

ARCHIVED REPORT

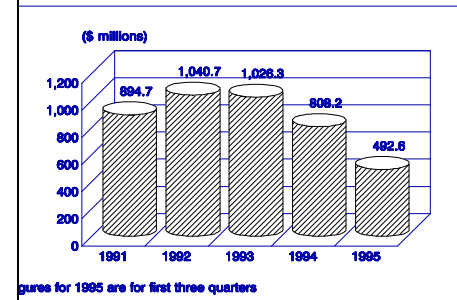
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Bath Iron Works - Archived 2/97

Outlook

- Company hard hit by decline in defense spending.
- Despite difficulties, Bath was awarded a \$836.7 million contract for three DDG-51 destroyers during 1994.

Total Prime Awards 1991-1995
Bath Iron Works



Headquarters

Bath Iron Works
700 Washington Street
Bath, ME 04530
Telephone (207) 443-3311

Bath Iron Works has engaged in shipbuilding since 1884 and has constructed more than 400 vessels for the US Navy and merchant ship operators. It is recognized as a builder of surface combatant ships in the frigate, destroyer and cruiser classes. Bath has built, is building, or has on order 24 percent of all surface combatants ordered by the Navy since 1946.

Although the company built ships for the Navy before the turn of the century, it gained its reputation during a four-year period in World War II when it constructed and launched 82 destroyers. In that period, Bath alone produced more destroyers than the entire Japanese Empire during the same period.

In more recent years, the company has been involved in the design and construction of some of the most technically advanced surface combatants in the world: the AEGIS destroyers and cruisers. The Bath-designed and built AEGIS destroyer Arleigh Burke was delivered in early 1991.

Bath Iron Works was incorporated in 1884 by Thomas Hyde. It initially made ship windlasses. In 1890 the company bought Goss Marine and entered the shipbuild-

ing business. The original company became financially distressed in the early 1890s, having joined a Shipbuilding Trust. It was sold in 1905 to John Hyde, son of the company's founder, and re-emerged as a shipbuilding company in time to build ships for World War I. By 1925 the company was in financial trouble and was closed. It reopened in 1927 under new ownership - William Newell and Archibald Main. Surprisingly, the company prospered and grew during the depression years, making Navy trawlers and private yachts. The company built 15 destroyers before the start of World War II and was in an excellent position to become a solid Navy partner during the WW II period.

Following WW II, the company tried diversification to offset the postwar business drop. In the Korean War period, Bath made the Sherman class destroyers and some Landing Ship Tanks (LSTs). By the 1960s Bath Iron Works became Bath Industries, a holding company comprising Bath Iron Works, Pennsylvania Crusher, and Hyde Windlass Company. In 1968 Bath Industries bought and merged with Congoleum-Nairn, a leading manufacturer of home furnishings. Later, in 1975, Bath Industries changed its name to Congoleum Corporation. The Bath Iron Works division continued in the shipbuilding business and was sold by Congoleum in August 1986 to a private firm, Gibbens, Green and Van Amerongen, a New York City investment company.

In 1995, Bath Iron Works was purchased by General Dynamics for \$300 million in order to boost GD's Electric Boat operations.

Bath Iron Works presently employs approximately 9,000 workers. The company is located on the Kennebec River about 12 miles from the North Atlantic. It is privately held.

Structure And Personnel

as of 1/95

Duane D. Fitzgerald

President and Chief Executive Officer

Harland D. Hatch

Senior Vice President and Chief Operating Officer

Patrick G. O'Keefe

Senior Vice President, Corporate Programs

Howard J. Yates Jr.

Vice President and Chief Administrative Officer

Michael F. Buck

Vice President, Human Resources

Steven G. Buttner

Vice President, Strategic Planning and Business Development

Jeffrey S. Geiger

Vice President, Engineering

Mark A. McAuliffe

Vice President, Production Planning and Materials

Jay S. Bailey

Vice President, Manufacturing Operations

John C. Mason

Vice President, AEGIS New Construction

Brent W. West

Treasurer and Assistant Secretary

Product Area

This company specializes in design, construction and modernization of ships for the US Navy and for foreign navies. Heavy repair work for the merchant marine and commercial markets is handled by the Portland, ME, repair yard. Bath maintains a complete metallurgical testing laboratory. Calibration of electronic instruments and

replacement parts for Navy ship supply systems are done in Bath. The shipyard also maintains a contract machining plant for design, fabrication, welding and assembly according to supplied specifications. Bath Iron Works offers naval engineering and marine architectural services.

