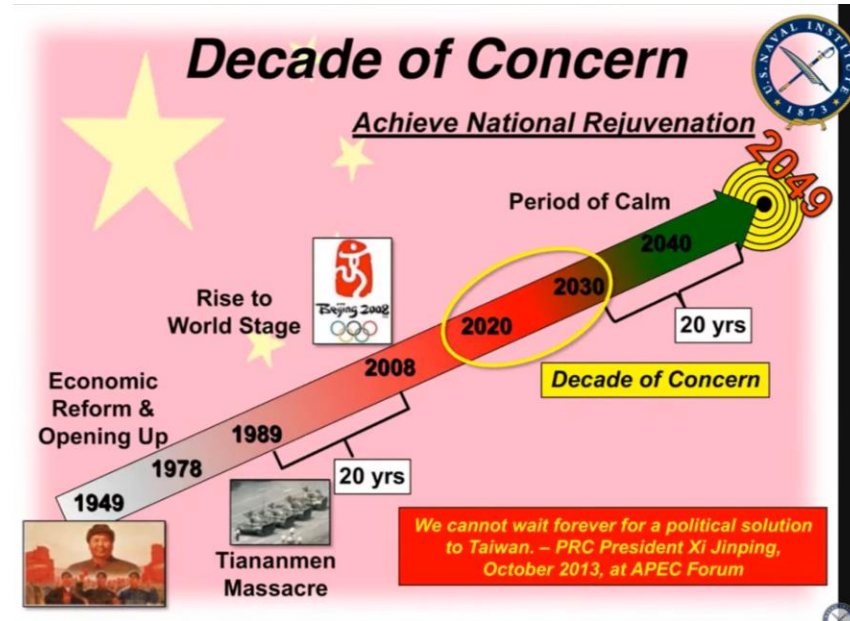


**Both Priorities Compete
with SSNs for Resources**



Demographics is Destiny

- The “one child” policy is at the heart of an impending demographic disaster in China.
- This wave of demographic damage to the active vs. inactive population ratio is beginning to crest now.
- Starting in the 2030’s China will need the Taiwanese (*ethnic Chinese*) population just to hold its own.



***We Are Now in the
Greatest Threat Window – The Davidson Window***



The War of 2026



A Los Angeles-class submarine at periscope depth in the western Pacific. U.S. NAVY

You Can't Win Without (More) Submarines

"If I had to give credit to the instruments and machines that won us the war in the Pacific, I would rank them in this order: submarines first, radar second, planes third, bulldozers fourth."—Fleet Admiral William F. Halsey, U.S. Navy

By Captain William Toti, U.S. Navy (Retired)

