

# Report on Survey of U.S. Shipbuilding and Repair Facilities

2003

# REPORT ON SURVEY OF U.S. SHIPBUILDING AND REPAIR FACILITIES 2003

Prepared By:

Office of Shipbuilding and Marine Technology
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#### INTRODUCTION

In compliance with the Merchant Marine Act of 1936, as amended <sup>1</sup>/, the Maritime Administration (MARAD) conducts an annual survey of the U.S. shipbuilding and ship repair industry to determine if an adequate industrial base exists for national defense and for use in a national emergency. This Report on the 2003 survey of U.S. shipyard facilities was prepared by MARAD's Office of Shipbuilding and Marine Technology, and is in response to the congressional mandate.

The statistical data accumulated by the survey is an important element in the assessment of the adequacy of the Nation's shipbuilding industrial base, including ship repair. It also provides critical input in determining which facilities will be used during the reactivation of the reserve fleets maintained by MARAD and the U.S. Navy.

In addition, the survey also provides a database that is used to evaluate the feasibility of proposed shipbuilding programs. From the data obtained, determinations are made as to which existing shipyards might construct proposed ships, consistent with ship size and delivery date requirements. The need for construction of new facilities to meet the demands of proposed shipbuilding programs can be also identified. The information, gathered by the annual survey, is also used extensively by MARAD in responses to queries received from a variety of interests, including members of Congress, the Secretary of Transportation, the Department of Defense, the Office of Management and Budget and other Government agencies.

Each year in late spring, Standard Form 17 (SF-17), "Facilities Available for the Construction or Repair of Ships," (Appendix A) is mailed to approximately 350 U.S. shipbuilding and ship repair facilities. The form developed jointly by MARAD and the U.S. Navy, represents a detailed questionnaire seeking information on shipbuilding and ship repair facilities, data not available from any other source on a continuing and structured basis.

I/ Section 210 - "It shall be the duty of the Secretary of Transportation to make a survey of the American merchant marine, as it now exists, to determine what additions and replacements are required to carry forward the national policy declared in Section 101 of this Act, and the Secretary of Transportation is directed to study, perfect, and adopt a long-range program for replacements and additions to the American merchant marine so that as soon as practicable the following objectives may be accomplished: ...Fourth, the creation and maintenance of efficient shipbuilding and repair capacity in the United States with adequate numbers of skilled personnel to provide an adequate mobilization base."

Section 211 - "The Secretary of Transportation is authorized and directed to investigate, determine, and keep current records of ... (g) The number, location, and efficiency of the shipyards existing on the date of enactment of this Act or thereafter built in the United States;"

Section 502(f) - "The Secretary of Transportation with the advice of and in coordination with the Secretary of the Navy, shall, at least once each year, as required for purposes of this Act, survey the existing privately owned shipyards capable of merchant ship construction, or review available data on such shipyards if deemed adequate, to determine whether their capabilities for merchant ship construction, including facilities and skilled personnel, provide an adequate mobilization base at strategic points for purposes of national defense and national emergency."

The completed SF-17's are reviewed and analyzed by MARAD's Office of Shipbuilding and Marine Technology and the U.S. Navy's Naval Sea Systems Command. The results of the analyses are published in this Report, which has been organized and condensed into narratives, exhibits, and appendices to focus attention on the areas of greatest interest to those using the publication.

The shipyard classifications and definitions contained in this Report are based on the joint U.S. Navy and MARAD 1982 Shipyard Mobilization Base Analysis (SYMBA). SYMBA established 1982 as the base year for subsequent annual studies and determined that only facilities with build or repair positions 114 meters (375 feet) or greater would be included in the Major Shipbuilding and Repair Base. In 1985, this shipyard capability parameter was increased to 122 meters (400 feet).

Consequently, a major shipbuilding and repair facility is defined as one that is open and has the capability to construct, drydock, and/or topside repair vessels with a minimum length overall of 122 meters, provided that water depth in the channel to the facility is at least 3.7 meters. Details concerning such facilities are contained in Appendix B to the Report.

Appendix B is a statistical abstract of data gathered from 89 companies responding to MARAD's annual survey, which meet the above criteria. It lists the facilities sorted by region, and displays information with respect to the size and type of each building position, drydock, berth space, employment, and remarks regarding principal shipyard activities.

In summary, Appendix B offers the following definitions and data:

#### Active Shipbuilding Yards

The Active Shipbuilding Yards are comprised of privately owned U.S. shipyards that are open, having at least one shipbuilding position capable of accommodating a vessel 122 meters (400 feet) in length or over. In addition, these shipyards must own or have in place a long-term lease (1 year or more) on the facility in which they intend to accomplish the shipbuilding work, there must be no dimensional obstructions in the waterway leading to open water (i.e., locks, bridges), and the water depth in the channel to the facility must be a minimum of 3.7 meters. The Active Shipbuilding Base, as identified by the U.S. Navy and MARAD, consists of those shipyards identified as Active Shipbuilding Yards.

#### Shipyards With Build Positions

Shipyards with Build Positions are those privately owned shipyards/facilities that are open with at least one building position capable of accommodating a vessel 122 meters in length and over, and that have not constructed a naval ship or major oceangoing merchant vessel in the past two years.

#### Repair With Drydocking Facilities

Repair with Drydocking Facilities are defined as those facilities having at least one drydocking facility that can accommodate vessels 122 meters in length and over, provided that water depth, in the channel, to the shipyard itself is at least 3.7 meters. These facilities may also be capable of constructing a vessel less than 122 meters in length overall.

#### Major Topside Repair Facilities

Major Topside Repair Facilities are those that have sufficient berth/pier space for topside repair of ships 122 meters in length and over, provided that water depth in the channel to the facility itself is at least 3.7 meters. These facilities may also have drydocks and/or construction capability for vessels less than 122 meters in length. Services rendered by these firms vary from a simple repair job to a major topside overhaul, particularly when the work on oceangoing ships can be accomplished without taking the ships out of the water. It is common practice for a shipyard to send its personnel and equipment to provide voyage repairs while the ship is at anchor or working cargo at a commercial marine terminal. There is an increasing trend worldwide to send ship repairers to the ship rather than to bring the ship to the shipyard, thus calling for greater mobility in the use of ship repair personnel.

Notwithstanding the above classifications, the large new construction shipbuilding facilities, described herein generally have drydocks and extensive waterfront acreage that are capable of all types of ship repair and maintenance. Accordingly, it should be noted that major shipyards usually combine repair, overhaul, and conversion with shipbuilding capabilities. It is often difficult, therefore, to draw a sharp line between new shipbuilding yards and ship repair yards, as many of them engage in both types of work.

This Report also contains Appendix C, a compendium of information on medium and small shipyards and boatbuilding and repair companies. It is a new section, added to this year's edition of the Survey of U.S. Shipbuilding and Repair Facilities. It has been added to acknowledge the important contributions of this sector of the industry to the vitality of our national economy, to the development of the U.S offshore energy industry, U.S. commerce, and to the support of an energy efficient, environmentally sound, intermodal transportation system.

Finally, the 2003 Survey and other industry related sources of information established the following:

 The Active Shipbuilding Yards employed roughly 59 percent of the U.S. shipbuilding and repair industry's total workforce, as reported by the Bureau of Labor Statistics under SIC 336611. A brief description of the nine shipyards and general arrangement drawings of each yard's facilities (Exhibit 11 – 19) were provided by each of the companies and can be found starting on page 25.

- The 15 Shipyards with Build Positions employed roughly 7 percent of the U.S. shipbuilding and repair industry's total workforce.
- Combined, the 24 Active Shipbuilding yards and the Shipyards with Build Positions account for about 66 percent of the U.S. shipbuilding and repair industry's total workforce.
- A geographical map locating these shipyards can be found in Exhibits 20 and 21.

Questions and comments about this report should be directed to Daniel Seidman at (202) 366-1888 or by email to Daniel.Seidman@MARAD.DOT.GOV.

# OVERVIEW OF MAJOR SHIPBUILDING AND REPAIR BASE

# MAJOR U.S. PRIVATE SHIPYARDS SUMMARY CLASSIFICATION DEFINITIONS

#### **Active Shipbuilding Yards**

The Active Shipbuilding Yards are comprised of those privately owned U.S. shipyards/facilities that are open, with at least one building position capable of accommodating a vessel 122 meters (400 feet) in length and over, and are currently engaged in the construction of naval ships and/or major oceangoing merchant vessels 122 meters (400 feet) in length and over.

#### Shipyards with Build Positions

Shipyards with Build Positions are those privately owned shipyards/facilities that are open, with at least one building position capable of accommodating a vessel 122 meters in length and over, and that have not constructed a naval ship or major oceangoing merchant vessel in the past two years.

#### Repair (with Drydocking)

Repair (with Drydocking) facilities are those shipyards that have graving docks, floating drydocks or marine rails capable of handling naval ships and/or major oceangoing merchant vessels 122 meters in length and over.

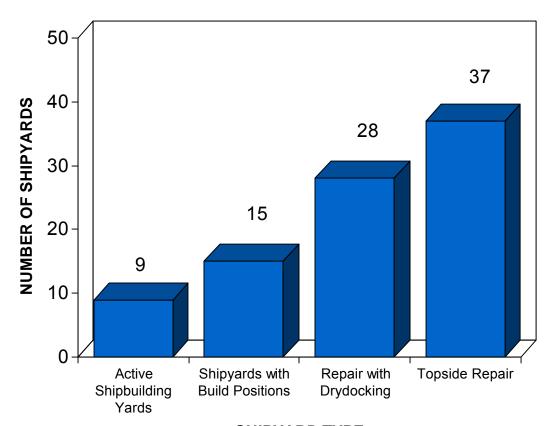
#### Topside Repair

Topside repair facilities are those shipyards that have sufficient berth/pier space, including dolphins, to accommodate a naval ship or major oceangoing merchant vessel of 122 meters in length or over.

# MAJOR SHIPBUILDING AND REPAIR BASE OCTOBER 2003

#### NUMBER OF SHIPYARDS BY TYPE

ACTIVE SHIPBUILDING YARDS	9	
SHIPYARDS WITH BUILD POSITIONS	15	
REPAIR WITH DRYDOCKING	28	
TOPSIDE REPAIR	37	
TOTAL	89	

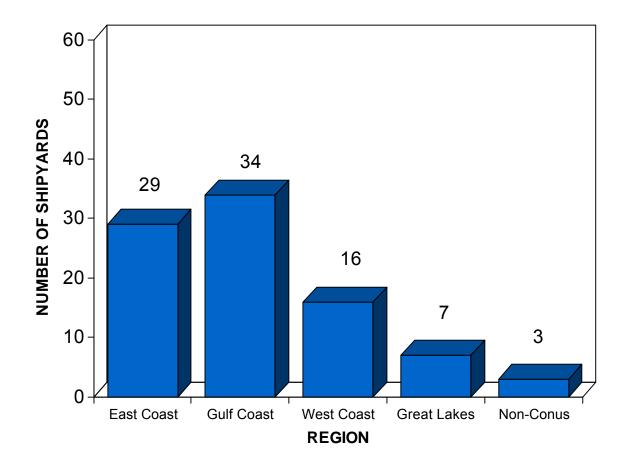


SHIPYARD TYPE

# MAJOR SHIPBUILDING AND REPAIR BASE OCTOBER 2003

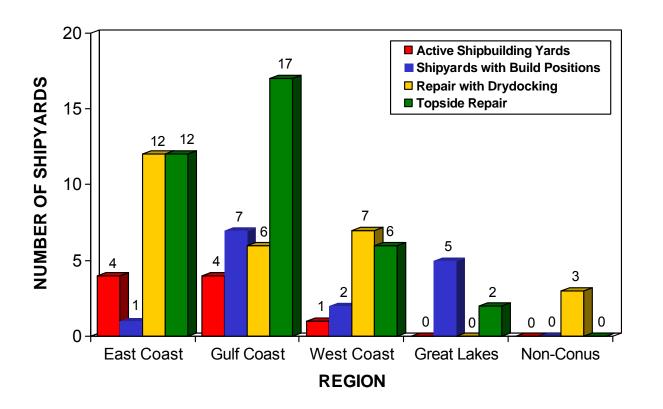
#### NUMBER OF SHIPYARDS BY REGION

EAST COAST	29
GULF COAST	34
WEST COAST	16
GREAT LAKES	7
NON-CONUS	3
TOTA	I 89



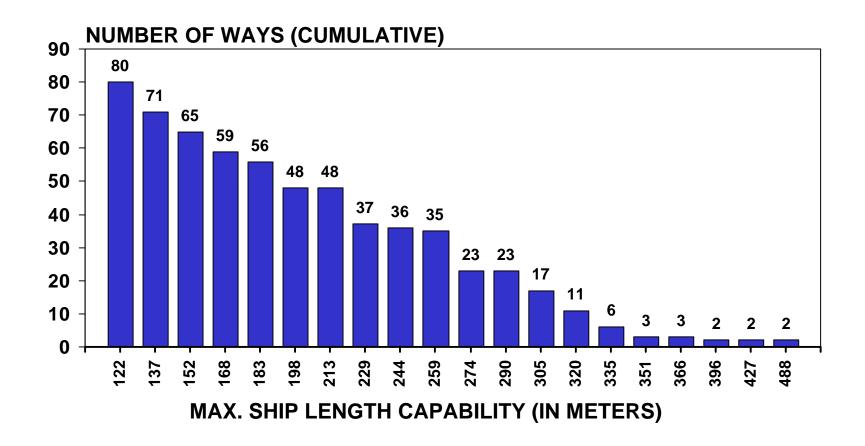
# MAJOR SHIPBUILDING AND REPAIR BASE OCTOBER 2003 NUMBER OF SHIPYARDS BY TYPE AND REGION

	ACTIVE				
	SHIPBUILDING	SHIPYARDS WITH	<b>REPAIR WITH</b>	TOPSIDE	
	<u>YARDS</u>	<b>BUILD POSITIONS</b>	DRYDOCKING	REPAIR	
EAST COAST	4	1	12	12	
GULF COAST	4	7	6	17	
WEST COAST	1	2	7	6	
GREAT LAKES	0	5	0	2	
NON-CONUS	0	0	3	0	
TOTAL	9	15	28	37	



## MAJOR U.S. SHIPBUILDING FACILITIES\*

NUMBER OF BUILDING POSITIONS BY MAXIMUM LENGTH CAPABILITY (OCTOBER 1, 2003)

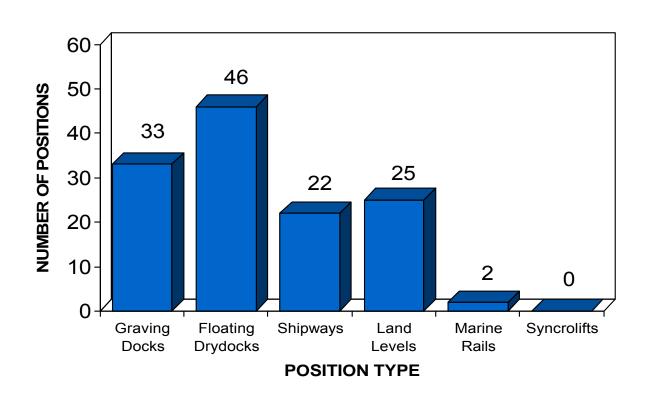


<sup>\*</sup> Shipways, Graving Docks and Land Level Positions

# MAJOR SHIPBUILDING AND REPAIR BASE OCTOBER 2003

# NUMBER OF BUILD AND REPAIR POSITIONS

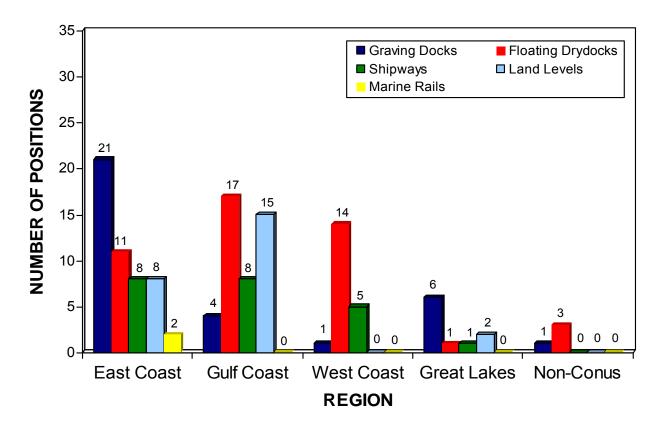
GRAVING DOCKS	33
FLOATING DRYDOCKS	46
SHIPWAYS	22
LAND LEVELS	25
MARINE RAILS	2
SYNCROLIFTS	0
TOTAL	128



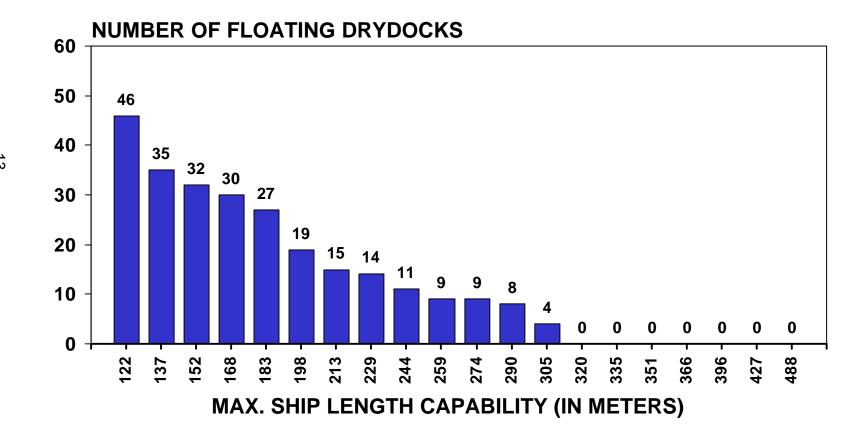
# MAJOR SHIPBUILDING AND REPAIR BASE OCTOBER 2003

#### NUMBER OF BUILD AND REPAIR POSITIONS BY REGION

	GRAVING	FLOATING		LAND	MARINE	
	DOCKS	DOCKS	SHIPWAYS	LEVELS	RAILS	
EAST COAST	21	11	8	8	2	_
GULF COAST	4	17	8	15	0	
WEST COAST	1	14	5	0	0	
<b>GREAT LAKES</b>	6	1	1	2	0	
NON-CONUS	1	3	0	0	0	
TOTAL	33	46	22	25	2	



# MAJOR U.S. SHIP REPAIR FACILITIES\* NUMBER OF FLOATING DRYDOCKS BY MAXIMUM LENGTH CAPABILITY (OCTOBER 1, 2003)



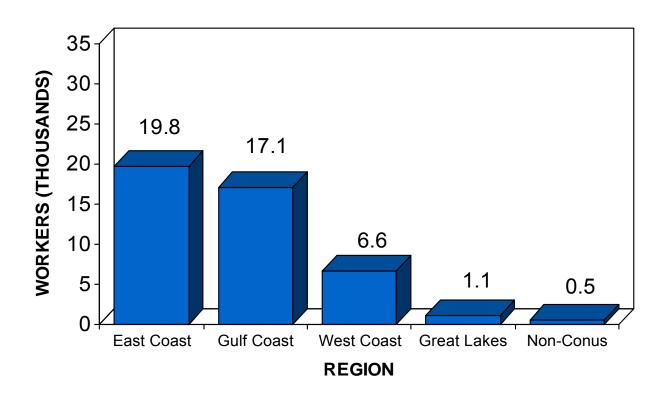
<sup>\*</sup> Includes Major Shipbuilding and Repair Yards with Drydock Facilities

# MAJOR SHIPBUILDING AND REPAIR BASE OCTOBER 2003

#### NUMBER OF PRODUCTION WORKERS BY REGION

(in Thousands)

EAST COAST	19.8
<b>GULF COAST</b>	17.1
WEST COAST	6.6
<b>GREAT LAKES</b>	1.1
NON-CONUS	0.5
TOTAL	45.1

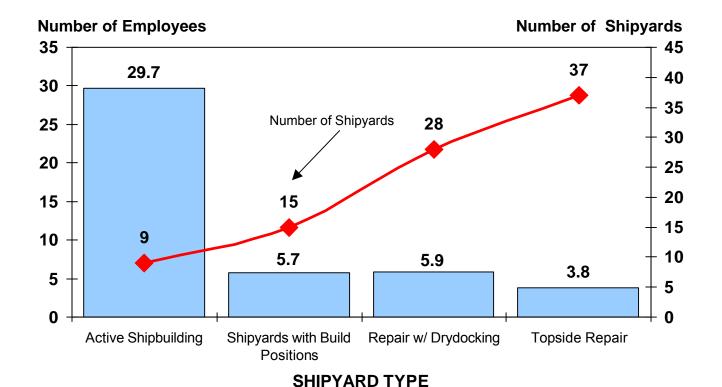


# MAJOR SHIPBUILDING AND REPAIR BASE OCTOBER 2003

NUMBER OF PRODUCTION WORKERS BY SHIPYARD TYPE

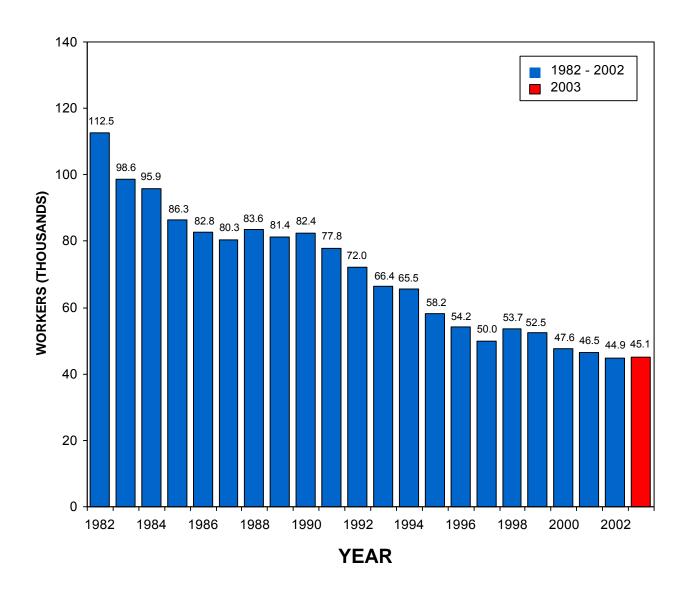
(in Thousands)