Facilities

The main shipbuilding yard is in Bath, ME and in nearby Brunswick, ME. Most of the ship repair work is done in Portland, ME.

Harding Plant, East Brunswick, ME, was built in the early 1940s to support the war effort. This plant is the beginning of all new ship construction that starts with the fabrication of steel and aluminum. The Harding plant is about three miles from the shipyards in Brunswick.

The Portland, ME, Overhaul and Repair Facility has some 1,600 feet of pier space and an 81,000-ton floating drydock. It is capable of repairing and/or converting most

commercial and naval ships. It is the major ship repair, overhaul and conversion yard on the United States east coast.

The Crew Training Facility, Bath, ME, covers 48,000 square feet of offices in Bath to provide the capability for simultaneous training of three AEGIS precommissioning crews.

The Church Road Facility, Brunswick, ME, is a 72,000-square-foot facility housing support and service personnel, primarily for the AEGIS program.

Corporate Overview

BIW is the lead yard for the Navy's new AEGIS destroyer, a multipurpose vessel projected to be the surface combatant of the 21st century. While there has already been an announced reduction in the number of

these ships the Navy plans to order, BIW believes the AEGIS destroyer will prove to be an excellent and economical ship, and that congressional and Navy support for the program will remain strong.

New Products And Services

LX. In March 1994, Bath Iron Works was one of five design teams awarded design study contract valued at \$480,000 each for the next-generation amphibious ship, the LX. Navy plans call for constructing 12 of the ships to replace a series of ships that are being decommissioned. Construction of the first ship is expected to begin 1996. The LX is also known as the LPD 17 class. Preliminary design contracts were also placed with Avondale Shipyards, Ingalls Shipyard, National Steel and Shipbuilding, and Newport News.

Technology Reinvestment Project. In late 1993, Bath won a \$14 million Technology Reinvestment Project contract from the Pentagon's Advanced Research Project Agency. Under the TRP Bath will conduct a study to determine what the differences are between commercial and military shipbuilding. Foreign partners Matsui Engineering and Kvaerner Masa Marine will transfer commercial shipbuilding technology, especially ship operating and ship maintenance, to Bath. The goal of the project is to actually win a contract to build a commercial ship, in Bath's shipyards, from one of its two partners by the end of the two-year study.

Plant Expansion/Modernization/

Organization Update

No recent activity has been announced.

Mergers/Acquisitions/Divestitures

General Dynamics Acquires BIW. In 1995, Bath Iron Works was purchased by General Dynamics for \$300 million in order to boost GD's Electric Boat operations. With the potential for additional ship construction in its future, the recently acquired Bath Iron Works should provided its new parent, General Dynamics, with a steady source of revenue. Due to General Dynamics strong management skills, BIW's profitability is expected to rise without the consolidation that has accompanied many of the current mergers and acquisitions that have occurred. Further, the differences between submarine construction at General Dynamic's Electric Boat and the DDG-51 construction at BIW would preclude moving work to only one site, keeping jobs and the raising political clout for the company's shipbuilding programs.

Teaming/Competition/Joint Ventures

No information concerning any teaming, competition or joint ventures with BIW has been announced.

Financial Results/Corporate Statistics

It is estimated that approximately 95 percent of the company's sales are to the US Navy. A little less are to the Coast Guard and a fractional percentage is industrial. Because the company is privately owned, true financial figures are unavailable. All figures below are estimated.