December 2023 | Proceedings | Vol. 149/12/1,450



**With Our Current Operational Submarine Inventory,
*Victory in the Taiwan Campaign is Far from Assured***

What We Are Doing is Not Enough

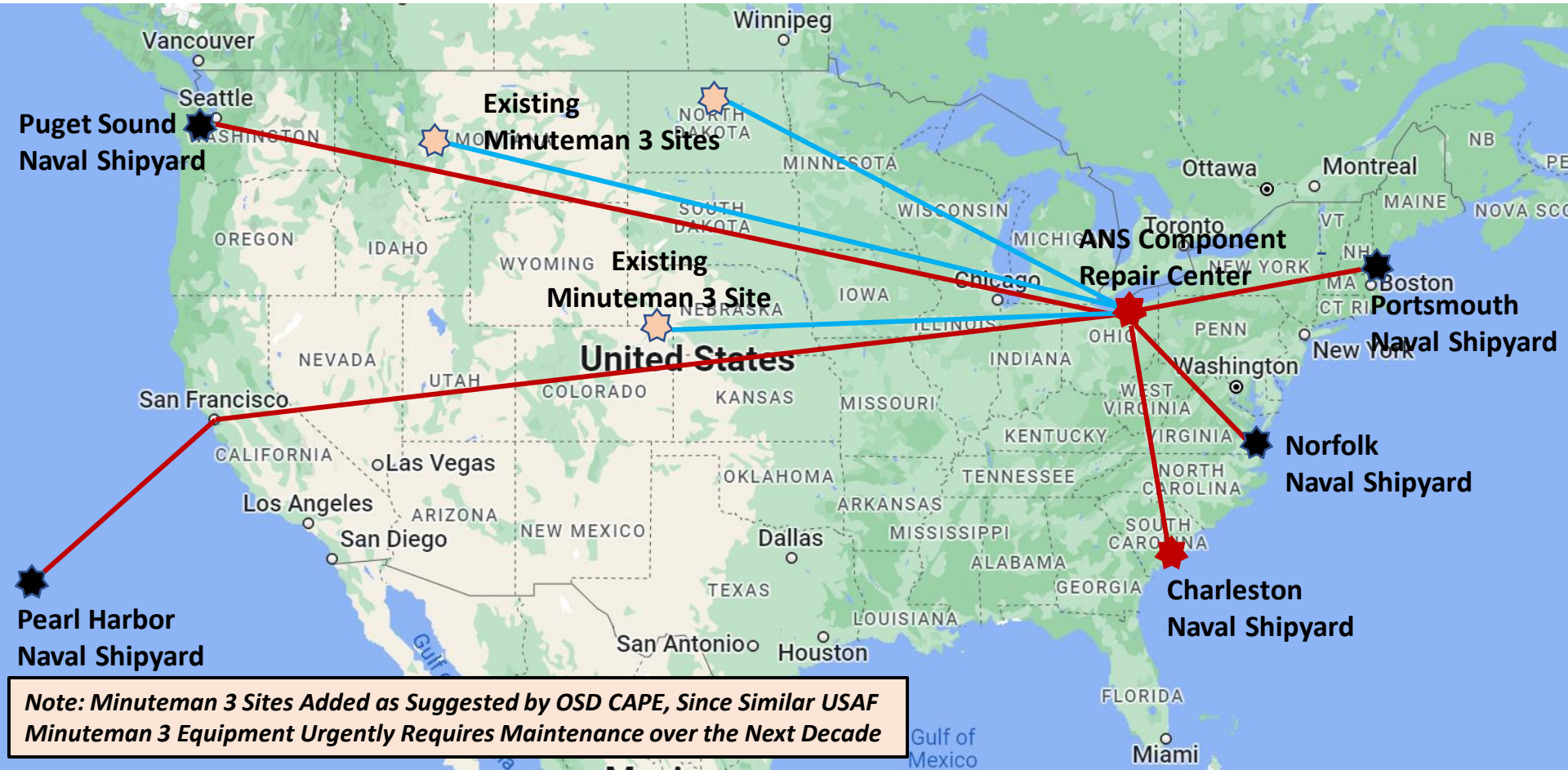


- SIOP aims to improve Naval Shipyard Efficiency and throughput by 4%, once it is complete in another 15 or more years
- If we improve the throughput of the existing Naval Shipyards by 10% right now, it will take about 30 years to restore the fleet



This is No Longer a Problem
This is an Urgent Crisis and Requires Urgent, Immediate Action

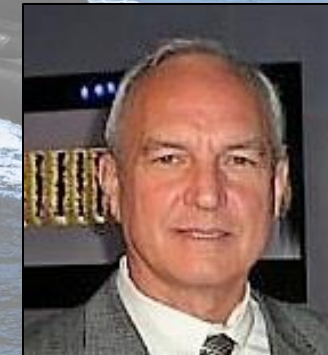
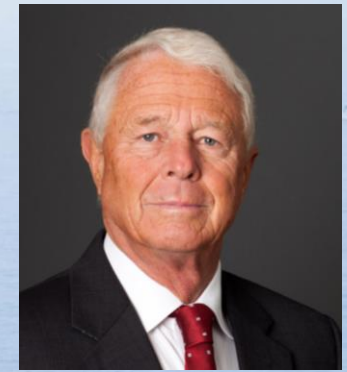
Key Defense Industrial Site Locations