ACTIVE SHIPBUILDING	29.7
SHIPYARDS WITH BUILD POSITIONS	5.7
REPAIR WITH DRYDOCKING	5.9
TOPSIDE REPAIR	3.8
TOTAL	45.1



# MAJOR SHIPBUILDING AND REPAIR BASE OCTOBER 2003

#### NUMBER OF PRODUCTION WORKERS 1982 - 2003



#### **EAST COAST**

#### **Active Shipbuilding Yards (4)**

Bath Iron Works Corporation - Bath, ME
Electric Boat Corporation - Groton, CT
Kvaerner Philadelphia Shipyard, Inc. - Philadelphia, PA
Northrop Grumman Newport News - Newport News, VA

#### Other Shipyards with Building Positions (1)

Atlantic Dry Dock Corporation - Jacksonville, FL

#### Repair Yards with Drydock Facilities (12)

Bayonne Dry Dock & Repair Corporation - Bayonne, NJ
Boston Ship Repair, Inc. - Boston, MA
Caddell Dry Dock & Repair Company, Inc. - Staten Island, NY
Colonna's Shipyard, Inc. - Norfolk, VA
Detyens Shipyards, Inc., Main Yard - North Charleston, SC
Detyens Shipyards, Inc., Wando Division - Mt. Pleasant, SC
GMD Shipyard Corporation - Brooklyn, NY
Metro Machine Corporation - Norfolk, VA
Metro Machine Corporation - Philadelphia Division - Philadelphia, PA
Norfolk Shipbuilding & Drydock Corporation - Norfolk, VA
North Florida Shipyard, Inc. - Jacksonville, FL
SPEEDE Shipyard, LLC - Norfolk, VA

#### **Topside Repair Yards (12)**

Associated Naval Architects, Inc. - Portsmouth, VA
Kerney Service Group, Inc. - Norfolk, VA
Marine Hydraulics International, Inc. - Norfolk, VA
Metal Trades, Inc. - N. Charleston, SC
Moon Engineering Company, Inc. - Portsmouth, VA
Newport Shipyard Company, LLC - Newport, RI
Norfolk Shiprepair & Drydock Corporation - Norfolk, VA
Promet Marine Services Corporation - Providence, RI

#### **EAST COAST**

#### **Topside Repair Yards (12)**

Reynolds Shipyard Corporation - Staten Island, NY Steel Style, Inc. - Newburgh, NY The General Ship Repair Corporation - Baltimore, MD The Hinckley Company - Portsmouth, RI

#### **EAST COAST TOTAL = 29 Yards**

#### **GULF COAST**

#### **Active Shipbuilding Yards (4)**

Bender Shipbuilding and Repair Company, Inc. - Mobile, AL Northrop Grumman Ship Systems, Avondale Operations - Avondale, LA Northrop Grumman Ship Systems, Ingalls Operations - Pascagoula, MS VT - Halter Marine Pascagoula - Pascagoula, MS

#### **Other Shipyards with Building Positions (7)**

Alabama Shipyard - Mobile, AL
AMFELS, Inc. - Brownsville, TX
Austal USA - Mobile, AL
Signal International, LLC - East Yard - Pascagoula, MS
Tampa Bay Shipbuilding & Repair Company - Tampa, FL
United Marine Enterprise, Inc., Port Arthur Shipyard - Beaumont, TX
VT - Halter Moss Point - Moss Point, MS

#### Repair Yards with Drydock Facilities (6)

Atlantic Marine - Mobile - Mobile, AL
Bollinger Gulf Repair, LLC - New Orleans, LA
Bollinger Houston, L.P. - Houston, TX
Gulf Marine Repair Corporation - Tampa, FL
International Ship Repair & Marine Services, Inc. - Tampa, FL
Signal International Texas, LP - D.O.C. Yard - Port Arthur, TX

#### **Topside Repair Yards (17)**

Boland Marine & Mfg. Company, Inc. - New Orleans, LA
Bollinger Algiers, LLC - New Orleans, LA
Bollinger Calcasieu, LLC - Sulphur, LA
Bollinger Lockport, LLC - Lockport, LA
Bollinger Texas City, L.P. - Texas City, TX
Buck Kreihs Company, Inc. - New Orleans, LA
CBH Services, Inc. - Orange, TX
Dixie Machine Welding & Metal Works, Inc. - New Orleans, LA
Gulf Copper & Manufacturing Corporation - Port Arthur, TX

#### **GULF COAST**

#### **Topside Repair Yards (17)**

Hendry Corporation - Tampa, FL
Houston Ship Repair, Inc., Brady Island Ship Repair Facility - Houston, TX
Newpark Shipbuilding & Repair, Inc., Brady Island Inc. - Houston, TX
Newpark Shipbuilding & Repair, Inc., Pasadena - Pasadena, TX
Newpark Shipbuilding & Repair, Inc., Pelican Island Inc. - Galveston, TX
Orange Shipbuilding Company, Inc. - Orange, TX
Sabine Shipyard, Inc. - Sabine Pass, TX
Signal International Texas, LP - Orange Yard - Orange, TX

#### **GULF COAST TOTAL = 34 Yards**

#### **WEST COAST**

#### **Active Shipbuilding Yards (1)**

National Steel and Shipbuilding Company - San Diego, CA

#### Other Shipyards with Building Positions (2)

Gunderson, Inc. - Portland, OR Todd Pacific Shipyards Corporation - Seattle, WA

#### Repair Yards with Drydock Facilities (7)

Cascade General, Inc. - Portland, OR
Lake Union Drydock Company - Seattle, WA
MAR COM, Inc. - Portland, OR
Puglia Engineering, Inc. dba Fairhaven Shipyard - Bellingham, WA
San Francisco Drydock, Inc. - San Francisco, CA
Southwest Marine, Inc., San Diego Division - San Diego, CA
Southwest Marine, Inc., San Pedro Division - Terminal Island, CA

#### **Topside Repair Yards (6)**

Bay Ship & Yacht Company, Alameda - Alameda, CA
Bay Ship & Yacht Company, Richmond - Alameda, CA
Continental Maritime of San Diego, Inc. - San Diego, CA
Dakota Creek Industries, Inc. - Anacortes, WA
Everett Shipyard, Inc. - Everett, WA
Foss Shipyard dba Foss Maritime Company - Seattle, WA

#### **WEST COAST TOTAL = 16 Yards**

#### **GREAT LAKES**

#### Other Shipyards with Building Positions (5)

Bay Shipbuilding Company - Sturgeon Bay, WI Fraser Shipyards, Inc. - Superior, WI Marinette Marine Corporation - Marinette, WI Metro Machine Corporation - Industrial Products Division - Erie, PA Toledo Ship Repair Company, - Toledo, OH

#### **Topside Repair Yards (2)**

H. Hansen Industries - Toledo, OH Nicholson Terminal & Dock Company - River Rouge, MI

#### **GREAT LAKES TOTAL = 7 Yards**

#### **NON-CONUS**

#### **Repair Yards with Drydock Facilities (3)**

Alaska Ship & Drydock, Inc. - Ketchikan, AK Honolulu Shipyard, Inc. - Honolulu, HI Marisco, Ltd. - Kapolei, HI

**NON-CONUS TOTAL = 3 Yards** 

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# DESCRIPTIONS AND GENERAL ARRANGEMENT DRAWINGS FOR THE ACTIVE SHIPBUILDING YARDS

#### **Bath Iron Works Corporation**

Bath Iron Works Corporation (BIW) is located on the Kennebec River in Bath, ME. The original iron foundry was established in 1826; it became Bath Iron Works Ltd in 1884, and the first ship was delivered in 1890. Since then, this shipyard has built over 230 U.S. Navy surface combatants and more than 160 commercial ships, including product tankers, containerships, roll-on/roll-off ships, private yachts and fishing vessels. BIW became a wholly owned subsidiary of General Dynamics Corporation in September 1995.

In 1973, BIW became the lead yard for the FFG-7 PERRY class frigate and delivered 24 of these ships. In 1982, the Navy selected BIW as the second-source shipbuilder for the AEGIS cruiser program. The company built eight CG-47 TICONDEROGA class cruisers and delivered the last one in 1993. In 1985, BIW won the competition for the design and construction of the U.S. Navy's DDG-51 ARLEIGH BURKE class AEGIS destroyers. The lead ship and 22 follow-on ships have been delivered since 1991. As of October 31, 2003, twelve DDG's were under contract. The last delivery is scheduled for 2010.

The facilities for new construction include two distinct configurations each consisting of three shipways. The first configuration consists of three shipways that reside on the land level transfer facility (LLTF) and can be used for both military and commercial shipbuilding. All three shipways on LLTF can accommodate ships of 243 meters in length with a maximum beam of 32 meters. Two of these shipways are serviced by two 300-metric ton whirley cranes. The third shipway is serviced by a 100-metric ton whirley crane. All cranes can be transferred by rail between all shipways. The second configuration consists of three inclined shipways; two can accommodate ships of 220 meters in length, one with a maximum beam of 30 meters and the other a maximum beam of 32 meters. These shipways are serviced by a 220-metric ton level-luffing crane. The third shipway, can handle a 210 meter ship with a beam of 26 meters. BIW has two principal structural assembly buildings. One building, which is 15,600 square meters, houses the panel line and has 15 workstations. The smaller one, which has 3,780 square meters, has 7 workstations. The pre-outfit building, 8,450 square meters, has 16 work stations and is used for equipment installation after units are blasted and painted. It is important to note, that while the inclined ways are a part of BIW's facilities, they are currently inactive. There are no plans to engage in construction or to revitalize the design and manufacturing processes required to build on our inclined ways.

BIW also operates three other industrial facilities.

As of mid-2003, the company had about 6,800 employees.

#### Bender Shipbuilding & Repair Company, Inc.

Bender Shipbuilding & Repair Co., Inc (BSR) is located on the Mobile River in Mobile, AL, about 48 kilometers from the Gulf of Mexico. The original machine and welding shop was established in 1919. After decades of executing voyage repairs in the port, in 1952 BSR acquired a small dry-dock and moved into the repair and construction of tugs and barges. In the 1960's, BSR established itself as a builder, becoming the dominant supplier of vessels to the Pacific Northwest fisheries. Over the years, BSR has produced a great variety of vessels; including, offshore supply, casino, fishing, tugs, oil spill response, barges, patrol boats and other types of vessels for customers the world over.

With the addition of larger dry-docks, BSR moved further into the repair and conversion market with a multitude of contracts with U.S. and foreign flag commercial ship operators, the Maritime Administration, Army Corps of Engineers, US Navy, and the Military Sealift Command. Since 2000, BSR has performed a steady stream of Navy overhauls and repair, dry-docking and repair contracts and conversions. BSR achieved ISO 9001:2000 Certification in 2002.

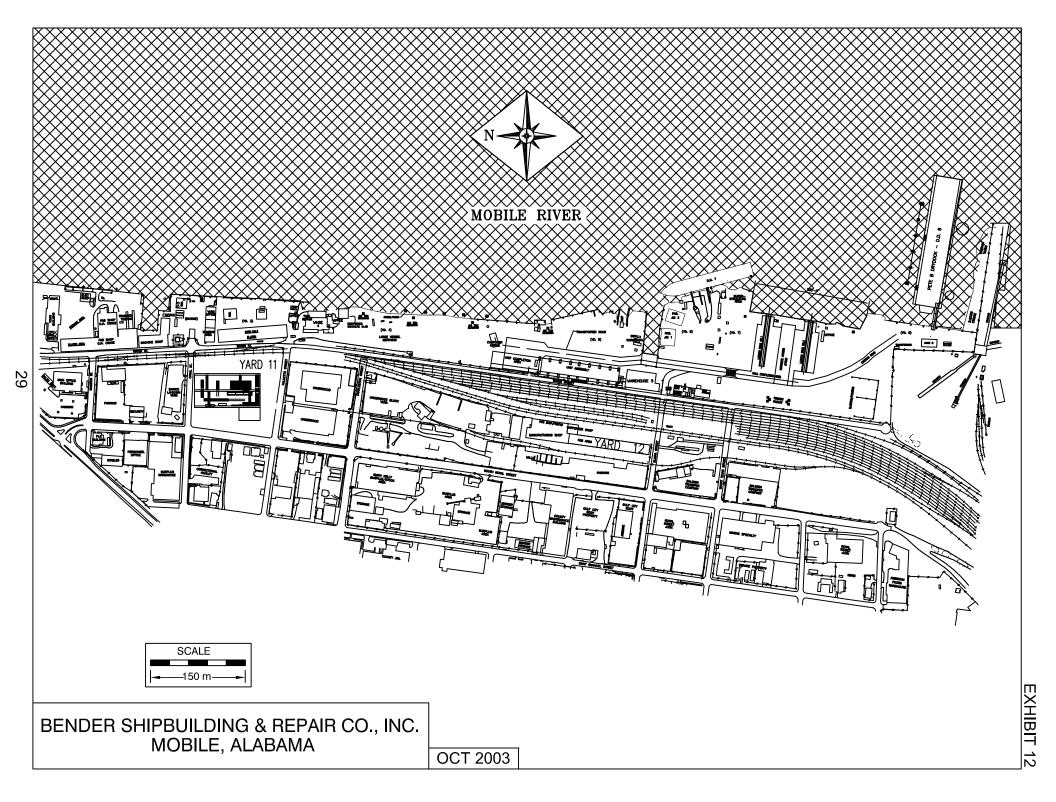
BSR's facilities stretch over a mile along the banks of the Mobile River. On the east bank, there is a repair operation with a 15,240-metric-ton dry-dock and a wet-berth suitable for Panamax–size vessels. The Corporate offices and the majority of the facilities, including three drydocks up to 24,350 ton capacity, are on the west bank adjacent to the City's downtown.

In the past five years, BSR has modernized its new construction facilities, beginning with a state-of-the-art steel processing facility. The facility features 2,400 square meters of covered steel plate storage area, capable of blasting plates up to 4 meters wide and a 175-ton iron worker. Plate cutting is done on a 81 meter by 4 meter cutting table serviced by two high-powered laser cutting systems (6kW and 4kW), while precision forming work is accomplished with an 1100-ton computer controlled press brake featuring a 7 meter CNC variable bottom die. The facility is managed with fully integrated shop floor management software utilizing state-of-the-art wireless communications. The steel processing facility delivers just-in-time parts to a panel line installed in 2001. The panel line features over 122 meters of semi-automated workstations on a mechanized roller table, with dedicated work cells for one-sided butt welding, stiffener fitting, an 8-headed stiffener welder and a girder fitting station.

BSR's main assembly shed was enhanced in 2000 and crane capacities were expanded. The main shed now includes 8 major workstations and a further expansion is planned.

The production processes are managed and controlled with a fully integrated fiber and wireless network throughout the yard, using state-of-the-art engineering, planning, scheduling and production support software tools. There are three launch positions that accommodate end translation to either a launch pontoon or one of BSR's larger dry-docks, the largest of which is capable of handling a 137 meter by 30 meter vessel. In recent years, over twenty vessels have been launched in this manner. The launch arrangement has also been used to roll vessels ashore for long-term conversion programs and re-float them at completion, thereby freeing the drydocks for other shorter-term work.

As of mid-2003, Bender Shipbuilding & Repair Co., Inc. employed about 870 personnel.



#### **Electric Boat Corporation**

Electric Boat Corporation (EB) is located on the Thames River in Groton, CT. Electric Boat is the primary design, construction, and life cycle support shipyard for U.S. Navy nuclear-powered submarines. A part of General Dynamics Corporation since 1952, the company was founded in 1899 to sell the Navy its first submarine, the HOLLAND. Since then, Electric Boat has delivered over half of all U.S. Navy submarines, including the USS CUTTLEFISH – the first welded submarine - in 1931, 85 fleet-type boats during World War II; the USS NAUTILUS - the first nuclear submarine - in 1954; and the USS GEORGE WASHINGTON - the first ballistic missile submarine - in 1959.

As of October 1, 2003, Electric Boat had under construction the third SSN-21 SEAWOLF class attack submarine, and the first four SSN-774 VIRGINIA class new attack submarine. The company is also engaged in the repair of nuclear submarines both in Groton, CT and at other homeports.

Electric Boat operates two major manufacturing and construction sites - a 48 hectare shipyard facility with 1,365 meters of deep water frontage on the Thames River in Groton, CT, and a 40 hectare modular construction facility in Quonset Point, RI, fronting on Narragansett Bay. Completely outfitted submarine sections weighing up to 1,540 metric tons are shipped from Quonset Point to Groton via a heavy lift system consisting of multi-wheeled transporters and a unique jack-up barge. Electric Boat also has major engineering support offices in Bangor, WA, Kings Bay, GA, and Washington, DC, and prototype reactor service activities in West Milton, NY.

The Quonset Point facilities include an Automated Frame and Cylinder Facility, where 20 automated fixtures are used to produce thick-walled submarine sections to demanding dimensional tolerances, and extensive steel fabrication, machine, pipe, electrical, and HVAC shops which support the modular outfitting of these sections.

Groton facilities include the principal research, engineering, and design activities, as well as shipyard operations centered around the land level submarine construction facility (LLSCF), which is capable of producing up to three submarines per year, and served by heavy-lift cranes capable of combined lifts up to 616 metric tons. There are three graving docks: GD1 and GD2 are used primarily for submarine repair and post-sea trial dockings; and, GD3 is used to launch ships up to 197 meters in length and 19,250 metric tons from the LLSCF. Six wet berth positions with portal cranes ranging from 75 to 300 tons can accommodate vessels up to 229 meters long and drawing 12 meters.

In 2001/2002, Electric Boat constructed a \$12 million Steel Processing Facility at Quonset Point incorporating state-of-the industry automated handling, blasting, laser marking plasma / laser / water jet cutting, rolling and pressing, structural shape forming and cutting, and other equipment.

As of mid-2003 Electric Boat had approximately 8,900 employees.

## Kvaerner Philadelphia Shipyard Inc

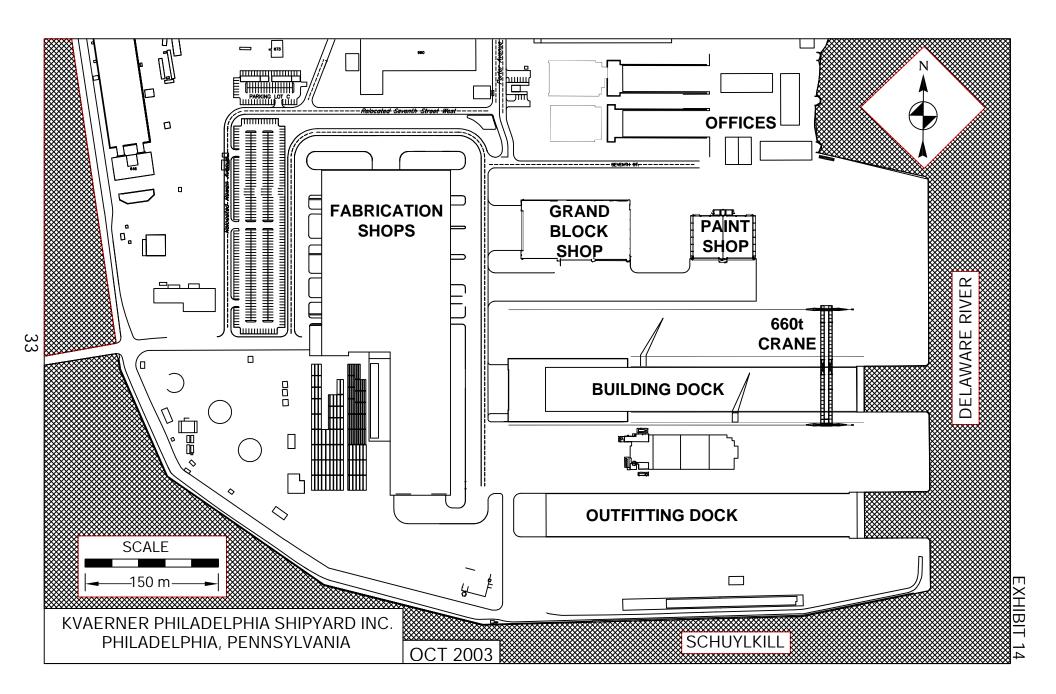
Kvaerner Philadelphia Shipyard Inc. (KPSI) is a newly constructed mid-sized shipyard located in Philadelphia, PA. KPSI is capable of constructing all types of vessels, but has chosen to focus exclusively on commercial vessels for the U.S. domestic market, primarily container vessels and tankers between 40,000 dwt and 100,000 dwt.

The immediate future of the new shipyard is to design and construct for the U.S. Jones Act Market. The first Philadelphia Class CV2600 Containership was delivered on October 5, 2003 to Matson Navigation Company and was deployed in their Hawaiian service. The second Philadelphia Class CV2600 Containership, currently under construction at KPSI, is scheduled for completion in 2004. A third is currently being built to spec until a contract is signed.

The yard is equipped to build Ro/Ro's, as well as crude and product tankers, which present significant fleet replacement opportunities over the next decades. From a size viewpoint, ships up to 300 meters by 42 meters can be constructed, both Handymax (40,000 - 50,000 deadweight (dwt)) and Panamax (65,000 - 75,000 dwt) being the prime tanker target. Containerships of 2,000 - 3,000 twenty-foot equivalent units (TEU) are considered the optimum size.

Occupying 46 hectares of the former Philadelphia Naval Shipyard, KPSI has implemented state-of-the-art facilities based on Kvaerner's European shipbuilding experience. The shipyard has two of the largest graving docks on the East Coast measuring 335 meters long and 45 meters wide with an intermediate gate and skidding system. KPSI's facilities include a gantry crane capable of lifting 660 tons and two 50-ton cranes. All three cranes serve one of the graving docks, or the Build Dock, where construction of the ship is completed. The second dock is used as a Outfitting Dock. The fabrication and panel shops occupy 39,800 square meters, the grand block shop is 7,900 square meters and two fully equipped paint shops each capable of holding a 600-ton grand block. KPSI also has two heavy lift transports capable of lifting 420 tons each.

