

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

# 2001



# REPORT ON SURVEY OF U.S. SHIPBUILDING AND REPAIR FACILITIES 2001

Prepared By:

Office of Shipbuilding and Marine Technology December 2001 INTENTIONALLY LEFT BLANK

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#### INTRODUCTION

In compliance with the Merchant Marine Act of 1936, as amended  $\frac{1}{}$ , 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 2001 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.

<sup>1/</sup> 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 92 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 2001 Survey and other industry related sources of information established the following:

 The Active Shipbuilding Yards employed roughly 45 percent of the U.S. shipbuilding and repair industry's total workforce, as reported by the Bureau of Labor Statistics under SIC 3731. A brief description of the eight shipyards and general arrangement drawings of each yard's facilities (Exhibit 11 – 18) were provided by each of the companies and can be found starting on page 23.

- The 17 Shipyards with Build Positions employed roughly 12 percent of the U.S. shipbuilding and repair industry's total workforce.
- Combined, the 25 Active Shipbuilding yards and the Shipyards with Build Positions account for about 57 percent of the U.S. shipbuilding and repair industry's total workforce.
- A geographical map locating these shipyards can be found in Exhibits 19 and 20.

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.

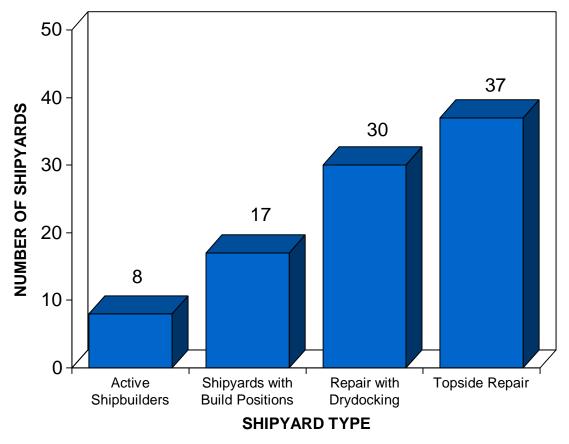
### **Topside Repair**

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.

### **OCTOBER 2001**

# NUMBER OF SHIPYARDS BY TYPE

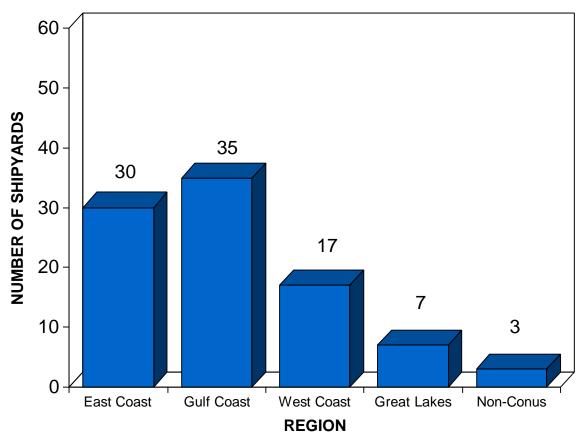
ACTIVE SHIPBUILDERS	8
SHIPYARDS WITH BUILD POSITIONS	17
REPAIR WITH DRYDOCKING	30
TOPSIDE REPAIR	37
TOTAL	92



### **OCTOBER 2001**

### NUMBER OF SHIPYARDS BY REGION

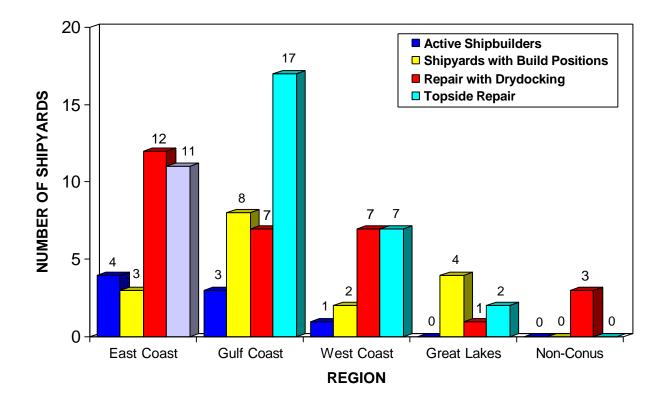
EAST COAST	30
GULF COAST	35
WEST COAST	17
GREAT LAKES	7
NON-CONUS	3
TOTAL	92