**Proposed New Industrial Installations
Compliment Existing Site Locations**

Bartlett Maritime Corporation Senior Advisory Board

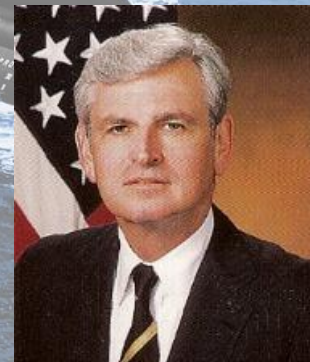
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- **VADM William Merz, USN(Ret)**, Former Commander 7th Fleet, Multiple Former Deputy Chief of Naval Operations Positions
- **Mr. John W. "Bill" Shirley**, Retired SES, Former Submarine Program Manager at Naval Reactors
- **Ms. Karen A. Henneberger**, Retired SES, New Ship Design Section Head at Naval Reactors
- **RADM Peter Stamatopoulos, SC, USN**, 49th Chief of Supply Corps, Former Commander, Naval Supply Systems Command
- **Mr. Richard Burkhart**, Industrial Entrepreneur
- **Mr. Robert Hogue**, CEO, In-Depth Engineering, Board of Directors, Naval Submarine League



Bartlett Maritime Corporation
Deeply Experienced; Totally Invested in Success; Shares Navy Priorities

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- **Mr. William J. Cassidy, Jr. Esq.**, General Counsel, Corporation Secretary
- **Mr. Stuart S. Dye, Esq.**, General Counsel Emeritus



***Bartlett Maritime Corporation - Deeply Experienced;
Totally Invested in Submarine Force Success***



The Bartlett Maritime Team

— an incredibly talented, broadly experienced, diverse group —



ADM Frank Bowman, USN(Ret),
Former Director, Naval Reactors



VADM Bill Merz, USN(Ret),
Fmr 7th Fleet, Former DCNO



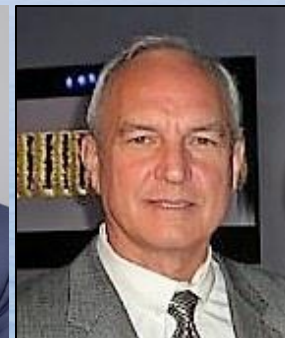
Mr. J. William Shirley,
SES, Retired from NR



Ms. Karen A. Henneberger
SES, Retired from NR



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SC, USN(Ret), Fmr Head of
Navy Supply Corps



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Left to Right (at left)
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Partner &
Facility
Design Agent*



*Legal and Government
Relations/Lobbying*



*Capital Markets
Advisor*



*Insurance
Brokers*



*Hendrix & Assoc.
Strategy*



*Organized Labor
Partner*



*Corporate
Bank*



*Building a better
working world*

*Transaction
Advisory*



*Environmental
Advisory*



*3D Printing
Fixtures &
Custom Dunnage*



MASTER
GAGE & TOOL CO.
THE MEASURED DIFFERENCE

Metrology Partner



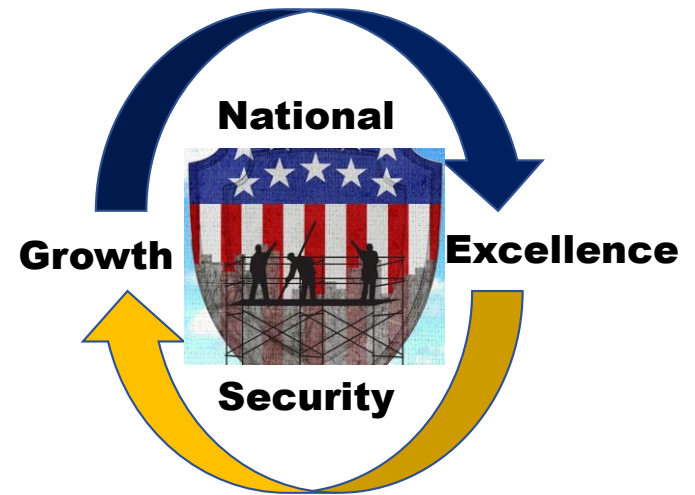
*Our Partners and Advisors
Drive Excellence and
Facilitate Access to Capital*

Accelerated Performance™

Find Another Gear and Meet All Requirements, But Faster



All Ahead Flank, Cavitate!