As of mid-2003 the total labor force was approximately 850 people.



## National Steel and Shipbuilding Company

National Steel and Shipbuilding Company (NASSCO), the largest shipbuilder on the West Coast, serves both commercial and U.S. Navy shipbuilding, conversion, and repair markets. The current company was formed as a business entity in 1959 and occupies 59 hectares on the harbor in San Diego, California. In November 1998, NASSCO was purchased by General Dynamics and became part of the General Dynamics Marine Group.

Commercial ships designed and constructed at NASSCO include oil tankers and product carriers, very large crude carriers up to 209,000 dwt, a 1,910 TEU containership, and, most recently, two 256 meter by 36 meter twin-shaft, electric-drive trailerships for Totem Ocean Trailer Express' service from Tacoma, WA to Anchorage, AK.

For the U.S. Navy, NASSCO specializes in auxiliary and support ships such as combat stores ships (AFS), destroyer tenders (AD), fast combat support ships (AOE), and strategic sealift roll-on/roll-off ships (T-AKR). Conversion projects include the two 90,000 dwt tankers to 1,000 bed Navy hospital ships (T-AH), strategic sealift and maritime prepositioning ships (T-AK/T-AKRs), and three Maersk Line L-Class containerships to strategic sealift large medium speed RO/ROs (LMSRs).

As of August 31, 2003, NASSCO's backlog included four 185,000 dwt double-hull crude carriers for BP Alaska Shipping and the first four of a potential 12 T-AKE dry cargo/ammunition ships, a new class of underway replenishment ships for the Navy. NASSCO also has multi-year contracts for the repair and maintenance of the Navy's San Diego based CG-47s, FFG-7s, LHAs, and LHDs.

NASSCO's ship construction facilities include a graving dock that can accommodate vessels up to 303 meters by 51 meters and two inclined building ways for up to panamax-size vessels (290 meters by 34 meters). Two new 300 ton heavy-lift portal cranes have been installed that can now provide combined lifts up to 560 tons. Berthing is available at eight full-service berths for ships with drafts up to 11 meters and lengths up to 305 meters. NASSCO also operates a floating drydock with an ABS-certified lift capacity of 43,656 long tons for ships up to 290 meters by 41 meters.

During 2000-2003, General Dynamics and NASSCO have invested over \$100 million in facilities upgrades to increase steel throughput and reduce construction durations. In addition to the two new 300 ton heavy-lift cranes, a new automated block assembly line, T-beam and profile line, and pipe shop have been constructed. This will increase the company's steel fabrication and assembly capacity to over 1,700 tons per week. NASSCO offers full-service marine engineering and naval architecture utilizing the latest commercial computer-aided design technology such as AutoCAD, Microstation, and TRIBON.

As of mid-2003, the total labor force was about 3,300.

# Northrop Grumman Ship Systems - Ingalls Operations and Avondale Operations

Northrop Grumman Ship Systems has two geographic locations: Avondale Operations (Avondale) located on the west bank of the Mississippi River approximately 22 kilometers upriver from New Orleans, LA; and Ingalls Operations (Ingalls) located on the Gulf of Mexico in Pascagoula, MS. Northrop Grumman Ship Systems has diversified shipbuilding facilities with an abundance of experience in the design, engineering, construction, conversion, overhaul, repair, fleet support of Navy warships and auxiliaries as well as commercial ships, offshore drilling rigs, platforms, and production modules.

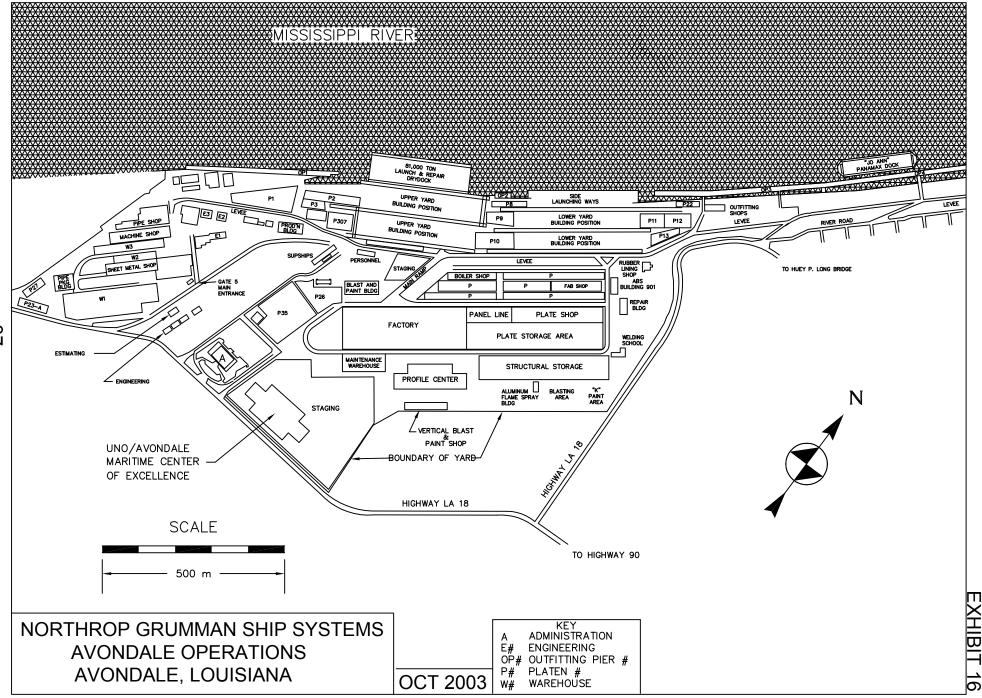
As of October 2003, the Northrop Grumman Ship Systems orderbook, including both Avondale and Ingalls facilities, consisted of: ten DDG-51 Class Guided Missiles Destroyers; one LHD-1 Class Amphibious Assault Ship; four LPD-17 Class Amphibious Assault Ships; two TAPS Trade Crude Oil Tankers.

Avondale facility totals 108 hectares containing three outfitting docks equipped with supporting shops and over 1,431 square meters of pier space. The upper yard shipbuilding area has two large positions to accommodate vessels up to 311 meters by 53 meters. The major part of one ship can be erected stern of a second ship in Position No. 1, while a third hull is being completed on Position No. 2. Ships constructed in the upper yard move laterally in three positions for launching in Avondale's 81,000-ton floating drydock, which can accommodate ships 305 meters by 66 meters, with a lift capacity of 82,296 metric tons. The lower yard shipbuilding area with side launching capabilities can accommodate vessels totaling 366 meters by 53 meters. Up to five vessels, greater than 213 meters length overall can be constructed simultaneously in the lower yard shipbuilding area. The 13,000-ton panamax floating drydock, which can accommodate ships up to 229 meters by 35 meters, has a lifting capacity of 19,000 metric tons.

Ingalls' West Bank facility totals 243 hectares and is geared to assembly-line construction. Fabricated steel and subassemblies are brought from various shops to the subassembly area where they are erected and pre-outfitted, then moved to the module assembly area. These areas are divided into five major bays or process lines that can produce 5,447 metric ton modules. After assembly and outfitting, the modules are moved to a floating drydock that is subsequently moved to a deep-water area where the ship is ballasted and launched. The drydock can launch or recover a maximum ship size of 305 meters by 53 meters and 38,100 metric tons. Approximately 1,432 meters of berthing space, serviced by cranes with a capacity of 272 metric tons, are available for outfitting. About 16,721 square meters of the shipyards slab area is roofed for early outfitting.

Ingalls' older East Bank facility has one pier in operation, providing 457 meters of berthing space serviced by cranes with 54 metric ton lifting capacity for outfitting and topside repair.

As of late 2003, Northrop Grumman Ship Systems employed a total labor force of approximately 19,000.



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## Northrop Grumman Newport News Shipbuilding

For more than a century, Newport News Shipbuilding has designed, built, overhauled and repaired a wide variety of ships for the U.S. Navy and commercial customers. Today, Newport News is the nation's sole designer, builder and refueler of nuclear-powered aircraft carriers and one of only two companies capable of designing and building nuclear-powered submarines. The company also provides after-market services for a wide variety of naval and commercial vessels.

With vast facilities located on more than 223 hectares along two miles of waterfront in Newport News, VA, the company has the capability to design, build and maintain every class of ship in the U.S. Navy's fleet.

Included in Newport News's major facilities are:

<u>Docks</u> - There are 6 landside drydocks and one floating drydock. Drydock 12, the largest building basin in the nation, can accommodate vessels up to 661 meters in length by 75 meters beam. An intermediate gate will permit the simultaneous work on two major ships in the dry dock. A 900-metric ton gantry crane, one of the largest in the Western Hemisphere, services Drydock 12 and can handle completely outfitted assemblies. Drydocks 10 and 11, which are serviced by a 310-long ton gantry crane, can be used for construction work, but are used primarily for ship overhaul, repair and deactivation. Drydocks 1, 2 and 4 are used mainly for ship repair and overhaul, and the floating dry dock, which is 195 meters by 41 meters, supports submarine construction from the Module Outfitting Facility (MOF). The floating dry dock is currently out of service, undergoing a long-term overhaul, and is scheduled to be back in service by June 2004.

<u>Vessel Berthing</u> - Newport News has two outfitting berths totaling 799 meters each serviced by 30-metric ton cranes. There are three piers totaling 1,944 meters of berthing space and serviced by cranes with capacities of up to 50 metric tons, plus two small service piers at the MOF.

As of mid-2003, the labor force at Newport News was approximately 17,400.

### VT-Halter Marine Pascagoula

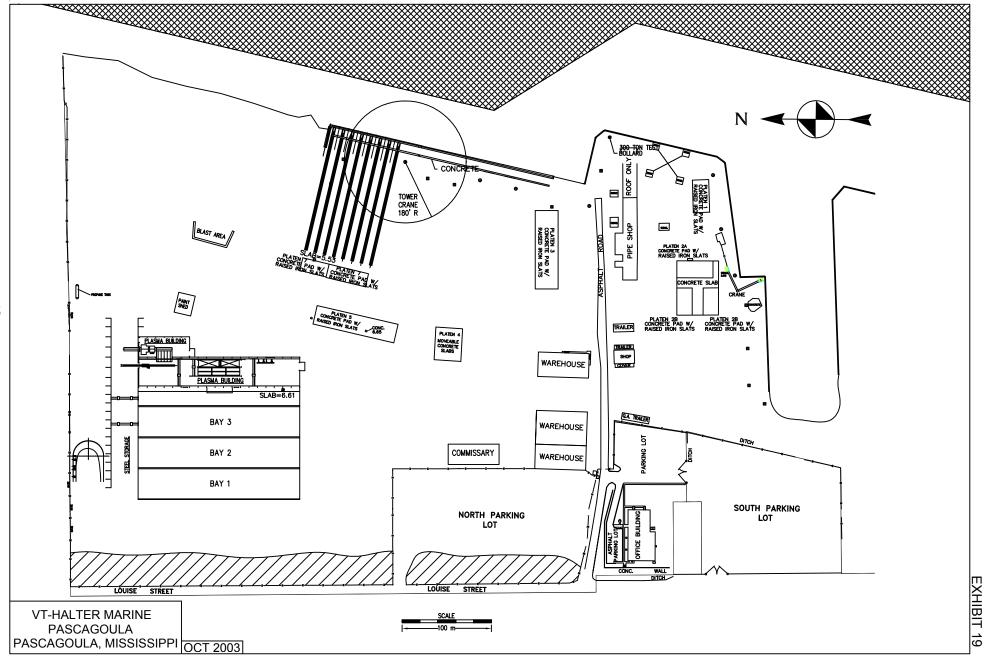
The VT-Halter Marine Pascagoula shipyard was acquired by Halter in November 1995 and is located in Pascagoula, MS. The shipyard consists of approximately 36 hectares of property and has the capacity to build and service vessels up to 244 meters of length by 35 meters beam and 0.6 meters of water depth with unlimited height.

The existing major facilities consist of over 914 meters of waterfront, 213 meters of steel bulkhead wet dock space and an unobstructed access to the Gulf of Mexico. The yard has over 3,902 square meters of under-cover production facilities divided between a fabrication shop, paint shop, maintenance shop and warehouse. The yard has a 274-meter slip for wet dock work and a 304-metric ton shore mounted crane. The yard has three crawler cranes and two-rack mounted gantry cranes.

This facility has recently undergone a \$20 million expansion, which was structured in three phases. The major components of this plan were implemented when the program was placed on hold until market conditions improved. The Panel Line Building was completed in addition to infrastructure improvements to the waterfront bulkheads, mooring equipment and yard facilities in preparation for the additional planed improvements. The scope that remains to be completed include additional outdoor assembly platens, hull erection slabs and cranes, completion of the outfitting wharf and provision of the utilities associated with these improvements.

The VT-Halter Marine Pascagoula shipyard is currently involved in support work for NOAA and LSV construction projects underway at VT-Halter Moss Point Shipyard.

As of mid-2003, employment at VT-Halter Pascagoula was about 430.



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# SHIPBUILDING INDUSTRY AND ACTIVITIES

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# Exhibit 20

2003

# MAJOR SHIPBUILDING FACILITIES IN THE UNITED STATES Active Shipbuilding Yards

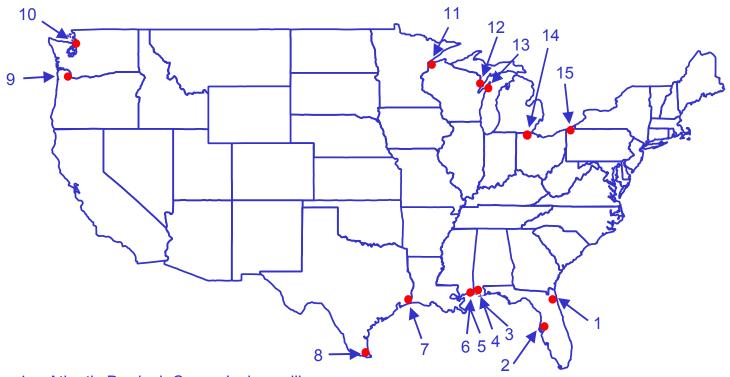


- 1. Bath Iron Works Corp.
- 2. Electric Boat Corp.
- 3. Kvaerner Philadelphia Shipyard, Inc.
- 4. Northrop Grumman Newport News
- 5. Bender Shipbuilding and Repair Company, Inc.
- 6. VT Halter Marine Pascagoula
- 7. Northrop Grumman Ship Systems Ingalls Operations
- 8. Northrop Grumman Ship Systems Avondale Operations
- 9. National Steel and Shipbuilding Co.

# Exhibit 21

2003

# MAJOR SHIPBUILDING FACILITIES IN THE UNITED STATES Other Shipyards with Build Positions



- 1. Atlantic Drydock Corp., Jacksonville
- 2. Tampa Bay Shipbuilding & Repair Co.
- 3. Austal USA
- 4. Alabama Shipyard, Inc
- 5. VT Halter Moss Point
- 6. Signal International, LLC East Yard
- 7. United Marine Enterprises, Inc.,
  Port Arthur Shipyard
- 8. AMFELS, Inc.
- 9. Gunderson, Inc.

- 10. Todd Pacific Shipyards Corporation
- 11. Fraser Shipyards
- 12. Marinette Marine Corporation
- 13. Bay Shipbuilding Co.
- 14. Toledo Ship Repair, Co.
- 15. Metro Machine Corporation, Industrial Products Division

# U.S. COMMERCIAL SHIPBUILDING ORDERBOOK

At the end of 2003, the orderbook for commerical oceangoing ships consisted of the following: two 32,000 GT containerships at Kvaerner Philadelphia, Philadelphia, PA; four 106,968 GT product tankers at National Steel Shipbuilding, San Diego, CA; two 88,187 GT crude carriers at Northrop Grumman Ship Systems, Avondale Operations, New Orleans, LA; and one 37,237 GT car/truck carrier at VT-Halter Marine Pascagoula, Pascagoula, MS. The orderbook has a total estimated value of almost \$1.8 billion.

### Exhibit 22

# U.S. COMMERCIAL ORDERBOOK (as of December 31, 2003)

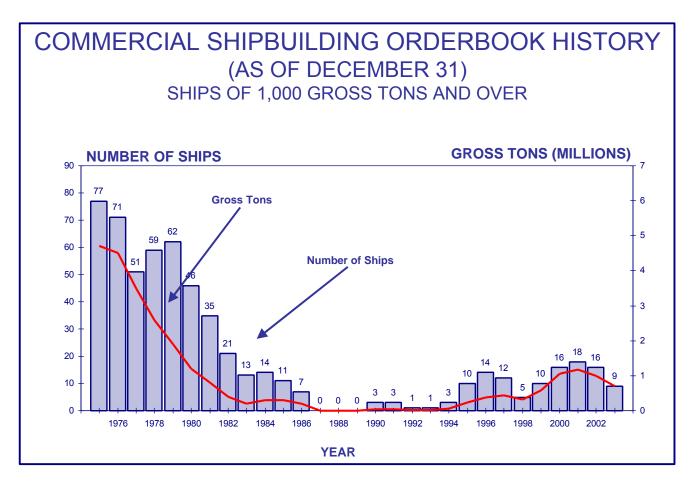
SHIPYARD	NUMBER	SHIPTYPE	GROSS TONS	CONTRACT DATE	LAST DELIVERY DATE	APPROXIMATE CONTRACT PRICE (In Millions)
VT - Halter Marine, Pascagoula	1	Car/Truck Carrier	37,237	12/14/1999	12/15/2004	\$ 70.1
Kvaemer, Philadelphia	2	Containership	32,000	01/24/2000	06/30/2005	\$ 294.0
National Steel and Shipbuilding	4	Product Tanker	106,968	09/15/2000	07/27/2006	\$ 840.0
Northrop Grumman, Avondale	2	Crude Carrier	88,187	06/30/1997	09/30/2005	\$ 570.5

# U.S. COMMERCIAL SHIP CONSTRUCTION

As of December 31, 2003, the U.S. commercial shipbuilding orderbook consisted of 9 oceangoing commercial vessels as listed previously.

These vessels are being financed in several different ways from the Title XI program and the Capital Construction Fund, both managed by the Maritime Administration, to private financing secured by the vessel owners. These vessels will all be eligible for the Jones Act, which will allow them to trade in the United States.

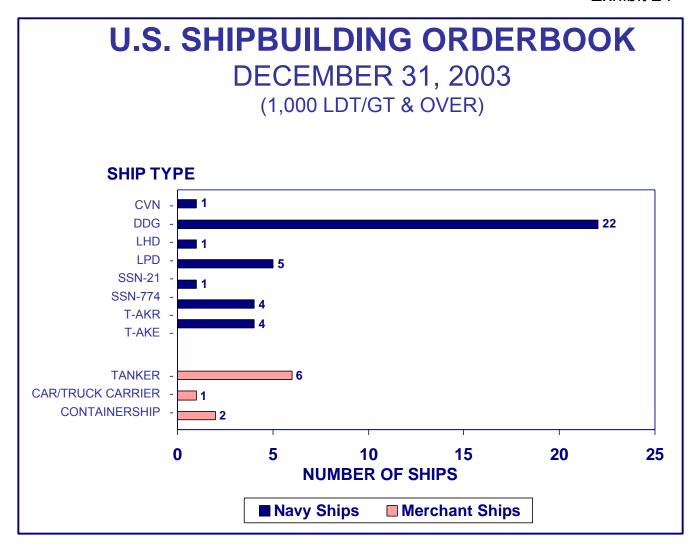
The exhibit below (Exhibit 23) shows the end year commercial ship construction orderbook since 1975.



# AGGREGATE U.S. SHIPBUILDING ORDERBOOK

As of December 31, 2003, ships on order or under construction in U.S. private shipyards totaled 34 naval and 9 commercial vessels (Exhibit 24). This orderbook includes naval vessels, 1,000 light displacement tons (LDT) and larger and commercial oceangoing ships, 1,000 GT and larger.

Eight shipyards had contracts for the construction of naval and commercial vessels. The naval shipbuilding orderbook, which was comprised of seven different types of vessels, included 30 ships scheduled for delivery in 2005 and later. Four shipyards had orders for a total of 9 commercial ships, six are scheduled to be delivered during 2004, two in 2005 and one in 2006.



# OVERALL NEW U.S. SHIPBUILDING ORDERS

During 2003, U.S. shipyards received no orders for the construction of oceangoing commercial vessels but did receive orders for four new naval vessels (Exhibit 25).

The Navy awarded the following contracts during 2003: one Amphibious Transport ship (LPD), one Combat Logistics vessel (T-AKE) and two Destroyers (DDG's).

NEW SHIPBUILDING ORDERS - 2003						
as of December 31, 2003						
(1,000 GT or LDT and OVER)						
SHIPYARD	DESIGN TYPE	CON PRI	PROXIMAT NTRACT CE Millions)	ESTIMATED	CONTRACT AWARD DATE	ESTIMATED DELIVERY DATE
-	TIFE	(1111)	//////////////////////////////////////	LDI/GI	DATE	DATE
COMMERCIAL SHIPS NONE						
NAVAL SHIPS						
Northrop Grumman, Ingalls	DDG 105	\$	401.5	8,344 LDT	01/02/2003	04/18/2008
National Steel & Shipbuilding	T-AKE 4	\$	288.0	17,871 LDT	07/21/2003	05/15/2007
Northrop Grumman, Ingalls	LPD 21	\$	816.6	25,300 LDT	11/26/2003	01/15/2007
Northrop Grumman, Ingalls	DDG 107	\$	401.5	8,344 LDT	12/23/2003	TBD
	4 Ships	\$ ^	1,907.6	59,859 LDT		

# U.S. COMMERCIAL SHIP DELIVERIES

During 2003, U.S. shipyards delivered four commercial oceangoing ships (Exhibit 26). National Steel Shipbuilding in San Diego, California delivered two 60,884 GT RO/RO Trailer Ships to TOTE Ocean Express for use in the Alaskan Jones Act Trade, Northrop Grumman Ship Systems, Avondale Operations, New Orleans, Louisiana delivered the third of a series of 88,187 GT crude tankers to Polar Tankers and Kvaerner, Philadelphia Shipyard, Philadelphia, Pennsylvania delivered its first commercial ship, a 32,000 GT 2,600 TEU containership, to Matson Navigation.