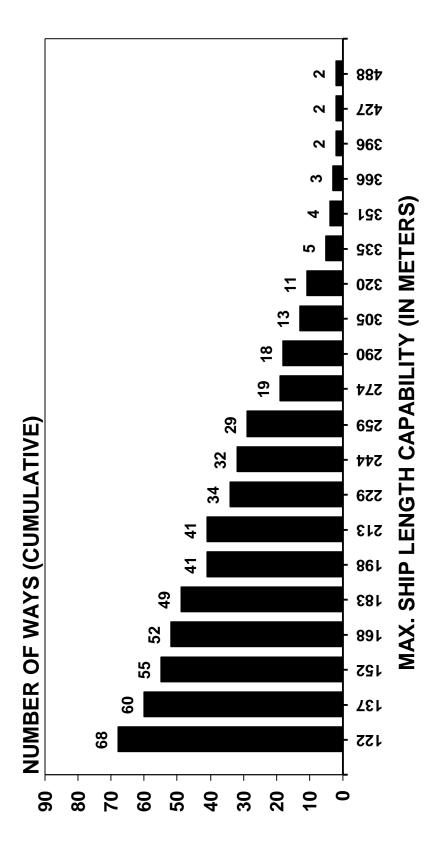


### **OCTOBER 2001**

# NUMBER OF SHIPYARDS BY TYPE AND REGION

	ACTIVE	SHIPYARDS WITH	<b>REPAIR WITH</b>	TOPSIDE
	SHIPBUILDERS	<b>BUILD POSITIONS</b>	DRYDOCKING	REPAIR
EAST COAST	4	3	12	11
GULF COAST	3	8	7	17
WEST COAST	1	2	7	7
GREAT LAKES	0	4	1	2
NON-CONUS	0	0	3	0
TOTAL	8	17	30	37