Y/E December 31	1990	1991	1992	1993	1994	1995
(\$ millions)						
Revenues ^(a)	640.0	700.0	800.0	800.0	750.0	800.0
Backlog ^(a)	1500.0	1700.0	1600.0	2200.0	1800.0	1900.0
^(a) All estimates						

Strategic Outlook

In June 1994, the US Navy decided to allocate the FY94 and FY95 construction of DDG-51 destroyers between Bath Iron Works and Ingalls Shipbuilding. This marked a departure from the previous practice of competitive procurement and was aimed at preserving the surface combatants construction infrastructure. Each contractor got three ships, Bath Iron Works being awarded a Flight II and a Flight IIA in FY94 and Flight IIA in FY95, while Ingalls received a Flight II in FY94 and two Flight IIAs in FY95. This meant that each contractor would get a Flight II and two Flight IIAs with Bath building the lead Flight IIA as a result of its lead-yard status.

Dividing the order between the two companies is a departure from the Navy's past practice of competitively buying DDG-51 ships. According to Navy Secretary John Dalton, the allocation "preserves an adequate industrial base, provides a basis to negotiate reasonable shipbuilding prices, and results in no significant advantage to either shipbuilder at the end of two years."

However, pressure has continued for the reduction of the program to a 2.5 or two ships per year level. As part of a series of defense cost reduction exercises aimed at eliminating a funding deficit, the Deputy Defense

Secretary instructed the US Navy to prepare two program alternatives for the DDG-51, one cutting the construction rate to 2.5 hulls per year, the second to two hulls per year. These reductions would apply between FY96 and FY01 with the construction rate reverting to three hulls per year thereafter. Although this reduction would hurt Bath Iron Works by forcing it to reduce staff, it would, in the long run, preserve the shipyard until the next program comes online.

Eventually, the procurement to take place over a six-year period was reduced from 18 hulls to 16 by ordering only two ships per year in 1996 and 1997. Thereafter, forward planning envisages a reversion of three hulls per year until the scheduled total was met. This plan was adopted. However, in July 1995 the Senate Armed Services Committee produced a split-year funding plan for the DDG-51 class. Under this, the two deleted DDG-51 class ships would be funded in the FY96 and FY97. The FY96 budget would provide US\$650 million for the two extra ships while the FY97 budget would provide the balance. According to supporters of the new split funding plan, the projected fiscal arrangements would not only reinstate the

two delayed ships but, by more efficiently allocating budget resources, allow the purchase of between five and six additional ships.

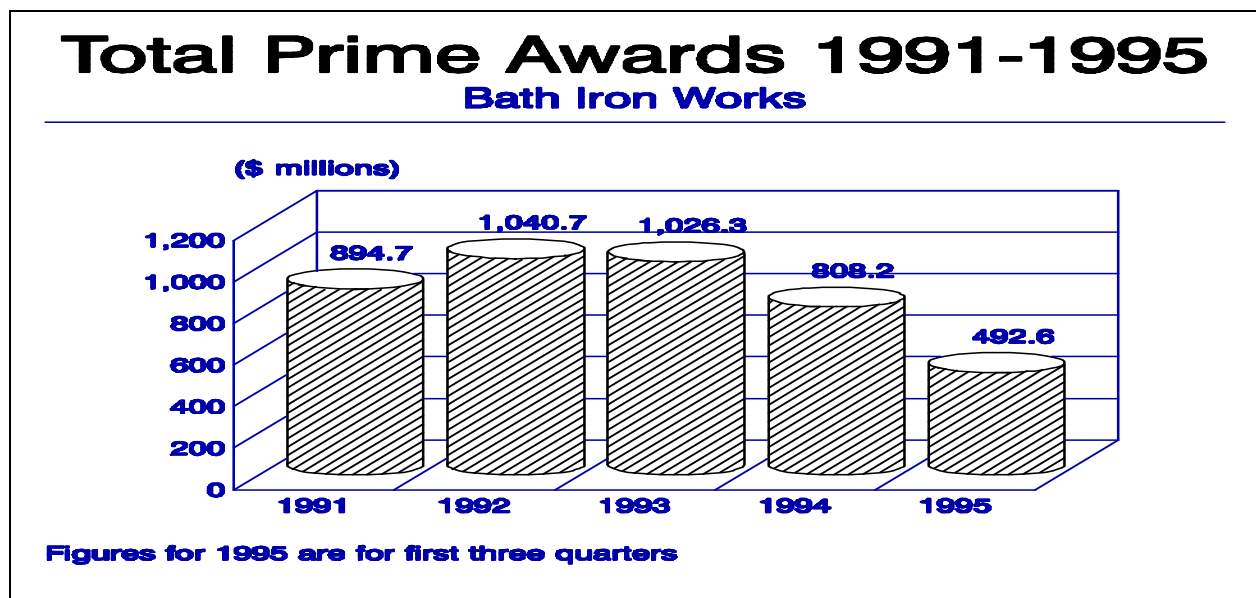
With the potential for additional ship construction in its future, the recently acquired Bath Iron Works should provide its new parent, General Dynamics, with a steady source of revenue. BIW, with its current backlog, presently has enough work to keep it going for at least two to two-and-a-half years. What happens after the work on the DDG-51 program is completed might not be pretty, despite the US Navy's best efforts to preserve the yard. However, as unit of General Dynamics, BIW's prospects are now greatly enhanced. Due to General Dynamics strong management skills, BIW's profitability is expected to rise without the consolidation that has accompanied many of the current mergers and acquisitions that have occurred. Further, the differences between submarine construction at General Dynamic's Electric Boat and the DDG-51 construction at BIW would preclude moving work to only one site, keeping jobs and the raising political clout for the company's shipbuilding programs.