### Exhibit 26

# COMMERCIAL OCEANGOING VESSELS DELIVERED - 2003

December 31, 2003 (1,000 GT and OVER)

	DESIGN		GROSS	CONTRACT DELIVERY	PRICE
SHIPYARD	TYPE	VESSEL NAME	TONS	DATE	(IN Millions)
National Steel and Shipbuilding	RO/RO	MIDNIGHT SUN	60,884	03/17/2003	\$150.0
Northrop Grumman, Avondale	•	POLAR DISCOVERY	88,187	07/21/2003	\$168.0
National Steel and Shipbuilding		NORTH STAR	60,884	08/14/2003	\$150.0
Kvaerner, Philadelphia	Containership	MANUKAI	32,600	09/05/2003	\$138.3
	4 Ships		242,555		\$606.3

# U.S. NAVAL SHIP DELIVERIES

During 2003, U.S. private shipyards delivered four new naval vessels, 1,000 LDT and larger. The naval vessels delivered totaled approximately 142,305 LDT and had an initial contract value estimated to be \$3.5 billion (Exhibit 27).

Three different types of naval ships were delivered by four shipyards: 2 - guided missile destroyers (DDG); 1 - vehicle cargo ships (T-AKR) and 1 – nuclear aircraft carrier (CVN).

Exhibit 27

# NAVY CONSTRUCTION VESSELS DELIVERED - 2003

December 31, 2003 (1,000 LDT and OVER)

SHIPYARD	SHIP CLASS and HULL NUMBER	ESTIMATED VESSEL NAME	LDT	DELIVERY DATE	APPROXIMATI CONTRACT PRICE (In Millions)
Northrop Grumman, Ingalls	DDG 89	MUSTIN	8,344	02/28/2003	\$ 400.0
Northrop Grumman, Avondale	T-AKR 306	BENAVIDEZ	34,408	06/30/2003	\$ 227.0
Northrop Grumman, Newport News	CVN 76	RONALD REAGAN	91,209	07/12/2003	\$ 2,500.0
Bath Iron Works	DDG 90	CHAFEE	8,344	08/06/2003	\$ 366.7
	4 Ships		142,305		\$ 3,493.7

# U.S. NAVY'S T-SHIP PROGRAM

The Navy's T-ship program is an important segment of ship construction and conversion activity for U.S. shipyards. T-ships are auxiliary vessels funded by the Navy budget but designed to be civilian-manned and under the control of the Military Sealift Command. Since mid-1979, 16 U.S. private shipyards have been awarded contracts for the construction of 74 new ships and the conversion of 36 existing vessels. The initial contract value for these vessels totaled approximately \$11.0 billion.

During 2003, there was only one new order for a T-ship placed with a U.S. shipyard.

During this same period, the last in a series of military sealift ships (T-AKR) was delivered by Northrop Grumman Ship Systems, Avondale Operations, New Orleans, Louisiana.

As of December 31, 2003, four T-ships were under construction or on order at one shipyard (Exhibit 28). The value of this orderbook is approximately \$1.3 billion.

### Exhibit 28

# T-SHIPS ON ORDER OR UNDER CONSTRUCTION (as of December 31, 2003)

	SHIP CLASS			APPROXIMATE CONTRACT
	and		DELIVERY	PRICE
SHIPYARD	HULL NUMBER	VESSEL NAME	DATE	(In Millions)
National Steel and Shipbuilding	T-AKE 1	LEWIS AND CLARK	03/19/2005	\$ 406.9
National Steel and Shipbuilding	T-AKE 2	SACAGAWEA	09/15/2005	\$ 301.6
National Steel and Shipbuilding	T-AKE 3	- unnamed -	05/15/2006	\$ 289.9
National Steel and Shipbuilding	T-AKE 4	- unnamed -	05/15/2007	\$ 288.0
	4 Ships			\$ 1,286.4

# PROJECTED U.S. NAVY SHIPBUILDING PLAN

The U.S. Navy shipbuilding plan for fiscal years 2004 - 2009 includes the construction of 52 new ships (Exhibit 29). More than \$80 billion is proposed for this plan. Shipyard contract value accounts for about a third of this amount, while the remainder is attributed to Government-furnished equipment placed aboard the vessels and to other Government program costs.

The Navy's proposed FY 2004 - 2009 shipbuilding program represent a continued increase in the amount of new shipbuilding work available to the nation's industrial base. This program, with an average of almost nine new ships per year, represents a 25 percent increase in the quantity of ships being procured as compared to the 2003-2008 plan.

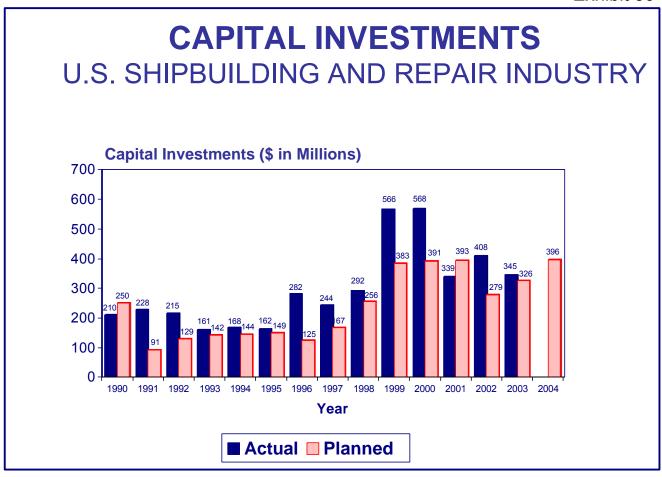
The Navy's plan includes the construction of 14 guided missile destroyers (DDG-51/DD(X)), 10 attack submarines (SSN) and 6 amphibious transport ships (LPD). These three shipbuilding programs will probably utilize more than 75 percent of the available new construction funding.

NAVY SHIPBUILDING PLAN Fiscal Years 2004 - 2009							
Ship Class	2004	2005	2006	2007	2008	2009	Total
New Construct	ion						
CVN	-	-	-	1	-	-	1
SSN-774	1	1	1	1	3	3	10
DD(X)	-	1	-	2	2	3	8
DDG-51	3	3	_	_	-	-	6
LCS	-	1	1	-	3	6	11
LPD	1	1	2	1	1	_	6
MPF	_	_	_	1	1	1	3
T-AKE	2	2	2	1	_	_	7
Total	7	9	6	7	10	13	52

# CAPITAL INVESTMENT IN U.S. SHIPBUILDING

During FY 2003, the U.S. ship construction and ship repair industry invested more than \$345 million in the upgrade and expansion of facilities (Exhibit 30). Much of this investment was to improve efficiency and competitiveness in the commercial shipbuilding arena. Improvements were made to update and convert shipyard facilities to be more commercially viable. Examples of recent capital investments are new pipe and fabrication shops, drydock extensions, military work enhancement programs, automated steel process buildings and expanded design programs. Many of these improvements have been necessary due to the increased utilization of U.S. shipyards, particularly those along the Gulf Coast, resulting from the resurgence of the Oil Patch Industry.

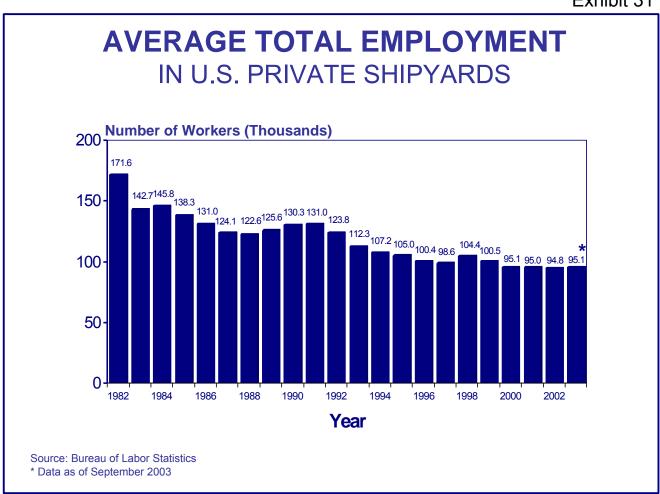
In 2004, the industry plans to spend about \$396 million in the upgrade and expansion of facilities, according to data received by the Maritime Administration. The industry's capital investments since 1970 have totaled approximately \$8.9 billion. The actual expenditures between 1985 and 2003, with the exception of 1990 and 2001, have consistently exceeded those planned.



# TOTAL EMPLOYMENT IN U.S. PRIVATE SHIPYARDS

According to employment data published by the Bureau of Labor Statistics (BLS), U.S. Department of Labor, under the Standard Industrial Classification (SIC) Code 3731 (Shipbuilding and Repairing), the average total employment in U.S. private shipyards for 2003 was 95,100 (Exhibit 31). This total reflects an increase of approximately .05 percent, from the 2002 revised average total employment for the shipbuilding and repairing industry. This average total employment in U.S. shipyards has held fairly steady since 2000.

Since the early 1980's, the long-term trend for employment in the U.S. private shipbuilding and repair business has been lower, despite increases experienced during 1989-1991, and in 1998. The 2003 employment level in the U.S. shipbuilding and repairing industry is down 45 percent from the 1982 level of 171,600 people.

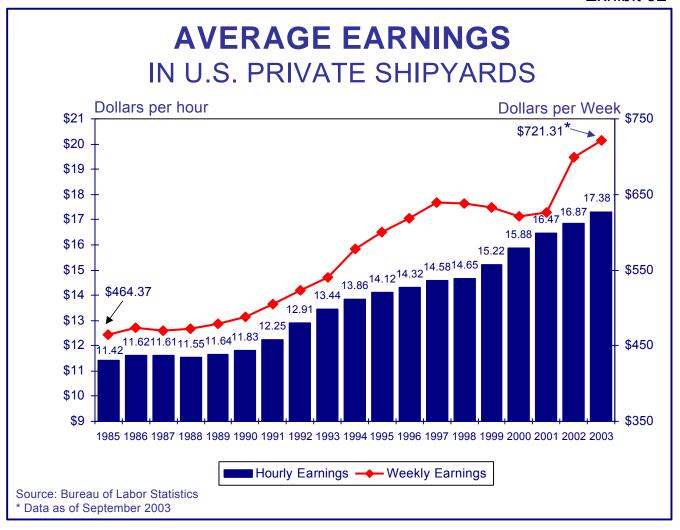


# AVERAGE EARNINGS IN U.S. PRIVATE SHIPYARDS

Average hourly earnings in the U.S. private shipyards are presented on a "gross" basis, reflecting not only changes in basic hourly and incentive wage rates, but also such variable factors as premium pay for overtime and late-shift work, as well as changes in output for workers paid on an incentive plan. Averages of hourly earnings differ from wage rates. Earnings are the actual return to the workers for a stated period of time; rates are the amount stipulated for a given unit of work or time. Gross average weekly earnings are derived by multiplying average weekly hours by average hourly earnings. Therefore, weekly earnings are affected not only by changes in gross average hourly earnings, but also by changes in the length of the workweek.

The annual average earnings of the private shipyards in the United States from 1985 through 2003 show an increase from \$11.42 to \$17.38 (Exhibit 32). During the same period, the average weekly earnings rose from \$464.37 to \$721.31.

Exhibit 32



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# SHIPYARD ACTIVITY REPORT SUMMARY 2003

### 62

# SHIPYARD ACTIVITY REPORT SUMMARY SHIPYARD ORDERBOOK AS OF DECEMBER 31, 2003

Area	Cargo	Roll-On / Roll-Off	Container	Barge Carrier	Tug / Barge	Tanker	Ore/Bulk	Govt.*	T-Ships	Other Vessels	T
Alea	Cargo	TOII-OII		HIPS UNDE			OTE/Duik	Govi.	1-onips	V 633613	
East Coast	_	_	1	-	4	-	_	_	_	18	
Gulf Coast	-	-	-	-	56	3	-	25	1	123	
West Coast	-	-	-	-	8	4	-	23	3	22	
Great Lakes					6			407		26	
and Inland TOTAL	-	-	1	-	6 <b>74</b>	7	-	127 <b>175</b>	4	189	
	T	1		SHIPS UND I			<u> </u>		<u> </u>	-	H
East Coast	-	-	-	-	-	-	-	-	-	-	$\vdash$
Gulf Coast	-	-	-	-	3	-	-	-	-	-	
West Coast Great Lakes and Inland	-	-	<u>-</u>	-	<u>-</u>	-	-	<u>-</u>	<u>-</u>	-	
TOTAL	_	_	-	-	3	_	_	-	_	-	
					* GO	VERNMEN <sup>*</sup>	T PROJECT	S EXCLUE	JING NAVY		

### **CONTRACTS FOR NEW VESSELS (January 2003 – December 2003)**

A& B Industries 1 Tug All American Marine, Inc. 1 Passenger Vessel 1 High Speed Catamaran Allen Marine, Inc. 1 Ferry Catamaran AMFELS, Inc. 1 Semi-Submersible Missile Detection Unit Atlantic Marine - Jacksonville 1 Hydro-Dump Barge Austal USA 1 High Speed Pass/Vehicle Catamaran 1 High Speed Boat **Basic Marine** 1 Fisheries Research Vessel Bay Shipbuilding Company 3 Double Hull Hot Oil Tank Barges 1 ATB Tua Bender Shipbuilding and Repair Company 1 Crane Barge **Blount Boats** 1 Trash Skimmer Boat 1 Cargo/Passennger Ferry 1 Dinner/Cruise Ferry Bollinger Gretna, LLC 1 Double Hull Oceangoing Barge Breaux's Bay Craft, Inc. 1 Crew Boat **Burger Boat Company** 2 Yachts C & G Boat Works 3 Supply Vessels Conrad Industries - Amelia Shipvard 1 Crew/Supply Boat Conrad Shipyard, Inc. 2 Deck Barge 1 Crane Barge Dakota Creek Industries. Inc.

1 Ferry (Catamaran)

**Derecktor Shipyards Connecticut** 4 Passenger Ferries 2 Fast Passenger Ferries Gladding-Hearn Shipbuilding 5 Aluminum Pilot Boats 1 Fast Ferry Gulf Craft, Inc. 2 Aluminum Crew/Supply Boats 1 Aluminum Passenger Catamaran Gunderson, Inc. 3 Double Hull Tank Barges 3 Oceangoing Deck Cargo Barges Hope Services, Inc. 2 Push Boats Island Boats, Inc. 1 Aluminum Catamaran 2 Landing Crafts 3 Passenger Catamaran 4 Tenders Jeffboat, LLC 1 Ocean Tank Barge 18 Inland Tank Barges Keith Marine, Inc. 1 Dinner Cruise Boat Kennedy Ship and Repair 1 Patrol Boat Kody Marine, Inc. 3 Push Boats Kvichak Marine Industries, Inc. 2 Aluminum Catamarans 1 Craft 1 Survey Catamaran 1 Aluminum Hoover Catamaran LEEVAC Industries. LLC 1 Paddlewheel Casino Boat Marine Builders, Inc. 5 Deck Barges 3 Push Boats 1 Dinner Boat **Marinette Marine Corporation** 29 Barges

1 Supply Vessel 1 Offshore Service Vessel National Steel and Shipbuilding Co. 1 T-AKE 4 Combat Logistics Dry Cargo Ship Neuville Boat Works, Inc. 1 Crew/Supply Boat Newpark Shipbuilding & Repair, Inc. 1 Deck Barge Nichols Brothers Boat Builders, Inc. 1 Aluminum Catamaran Orange Shipbuilding Company, Inc. 1 Deck Barge 1 Crane Barge Rodriguez Boat Builders, Inc. 1 Passenger Boat Rozema Boat Works Boat 2 Oil Spill Response Boat 1 Oil Containment Barge SAFE Boats International 1 Response Boat Seaark Marine, Inc. 18 Aluminum Patrol Boat 1 Aluminum Crew Boat Seacraft Shipyard Corporation 1 Crew / Supply Boat 1 Research Vessel SEMCO 1 Self-Elevating Lift Boat SENESCO / Southeastern New England Shipbuilding Corporation 2 Double Hulled Fuel Barge Skipperliner Industries, Inc. 1 Dinner Cruise Yacht Steiner Shipyard, Inc. 1 Vehicle / Passenger Ferry Sundial Marine Tug & Barge Works, Inc. 3 Petroleum Barges Thoma-Sea Boat Builders, Inc. 1 Tug

Master Boat Builders, Inc.

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CONTRACTS FOR NEW VESSELS (January 2003 – December 2003) (CONTINUED)				
Toledo Ship Repair Company,				

## **VESSELS DELIVERED (January 2003 – December 2003)**

A & B Industries 1 Model Bow Tug Alabama Shipyard 1 ATB Tug 1 ATB, Double Hulled Barge All American Marine, Inc. 1 Aluminum Research Catamaran 1 High Speed Aluminum Catamaran 1 Monohull Research Vessel 1 Passenger Vessel Allen Marine, Inc. 3 Catamaran Ferries 3 Passenger Ferries Atlantic Marine - Jacksonville 1 ATB Tug Austal USA 1 Aluminum High Speed Catamaran 1 Dinner Cruise Boat 1 High Speed Boat Basic Marine 1 Fisheries Research Vessel 1 Vehicle/Passenger Ferry Bath Iron Works Corporation 1 Destroyer (DDG 90) Bay Shipbuilding Company 1 Passenger Vessel 1 Vehicle/Passenger Ferry Bender Shipbuilding and Repair Co., Inc. 1 Construction Vessel 2 Crane Barges 2 Offshore Platform Supply Vessels 2 Platform Supply Vessels Bentz Boats, LLC 4 Tour Boats **Blount Boats** 1 Boat 1 High Speed Whaler Catamaran

Bollinger Algiers, LLC 7 Tugs (Conversion) Bollinger Gretna, LLC 1 Double Hull Oceangoing Barge 1 Dble Hull Oil Oceangoing Barge Bollinger Lockport, LLC 1 ATB Tug 13 Coastal Patrol Boats 3 Offshore Supply Vessels 2 Platform Supply Vessels 1 Supply Vessel 3 Tank Barges 1 Z-Drive Tug Bollinger Marine Fabricators, LLC 2 Dble Hulled Oil Oceangoing Barge **Breaux Brothers** 4 Crew Boats 2 Survey Vessels Breaux's Bay Craft, Inc. 2 Crew Boats Burger Boat Company 3 Yachts C & G Boat Works 5 Crew Boats 4 Supply Vessels Conrad Shipvard, Inc. 1 Crew/Supply Vessel 3 Deck Barges Dakota Creek Industries, Inc. 1 Ferry Derecktor Shipyards Connecticut 4 Passenger Ferries 1 Sail Yacht Eagle Drydock and Marine Repairs 1 Dredge Tender Eastern Shipbuilding Group 1 Catamaran Vessel 3 Clam Boats 6 Offshore Supply Vessels 2 Ship Assist Tug 1 Vehicle / Passenger Ferry

Freeport Shipbuilding Group 1 Dinner Cruise Boat 1 Passenger Ferry 1 Passenger / Vehicle Ferry **GEO Shipyards** 1 Sport Fishing Boat Gladding-Hearn Shipbuilding 3 Fast Ferry 1 Catamarán Ferry 3 Aluminum Pilot Boats Gulf County Shipbuilding 1 Swath Passenger Cruise Boat 3 Aluminum Crew/Supply Boats 1 Aluminum Passenger Catamaran Gunderson, Inc. 1 Deck Cargo Barge 3 Oceangoing Deck Cargo Barges HBC Barge LLC 1 Deck Barge Hope Services, Inc. 3 Push Boats Houma Fabricators -Shipyard De Hoop of Houma, Inc. 3 Offshore Supply Vessel Island Boats, Inc. 1 Ferry 4 Tenders 1 Aluminum Catamaran 3 Landing Craft 3 Passenger Catamaran Ferries John Bludworth Shipyard, LLC 1 Inland Tow Boat Keith Marine, Inc. 1 Yacht Knight & Carver Yacht Center 1 Sailing Catamaran Kody Marine, Inc.

3 Push Boats

## **VESSELS DELIVERED (January 2003 – December 2003)**

(CONTINUED)

Kvaerner Philadelphia Shipyard, Inc.

1 2600 TEU Containership

Kvichak Marine Industries, Inc.

3 Aluminum Catamaran

1 Hoover Craft

2 Patrol Boats

1 Aluminum Pilot Boat

1 Survey Catamaran

1 Foil-Assist Survey Catamaran

LaForce Shipyard

1 Aluminum Supply Crew Boat

LEEVAC Industries, LLC

4 Offshore Supply Vessels

LeTourneau

1 Jackup Drilling Rig

Main Iron Works, Inc.

2 Tugs

1 Scalloper Boat

Marine Builders, Inc.

6 Deck Barges

2 Dinner Cruise Boats

4 Push Boats

Marinette Marine Corporation

5 Seagoing Bouy Tenders

Master Boat Builders, Inc.

1 Offshore Service Boat

3 Supply Boats

Merrifield-Roberts

1 Catamaran

Modutech Marine, Inc.

1 Fast Patrol Boat

National Steel and Shipbuilding Company

2 Trailer Ships

Neuville Boat Works, Inc.

2 Crew/Supply Vessels

Newpark Shipbuilding & Repair, Inc.

2 Deck Barges

Nichols Brothers Boat Builders, Inc.

1 Fire Boat

1 Stearnwheeler Steam Boat

North American Shipbuilding Company

1 Offshore Supply Vessel

6 Supply Anchor Handling Vessels

Northrop Grumman Newport News

1 Aircraft Carrier (CVN 76)

Northrop Grumman Ship Systems, Avondale Operations

1 Crude Tanker

1 Sealift Ship (T-AKR 306)

Northrop Grumman Ship Systems, Ingalls Operations

1 Destroyer (DDG 89)

Orange Shipbuilding Company, Inc.