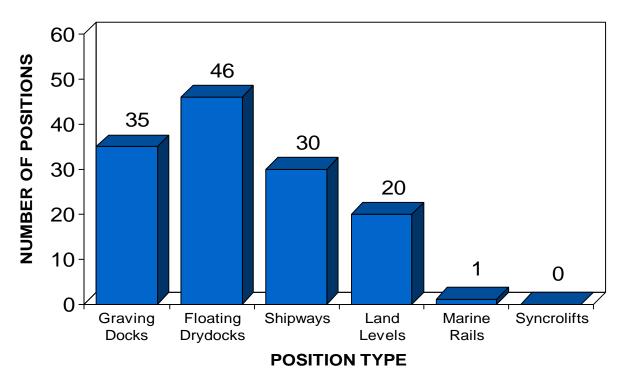


\* Shipways, Graving Docks and Land Level Positions

### **OCTOBER 2001**

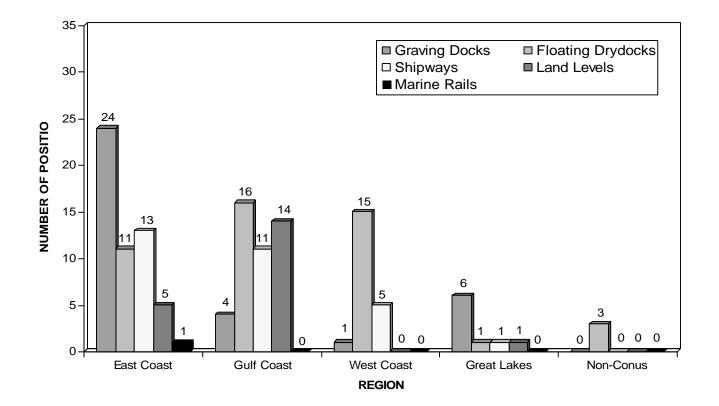
# NUMBER OF BUILD AND REPAIR POSITIONS

GRAVING DOCKS	35
FLOATING DRYDOCKS	46
SHIPWAYS	30
LAND LEVELS	20
MARINE RAILS	1
SYNCROLIFTS	0
TOTAL	132

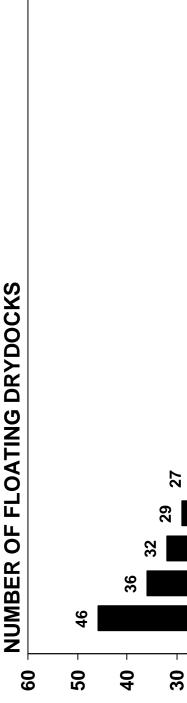


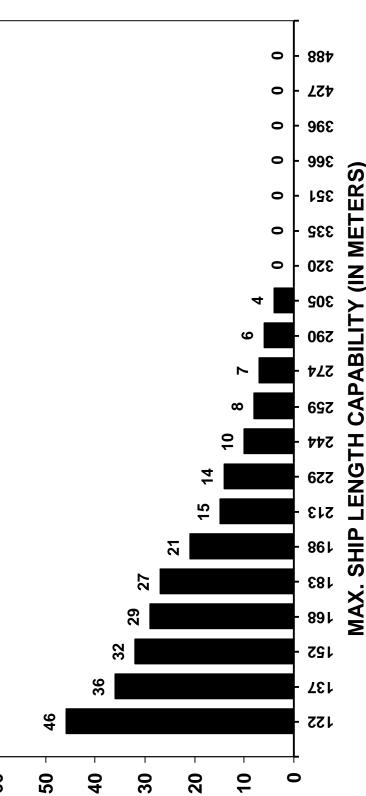
# NUMBER OF BUILD AND REPAIR POSITIONS BY REGION

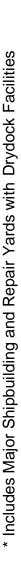
	GRAVING DOCKS	FLOATING DRYDOCKS	SHIPWAYS	LAND LEVELS	MARINE RAILS
EAST COAST	24	11	13	5	1
GULF COAST	4	16	11	14	0
WEST COAST	1	15	5	0	0
GREAT LAKES	6	1	1	1	0
NON-CONUS	0	3	0	0	0
TOTAL	35	46	30	20	1



MAJOR U.S. SHIP REPAIR FACILITIES\* NUMBER OF FLOATING DRYDOCKS BY MAXIMUM LENGTH CAPABILITY (OCTOBER 1, 2001)



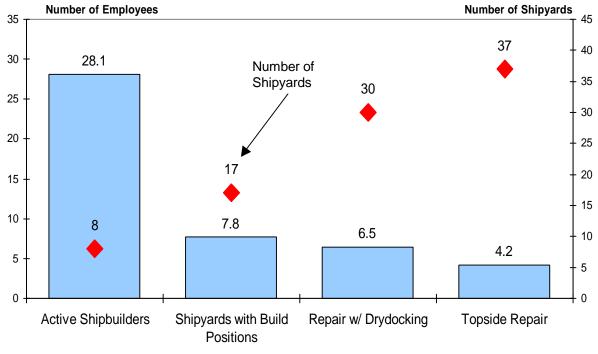




# NUMBER OF PRODUCTION WORKERS BY SHIPYARD TYPE

(in Thousands)