Prime Award Summary

The five-year summary of awards by customer, with dollars in millions, is given below. Dashes indicate that the data are not available. Zeroes represent awards, if any, of less than \$50,000. Data for 1995 are for the first three quarters only.

(\$ millions)		1991	1992	1993	1994	1995
DEPT OF TRANSPORTATION ^(a)	OF	26.1	-0.1	0.0	0.0	0.0
NAVY		868.6	1040.8	1026.3	808.2	492.6
TOTAL		894.7	1,040.7	1,026.3	808.2	492.6

^(a) Coast Guard



The five-year summary of awards by major geographical area and by customers, with dollars in millions, is reported below.

Eastern Region

Bath, ME

(\$ millions)	1991	1992	1993	1994	1995
DEPT OF TRANSPORTATION	26.1	(0.1)	0.0	0.0	0.0
NAVY	850.6	1034.3	1025.8	808.2	492.6
TOTAL	876.7	1,034.2	1,025.8	808.2	492.6

Portland, ME

(\$ millions)	1991	1992	1993	1994	1995
NAVY	18.1	6.5	0.5	0.0	0.0

Program Activity

Some important aerospace and government programs currently underway at BIW are listed below. The briefs are intended to provide a listing of programs that are of major importance to the company. For detailed information or analysis of specific aerospace and defense programs or equipment, please refer to the appropriate FORECAST INTERNATIONAL binder (for example, AIRCRAFT, MILITARY VEHICLES, WARSHIPS, MISSILES, ELECTRONICS, and GAS TURBINES). The following is an outline of the company's business interests:

Warship Programs

CG-47 Ticonderoga Class

The CG-47 Ticonderoga class AEGIS cruisers are designed to serve as anti-air warfare (AAW) combatants providing long-range surveillance and defense capabilities to carrier battle groups and surface action groups. They also have excellent capabilities in anti-submarine warfare (ASW) and anti-surface warfare (ASUW). The first ship of the class was built by Litton Industries' Ingalls Shipyard and commissioned in January 1983. With the commissioning of the *USS Port Royal* in 1994, the CG-47 program has come to the end of its procurement phase. The work breakdown is as follows:

Ship	Builder	Ordered	Commissioned
CG-47 Ticonderoga	Ingalls	FY78	1/1983
CG-48 Yorktown	Ingalls	FY80	7/1984
CG-49 Vincennes	Ingalls	FY81	7/1985
CG-50 Valley Forge	Ingalls	FY81	1/1986
CG-51 Thomas S. Gates	Bath	FY82	8/1987
CG-52 Bunker Hill	Ingalls	FY82	9/1986
CG-53 Mobile Bay	Ingalls	FY82	2/1987
CG-54 Antietam	Ingalls	FY83	6/1987
CG-55 Leyte Gulf	Ingalls	FY83	9/1987
CG-56 San Jacinto	Ingalls	FY83	1/1988
CG-57 Lake Champlain	Ingalls	FY84	8/1988
CG-58 Phillipine Sea	Bath	FY84	2/1989
CG-59 Princeton	Ingalls	FY84	2/1989
CG-60 Normandy	Bath	FY85	9/1989
CG-61 Monterey	Bath	FY85	12/1989
CG-62 Chancellorsville	Ingalls	FY85	9/1989
CG-63 Cowpens	Bath	FY86	3/1991
CG-64 Gettysburg	Bath	FY86	6/1991
CG-65 Chosin	Ingalls	FY86	1/1991
CG-66 Hue City	Ingalls	FY87	9/1991
CG-67 Shiloh	Bath	FY87	7/1992

CG-68 Anzio	Ingalls	FY87	5/1992
CG-69 Vicksburg	Ingalls	FY88	11/1992
CG-70 Lake Erie	Bath	FY88	3/1993
CG-71 Cape St. George	Ingalls	FY88	4/1993
CG-72 Vella Gulf	Ingalls	FY88	9/1993
CG-73 Port Royal	Ingalls	FY88	7/1994

DDG-51 Arleigh Burke Class

The DDG-51 class is an AEGIS guided-missile destroyer designed for the escort of aircraft carrier battle groups and surface action groups in high-threat areas, anti-air warfare, anti-submarine warfare and anti-surface warfare. There have been 32 ships authorized, 11 of which are in service. On July 4, 1991, the DDG-51 Arleigh Burke was commissioned. A breakout of the ships and their builders is as follows:

Ship	Builder	Ordered	Commissioned
DDG-51 Arleigh Burke	Bath	03/1985 (FY85)	7/1991
DDG-52 Somers	Ingalls	06/1987 (FY87)	12/1992
DDG-53 John Paul Jones	Bath	06/1987 (FY87)	12/1993
DDG-54 Curtis Wilbur	Bath	12/1988 (FY89)	3/1994
DDG-55 Stout	Ingalls	12/1988 (FY89)	8/1994
DDG-56 John S. McCain	Bath	12/1988 (FY89)	7/1994
DDG-57 Mitscher	Ingalls	12/1988 (FY89)	12/1994
DDG-58 Laboon	Bath	12/1988 (FY89)	3/1995
DDG-59 Russell	Ingalls	02/1990 (FY90)	5/1995
DDG-60 Paul Hamilton	Bath	02/1990 (FY90)	5/1995
DDG-61 Ramage	Ingalls	02/1990 (FY90)	7/1995
DDG-62 Fitzgerald	Bath	02/1990 (FY90)	7/1995
DDG-63 Stethem	Ingalls	02/1990 (FY90)	8/1995
DDG-64 Carney	Bath	01/1991 (FY91)	1/1996
DDG-65 Benfold	Bath	01/1991 (FY91)	12/1995
DDG-66 Gonzales	Ingalls	01/1991 (FY91)	7/1996
DDG-67 Cole	Ingalls	01/1991 (FY91)	3/1996
DDG-68 The Sullivans	Bath	04/1992 (FY92)	12/1996
DDG-69 Milius	Ingalls	04/1992 (FY92)	8/1996
DDG-70 Hopper	Bath	04/1992 (FY92)	5/1997
DDG-71 Ross	Ingalls	04/1992 (FY92)	4/1997
DDG-72 Mahan	Bath	04/1992 (FY92)	10/1997
DDG-73 Decatur	Bath	01/1993 (FY93)	10/1997
DDG-74 McFaul	Ingalls	01/1993 (FY93)	3/1998
DDG-75 Donald Cook	Bath	01/1993 (FY93)	8/1998
DDG-76 Higgins	Bath	01/1993 (FY93)	1/1999
DDG-77 O'Kane	Bath	07/1994 (FY94)	4/1999
DDG-78 Porter	Ingalls	07/1994 (FY94)	4/1999
DDG-79 Oscar Austin	Bath	07/1994 (FY94)	2/2000
DDG-80	Bath	07/1994 (FY95)	
DDG-81	Ingalls	07/1994 (FY95)	
DDG-82	Ingalls	07/1994 (FY95)	