3 Tugs

1 Deck Barge

1 Dobule Bottomed Tug

1 Dobule Ended Passenger Ferry

3 Pusher Tugs

1 Z-Drive Tug

Palmer Johnson Incorporated

5 Motor Yachts

Patti Shipyard, Inc.

2 Steel Ferries

Quality Shipyards, LLC

4 Supply Platform Vessels

Queen Craft Shipyard

1 Crew Boat

Rodriguez Boat Builders, Inc.

3 Offshore Tugs

1 Passenger

1 Scalloper Boat

Rozema Boat Works

4 Oil Spill Response

SAFE Boats International

17 Oil Spill Response

1 ALUMINUM Fire/Rescue Boat

22 Aluminum Patrol Boat

Seacraft Shipyard Corporation

1 Aluminum Luxuray Yacht

1 Crew/Supply Boat

1 Research Vessel

SEMCO

1 Self-Elevating Lift Boat

SENESCO / Southeastern New England Shipbuilding Corporation

2 Double-Hulled Fuel Barge

3 Deck Barges

Serodino, Inc.

2 Dinner Boats

Skipperliner Industries, Inc.

1 Dinner Cruise

Steiner Shipyard, Inc

1 Vehicle / Passenger Ferry

Sundial Marine Tug & Barge Works, Inc.

3 Petroleum

Thoma-Sea Boat Builders, Inc.

2 Tua

Trinity Madisonville

6 Tank Barges

Trinity Marine Products, Inc.

7 Double Hulled Tank Barge

**Trinity Yachts** 

4 Motor Yachts

United Marine Enterprise, Inc., Port Arthur Shipyard

1 Drvdock

1 Deck Cargo Barge

Verret Shipyard

1 Push Boat

VT - Halter Moss Point

1 Offshore Supply Vessel

Washburn & Doughty Assoc., Inc.

2 Z-Ddrive Tugs Westport Shipyard, Inc.

7 Motor Yachts William E. Munson Company

2 Landing Craft Winninghoff Boats, Inc.

3 Utility Boats

1 Barge

VESSELS DELIVERED (January 2003 – December 2003) (CONTINUED)					
Yank Marine 1 Dinner Cruise Boat 5 Passenger Boats 1 Passenger Catamaran Zidell Marine Corporation 1 Petroleum Barge					

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# APPENDIX A STANDARD FORM 17

# FACILITIES AVAILIABLE FOR THE CONSTRUCTION OR REPAIR OF SHIPS

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#### Standard Form 17 (Rev. 9-96)

DEPARTMENT OF THE NAVY (NAVSEASYSCOM) & MARITIME ADMINISTRATION Coordinator for Ship Repair and Conversion (DOD-DOC)

#### FACILITIESAVAILABLEFOR THE CONSTRUCTIONOR REPAIROF SHIPS

Form Approved OMB No. 0703-0006 Expires Aug 31, 1999

The public reporting burden for this collection of information is estimated to average 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0703-0006), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS. RETURN COMPLETED FORM TO THE APPROPRIATE DEPARTMENT OF DEFENSE OFFICE OR MARITIME

<b>TO</b> : (Co	mple	te depar	tmental address	)		SHIPYARD	AND ADDRES	SS					INSTR	RUCTIONS	
												Departme	ent of Defe	copy to apense Office or shington, D.C.	Maritime
						BUILDI	NG WAYS (N	/I.L.W.)			•				
NO.						DEPTH O	F WATER					CRANES	SERVING W	AY	
OF WAY		NCHING ( one)	DIMENSIC	INS	MAXIMUM SHIP SIZE (Ton 2,240 lbs.)	OVER WAY END	AT DROP OFF		DITION WAY	NO.		(Plus hook bridge cran	-	LIFT CAP (Std. to	
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		SIDE	WIDTH		BEAM								ļ		
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LENGTH	OF I	AUNCH	ING RUN	DEPTH (	OF RUN AT M.L.W.	TIDAL RAN	GE (Difference	M.LM.H.)	IS FIRE PRO	TECTION	AVAILABL	E ON	IS SNUB	BING NECESS	SARY?
									BUILDING V	WAY?	YES	NO	YES	NO	

				SHIP'S	BERTHS (P	iers, Whar	ves, Bulkheads, I	Mooring Do	lphins (M.L.W	<b>(.))</b>			
			LENGTH	WATE	R DEPTH	HEIGHT	USE REPAIR		/ICE AVAILABL		CRAN	IES SERVING E	BERTHS, ETC.
NO.	TYPE	(Act	LENGTH tual and Usable)	INBOARD	OUTBOARD	OF	AND/OR OUTFITTING	and unit	oreviations of serv is of measure nota under legend)			ook height M.L.W.)	LIFT CAPACITY (Std. tons)
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		USE.											REACH
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				DRYDO			er) (List building						
роск	MATERIAL CONS	STRUCTED	MAXIMUM SHIP SIZ	ZE		ENGTH		CLEAR	WIDTH		DEPTH/DRAFT	Γ	LIETING CADACITY
NO.	OF - TYI FLOATING-(FD); GR. MARINE RAILW	AVING-(GD);	ACCOMMODATED LENGTH OA - BEAR	OVED.	ALL AT C	OPING (GD); PONTOONS (FD)	AT KEEL BLOCKS; ON CRADLE (MR)	AT TOP; CRADLE (MR)	AT KEEL BLOCKS	OVER SILL (GD)	OVER FLOOR	OVER KEEL BLOCKS	LIFTING CAPACITY (Ton 2,240 lbs.)
LEGEND	(Abbreviations	of Service	! !s)				1	l	I		1	1	1
	Fresh water - F	F.W G.P.	.M P.S.I.		S - P/HR - P A - C.F.M			Electric po	ower - E-V-AC	C-AMP C-AMP			ion - FP - G.P.M P.S.I wer - SS - Yes or No

				PRINCIPAL SHOPS AN	D BUILDING	SS							
NAME (	NE CHOD	DIMENS	SIONS OF	MATERIALS PROCESSED	LA	ARGEST EXI	Т	WEIGHT OF	MATERIAL C	R NUMBER	ALL OTHER SHOPS (List names and dimensions,		
OR BU	of Shop Ilding		BUILDING	(See Note)	WIDTH	Н	IEIGHT		OF UNITS PF HOURS (See		include mold loft, if a		
FABRICATI	NG												
PLATE													
SHEET MET	AL												
SUBASSEM	BLY												
CARPENTER	3												
WOODWOF	RKING												
BOAT ASSI OR MOLDIN													
MACHINE													
ELECTRICA	L												
ELECTRONI	С												
PIPE													
GALVANIZII	NG												
FOUNDRY													
RIGGER													
NOTE: Ind	dicate mat	erials as ste	el, aluminur	m, reinforced plastic, wood, plyw									
			RIDGE TYPE		HOP OR YA	ARD CRANE	S (5 tons		TATIONADV	, RAIL OR M	ODII E		
CAP.	MAX.	HEIGHT	I I			CAP.	MAX.	CAPACITY	воом	HEIGHT		HGT. OF HOOK	
(Std. tons)	SPAN	ог ноок		AREA/SHOP SERVICED	TYPE	(Std. tons)		AT REACH		HINGE	AREA SERVICED	ABOVE BASE AT OUT REACH	

ANA IOD ITEMS OF MACHINE TOOLS AND FOLIDMENT // building to the large damage.	CTODACE CDAC		DONIENTO AND	D MATERIALS // aca b = = 4
MAJOR ITEMS OF MACHINE TOOLS AND EQUIPMENT (List briefly such of the large items as will indicate the	Of storage // ist dir	e (Sq. 11.) FOR COM mensions for each ai	POINEIN IS AIN	D MATERIALS (Less boat
capacities of all important shops in maximum work piece size, e.g., 30' plate bending rolls, 10' plate shears, 4 ton Hydraulic press, 30' plate furnace, engine lathe 36" x 20" b.c., etc.)	Storage) (List dir.	nensions for each ar	ea, plus type	materiai storeu)
ton mydraunc press, 30 piate rumace, engine lathe 30 x 20 b.c., etc.)				
	RAW STEEL STO	DRAGE (Sq. ft.)	WELDING A	AND ASSEMBLY (Sq. ft.)
		ACREAGE LEGA	LLV CONTRO	UED
	IN USE		D (Including	TOTAL (Including
		in use)		undeveloped)
	EVIOTING LOCA	L ODDINANIOTO LINA	ITING PROPIL	
	EXISTING LOCA	L ORDINANCES LIM	ITING PRODU	CTIVE USE
	LIMITATIONS IN	POSED BY PROPER	TV ZONING CI	ASSIEICATION
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	VADDIAVOUT	DI FACE FUDAVOU	A DI OT DI ANI	OF VARD OR BLANT
		- PLEASE FURNISH	A PLOT PLAN	OF YARD OR PLANT,
	IF AVAILABLE.			

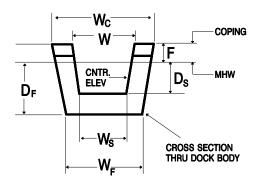
LOCATION OF PRODUCTION FA	ACILITIES FOR PROD	UCTS LISTED IN ITEM	8 OF SF 129	ON WATER	FRONT	PROJECTS UNDER CONSTRUCTION WHICH WILL ALTER NAVIGATIONAL
				YES	NO	RESTRICTIONS (Specify projects and state effect and estimated completions.)
EMPLOYMENT	CURRENT	CURRENT NO. SHIFTS	MOBILIZAT	ION - SHIFTS		
MANAGEMENT, ADMINISTRATION						
PROFESSIONAL, ENGINEERING						
PROFESSIONAL, TECHNICAL (All others)						
PRODUCTION, SKILLED						
PRODUCTION, SEMISKILLED						
PRODUCTION, UNSKILLED						
NONPRODUCTION						
TOTAL						
NUMBER OF PRODUCTION PER CONSTRUCTION (	SONNEL PRESENTLY ); REPAIR (	FENGAGED IN SHIP A	ND/OR BOAT	·		
APPROXIMATE TOTAL EMPLOY		LIATED CONCERNS O	NLY LISTED IN ITEI	VI 6 OF SF 129	9	DESCRIPTION OF TYPES OF WORK NORMALLY SUBCONTRACTED
(NOTE: An affiliate is a concer controlled by, or is under comm does not in itself constitute affi	n that directly, or ind non control with, the	lirectly through one or	more intermediary	controls, or is	;	
DISTANCE TO NEAREST RAILR	OAD CONNECTION	DISTANCE TO NEAR	est airport - ide	NTIFY		
LARGEST CONVEYANCE AVAI	LABLE AND MAXIMI	L UM DIMENSIONS OF L	OAD, FOR OVERLA	AND TRANSPO	DRTA-	
TION OF FINISHED PRODUCTS	(Not to exceed limita	ations imposed by loca	al ordinances)			
N/	AVIGATIONAL RESTI	RICTIONS (Indicate all	at M.L.W.)			
MINIMUM CHANNEL TO TIDEW		MINIMUM HORIZON		L BRIDGE		
		CLEARANCES TO TIL	DEWATER (Identify	structures)		
LIMITING LOCK DIMENSIONS T	O TIDEWATER (Iden	l tify locks)				

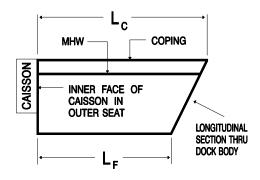
PRODUCTION EXPERIENCE (List at least three of the largest and the most complex ships or boats constructed, indicating (1) date completed, (2) hull length, beam, and molded depth, (3) type propulsion unit (fully described), (4) horsepower, (5) electrical and/or electronic installation, (6) special piping features, (7) size and tensile strength of plates, if steel, or type hull material, if other than steel, (8) special annealing, heat treating, or stress relieving problems encountered, if steel, plus, (9) any other important problems resolved.) (NOTE: If no previous construction experience give detailed description of major conversion or industrial manufacturing work considered comparable to ship or boat construction.)

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Page 6 of 6 Pages

### **GRAVING DOCK CHARACTERISTICS SUMMARY**

#### **GRAVING DOCK NOMENCLATURE**





#### **KEY**

MHW - Mean High Water

D<sub>F</sub> - Depth of Dock from MHW to Floor
D<sub>S</sub> - Depth of Dock from MHW to Sill

L<sub>C</sub> - Length of Dock at Coping L<sub>F</sub> - Length of Dock at Floor

W - Width of Dock at Top of Entrance

W <sub>C</sub> - Width of Dock at Coping or maximum clear width above Dock Floor

W<sub>F</sub> - Width at Dock Floor

W<sub>S</sub> - Width of Dock at Entrance (Sill)

F - Freeboard. Distance from MHW to top of coping. Indicate if part of Freeboard may be superflooded.

			ENTR	ANCE DIMEN	NSIONS		DOCK BO	DY DIMENSI	ONS	S U P		AVAII	ABLE ELEC			
	LEN	GTH	W	IDTH	DEPTH	WII	OTH	DEPTH	FREEBOARD	E R F	STANDARD DEFINITION				REMARKS	
GRAVING DOCK IDENTIFIER	FLOOR L <sub>F</sub>	COPING L <sub>C</sub>	SILL W <sub>S</sub>	COPING W	MHW D <sub>S</sub>	FLOOR W <sub>F</sub>	COPING W <sub>c</sub>	MHW D <sub>F</sub>	F	L O O D I N G	L <sub>C</sub> x W <sub>C</sub> x D <sub>S</sub>	VOLTS	AMPS	HERTZ	(e.g. indicate dimensions of pits in dock floor)	

### 1-10

### FLOATING DRYDOCK CHARACTERISTICS SUMMARY

FLOATING	MAXIMUM	MAXIMUM DEPTH	CLEAR WIDTH	LIFT	NORMAL KEEL	(SHORI	E ELECTRICAL E POWER TO V	ESSEL)	REMARKS  (Indicate existence of hauling blocks, if end selection can be
DRYDOCK IDENTIFIER	LENGTH OF PONTOON	OVER BLOCKS	BETWEEN WINGWALLS	CAPACITY (TONS)	BLOCK HEIGHT	VOLTS	AMPS	HERTZ	lowered, and max. length of ship DD can accommodate).
									0000 01151/51/

## APPENDIX B

# MAJOR U.S. PRIVATE SHIPBUILDING AND REPAIR FACILITIES

# MAJOR U.S. PRIVATE SHIPYARD CLASSIFICATION DEFINITIONS

#### Active Shipbuilding Yards

The Active Shipbuilding Yards are those privately owned U.S. shipyards/facilities that are open with at least one building position capable of accommodating a vessel 122 meters (400 feet) in length and over, and are currently engaged in the construction of naval ships and/or major oceangoing merchant vessels 122 meters (400 feet) in length and over.

#### Other Shipyards With Building Positions

Other Shipyards With Building Positions are those privately owned shipyards/facilities that are open with at least one building position capable of accommodating a vessel 122 meters in length and over, and that have not constructed a naval ship or major oceangoing merchant vessel in the past two years. The shipyards may not be capable of ship construction without significant capital investments. These shipyards could, however, be used in module ship construction.

#### Repair Yards With Drydock Facilities

Repair Yards With Drydock Facilities are those shipyards that have graving docks, floating drydocks, or marine rails capable of handling naval ships and/or major oceangoing merchant vessels 122 meters in length and over. These shipyards may also be capable of constructing vessels less than 122 meters in length.

#### Topside Repair Yards

Topside Repair Yards are those shipyards that have sufficient berth/pier space, including dolphins, to accommodate a naval ship or major oceangoing merchant vessel ships of 122 meters in length or over. These shipyards may also be capable of constructing and/or drydocking vessels less than 122 meters in length.

#### **GENERAL REQUIREMENTS**

The shipyard must own or have in place a long-term lease (1 year or more) on the facility in which they intend to accomplish the work. There must be no dimensional obstructions in the waterway leading to open ocean (i.e., locks, bridges). Water depth in the channel to the facility must be a minimum of 3.7 meters (at Mean Low Tide {MLT}).

#### NOTE

The following criteria were developed to establish the maximum ship size that could be accommodated in each drydock:

For floating drydocks, the maximum ship length is as given by the shipyards. The maximum beam is determined by allowing a 0.6 meter clearance at each side between the ship and wing wall.

For graving docks, the maximum ship length is determined by allowing a 0.6 meter clearance at each end between the ship and the inside of the dock at the floor. The maximum beam was determined by allowing a 0.6 meter clearance on each side between the ship and each side of the dock entrance at the sill, unless the shipyard indicated more clearance is required.

There are several types of floating drydocks and graving docks and, under certain circumstances, additional clearance would be necessary between the ship and the dock body. Permissible ship sizes requiring additional clearance may be determined by simple calculation from the above criteria.

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Piers Usable Lengtl	<u>Remarks</u>
Shipyard Name	SW Shipway GD Graving Drydock FD Floating Drydock Longest	1/ Type of work usually engaged in 2/ Employment - Mid 2003
and Address	MR Marine Railway  LL Land Level Position  SL Syncrolift  TR Travel Lift	Lengths are in Meters

#### **EAST COAST**

#### Active Shipbuilding Yards

Bath Iron Works Corporation 700 Washington Street			1/ Construction, repair, and conversion.
Bath, ME 04530	213 X 26 SW 219 X 34 SW 219 X 39 SW (2) 259 X 38 LL	259 899	<u>2/</u> 6,738
	366 X 38 LL 244 X 38 FD		
Web Address: www.gdbiw.com			
Electric Boat Corporation			1/ Construction of submarines for the U.S. Navy.
75 Eastern Point Road		229	the O.S. Navy.
Groton, CT 06340-4989	(4) 134 X 10 SW	1,034	2/ 0.007
	174 X 24 LL	•	<u>2/</u> 8,887
	151 X 20 GD		
	180 X 26 GD		
	183 X 27 GD		
Web Address: www.gdeb.com			
Kvaerner Philadelphia Shipyard, Inc.			1/ New construction.
Philadelphia Naval Business Center			
Philadelphia, PA 19112-1808	(2) 330 X 43 GD	200	2/ 845
Web Address: www.phillyshipyard.com			

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pier	
	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
Shipyard Name	GD Graving Drydock  FD Floating Drydock Longest	2/ Employment - Mid 2003
and Address	MR Marine Railway  LL Land Level Position	Lengths are in Meters
	SL Syncrolift TR Travel Lift	Lenguis are in Meters

#### **EAST COAST**

#### Active Shipbuilding Yards

Northrop Grumman Newport News			1/ Construction, repair, and
4101 Washington Avenue		500	conversion.
Newport News, VA 23607-2770	(4) 183 X 12 LL	<u>509</u> 2,972	
	139 X 21 GD **	2,512	<u>2/</u> 17,440
	159 X 21 GD **		
	197 X 27 GD **		
	262 X 31 GD **		
	292 X 37 GD *		
	344 X 41 GD *		
	661 X 75 GD *		
	195 X 41 FD		
Web Address: www.nn.northropgrumma	n.com/index.asp		
			<ul> <li>Used for construction.</li> </ul>
			** Used for repair and overhaul.