ACTIVE SHIPBUILDERS	28.1
SHIPYARDS WITH BUILD POSITIONS	7.8
REPAIR WITH DRYDOCKING	6.5
TOPSIDE REPAIR	4.2
TOTAL	46.6

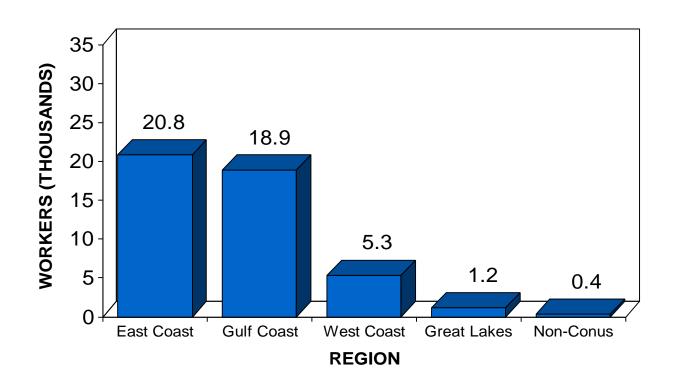


SHIPYARD TYPE

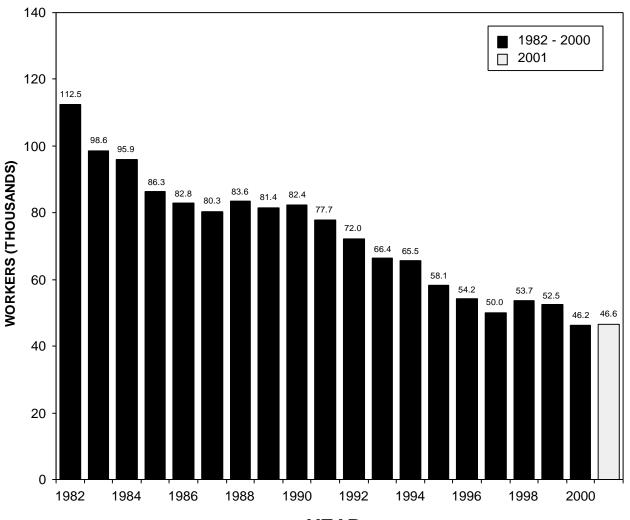
# NUMBER OF PRODUCTION WORKERS BY REGION

(in Thousands)

EAST COAST	20.8
GULF COAST	18.9
WEST COAST	5.3
GREAT LAKES	1.2
NON-CONUS	0.4
TOTAL	46.6



NUMBER OF PRODUCTION WORKERS 1982 - 2001



YEAR

#### EAST COAST

#### Active Shipbuilding Yards (4)

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

#### **Shipyards with Build Positions (3)**

Atlantic Dry Dock Corporation - Jacksonville, FL Baltimore Marine Industries, Inc. - Baltimore, MD Intermarine Savannah - Savannah, GA

#### Repair (With Drydocking) (12)

Bayonne Dry Dock & Repair Corporation - Bayonne, NJ Caddell Dry Dock & Repair Company, Inc. - Staten Island, NY Colonna's Shipyard, Inc. - Norfolk, VA Detyens Shipyard, Inc., Main Yard - Charleston, SC Detyens Shipyard, Inc., Wando Division - Mt. Pleasant, SC Eastern Technical Enterprises, Inc. - Brooklyn, NY Economic Development & Industrial Corporation of Boston (EDIC) - Boston, MA GMD Shipyard Corporation - Brooklyn, NY Metro Machine Corporation - Norfolk, VA Metro Machine Corporation - Philadelphia Division - Philadelphia, PA Norfolk Shipbuilding & Drydock Corporation, Berkeley - Norfolk, VA

#### Topside Repair (11)

American Shipyard Company, LLC - Newport, RI Associated Naval Architects, Inc. - Portsmouth, VA Marine Hydraulics International, Inc. - Norfolk, VA Metal Trades, Inc. - Hollywood, SC Moon Engineering Company, Inc. - Portsmouth, VA Norfolk Shiprepair & Drydock Corporation - Norfolk, VA

#### EAST COAST (Continued)

#### **Topside Repair** (11)

Promet Marine Services Corporation - Providence, RI 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 - 30 Yards

#### **GULF COAST**

#### Active Shipbuilding Yards (3)

Halter Pascagoula - Pascagoula, MS Northrop Grumman Ship Systems, Avondale Operations - Avondale, LA Northrop Grumman Ship Systems, Ingalls Operations - Pascagoula, MS

#### **Shipyards with Build Positions (8)**

Alabama Shipyard, Inc. - Mobile, AL AMFELS, Inc. - Brownsville, TX Bender Shipbuilding & Repair Company, Inc. - Mobile, AL Friede Goldman Offshore, East - Pascagoula, MS Halter Moss Point - Moss Point, MS Newpark Shipbuilding, Galveston - Galveston, TX Tampa Bay Shipbuilding & Repair Company - Tampa, FL United Marine Port Arthur Shipyard - Port Arthur, TX

#### Repair (With Drydocking) (7)

Atlantic Marine, Inc., Mobile- Mobile, AL Bollinger Gulf Repair - New Orleans, LA Bollinger Houston - Houston, TX FGO Texas D.O.C.Yard - Port Arthur, TX Gulf Marine Repair Corporation - Tampa, FL Halter Port Bienville - Lakeshore, MS International Ship Repair & Marine Service, Inc.- Tampa, FL

#### Topside Repair (17)

Boland Marine & Manufacturing Company, Inc. - New Orleans, LA Bollinger Algiers, LLC - New Orleans, LA Bollinger Calcasieu - Sulphur, LA Bollinger Lockport, LLC - Lockport, LA Bollinger Texas City - Texas City, TX CBH Services, Inc. - Orange, TX