FFG-7 Oliver Hazard Perry Class

The FFG-7 class are guided-missile frigates designed to conduct offensive Anti-Submarine Warfare (ASW) operations and provide ASW and Anti-Aircraft Warfare (AAW) protection. Production in the US has been concluded. Over the program's lifetime, BIW built the following ships (note: only BIW-constructed ships are listed in the following chart):

Name	Builder	Ordered	Commissioned
FFG-7 Oliver Hazard Perry ^(a)	Bath	FY73	12/77
FFG-8 McInerney	Bath	FY75	12/77
FFG-11 Clark ^(a)	Bath	FY76	5/80

FFG-13 Samuel Eliot Morison ^(a)	Bath	FY76	10/80
FFG-15 Estocin ^(a)	Bath	FY76	1/81
FFG-16 Clifton Sprague ^(a)	Bath	FY76	3/81
FFG-21 Flatley ^(a)	Bath	FY77	6/81
FFG-24 Jack Williams ^(a)	Bath	FY77	9/81
FFG-26 Gallery ^(a)	Bath	FY77	12/81
FFG-29 Stephen W. Groves	Bath	FY78	4/82
FFG-32 John H. Hall	Bath	FY78	6/82
FFG-34 Aubrey Fitch	Bath	FY78	10/82
FFG-36 Underwood	Bath	FY79	1/83
FFG-39 Doyle	Bath	FY79	4/83
FFG-42 Klakring	Bath	FY79	8/83
FFG-45 Dewert	Bath	FY80	11/83
FFG-47 Nicholas	Bath	FY80	2/84
FFG-49 Robert G. Bradley	Bath	FY80	6/84
FFG-50 Taylor	Bath	FY81	10/84
FFG-53 Hawes	Bath	FY81	1/85
FFG-55 Elrod	Bath	FY81	4/85
FFG-56 Simpson	Bath	FY82	8/85
FFG-58 Samuel B. Roberts	Bath	FY82	4/86
FFG-59 Kauffman	Bath	FY83	2/87

^(a) These ships are members of the US Naval Reserve Force (NRF).

US Contract Awards

Below is a listing of major contracts awarded to BIW from the United States government in the past four years (contracts as of press date).

<u>Date</u>	<u>Award (\$ millions)</u>	<u>Contract #</u>	<u>Description</u>
1993			
1/8/93	\$25.8	N00024-91-C-2800	Lead yard services on the DDG-51 AEGIS destroyers.
1/19/93	\$723.8	N00024-93-C-2800	Three DDG-51 AEGIS destroyers.
8/9/93	\$18.0	N00024-91-C-2800	Lead yard services on the DDG-51 AEGIS destroyers.
11/9/93	\$18.3	N00024-90-C-2802	Planning yard services for the DDG-51 AEGIS destroyers.
12/2/93	\$28.0	N00024-93-G-2117	Spare parts for Taiwanese Navy FFG-2 ships.
1994			
7/20/94	\$836.7	Not available	Three DDG-51 AEGIS destroyers.
10/11/94	\$10.3	N00024-91-C-2800	Lead yard services on the DDG-51 AEGIS destroyers.
12/16/94	\$41.3	N00024-91-C-2800	Lead yard services on the DDG-51 AEGIS destroyers.
1995			
1/6/95	\$367.6	N00024-95-C-2808	Modification for one previously awarded DDG-51 AEGIS destroyer.
2/14/95	\$28.2	N00024-91-C-2800	Lead yard services on the DDG-51 AEGIS destroyers.
2/21/95	\$11.7	N00024-95-C-2808	Planning yard services for the DDG-51 AEGIS destroyers.

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