(Vessels 122 Meters in Length and Over)

(LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u>
SW Shipway GD Graving Drydock FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift	Longest  Total Linear	<ul> <li>1/ Type of work usually engaged in</li> <li>2/ Employment - Mid 2003</li> <li>Lengths are in Meters</li> </ul>
	GD Graving Drydock FD Floating Drydock MR Marine Railway LL Land Level Position	SW Shipway  GD Graving Drydock  FD Floating Drydock  MR Marine Railway  LL Land Level Position  SL Syncrolift  Usable Length  Usable Length  Total Linear

#### **EAST COAST**

#### Other Shipyards with Building Positions

Atlantic Dry Dock Corporation 8500 Heckscher Drive Jacksonville, FL 32226-2400	137 X 23 SW 189 X 26 FD 137 X 23 MR 76 X 12 MR	310 731	<ul><li>1/ Construction, repair, and overhaul of small and medium size vessels.</li><li>2/ 977</li></ul>
Web Address: www.atlanticmarine.com			
			AFDM-7 "Sustain" ex Navy dock

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pier Usable Leng	<u> </u>
	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
Shipyard Name	FD Floating Drydock Longest	<u>2/</u> Employment - Mid 2003
and Address	MR Marine Railway Total Linea  LL Land Level Position	•
	SL Syncrolift TR Travel Lift	Lengths are in Meters

#### **EAST COAST**

Bayonne Dry Dock & Repair Corporation			<ol> <li>General ship repair with drydocking.</li> </ol>
Brooklyn Navy Yard, Building 386 Bayonne, NJ 07002		488	aryaconing.
Bayonne, NJ 07002	329 X 45 GD	488	2/ 104
			<u>=</u> 104
Web Address: - NOT AVAILABLE -			
Boston Ship Repair, Inc.			1/ Ship repair.
32A Drydock Avenue			
Boston, MA 02210	350 X 37 GD		
			<u>2/</u> 100
Web Address: - NOT AVAILABLE -			
Caddell Dry Dock & Repair Company, Inc.			1/ General ship repair.
P.O. Box 327			17 Ceneral only repair.
Staten Island, NY 10310	101 X 18 FD	169	
	137 X 25 FD	770	<u>2/</u> 158
	55 X 15 FD		
	78 X 16 FD		
	78 X 20 FD		
	80 X 13 FD		
	79 X 20 FD		
Web Address: www.caddelldrydock.com			
Colonna's Shipyard, Inc.			1/ General ship repair.
400 East Indian River Road			
Norfolk, VA 23523	195 X 25 FD	274	
	98 X 20 FD	1,545	<u>2/</u> 333
	104 X 18 MR		
	110 X 21 MR		
	56 X 13 MR		
	64 X 11 MR		
Web Address: www.colonnaship.com			

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pier Usable Leng	<u> </u>
	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
Shipyard Name	FD Floating Drydock Longest	<u>2/</u> Employment - Mid 2003
and Address	MR Marine Railway Total Linea  LL Land Level Position	•
	SL Syncrolift TR Travel Lift	Lengths are in Meters

#### **EAST COAST**

Detyens Shipyards, Inc., Main Yard 1670 Drydock Avenue, Building 236 North Charleston, SC 29405-2121	178 X 28 GD * 185 X 29 GD * 226 X 32 GD *	640 1,913	<ul><li>1/ General ship repair and conversion.</li><li>2/ 456</li></ul>
Web Address: www.detyens.com			<ul> <li>Leased from Charleston Naval Shipyard Redevelopment Association.</li> </ul>
Detyens Shipyards, Inc., Wando Division 2383 Hwy 41		400	1/ General ship repair.
Mt. Pleasant, SC 29466 Web Address: www.detyens.com	152 X 20 FD	<u>122</u> 545	<u>2/</u> 56
GMD Shipyard Corporation Brooklyn Navy Yard, Building 386 Brooklyn, NY 11205	(2) 330 X 45 GD	233 503	<ul><li>1/ General ship repair.</li><li>2/ 34</li></ul>
Web Address: - NOT AVAILABLE -  Metro Machine Corporation			1/ General ship repair and
200 Ligon Street Norfolk, VA 23501 Web Address: www.memach.com	290 X 40 FD	239 885	conversion.  2/ 464
Metro Machine Corporation - Philadelphia Philadelphia Naval Business Center Philadelphia, PA 19112	Division 219 X 24 GD 300 X 34 GD	341 1,195	<ul><li>1/ General ship repair and conversion.</li><li>2/ 156</li></ul>
Web Address: www.memach.com			

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pi	
	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
Shipyard Name	GD Graving Drydock  FD Floating Drydock  Longes	<u>2/</u> Employment - Mid 2003
and Address	MR Marine Railway Total Line	
	LL Land Level Position  SL Syncrolift  TR Travel Lift	Lengths are in Meters

#### **EAST COAST**

Norfolk Shipbuilding & Drydock Corporation, B	erkley	1/ Ship	re <u>p</u> air and conversion.
750 West Berkley Avenue Norfolk, VA 23523-1002	174 X 29 FD 305 X 48 FD	393 1,227	<u>2/</u> 1,021
Web Address: www.norshipco.com			
North Florida Shipyard, Inc. P.O. Box 3255		000	1/ Ship repair and conversion.
Jacksonville, FL 32206  Web Address: www.northfloridashipyard.com	122 X 17 FD	<u>290</u> 966	<u>2/</u> 363
SPEEDE Shipyard, LLC 200 Ligon Street Norfolk, VA 23501	302 X 5 FD		1/ Drydock and coating of Panamax beam ships.
Web Address: www.memach.com	302 A 31D		<u>2/</u> 12

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/P Usable Le	<u> </u>
	SW Shipway	1/ Type of work usually engaged in
Shipyard Name	GD Graving Drydock  FD Floating Drydock Longes	2/ Employment - Mid 2003
and Address	MR Marine Railway Total Line	
	LL Land Level Position	Lawreth a one in Matana
	SL Syncrolift	Lengths are in Meters
	TR Travel Lift	

#### **EAST COAST**

Associated Naval Architects, Inc.			1/ General ship repair.
3400 Shipwright Street			
Portsmouth, VA 23703	37 X 11 MR	137	
	37 X 12 MR	439	<u>2/</u> 63
	40 X 12 MR		
	72 X 15 MR		
Web Address: www.anashipyard.com	72 % 10 1111		
Kerney Service Group, Inc.			1/ Topside repair.
1601 South Main Street		244	
Norfolk, VA 23523-1266		366	a. a-
Web Address: - NOT AVAILABLE -			<u>2/</u> 85
Marine Hydraulics International, Inc.			1/ General ship repair.
543 East Indian River Road			17 General Ship repair.
Norfolk, VA 23523		219	
NOTION, VA 23323		829	2/ 316
Web Address: www.mhi-shiprepair.com			<u>z</u> 010
Metal Trades, Inc.			1/ General ship repair, fabrication
1210 Truxtun Avenue, Building 2			and layberth.
N. Charleston, SC 29405	22 V 40 TD	320	
3	23 X 10 TR	1,026	<u>2/</u> 163
	23 X 9 MR		
	63 X 18 MR 91 X 18 MR		
Web Address: www.metaltrades.com	91 X 10 WR		
Moon Engineering Company, Inc.			1/ General ship repair.
2 Harper Avenue		044	
Portsmouth, VA 23707-0909		1,037	2/ 241

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Piers Usable Lengt	_
Shipyard Name	SW Shipway GD Graving Drydock FD Floating Drydock Longest	<ul><li>1/ Type of work usually engaged in</li><li>2/ Employment - Mid 2003</li></ul>
and Address	MR Marine Railway Total Linear  LL Land Level Position  SL Syncrolift  TR Travel Lift	Lengths are in Meters

#### **EAST COAST**

Newport Shipyard Company, LLC			1/ General ship repair.
1 Washington Street			
Newport, RI 02840-1513	24 X 7 TR	305	
	46 X 12 TR	588	2/ 65
			_
	91 X 19 MR		
Web Address: www.newportshipyard.com			
Norfolk Shiprepair & Drydock Corporation			1/ General ship repair.
Foot of Claiborne Avenue			··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··
Norfolk, VA 23504		183	
Notion, VA 23504	136 X 23 MR	1,106	2/ 152
	73 X 13 MR		<u>2/</u> 152
Web Address: - NOT AVAILABLE -			
Promet Marine Services Corporation			1/ General ship repair.
242 Allens Avenue			<u></u> Conoral only ropall.
Providence, RI 02905		183	
Flovidence, Nr. 02905	46 X 10 TR	366	2/ 62
Web Address was a second as a			<u> </u>
Web Address: www.prometmarineservices.o	com		
Reynolds Shipyard Corporation			1/ General ship repair.
200 Edgewater Street			<u></u> Conoral only ropall.
Staten Island, NY 10305		134	
Stater Island, NT 10303		134	2/ 10
Web Address: - NOT AVAILABLE -			<u>zi</u> 10
Steel Style, Inc.			1/ General ship repair.
401 S. Water Street		102	
Newburgh, NY 12550	43 X 15 MR	183	
	91 X 30 MR	335	<u>2/</u> 23
Web Address: - NOT AVAILABLE -			

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pier Usable Leng	
	SW Shipway	1/ Type of work usually engaged in
Shipyard Name	GD Graving Drydock  FD Floating Drydock  Longest	2/ Employment - Mid 2003
and Address	MR Marine Railway Total Linea	r
	LL Land Level Position	Lengths are in Meters
	SL Syncrolift TR Travel Lift	Longino di ci il motoro

#### **EAST COAST**

The General Ship Repair Corporation 1449 Key Highway Baltimore, MD 21230 Web Address: www.generalshiprepair.com	30 X 15 LL	<ul><li>1/ General ship repair.</li><li>2/ 37</li></ul>
The Hinckley Company One Little Harbor Landing Portsmouth, RI 02871 Web Address: www.thco.com	24 X 5 TR	<ul><li>1/ General ship repair.</li><li>2/ 106</li></ul>

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pier Usable Leng	<u> </u>
	SW Shipway	1/ Type of work usually engaged in
Shipyard Name	GD Graving Drydock  FD Floating Drydock Longest	2/ Employment - Mid 2003
and Address	MR Marine Railway Total Linea	<del></del>
	LL Land Level Position	
	SL Syncrolift	Lengths are in Meters
	TR Travel Lift	

#### **GULF COAST**

#### Active Shipbuilding Yards

Bender Shipbuilding and Repair Co	mpany, Inc.		1/ Construction, repair, and
265 South Water Street		050	conversion of ships and small vessels.
Mobile, AL 36603	122 X 24 SW	258	vessels.
	(2) 34 X 12 SW	1,151	<u>2/</u> 867
	61 X 13 SW		
	61 X 14 SW		
	(2) 76 X 14 SW		
	119 X 14 FD		
	167 X 27 FD		
	196 X 36 FD		
·	om 		
			1/ Modular ship construction, conversion, and repair.
Mail Station 91	Avondale Operations	521	
Mail Station 91		521 1,431	
Northrop Grumman Ship Systems, Mail Station 91 Avondale, LA 70150-0280	Avondale Operations  265 X 38 SW *		conversion, and repair.
Mail Station 91	Avondale Operations  265 X 38 SW *  311 X 53 SW ***		conversion, and repair.
Mail Station 91	Avondale Operations  265 X 38 SW *  311 X 53 SW ***  (2) 265 X 38 LL **		conversion, and repair.
Mail Station 91	Avondale Operations  265 X 38 SW *  311 X 53 SW ***  (2) 265 X 38 LL **  (2) 311 X 53 LL **		conversion, and repair.
Mail Station 91 Avondale, LA 70150-0280	Avondale Operations  265 X 38 SW * 311 X 53 SW ***  (2) 265 X 38 LL **  (2) 311 X 53 LL **  229 X 35 FD * 305 X 66 FD **		conversion, and repair.
Mail Station 91 Avondale, LA 70150-0280	Avondale Operations  265 X 38 SW * 311 X 53 SW *** (2) 265 X 38 LL ** (2) 311 X 53 LL ** 229 X 35 FD *		conversion, and repair.
Mail Station 91 Avondale, LA 70150-0280	Avondale Operations  265 X 38 SW * 311 X 53 SW ***  (2) 265 X 38 LL **  (2) 311 X 53 LL **  229 X 35 FD * 305 X 66 FD **		conversion, and repair.  2/ 6,953

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pier Usable Leng	<u> </u>
	SW Shipway	1/ Type of work usually engaged in
Shipyard Name	GD Graving Drydock  FD Floating Drydock Longest	2/ Employment - Mid 2003
and Address	MR Marine Railway Total Linea	<del></del>
	LL Land Level Position	
	SL Syncrolift	Lengths are in Meters
	TR Travel Lift	

#### **GULF COAST**

#### Active Shipbuilding Yards

Northrop Grumman Ship Systems, Inga P.O. Box 149 Pascagoula, MS 39568-0149	(5) 259 X 53 LL * 488 X 53 LL * 305 X 53 FD *	792 1,758	<ul><li>1/ Construction, repair, and conversion.</li><li>2/ 10,523</li></ul>
Web Address: www.ss.northropgrumn	nan.com/company/ingalls.cfm		* West Bank can only launch ships up to 259 X 53 meters. Land
			Level Positions constrained by launching capability.
VT - Halter Marine Pascagoula 5110 Washington Avenue Pascagoula, MS 39568-1328	160 X 32 SW 229 X 30 SW	<u>274</u> 762	<ul><li>1/ Construction and repair of ships and small vessels.</li><li>2/ 436</li></ul>
Web Address: www.haltermarine.com			

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pie Usable Leng	
	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
Shipyard Name	FD Floating Drydock Longest	2/ Employment - Mid 2003
and Address	MR Marine Railway Total Linea  LL Land Level Position	r
	SL Syncrolift TR Travel Lift	Lengths are in Meters

#### **GULF COAST**

#### Other Shipyards with Building Positions

Alabama Shipyard P.O. Box 3201		328	1/ Conversion, repair with major shipbuilding capability.
Mobile, AL 36652	290 X 50 LL	642	0/ 400
Web Address: www.atlanticmarine.com		072	<u>2/</u> 139
AMFELS, Inc.			1/ Offshore oil rigs with major
20000 Highway 48		610	shipbuilding capability.
Brownsville, TX 78523	335 X 122 LL	610 610	
	183 X 30 FD	010	<u>2/</u> 2,084
Web Address: - NOT AVAILABLE -			
Austal USA			1/ Builds high-speed aluminum
P.O. Box 1049		122	vessels.
Mobile, AL 36633	130 X 10 LL	122	
Web Address: www.austal.com/overview/usa	a.cfm	122	<u>2/</u> 167
Signal International, LLC - East Yard			1/ Repair and modification to oil
600 Louise Street		242	rigs.
Pascagoula, MS 39581	165 X 160 SW	610 610	
	111 X 62 FD	610	<u>2/</u> 215
Web Address: www.signalint.com			
Tampa Bay Shipbuilding & Repair Company			1/ Full service conversion and
1130 McClosky Boulevard			repair facility.
Tampa, FL 33605	166 X 25 GD	311 622	
(	2) 227 X 34 GD	022	<u>2/</u> 405
	273 X 46 GD		
Web Address: www.tampabayship.com			

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Piers Usable Lengtl	<u>Remarks</u>
Shipyard Name	SW Shipway GD Graving Drydock FD Floating Drydock Longest	1/ Type of work usually engaged in 2/ Employment - Mid 2003
and Address	MR Marine Railway  LL Land Level Position  SL Syncrolift  TR Travel Lift	Lengths are in Meters

#### **GULF COAST**

#### Other Shipyards with Building Positions

United Marine Enterprise, Inc., Port Arthur Sh. P.O. Box 22077 Beaumont, TX 77720 Web Address: www.unitedmarineshipyard.co	122 X 61 LL	488 488	<ul><li>1/ Construction and repair of ships and offshore vessels.</li><li>2/ 86</li></ul>
VT - Halter Moss Point 5801 Elder Ferry Road Moss Point, MS 39562 Web Address: www.haltermarine.com	110 X 23 LL 140 X 30 LL		<ul><li>1/ Construction of ships up to 146 meters in length.</li><li>2/ 299</li></ul>

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Piers Usable Lengtl	<u>Remarks</u>
Shipyard Name	SW Shipway GD Graving Drydock FD Floating Drydock Longest	1/ Type of work usually engaged in 2/ Employment - Mid 2003
and Address	MR Marine Railway  LL Land Level Position  SL Syncrolift  TR Travel Lift	Lengths are in Meters

#### **GULF COAST**

Atlantic Marine - Mobile P.O. Box 3202			1/ Ship repair and conversion.
Mobile, AL 36652	213 X 26 FD 305 X 49 FD	962	<u>2/</u> 259
Web Address: www.atlanticmarine.com			
Bollinger Gulf Repair, LLC 3900 Jourdan Road New Orleans, LA 70126	152 X 23 SW	549 549	<ul><li>1/ Construction and repair of offshore oil vessels and barges.</li><li>2/ 285</li></ul>
	91 X 15 SW 133 X 18 FD 134 X 26 FD 229 X 32 FD		<u>zi</u> 200
Web Address: www.bollingershipyards.com			
Bollinger Houston, L.P. 201 Broadway Street			1/ General ship repair.
Houston, TX 77012	213 X 27 SW 122 X 24 FD * 37 X 12 FD 67 X 24 FD	152 335	<u>2/</u> 60
Web Address: www.bollingershipyards.com			Two drydocks are combined.
Gulf Marine Repair Corporation 1200 Sertoma Drive			1/ Ship repair and overhaul.
Tampa, FL 33605	168 X 24 FD 61 X 15 FD	<u>366</u> 747	<u>2/</u> 138
Web Address: www.gulfmarinerepair.com			

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pie Usable Leng	
	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
Shipyard Name	FD Floating Drydock Longest	2/ Employment - Mid 2003
and Address	MR Marine Railway Total Linea  LL Land Level Position	r
	SL Syncrolift TR Travel Lift	Lengths are in Meters

#### **GULF COAST**

International Ship Repair & Marine Services, I 1616 Penny Street	nc.		1/ General ship repair.	
Tampa, FL 33605-6058	145 X 29 FD 198 X 29 FD	1,158	<u>2/</u> 167	
	229 X 29 FD 76 X 13 FD 76 X 29 FD			
Web Address: www.internationalship.com	76 X 32 FD			
Signal International Texas, LP - D.O.C. Yard 2500 Martin Luther King Boulevard		34	1/ Repair of offshore oil rigs.	
Port Arthur, TX 77640  Web Address: www.signalint.com	126 X 111 FD	34	<u>2/</u> 140	

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pier	
	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
Shipyard Name	GD Graving Drydock  FD Floating Drydock Longest	2/ Employment - Mid 2003
and Address	MR Marine Railway  LL Land Level Position	Lengths are in Meters
	SL Syncrolift TR Travel Lift	Lenguis are in Meters

#### **GULF COAST**

Boland Marine & Mfg. Company, Inc.			1/ General ship repair and	
P.O. Box 53287		305	conversion.	
New Orleans, LA 70153			305	0/ 77
Web Address: www.bolandmarine.com			<u>2/</u> 77	
Bollinger Algiers, LLC				1/ Repairs towboats, barges, and
134 Powder Street			122	vessels to 76 meters.
New Orleans, LA 70114	107 X 91 X		122	<u>2/</u> 41
Web Address: www.bollingershipyards.co	om			
Bollinger Calcasieu, LLC				1/ Repair and drydocking of small
086 Global Drive			407	vessels.
Sulphur, LA 70665	26 X	9 SW	<u>137</u> 408	
	76 X	23 SW	400	<u>2/</u> 74
	(2) 91 X	15 FD		
	91 X	16 FD		
	63 X	23 MR		
Web Address: www.bollingershipyards.co	om			
Bollinger Lockport, LLC				1/ General ship repair.
3365 Hwy. 308 South			400	
ockport, LA 70374	(2) 114 X	30 SW	488 488	
	20 X	5 MR	400	<u>2/</u> 801
	20 X	7 MR		
	27 X	9 MR		
	37 X	10 MR		
	49 X	12 MR		
Web Address: www.bollingershipyards.co	nm.			

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Piers Usable Length	Remarks
Shipyard Name	SW Shipway  GD Graving Drydock  FD Floating Drydock Longest	1/ Type of work usually engaged in 2/ Employment - Mid 2003
and Address	MR Marine Railway Total Linear  LL Land Level Position  SL Syncrolift  TR Travel Lift	Lengths are in Meters

#### **GULF COAST**

Bollinger Texas City, L.P. 2201 Dock Road, Dock 42		169	1/ General ship repair.
Texas City, TX 77590	110 X 24 FD 55 X 24 FD	<u>168</u> 168	<u>2/</u> 205
	67 X 16 FD		
	67 X 24 FD		
Web Address: www.purgit.com/bludbond_sy.h	tm		
Buck Kreihs Company, Inc.			1/ Ship repair.
P.O. Box 53305		1,128	
New Orleans, LA 70153		1,128	2/ 112
Web Address: www.buckkreihs.com			
CBH Services, Inc.			1/ General ship repair.
200 Pier Pond			<u>ir</u> Certeral strip repair.
Orange, TX 77630		229	
Mah Address NOTAVALIADI E		229	<u>2/</u> 45
Web Address: - NOT AVAILABLE -			
Dixie Machine Welding & Metal Works, Inc.			1/ General ship repair.
1031 Annunciation Street			
New Orleans, LA 70130		<u>274</u> 274	
Web Address: www.dixiemachine.com		214	<u>2/</u> 36
Gulf Copper & Manufacturing Corporation			1/ General ship repair.
P.O. Box 547		262	
Port Arthur, TX 77640	76 X 18 SW	524	2/ 373
Web Address: www.gulfcopper.com			<u>a</u> 515

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Piers Usable Lengtl	<u>Remarks</u>
Shipyard Name	SW Shipway GD Graving Drydock FD Floating Drydock Longest	1/ Type of work usually engaged in 2/ Employment - Mid 2003
and Address	MR Marine Railway  LL Land Level Position  SL Syncrolift  TR Travel Lift	Lengths are in Meters

#### **GULF COAST**

Hendry Corporation 5107 S. Westshore Boulevard Tampa, FL 33611 Web Address: www.hendrycorp.com	72 X 12 FD	305 305	<ul><li>1/ General ship repair.</li><li>2/ 55</li></ul>
Houston Ship Repair, Inc., Brady Island Ship Re 8510 Cypress Street Houston, TX 77012 Web Address: www.houstonshiprepair.com	pair Facility	224 224	<ul><li>1/ General ship repair and conversion.</li><li>2/ 75</li></ul>
Newpark Shipbuilding & Repair, Inc., Brady Islan 8502 Cypress Street Houston, TX 77012  Web Address: www.fwav.com	46 X 22 FD 55 X 22 FD 61 X 15 MR 91 X 21 MR	305 671	<ul><li>1/ Inland barge and boat construction &amp; repair, including offshore vessel repair.</li><li>2/ 200</li></ul>
Newpark Shipbuilding & Repair, Inc., Pasadena 1600 North Witter Pasadena, TX 77506 Web Address: www.fwav.com	36 X 15 FD 49 X 20 FD 61 X 22 FD 68 X 20 FD	305 777	<ul><li>1/ Repair of barges, boats and offshore supply vessels.</li><li>2/ 102</li></ul>

(Vessels 122 Meters in Length and Over)

(LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u>
SW Shipway GD Graving Drydock FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift	Longest  Total Linear	<ul> <li>1/ Type of work usually engaged in</li> <li>2/ Employment - Mid 2003</li> <li>Lengths are in Meters</li> </ul>
	GD Graving Drydock FD Floating Drydock MR Marine Railway LL Land Level Position	SW Shipway  GD Graving Drydock  FD Floating Drydock  MR Marine Railway  LL Land Level Position  SL Syncrolift  Usable Length  Usable Length  Total Linear

#### **GULF COAST**

Newpark Shipbuilding & Repair, Inc., Pelicar 2920 Newpark Road Galveston, TX 77554 Web Address: www.fwav.com	116 X 32 FD 73 X 35 FD	343 998	<ul><li>1/ Repair of offshore rigs, barges, boats and offshore supply vessels.</li><li>2/ 195</li></ul>
Orange Shipbuilding Company, Inc. 710 Market Street Orange, TX 77631-1670 Web Address: - NOT AVAILABLE -	91 X 23 SW	183 259	<ul><li>1/ General ship repair and small vessel construction.</li><li>2/ 60</li></ul>
Sabine Shipyard, Inc. Box 405 Sabine Pass, TX 77655 Web Address: - NOT AVAILABLE -		244 396	1/ Repairs offshore oil rigs.
Signal International Texas, LP - Orange Yard 91 West Front Street Orange, TX 77630 Web Address: www.signalint.com	d	251 808	<ul><li>1/ Repair of offshore oil rigs.</li><li>2/ 121</li></ul>

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pie Usable Leng	
	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
Shipyard Name	FD Floating Drydock Longest	2/ Employment - Mid 2003
and Address	MR Marine Railway Total Linea  LL Land Level Position	r
	SL Syncrolift TR Travel Lift	Lengths are in Meters