#### **GULF COAST** (Continued)

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

Dixie Machine Welding & Metal Works, Inc. - New Orleans, LA FGO Texas Orange Yard - Orange, TX Gulf Copper and Manufacturing Corporation - Port Arthur, TX Hendry Corporation - Tampa, FL Houston Ship Repair, Inc., Brady Island Ship Repair Facility - Houston, TX Newpark Shipbuilding & Repair, Inc., Brady Island - Houston, TX Newpark Shipbuilding & Repair, Inc., Pasadena - Pasadena, TX Newpark Shipbuilding & Repair, Inc., Pelican Island - Galveston, TX Northrop Grumman Ship Systems, AvondaleOper. - Algiers Div., - Avondale, LA Orange Shipbuilding Company, Inc. - Orange, TX Sabine Offshore Services, Inc. - Sabine Pass, TX

Gulf Coast Total - 35 Yards

#### WEST COAST

#### Active Shipbuilding Yards (1)

National Steel & Shipbuilding Company - San Diego, CA

#### Shipyards with Build Positions (2)

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

#### Repair (With Drydocking) (7)

Bellingham Bay Shipyard, LLC - Bellingham, WA Cascade General, Inc. - Portland, OR Lake Union Drydock Company - Seattle, WA MAR COM, Inc. - Portland, OR 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 (7)

Bay Ship & Yacht Company, Alameda- Alameda, CA Bay Ship & Yacht Company, Richmond- Richmond, CA Continental Maritime of San Diego, Inc. - San Diego, CA Dakota Creek Industries, Inc. - Anacortes, WA Foss Shipyard - Seattle, WA Pacific Fisherman, Inc. - Seattle, WA San Pedro Boat Works - San Pedro, CA

West Coast Total - 17 Yards

#### **GREAT LAKES**

#### Active Shipbuilding Yards (0)

None

#### **Shipyards with Build Positions (4)**

Bay Shipbuilding Company - Sturgeon Bay, WI Fraser Shipyards, Inc. - Superior, WI Marinette Marine Corporation - Marinette, WI Metro Machine of Pennsylvania, Industrial Products Division- Erie, PA

#### Repair (With Drydocking) (1)

Toledo Ship Repair Company, Toledo Shipyard-Toledo, OH

#### Topside Repair (2)

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

Great Lakes Total - 7 Yards

#### **NON-CONUS**

#### Active Shipbuilding Yards (0)

None

#### **Shipyards with Build Positions (0)**

None

#### Repair (With Drydocking) (3)

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

#### Topside Repair (0)

None

Non-Conus Total - 3 Yards

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# DESCRIPTIONS AND GENERAL ARRANGEMENT DRAWINGS FOR THE ACTIVE SHIPBUILDING YARDS

#### Bath Iron Works Corporation

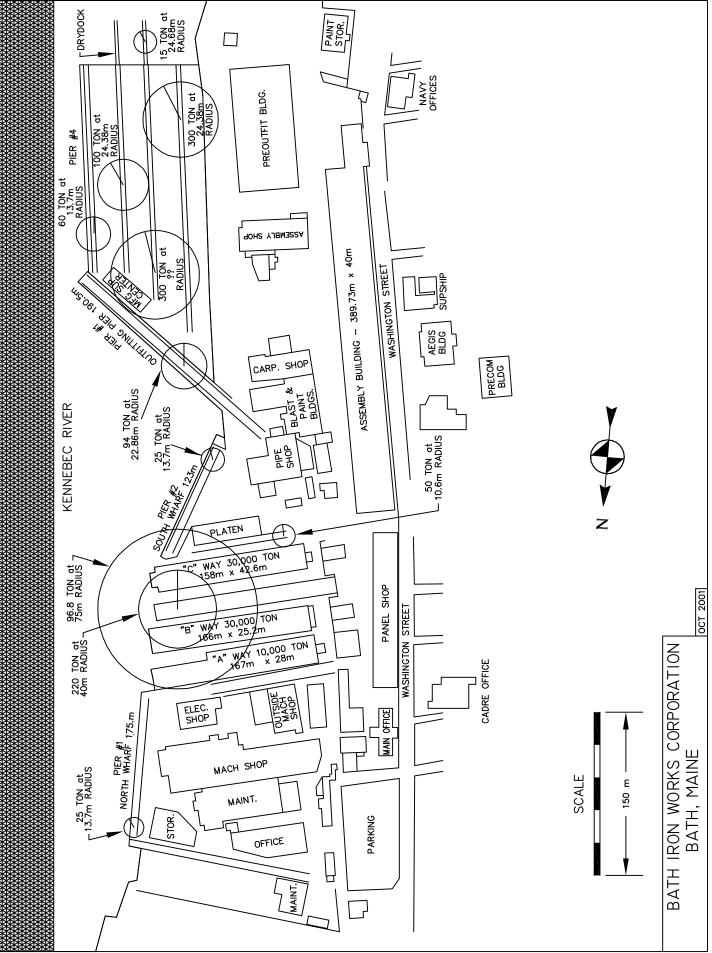
Bath Iron Works Corporation (BIW) is located on the Kennebec River in Bath, ME. The original iron foundry was established in 1826; it became Bath Iron Works Ltd in 1884, and the first ship was delivered in 1890. Since then, this shipyard has built over 240 U.S. Navy surface combatants and more than 160 commercial ships, including product tankers, containerships, roll -on/roll-off ships (RO/RO's), private yachts and fishing vessels. BIW became a wholly owned subsidiary of General Dynamics Corporation in September 1995.