These Proven Accelerated Performance™ Production Optimization Principles will drive all BMC & Subsidiary Units

Good Ideas are not adopted automatically. They must be driven into practice with a courageous impatience – Admiral H.G. Rickover



Live Here – Work There

The Bartlett Maritime Rotational Workforce Program™



**Robust Available Untapped
8 Million Pop. Laborshed**

**Focused Classroom
Training**

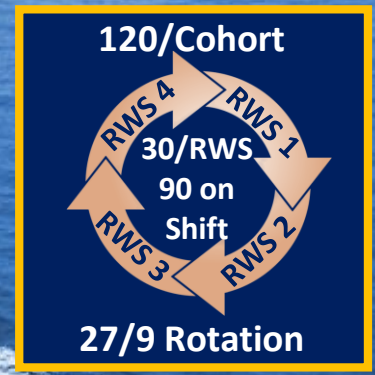
**Practical Skills
Qualification**

**Skilled Trades
at Work**

Bartlett Maritime Rotational Workforce Program™



*Supporting the
Submarine Industrial Base*



Cleveland A Long History Supporting National Security

- **SS William G Mather**
 - 55 Years as a Lake Bulker
 - Year-Round Operation during World War 2 to keep the Steel Mills Open – providing the lifeblood of the war effort
- **USS Cod (SS 224)**
 - Gato Class WW2 Fleet Boat, equipped with still operable diesel engines built in Cleveland
 - 7 Successful War Patrols in the Pacific



The Industrial Midwest
Once Again Stepping Up to Lead Supporting National Security



THE U.S. AND REGIONAL ECONOMIES FALL INTO A MILD RECESSION STARTING IN SPRING-2024.

Stuart G. Hoffman
Senior Economic Advisor

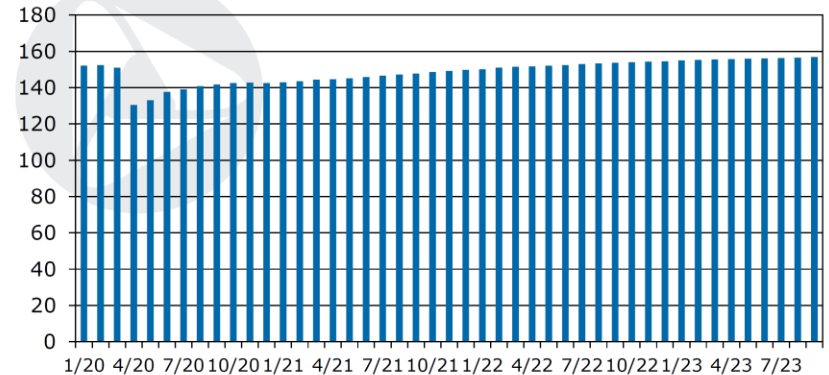
Cleveland Economic Update

October 19, 2023



EMPLOYMENT ROSE 26.45 MILLION FROM MAY 2020 TO SEPTEMBER 2023, MUCH MORE THAN OFFSETTING THE HUGE DECLINE OF 22 MILLION JOBS IN MARCH AND APRIL 2020 COMBINED. PAYROLL JOBS WILL START DECLINING IN SPRING 2024.

Employment: Total Nonfarm, (Mil., Seasonally Adjusted)



Source: Bureau of Labor Statistics



- The US overall has 4.5 Million more people employed now as compared to prior to the Pandemic
- The Pittsburgh – Cleveland – Detroit Corridor has only 80 – 90% of the people employed now as compared to pre-Pandemic. *This region is the worst performing area, as measured by employment, in the nation.*



The Bartlett Maritime Plan™ Leverages the Available Workforce in this Region to Support National Security with Great Jobs

The Bartlett Maritime Plan™ is Good for Northeast Ohio

- The plan “unsticks” a completely “stuck” submarine maintenance program
- The plan will help to Prevent the “War of 2026”
- The plan will create thousands of new jobs in Northeast Ohio



“Immediate Action is Required to Dramatically Improve Submarine Maintenance. What is Your Position Regarding the Bartlett Maritime Plan™?”