#### **WEST COAST**

#### Active Shipbuilding Yards

National Steel and Shipbuilding Company 2798 Harbor Drive San Diego, CA 92113	(2) 290 X 34 SW 303 X 51 GD 290 X 41 FD	305 2,106	<ul><li>1/ Construction, repair, and conversion.</li><li>2/ 3,637</li></ul>
Web Address: www.nassco.com			

(Vessels 122 Meters in Length and Over)

(LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u>
SW Shipway GD Graving Drydock FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift	Longest  Total Linear	<ul> <li>1/ Type of work usually engaged in</li> <li>2/ Employment - Mid 2003</li> <li>Lengths are in Meters</li> </ul>
	GD Graving Drydock FD Floating Drydock MR Marine Railway LL Land Level Position	SW Shipway  GD Graving Drydock  FD Floating Drydock  MR Marine Railway  LL Land Level Position  SL Syncrolift  Usable Length  Usable Length  Total Linear

#### **WEST COAST**

#### Other Shipyards with Building Positions

Gunderson, Inc. 4350 Northwest Front Avenue Portland, OR 97210 Web Address: www.gundersoninc.com	223 X 32 SW	<u>335</u> 335	<ul><li>1/ Construction, repair, and conversion.</li><li>2/ 103</li></ul>
Todd Pacific Shipyards Corporation 1801 16th Avenue, S.W. Seattle, WA 98134	(2) 137 X 18 SW * 198 X 26 FD 287 X 41 FD	427 1,834	<ul><li>1/ Repair and conversion with major shipbuilding capability.</li><li>2/ 1,195</li></ul>
Web Address: www.toddpacific.com			<ul> <li>Max. ship size is 137 X 29 meters using two 137 X 18 meter SWs.</li> </ul>

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/F Usable Lo	
	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
Shipyard Name	FD Floating Drydock Longe:	<u>2/</u> Employment - Mid 2003 st
and Address	MR Marine Railway Total Linear  LL Land Level Position	
	SL Syncrolift TR Travel Lift	Lengths are in Meters

#### **WEST COAST**

Cascade General, Inc. 5555 North Channel Avenue, Building Portland, OR 97217  Web Address: www.casgen.com	182 X 26 FD 247 X 34 FD	427 4,002	<ul><li>1/ General ship repair.</li><li>2/ 483</li></ul>
Lake Union Drydock Company 1515 Fairview Avenue, East Seattle, WA 98102-3791  Web Address: www.ludd.com	128 X 18 FD 61 X 14 FD	381 750	<ul><li>1/ General ship repair and conversion.</li><li>2/ 100</li></ul>
MAR COM, Inc. 8970 N. Bradford Street Portland, OR 97203 Web Address: www.marcomship.com	91 X 15 SW 91 X 23 SW 126 X 18 FD	<u>122</u> 174	<ul><li>1/ General ship repair and new construction.</li><li>2/ 54</li></ul>
Puglia Engineering, Inc. dba Fairhaven Sh 201 Harris Street Bellingham, WA 98225-7018 Web Address: - NOT AVAILABLE -	122 X 17 FD 37 X 11 MR	213 351	<ul><li>1/ Ship and vessel repair.</li><li>2/ 139</li></ul>
San Francisco Drydock, Inc. Foot of 20th Street San Francisco, CA 94120  Web Address: www.sfdrydock.com	186 X 26 FD 290 X 44 FD	250 809	<ul><li>1/ Ship repair and overhaul.</li><li>2/ 302</li></ul>

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Piers Usable Lengtl	<u>Remarks</u>
Shipyard Name and Address	SW Shipway GD Graving Drydock FD Floating Drydock Longest	1/ Type of work usually engaged in 2/ Employment - Mid 2003
	MR Marine Railway  LL Land Level Position  SL Syncrolift  TR Travel Lift	Lengths are in Meters

#### **WEST COAST**

Southwest Marine, Inc., San Diego Division Foot of Sampson Street San Diego, CA 92170-3308	127 X 19 FD 200 X 31 FD	<u>213</u> 604	<ul><li>1/ Ship repair, overhaul, and conversion.</li><li>2/ 1,082</li></ul>
Web Address: www.usmarinerepair.com/swmsd.htm			
			Graving dock at Naval Station can be leased as required.
Southwest Marine, Inc., San Pedro Division P.O. Box 3600 Terminal Island, CA 90731-7331	122 X 17 FD 209 X 27 FD	201 769	<ul><li>1/ Ship repair, overhaul, and conversion.</li><li>2/ 85</li></ul>
Web Address: www.usmarinerepair.com			

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Piers Usable Leng	
Shipyard Name and Address	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
	FD Floating Drydock  MR Marine Railway  LL Land Level Position  Longest	<u>2/</u> Employment - Mid 2003 —
	SL Syncrolift TR Travel Lift	Lengths are in Meters

## **WEST COAST**

## Topside Repair Yards

Bay Ship & Yacht Company, Alameda			1/ General ship repair.
2900 Main Street			
Alameda, CA 94501	119 X 17 FD	213	
,		503	2/ 177
	49 X 9 FD		<del>_</del>
Web Address: www.bay-ship.com			
Bay Ship & Yacht Company, Richmond			1/ General ship repair.
2900 Main Street			
Alameda, CA 94501	0- V - TD	488	
Alameda, OA 54501	27 X 7 TR	892	<u>2/</u> 25
Web Address: www.bay-ship.com			<u>=</u> 20
Continental Maritime of San Diego, Inc.			1/ General ship repair.
1995 Bay Front Street		213	
San Diego, CA 92113-2122		838	
		030	<u>2/</u> 461
Web Address: www.continentalmaritime.com			
			Graving and floating docks at Naval Station can be leased as required.
Dakota Creek Industries, Inc.			1/ General ship repair, steel and
P.O. Box 218			aluminum vessel construction
		305	to 106 meters.
Anacortes, WA 98221	107 X 22 LL	477	0/ 000
	107 X 24 FD		<u>2/</u> 220
	107 X 22 SL		
Web Address: www.dakotacreek.com			
Everett Shipyard, Inc.			1/ Topside repair work and small
1016 14th Street			boat construction.
Everett, WA 98201	40 X 11 MR	335	
•	TO A IT IVIT	640	<u>2/</u> 73
Web Address: www.everettship.com			_

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pier	
	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
Shipyard Name	GD Graving Drydock  FD Floating Drydock Longest	2/ Employment - Mid 2003
and Address	MR Marine Railway  LL Land Level Position	Lengths are in Meters
	SL Syncrolift TR Travel Lift	Lenguis are in Meters

## **WEST COAST**

## Topside Repair Yards

Foss Shipyard dba Foss Maritime Company 660 West Ewing Street Seattle, WA 98119	59 X 13 FD 67 X 18 FD	146 715	<ul><li>1/ Vessel repair, alteration, and overhaul.</li><li>2/ 111</li></ul>
Web Address: www.foss.com			

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Pie Usable Len	
	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
Shipyard Name	FD Floating Drydock Longest	<u>2/</u> Employment - Mid 2003
and Address	MR Marine Railway Total Linea  LL Land Level Position	
	SL Syncrolift TR Travel Lift	Lengths are in Meters

## **GREAT LAKES**

## Other Shipyards with Building Positions

(Maximum ship size that can exit the St. Lawrence Seaway locks is 222 meters X 24 meters)

Bay Shipbuilding Company 605 North Third Avenue Sturgeon Bay, WI 54235-0830 Web Address: www.manitowocmarine.com	223 X 32 SW 305 X 32 GD 55 X 12 GD 195 X 21 FD	305 2,163	<ul><li>1/ Ship construction, repair, and conversion.</li><li>2/ 223</li></ul>
Fraser Shipyards, Inc. Third Street & Clough Avenue Superior, WI 54880  Web Address: www.frasershipyards.com	189 X 18 GD 252 X 25 GD	<u>274</u> 527	<ul><li>1/ Construction, repair, and conversion.</li><li>2/ 48</li></ul>
	(2) 122 X 24 LL 46 X 15 LL (3) 76 X 15 LL 76 X 20 LL 37 X 9 SL	651 651	<ul><li>1/ Construction and repair of medium to small vessels.</li><li>2/ 833</li></ul>
Metro Machine Corporation - Industrial Produ Foot of Holland Street Erie, PA 16507 Web Address: www.memach.com	ucts Division 305 X 32 GD	366 860	<ul><li>1/ Construction, repair, and conversion.</li><li>2/ 19</li></ul>

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/P Usable Le	<u> </u>
	SW Shipway	1/ Type of work usually engaged in
Shipyard Name	GD Graving Drydock  FD Floating Drydock Longes	2/ Employment - Mid 2003
and Address	MR Marine Railway Total Line	
	LL Land Level Position	Lawreth a one in Matana
	SL Syncrolift	Lengths are in Meters
	TR Travel Lift	

## **GREAT LAKES**

## Other Shipyards with Building Positions

(Maximum ship size that can exit the St. Lawrence Seaway locks is 222 meters X 24 meters)

Toledo Ship Repair Company, Toledo Shipya 2245 Front Street	ard	400	_ co	onversion.	1/ Construction, ship repair and
Toledo, OH 43605-1231	152 X 21 GD 223 X 22 GD	<u>183</u> 305	<u>2/</u>	93	
Web Address: www.manitowocmarine.com					

(Vessels 122 Meters in Length and Over)

	Maximum Ship Size (LOA X Beam)  Berths/Piers Usable Lengtl	<u>Remarks</u>
Shipyard Name	SW Shipway GD Graving Drydock FD Floating Drydock Longest	1/ Type of work usually engaged in 2/ Employment - Mid 2003
and Address	MR Marine Railway  LL Land Level Position  SL Syncrolift  TR Travel Lift	Lengths are in Meters

## **GREAT LAKES**

## **Topside Repair Yards**

(Maximum ship size that can exit the St. Lawrence Seaway locks is 222 meters X 24 meters)

H. Hansen Industries 2824 N. Summit Street Toledo, OH 43611		<u>226</u> 451	1/ General ship repair.
Web Address: - NOT AVAILABLE -		451	<u>2/</u> 60
Nicholson Terminal & Dock Company P.O. Box 18066			1/ General ship repair.
River Rouge, MI 48218	69 X 16 FD	701 1,097	2/ 65
Web Address: www.nicholson-terminal.com			

(Vessels 122 Meters in Length and Over)

	(LOA A Dealli)	ns/Piers Remarks e Length
	SW Shipway GD Graving Drydock	1/ Type of work usually engaged in
Shipyard Name	ED Clasting Drudgels	2/ Employment - Mid 2003
and Address	MD M : D ::	Linear
	SL Syncrolift	Lengths are in Meters
	TR Travel Lift	

## **NON-CONUS**

## Repair Yards with Drydock Facilities

Alaska Ship & Drydock, Inc. 3801 Tongass Avenue	205		1/ Ship and vessel repair.	
Ketchikan, AK 99901	137 X 32 FD	305 305	<u>2/</u> 89	
Web Address: - NOT AVAILABLE -				
Honolulu Shipyard, Inc. P.O. Box 30989 Honolulu, HI 96820	305 X 55 GD 122 X 32 FD 55 X 24 FD	213 213	<ul><li>1/ General ship repair and overhaul.</li><li>2/ 385</li></ul>	
Web Address: www.pacificshipyards.com				
Marisco, Ltd. 91-607 Malakole Road			1/ General ship repair.	
Kapolei, HI 96707	116 X 16 FD 190 X 28 FD	34 34	<u>2/</u> 130	
Web Address: www.marisco.net				

## APPENDIX C

## MEDIUM AND SMALL SIZE U.S. SHIPYARDS

# MEDIUM AND SMALL SIZE U.S. SHIPYARDS CLASSIFICATION DEFINITIONS

### **Boatbuilding and Repair Companies**

Boatbuilding and Repair Companies are those privately owned shipyards capable of building and/or repairing maritime vessels less than 122 meters (400 feet) in length.

## Vessel Repair Companies

Vessel Repair Companies are those facilities that only provide repair services, either repair with drydocking or topside repair, to maritime vessels less than 122 meters (400 feet). These companies must have their own waterfront facilities.

#### Fabricators / Manufacturers of Maritime Vessels

Fabricators /Manufacturers of Maritime Vessels are companies that build small commercial crafts less than 76 meters (250 feet).

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock	Berths/Piers Remarks Usable Length Type of work usually engage	Remarks Type of work usually engaged in
and Address	FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

#### **EAST COAST**

Chesapeake Shipbuilding Corporation Construction of small excursion and passenger vessels. 710 Fitzwater Street Salisbury, MD 21801 Web Address: - NOT AVAILABLE -Gladding-Hearn Shipbuilding Construction of small vessels including catamaran ferries. One Riverside Avenue Somerset, MA 02726-0300 61 X 15 SW 38 38 Web Address: www.gladding-hearn.com Yank Marine Builds and repairs small vessels. Mosquito Landing Road Tuckahoe, NJ 08250 Web Address: - NOT AVAILABLE -

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

GULF COAST			
Allied Shipyard, Inc. P.O. Box 1240			Construction, repair, and conversion of small vessels.
La Page I A 70272	(2) 22 X 8 S	SW 55	
	57 X 14 F		
	64 X 14 F		
	64 X 18 F	-D	
	(2) 52 X 12 N	ИR	
Web Address: - NOT AVAILABLE -			
Bollinger Gretna, LLC			Construction of small vessels.
4640 Peters Road			
Harvey, LA 70058	152 X 29 C	396 396	
·	98 X 17 C		
	99 X 16 C	· · · ·	
	67 X 17 F	D	
Web Address: www.bollingershipyards.com			
Bollinger Larose, LLC			Repair of small marine vessels.
1515 Hwy. 24			. topuli or ornali maimo voccio.
Larose, LA 70373	107 X 15 F	-D 229	
	107 X 13 T		
	(2) 76 X 12 F	·	
	101 X 24 N	ИR	
Web Address: www.bollingershipyards.com			
Bollinger Marine Fabricators, LLC			Construction and repair of
816 Bollinger Lane			small vessels.
Amelia, LA 70340	04 V 40 0	314/ 450	
,	91 X 46 S	SW 152 777	
Web Address: www.bollingershipyards.com		111	

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

### **Boatbuilding and Repair Companies**

#### **GULF COAST**

Bollinger Morgan City, LLC 806 Bollinger Lane Amelia, LA 70340

122 X 30 FD 55 X 18 FD 61 X 16 FD

64 X 21 FD

Web Address: www.bollingershipyards.com

Bollinger Quick Repair, LLC 615 Destrehan Avenue Harvey, LA 70058

(2) 46 X 18 FD

(2) 76 X 18 FD

(2) 76 X 22 FD

Web Address: www.bollingershipyards.com

Breaux Brothers P.O. Box 550

Loreauville, LA 70552-0550

Web Address: - NOT AVAILABLE -

Breaux's Bay Craft, Inc.

P.O. Box 306

Loreauville, LA 70552

Web Address: - NOT AVAILABLE -

C & G Boat Works 8685 E. Davenport Street La Batre, AL 36509-2115

Web Address: - NOT AVAILABLE -

Repair of small boats.

Repair of small boats.

Construction of small boats.

Construction of small boats.

Boat building and repair.

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

SW 610
GW 774 FD
D
-D
-D
Boat building and refurbishing
D 70
70
Construction and repair of
small vessels.
Construction of passenger
vessels and work boats.
L
IR
Occapional in the second
Construction of small vessels.

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

#### **Boatbuilding and Repair Companies**

#### **GULF COAST**

Glendale Boat Works, Inc. Towboat construction and repair. 18300 Market Street Channelview, TX 77530 27 X 15 GD Web Address: - NOT AVAILABLE -Horizon Shipbuilding, Inc. Construction and repair of marine vessels. 13980 Shell Road Bayou La Batre, AL 36509 61 X 16 SW 213 47 X 9 MR 213 Web Address: www.horizonshipbuilding.com Houma Fabricators - Shipyard De Hoop of Houma, Inc. Construction of small vessels. 1100 Oak Street Houma, LA 70363 91 X 23 SW 107 107 Web Address: - NOT AVAILABLE -Intracoastal City Drydock & Shipbuilding, Inc. Repairs small boats. 18938 Live Oak Road Abbeville, LA 70510 Web Address: - NOT AVAILABLE -Kennedy Ship and Repair Construction, repair, refit and conversion of all vessels to 6200 Harborside Drive 91 meters. Galveston, TX 77554-2841 91 X 16 GD Web Address: www.kennedyship.com

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

### **Boatbuilding and Repair Companies**

**GULF COAST** Builds small boats. Kody Marine, Inc. 600 Peters Road Harvey, LA 70058-1705 29 X 16 GD Web Address: - NOT AVAILABLE -LEEVAC Industries, LLC Construction, repair, and conversion of small boats. P.O. Box 1190 Jennings, LA 70546 (2) 128 X 27 SW 305 147 X 23 GD 488 91 X 18 FD Web Address: - NOT AVAILABLE -Mississippi Marine Corporation Construction and repair of inland and offshore marine 2219 Harbor Front Road vessels. Greenville, MS 38702-0539 46 X 15 SW 76 X 30 SW 122 X 18 FD 122 X 19 FD 61 X 21 FD 91 X 17 FD 99 X 20 FD Web Address: - NOT AVAILABLE -North American Shipbuilding Company Construction of small vessels. P.O. Drawer 580 Larose, LA 70373 Web Address: www.chouest.com

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

GULF COAST			
Northrop Grumman Ship Systems, Gulfpor	t Operations		Construction of small vessels,
13303 Industrial Seaway Road			steel and composite material.
Gulfport, MS 39503		76	
Web Address: www.northropgrumannshi	psystems.com	76	
Patti Shipyard, Inc.			Construction of vessels to
P.O. Box 271			107 meters.
Pensacola, FL 32507-1374	107 X 17 SW		
Web Address: - NOT AVAILABLE -			
Quality Shipyards, LLC			Construction, repair, and
P.O. Box 1817			conversion of boats and barges.
Houma, LA 70361-1817	168 X 30 SW	374	
	(2) 58 X 20 FD	695	
	70 X 17 FD		
	76 X 24 FD		
Web Address: - NOT AVAILABLE -			
R & R Marine Maintenance			Small vessel repair and
P.O. Box 1660			construction.
Groves, TX 77619	61 X 26 FD		
Web Address: - NOT AVAILABLE -			
Rodriguez Boat Builders, Inc.			Construction of small vessels.
P.O. Box 842			
Bayou La Batre, AL 36509	27 X 3 SW	6	
Web Address: www.boatbuilderonline.co	m	J	

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

### **Boatbuilding and Repair Companies**

#### **GULF COAST**

Sneed Shipbuilding, Inc., Channelview Construction and repair of small vessels. 17112 Market Street Channelview, TX 77530 31 X 17 FD Web Address: - NOT AVAILABLE -Sneed Shipbuilding, Inc., Orange Construction and repair of small vessels. 2011 Dupont Drive Orange, TX 77630-7315 37 X 17 FD 137 Web Address: - NOT AVAILABLE -Sun State Marine Services, Inc. Construction and repair of vessels to 91 meters. P.O. Box 1167, Reynolds Industrial Park Greencove, FL 32043 Web Address: - NOT AVAILABLE -Textron Marine and Land Systems, Division of Textron, Inc. Builds small boats and ACV'S. 19401 Chef Menteur Highway New Orleans, LA 70129 (3) 69 X 15 LL 262 498 Web Address: www.textron.com VT - Halter Moss Point Marine Construction and repair of small vessels. 7801 Trinity Drive Escatawapa, MS 39552 162 X 25 SW 328 69 X 25 SW 328 91 X 25 SW Web Address: - NOT AVAILABLE -

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

#### **INLAND**

Marine Builders, Inc. 208 Church Street

Utica, IN 47130

46 X 9 SW

Web Address: www.marineworks.com/mbi.html

National Maintenance & Repair, Inc.

Foot of Hawthorne Street

Hartford, IL 62048-0038

18 X 16 FD 49 X 16 FD 61 X 16 FD 61 X 17 FD

Web Address: www.nmrinc.com

SeaArk Marine, Inc. P.O. Box 210

Monticello, AR 71655

Web Address: www.seaark.com

Builds aluminum boats in the

Construction of small vessels.

Builds and repair small vessels.

5-20 meter range.

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

## **NON-CONUS**

Seward Ship's Drydock, Inc.

P.O. Box 944

Seward, AK 99664

107 X 24 LL 168
(2) 55 X 24 LL 251
40 X 10 TR
107 X 23 SL

Web Address: www.sewardships.com

Conversion and repair of small vessels.

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

#### WEST COAST

Al Larson Boat Shop			Construction and repair of
1046 South Seaside Avenue			small vessels.
Terminal Island, CA 90731	34 X 8 SW	110	
	37 X 8 SW	387	
	40 X 10 SW		
	55 X 20 SW		
	76 X 12 FD		
Web Address: www.larsonboat.com			
MARCO Shipyard, Seattle			Construction and repair of
2300 W. Commodore Way			vessels to 76 meters.
Seattle, WA 98199	33 X 9 SW	49	
	61 X 13 SW	244	
	67 X 16 SW		
	37 X 11 FD		
	67 X 16 FD		
	33 X 9 SL		
Web Address: www.marcoseattle.com			
Marine Industries Northwest, Inc.			Topside repair and conversion
P.O. Box 1275			of small vessels.
Tacoma, WA 98401-1275	119 X 17 FD	110	
	61 X 15 MR	171	
Web Address: - NOT AVAILABLE -			
Nichala Prothora Poet Puildora Inc			Post construction and renair
Nichols Brothers Boat Builders, Inc. P.O. Box 580			Boat construction and repair.
Freeland, WA 98249			
i iccianu, VVA 90249			
Web Address: www.nicholsboats.com			

	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
Shipyard Name and Address	MR Marine Railway  LL Land Level Position  SL Syncrolift  TR Travel Lift	Longest Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

#### **WEST COAST**

Northlake Shipyard, Inc. 1441 North Northlake Way Seattle, WA 98103

58 X 12 FD 85 X 12 FD

Web Address: - NOT AVAILABLE -

Southern Oregon Marine, Inc. (SOMAR)

155 East Market Avenue

Coos Bay, OR 97420 107 X 30 SW 61 X 13 FD

Web Address: - NOT AVAILABLE -

William E. Munson Company 17183 Bennett Road Mt. Vernon, WA 98273

Web Address: www.munsonboats.com

Repair of small vessels.