Since 1968, BIW has delivered 23 commercial ships and 53 U.S. Navy warships. In 1973, BIW became the lead yard for the FFG-7 PERRY class frigate and has 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 DDG -51 ARLEIGH BURKE class AEGIS destroyers, the U.S. Navy's newest surface combatant. The lead ship and 18 follow-on ships have been delivered since 1991. As of October 1, 2001, eight DDG's were under contract with the last delivery scheduled for 2006.

BIW was part of the team that, in 1996, was awarded the design and construction contract for the first three SAN ANTONIO class amphibious transport dock ships (LPD 17). BIW is slated to construct the third ship of the contract and 4 of 12 total ships in the program.

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 and can be used for both military and commercial shipbuilding. All three shipways can accommodate ships of 224 meters in length with a maximum beam of 40 meters. Two 300-metric ton whirley cranes service two of these shipways. 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 34 meters and the other a maximum beam of 39 meters. A 200-metric ton level-luffing crane services these shipways. The third shipway, which can handle a 210 meter ship with a beam of 26 meters, is serviced by a 270-metric ton crane. 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 BWI'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.

As of mid-2001, the company had about 6,800 employees.



#### **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 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.

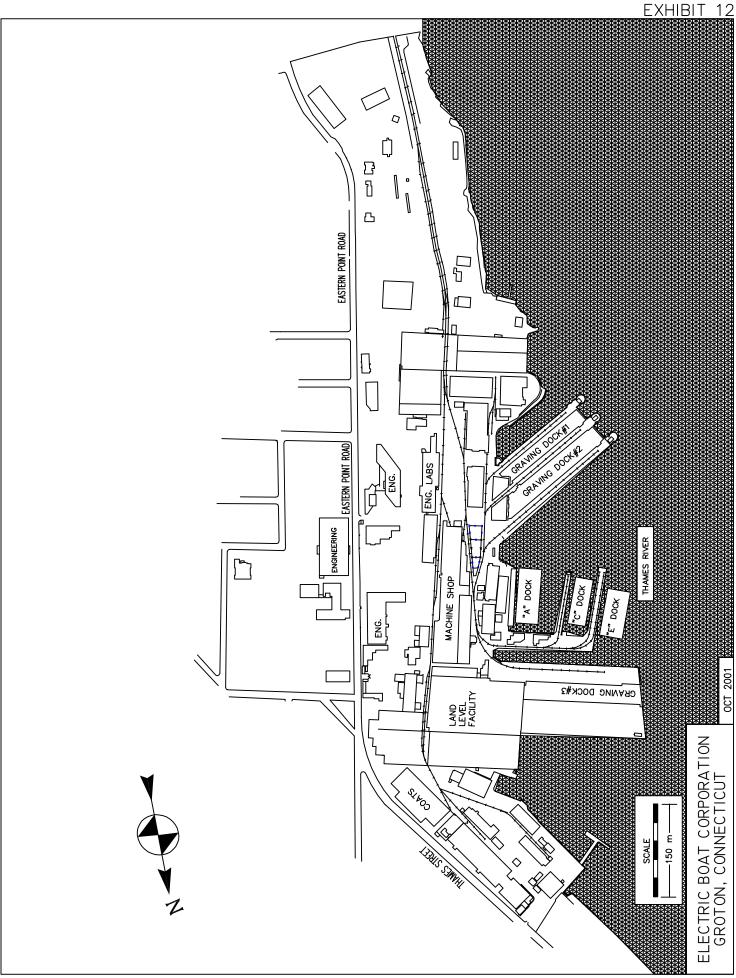
As of October 1, 2001, Electric Boat had under construction the third SSN -21 SEAWOLF class attack submarine and the first SSN-774 VIRGINIA class new attack submarine. Electric Boat is the lead design yard for the VIRGINIA class submarine. The company is also engaged in the repair of nuclear submarines both in Groton and at other Navy homeports.

Electric Boat operates two major manufacturing sites - a 292 hectare shipyard facility with 1,365 meters of deep water frontage on the Thames River in Groton, CT, and a 245 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.

The 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. Seven wetberth positions with portal cranes ranging from 75 to 300 tons can accommodate vessels up to 229 meters long and drawing 12 meters. In 1999, Electric Boat constructed an \$11.5 million Command and Control System Module (CCSM) Off-Hull Assembly and Test Site (COATS) facility in Groton to enable earlier equipment integration and testing for the VIRGINIA class program.

As of mid-2001 Electric Boat had approximately 9,100 employees.



#### Halter Marine, Inc. – Pascagoula

The Halter Pascagoula shipyard is located on a 78 hectare deep-water site in Pascagoula's Bayou Casotte Industrial Development District and has clear access to the open waters of the Gulf of Mexico. The Pascagoula Complex has a designed annual throughput capacity of 50,000 tons of steel. The northern half, Halter Pascagoula, was developed to build large oceangoing ships while the southern half of the Pascagoula Complex, Friede Goldman Offshore (FGO), was specifically designed to build large offshore drilling rigs, particularly semi-submersibles and jack-ups. Management of the two yards is now integrated, with a Senior Vice President of FGO responsible for rig construction programs and a Senior Vice President of Halter responsible for ship constriction programs and all support activities.

Halter Pascagoula, consisting 36 hectares, was acquired by Halter in November 1995, from Chicago Bridge & Iron. This facility can build large oceangoing ships of up to 213 meters in length by 32 meters in breadth. Halter retained the leading Japanese shipbuilder, Ishikawajima-Harima Heavy Industries Co., Ltd., (IHI) to develop a plan, schedule and cost estimate for its development to allow the construction of containerships. This plan was structured in three phases and estimated to cost approximately \$25 million. The major components of this plan had already been implemented by the time the entire program was placed on hold for market conditions to improve.

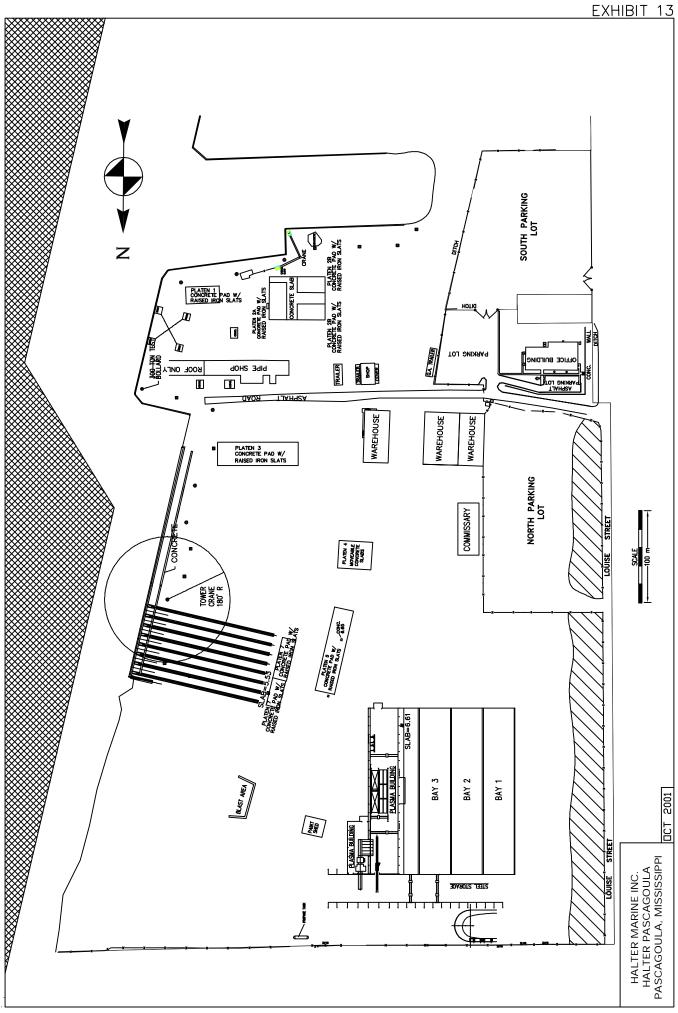
The north area Panel Line Building contains five bays: three 145 meters by 27 meters, one 145 meters by 53 meters and one 49 meters by 18 meters.