Construction and repair of small vessels.

Builds aluminum work boats to

15 meters.

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address		Total Linear	Lengths are in Meters

## **Vessel Repair Companies**

**EAST COAST** 

Staten Island, NY 10303

Web Address: www.mayship.com

#### Anfrank Metal Fabricating Ind., Inc. General ship repair. The Brooklyn Navy Yard Brooklyn, NY 11205 Web Address: - NOT AVAILABLE -General ship repair. B & A Marine Company, Inc. 75 Huntington Street Brooklyn, NY 11231 229 229 Web Address: www.bamarine.com Davis Boat Works. Inc. Repair and conversion of small boats and vessels. 99 Jefferson Avenue Newport News, VA 23607 43 X 11 TR Web Address: www.davisboat.com Lyon Shipyard, Inc. General ship repair. Foot of Brown Avenue Norfolk, VA 23501 107 91 X 23 FD 61 X 11 MR 555 Web Address: www.lyonshipyard.com May Ship Repair Contracting Corporation General ship repair. 3075 Richmond Terrace

FD

FD

122 X

152 X

	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
Shipyard Name and Address	FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

## Vessel Repair Companies

## EAST COAST

<u>122</u> 198	General ship repair.

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

## **Vessel Repair Companies**

## **GREAT LAKES**

Vinette Company 1212 19th Avenue North Escanaba, MI 49829 Repair of small vessels to 36 meters.

18 X 5 TR 24 X 7 TR

Web Address: - NOT AVAILABLE -

	(LC SW	imum Ship Size DA X Beam) Shipway	Berths/Piers Usable Length	Remarks Type of work usually engaged in
Shipyard Name and Address	FD MR LL SL	Graving Drydock Floating Drydock Marine Railway Land Level Position Syncrolift Travel Lift	Longest Total Linear	Lengths are in Meters
	<u>Ve</u>	ssel Repair Co	ompanies	
GULF COAST				
A & B Industries				Small vessel construction and repair.
P.O. Box 1137 Amelia, LA 70340	(2)	30 X 9 SW 56 X 18 SW 30 X 17 FD 43 X 17 FD	<u>70</u> 177	терап.
Web Address: www.ab-industries.com	n			
Berwick Shipyard Corporation Box 168 Berwick, LA 70342				Drydocking and repair of commerical vessels up to 76 meters.
Web Address: - NOT AVAILABLE -				
Bollinger Amelia Repair, LLC 606 Ford Industrial Road				Repair with drydocking of small vessels.
Amelia, LA 70340		37 X 10 FD 61 X 21 FD	<u>91</u> 183	
Web Address: www.bollingershipyard	ls.com			
Bollinger Fourchon, LLC  106 Norman Doucet Drive				General ship repair.
Golden Meadow, LA 70357  Web Address: www.bollingershipyard	ls.com		91 91	
Border Shipyards, Inc. HC 70 Box 5 Brownsville, TX 78521				Repairs shrimp boats.

Web Address: - NOT AVAILABLE -

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock FD Floating Drydock	Longest Total Linear	Remarks Type of work usually engaged in
and Address	• •		Lengths are in Meters

## **Vessel Repair Companies**

#### **GULF COAST**

Burton Shipyard, Inc. P.O. Box 278

Bridge City, TX 77611

49 X 15 FD (2) 49 X 17 FD

Repairs tugs, barges and offshore vessels.

Web Address: www.burtonshipyard.com

Hudson Drydocks, Inc.

P.O. Box 1781

Morgan City, LA 70381

34 X 12 FD 55 X 18 FD

67 X 28 FD

244

244

Repair of small vessels.

Web Address: www.hudsondrydocks.com

Kiva Construction & Engineering, Inc.

P.O. Drawer 40 Anahuac, TX 77514

Web Address: - NOT AVAILABLE -

Maintains their own fleet of tug

boats.

Web Address. - NOT AVAILABLE

Kremer Marine, Inc. 1408 Cowan Road Gulfport, MS 39507

Web Address: - NOT AVAILABLE -

LA Dock Company, Baton Rouge Shipyard

4780 North River Road Port Allen, LA 70767

53 X 11 FD 59 X 11 FD

Web Address: - NOT AVAILABLE -

Repairs vessels up to 20 meters.

Repair of small vessels.

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

## **Vessel Repair Companies**

#### **GULF COAST**

Ocean Technical Services, Inc. Repair of small boats. 1140 Peters Road Harvey, LA 70058 179 179 Web Address: www.oceantech.com R & R Marine Fabrication and Drydock Topside marine repair. 5700 Proctor Street Extension Port Arthur, TX 77642 76 X 24 FD Web Address: - NOT AVAILABLE -R & R Marine Fabrication and Drydock, North Yard Topside marine repair. 7200 Highway 87 East Port Arthur, TX 77642 457 457 Web Address: - NOT AVAILABLE -Seacraft Shipyard Corporation Repair and conversion of small boats and ferries. P.O. Drawer 1550 Amelia, LA 70340-1550 46 X 9 TR 56 X 15 FD Web Address: www.seacraftshipyard.com Southwest Marine, Inc., Ingleside Division Repair of small vessels. P.O. Box 999 Ingleside, TX 78362 214 214 Web Address: www.usmarinerepair.com

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

## **Vessel Repair Companies**

#### **GULF COAST**

Tri-Kat Marine, Inc. 1408 Cowan Road Gulfport, MS 39507 Repairs small boats.

Web Address: - NOT AVAILABLE -

Violet Dock Port, Inc. 6800 St. Bernard Highway Violet, LA 70092 Vessel lay-up.

Web Address: - NOT AVAILABLE -

Williamson Boat Works 1008 Boat Works Roaf Riviera, TX 78379 Repair of small boats.

Repairs small boats.

Web Address: - NOT AVAILABLE -

Zimco Marine, Inc. 400 Washington Street Port Isabel, TX 78578

610 1,798

Web Address: - NOT AVAILABLE -

37 X 8 MR

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

## **Vessel Repair Companies**

#### **INLAND**

Great Lakes Towing Shipyard 1800 Terminal Tower Cleveland, OH 44113

Web Address: - NOT AVAILABLE -

James Marine, Inc. P.O. Box 2305

Paducah, KY 42002-2305

15 X 14 FD 21 X 19 FD 34 X 20 FD 49 X 20 FD 58 X 21 FD (2) 61 X 18 FD

Web Address: - NOT AVAILABLE -

Missouri Drydock & Repair Company

P.O. Box 700

Cape Girardeau, MO 63701

(2) 76 X 16 FD

61 X 20 FD

Web Address: - NOT AVAILABLE -

Walker Paducah Corporation

P.O. Box 1400

Paducah, KY 42002-1400

Web Address: - NOT AVAILABLE -

Repair of small vessels.

Repair of small vessels.

Repair of inland river boats.

Repair and drydocking of towboats and barges.

52 X 17 FD 61 X 16 FD 64 X 16 FD 70 X 19 FD 88 X 25 FD

	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
Shipyard Name and Address	FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

## **Vessel Repair Companies**

## **NON-CONUS**

Honolulu Marine, Inc.

123 Ahui Street

Honolulu, HI 96813

Web Address: - NOT AVAILABLE 
Repair and construction of small boats.

Repair and construction of small boats.

Shipyard Name and Address	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Longest Total Linear	Remarks Type of work usually engaged in
	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift		Lengths are in Meters

## **Vessel Repair Companies**

Actoria Marina Canatrustian Company			Danair of amall vascala
Astoria Marine Construction Company 92134 Front Road			Repair of small vessels.
Astoria, OR 97103	15 X 5 MR		
,	24 X MR		
	61 X 10 MR		
	91 X 10 MR		
Web Address: - NOT AVAILABLE -			
Duwamish Shipyard, Inc.			Ship repair, maintenance, and
5658 West Marginal Way, S.W.			conversion.
Seattle, WA 98106	121 X 29 GD	56	
	41 X 10 FD	193	
	61 X 13 FD		
Web Address: - NOT AVAILABLE -			
Pacific Fishermen, Inc.			General repair of commercial
5351 24th Avenue, N.W.			vessels.
Seattle, WA 98107	37 X 7 MR	91	
	49 X 10 MR	91	
	44 X 11 SL	01	
Web Address: www.pacificfishermen.com			
Stone Boat Yard, Inc.			Repair of small boats.
2517 Blanding Avenue			Repair of official boats.
Alameda, CA 94501	04 W 0 TF	074	
7.11.11.10.00.1	21 X 6 TR	274	
	50 X 11 MR	320	
Web Address: - NOT AVAILABLE -			

	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
Shipyard Name and Address	FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

## **Vessel Repair Companies**

## **WEST COAST**

Ventura Harbor Boatyard, Inc.

1415 Spinnaker Drive
Ventura, CA 93001-4339

17 X 5 TR
40 X 9 TR

55
145

Web Address: www.vhby.com

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

EAST COAST			
Blount Boats, Inc. 461 Water Street Warren, RI 02885 Web Address: www.blountbarker.com	69 X 15 SW	<u>67</u> 165	Designs and builds small vessels to 69 meters.
Boston Whaler, Inc. 4121 South U.S. Highway One Edgewater, FL 32141-7221 Web Address: www.whaler.com			Builds fiberglass boats up to 10 meters in length and fishing vessels 4 meters - 9 meters.
Derecktor Shipyards Connecticut 837 Seaview Avenue Bridgeport, CT 06607-1607	76 X 19 TR 73 X FD		Builds & services aluminum boats to 700 GT.
Web Address: www.derecktor.com			
Derecktor Shipyards New York 311 East Boston Post Road Mamaroneck, NY 10543	40 X 9 LL 61 X 15 LL	<u>48</u> 191	New construction and repair of vessels up to 46 meters.
Web Address: www.derecktor.com			
Ellicott International 1611 Bush Street Baltimore, MD 21230			Builds small dredges.
Web Address: www.dredge.com			

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

#### Fabricators/Manufacturers of Maritime Vessels

#### **EAST COAST** H & H Marine, Inc. Builds fiberglass lobster boats. U.S. Route 1 Steuben, ME 04680 Web Address: - NOT AVAILABLE -Muller Boat Works, Inc. Small boat construction. 2214 E. 69th Street Brooklyn, NY 11234 Web Address: - NOT AVAILABLE -PJ Sports Yachts Construction and repair. 301 N. Lathrop Avenue Savannah, GA 31415 55 X 12 LL 244 152 X 17 GD \* 457 56 X 12 MR Web Address: www.intermarineus.com Stevens Marine Services, Inc. Repair of small vessels and barge construction. 4170 Hwy 165 Yonges Island, SC 29448 107 37 X 10 MR 168 55 X 14 MR 76 X 24 MR Web Address: www.stevens-towing.com/shipyard.html Thomas Marine, Inc. Builds aluminum work boats to 15 meters. 37 Bransford Street Patchogue, NY 11772 Web Address: - NOT AVAILABLE -

	Maximum Ship Size (LOA X Beam) SW Shipway GD Graving Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
Shipyard Name and Address	FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

## **EAST COAST**

Washburn & Doughty Assoc., Inc.

P.O. Box 226

East Boothbay, ME 04544

29 X 10 SW 61 X 12 SW

Web Address: www.washburndoughty.com

Winninghoff Boats, Inc. Warehouse Lane Rowley, MA 01969

Web Address: - NOT AVAILABLE -

Builders of aluminum and steel vessels to 61 meters.

Builds small aluminum boats.

Chimunal Nama	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
Shipyard Name and Address	FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

## **GREAT LAKES**

Skipperliner Industries, Inc. 621 Park Plaza Drive LaCrosse, WI 54601

Web Address: - NOT AVAILABLE -

Builds small boats.

	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
Shipyard Name and Address	FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest 	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

#### **GULF COAST**

Aker Gulf Marine Fabricator of offshore oil/gas rigs. FM1069 South Aransas, TX 78335 Web Address: - NOT AVAILABLE -Boconco Shipyard Builds small utility boats. 14530 Shell Belt Road Bayou La Batre, AL 36509 Web Address: - NOT AVAILABLE -Farmer's Marine Copper Works, Inc. Fabrication for oil rigs. P.O. Box 748 Galveston, TX 77553 Web Address: - NOT AVAILABLE -**Gulf County Shipbuilding** Small boat construction. 511 Old Dynamite Dock Road Port St. Joe, FL 32456-6365 Web Address: www.gcship.com Gulf Craft, Inc. Builds small boats. 3904 Highway 182 Patterson, LA 70392 Web Address: www.gulfcraftinc.com

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

### Fabricators/Manufacturers of Maritime Vessels

GULF COAST			
Harrison Bros. Dry Dock, Inc.			Builder of small boats and
P.O. Box 1843			general vessel repair.
Mobile, AL 36633-1843	40 X 11 FD	168	
	50 X 24 FD	395	
Web Address: www.harrisonbrothers.com			
Hope Services, Inc.			Builds OSV's, tugs and boats
P.O. Box 9157			to 46 meters.
Houma, LA 70361		1,067	
Web Address: - NOT AVAILABLE -		1,067	
Inland Boat Works			Construction of small boats
2842 E. Roundbunch Road			and barges.
Orange, TX 77630			
Web Address: - NOT AVAILABLE -			
Island Boats, Inc.			Builds aluminum boats to
5109 East Old Spanish Trail			30 meters.
Jeanerette, LA 70544	30 X 11 MR		
Web Address: www.islandboats.com			
John Bludworth Shipyard, LLC			Repair and construction of
P.O. Box 2441			boats and barges.
Corpus Christi, TX 78403	407 V 05 55	25	-
20.500 0.1100, 17. 10100	107 X 25 FD	<u>35</u> 101	
Web Address: www.jbludshipyard.com		101	

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

#### Fabricators/Manufacturers of Maritime Vessels

#### **GULF COAST**

Keith Marine, Inc. P.O. Box 187

Palatka, FL 32178-0187

Web Address: www.keithmarine.com

Kiewit Offshore Services 2440 Kiewit Road Ingleside, TX 78362

Web Address: - NOT AVAILABLE -

LeTourneau

P.O. Box 2307

Longview, TX 75606

v, 1X 75606 (2) 119 X 91 SW (2) 134 X 107 LL

76 X 76 LL

Web Address: www.letourneau-inc.com

Main Iron Works, Inc.

P.O. Box 1918

Houma, LA 70361

24 X 12 FD 43 X 16 FD 152

335

46 X 15 FD 49 X 21 FD 61 X 27 FD

Web Address: - NOT AVAILABLE -

Builds small boats.

Fabrication of offshore

structures.

Offshore oil rig construction.

Builds small boats.

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

#### Fabricators/Manufacturers of Maritime Vessels

#### **GULF COAST**

Mariner Shipyard Services Construction and repair of small vessels. P.O. Box 84579 Baton Rouge, LA 70884 Web Address: - NOT AVAILABLE -Builds small boats. Master Boat Builders, Inc. P.O. Box 702 Bayou La Batre, AL 36509 41 X 9 LL 46 X 11 LL 82 X 18 LL Web Address: - NOT AVAILABLE -Master Marine, Inc. Boat building and repair. P.O. Box 665 Bayou La Batre, AL 36509 122 29 X 7 SW 40 X 9 SW 402 50 X 12 SW 34 X 8 FD 56 X 13 FD Web Address: - NOT AVAILABLE -Midship Marine Builds aluminum boats to 49 meters. 1901 Destrehan Avenue Harvey, LA 70058-1101 Web Address: - NOT AVAILABLE -Neuville Boat Works, Inc. Builds aluminum boats 12-43 meters. 6402 Daspit Road New Iberia, LA 70560 Web Address: - NOT AVAILABLE -

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
and Address	MR Marine Railway  LL Land Level Position  SL Syncrolift  TR Travel Lift	Longest Total Linear	Lengths are in Meters

#### Fabricators/Manufacturers of Maritime Vessels

#### **GULF COAST**

**Premier Industries** Fabrication and drill rig conversions. 3450 Peters Road Harvey, LA 70058 Web Address: - NOT AVAILABLE -Progressive Industrial Builds tugs and OSVs. 1412 18th Avenue Drive, East Palmetto, FL 34221-6500 Web Address: - NOT AVAILABLE -Queen Craft Shipyard Builds small boats. 3615 Calhoun Avenue Panama City, FL 32405 Web Address: - NOT AVAILABLE -Royal Crown Yachts Builds small ferries and yachts. 5353 W. Tyson Avenue Tampa Bay, FL 33611-3225 Web Address: - NOT AVAILABLE -Sea-Fab, Inc. Small boat construction. 4111 Cedar Street Pascagoula, MS 39567 Web Address: - NOT AVAILABLE -

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

#### Fabricators/Manufacturers of Maritime Vessels

#### **GULF COAST**

**SEMCO** Builds tugs and OSV's. P.O. Box 460 LaFitte, LA 70067-5314 Web Address: - NOT AVAILABLE -Signal International, LLC - West Yard Repair of offshore oil rigs. 3400 Litton Road Pascagoula, MS 39568 Web Address: www.signalint.com St. Augustine Marine Builds small boats. 404 South Riberia Street, Suite A St. Augistine, FL 32084 Web Address: - NOT AVAILABLE -Builds small vessels. Swiftships Shipbuilders, LLC 1105 Levee Road, P.O. Box 2869 Morgan City, LA 70381 549 584 Web Address: www.swiftships.com Thoma-Sea Boat Builders, Inc. Builds OSV's and tug boats. P.O. Box 53 Bourg, LA 70343 Web Address: - NOT AVAILABLE -

	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
Shipyard Name and Address	FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest 	Lengths are in Meters

#### Fabricators/Manufacturers of Maritime Vessels

#### **GULF COAST**

United States Marine, Inc. 19807 Chef Meneur Highway New Orleans, LA 70129

14 X 4 MR

Builds small aluminum and composite boats up to

25 meters.

Builds small boats.

Web Address: www.usmi.com

Verret Shipyard 29120 Highway 75

Plaquemine, LA 70764-6101

91 X 9 LL

Web Address: - NOT AVAILABLE -

	Maximum Ship Size (LOA X Beam)  SW Shipway GD Graving Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
Shipyard Name and Address	FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest 	Lengths are in Meters

#### Fabricators/Manufacturers of Maritime Vessels

152 X

FD

#### **INLAND**

Bentz Boats, LLC 613 Bryden #C Lewiston, ID 83501 Builds commercial aluminum jet boats for shallow water use.

Web Address: www.bentzboats.com

Mark Steel 1230 West 200 South Salt Lake City, UT 84104 Builds small ferries.

Web Address: - NOT AVAILABLE -

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

#### Fabricators/Manufacturers of Maritime Vessels

#### **NON-CONUS**

Allen Marine, Inc.

1512 Sawmill Creek Road

Sitka, AK 99835-9703

20 X 7 TR

Construction of small boats and ferries.

30 X 9 TR 524

Web Address: www.allenmarineboats.com

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
and Address	MR Marine Railway  LL Land Level Position  SL Syncrolift  TR Travel Lift	Longest Total Linear	Lengths are in Meters

#### Fabricators/Manufacturers of Maritime Vessels

#### **WEST COAST**

Builds aluminum boats. All American Marine, Inc. 201 Harris Avenue Bellingham, WA 98225-7018 Web Address: www.allamericanmarine.com Aluminum Marine Construction, Inc. (ALMAR) Builds aluminum boats up to 11 meters. 2301 East Dock Street Tacoma, WA 98402 Web Address: www.almarboats.com Anderson's Boat Yard, Inc. P.O. Box 326 Sausalito, CA 94966 Web Address: - NOT AVAILABLE -Kvichak Marine Industries, Inc. Aluminum vessel construction and repair. 469 NW Bowdoin Place Seattle, WA 98107 15 15 Web Address: www.kvichak.com Modutech Marine, Inc. Builds small boats. 2218 Marine View Drive Tacoma, WA 98422 Web Address: - NOT AVAILABLE -

	Maximum Ship Size (LOA X Beam) SW Shipway GD Graving Drydock	Berths/Piers Usable Length	Remarks Type of work usually engaged in
Shipyard Name and Address	FD Floating Drydock MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Longest Total Linear	Lengths are in Meters

#### Fabricators/Manufacturers of Maritime Vessels

#### **WEST COAST**

Moose Boats Builds catamran boats up to 11 meters in length. 201 Willow Road Nicasio, CA 94946 Web Address: www.mooseboats.com Northwind Marine, Inc. Builds small vessels. 511 South Webster Street Seattle, WA 98108-4138 Web Address: - NOT AVAILABLE -Oregon Iron Works, Inc. Marine Division Fabricated structural materials. 3515 SouthEast Columbia Way Vancouver, WA 98661 Web Address: www.oriron.com Rozema Boat Works Builds small aluminum boats. 11130 Bayview Edison Road Mount Vernon, WA 98273-8216 Web Address: - NOT AVAILABLE -SAFE Boats International Builds foam stabilized aluminum boats to 14 meters. 8800 Barney White Road Port Orchard, WA 98367 Web Address: - NOT AVAILABLE -

Shipyard Name	Maximum Ship Size (LOA X Beam)  SW Shipway  GD Graving Drydock  FD Floating Drydock	Berths/Piers Usable Length Longest	Remarks Type of work usually engaged in
and Address	MR Marine Railway LL Land Level Position SL Syncrolift TR Travel Lift	Total Linear	Lengths are in Meters

#### Fabricators/Manufacturers of Maritime Vessels

#### **WEST COAST**

SWATH Ocean Systems, Inc.

997 G Street

Chula Vista, CA 91910-3414

Web Address: - NOT AVAILABLE -

Western Towboat Company
617 N.W. 40th Street
Seattle, WA 98107
Builds tugs to 37 meters for their own use.

113 X 24 LL

Web Address: www.westerntowboat.com

Willard Marine, Inc.

1250 North Grove Street

Anaheim, CA 92806

Builds small fiberglass and aluminum boats.

Web Address: www.willardmarine.com

Workskiff, Inc.

880 North Hill Blvd

Builds aluminum boats under 9 meters.

Web Address: www.workskiff.com

Burlington, WA 98233

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