The yard has over 23,600 square meters of under -cover production facilities divided between a fabrication shop, paint shop, maintenance shop, and warehouse. The main module building platen is approximately 229 meters in length by 20 meters in width, covering an area of approximately 4,645 square meters. The main fabrication shop is centrally located near the building platens and contains 1,393 square meters. Two additional module assembly areas enclose approximately 1,858 square meters each are located adjacent to the erection/launchways.

The yard has a steel fabrication throughput capacity of 3,628 metric tons per month. The pipe shop has the capacity to provide up to 22,858 linear meters of pipe per year, ranging in diameter from 1.27 centimeters to 30.48 centimeters, and the paint shop has the capacity to blast and paint over 363 metric tons per month.

The Pascagoula Complex has approximately 1,525 meters of waterfront; about 915 meters have been improved for use as outfitting pier space, of which approximately 300 meters is located in the North Yard. The balance of the north yard waterfront will be developed during 2002.

As of mid-2001, employment at Halter Pascagoula was 720.



#### Kvaerner Philadelphia Shipyard Inc.

Kvaerner Philadelphia Shipyard Inc. (KPSI) is a newly constructed mid -sized shipyard located in Philadelphia, PA. KPSI's capacity is 25,000 tons of steel per annum. This capacity translates to between two and three ships per year.

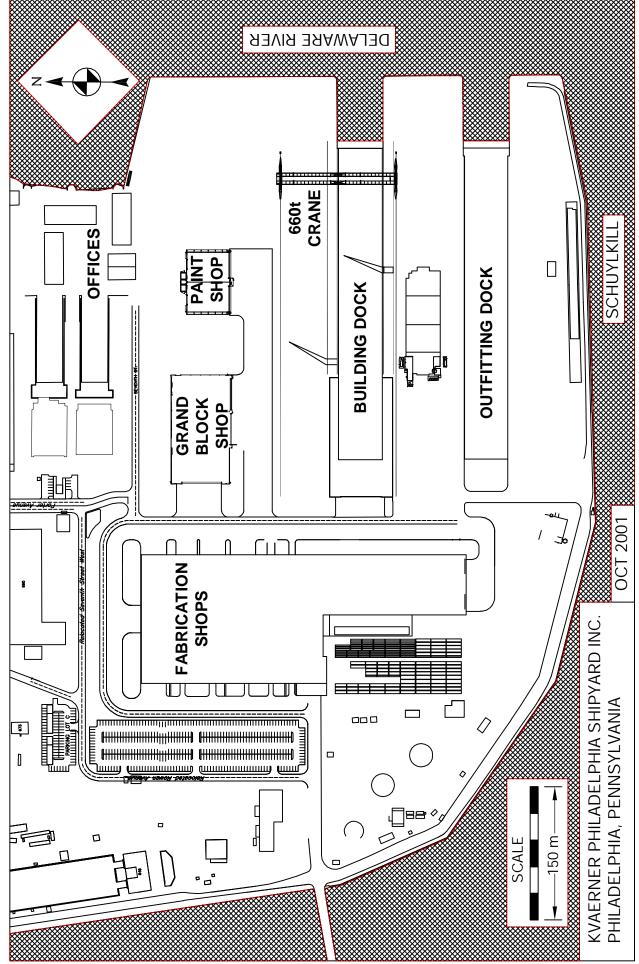
The immediate future of the new shipyard is to design and construct containerships, Ro/Ro's, as well as crude and product tankers for the U.S. Jones Act Market. These types of vessels represent significant fleet replacement opportunities over the next several decades. Currently, KPSI is constructing its first ship, a Philadelphia-Class CV2600 Containership.

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. Future ship types that will be targeted include LPG and fast coastal Ro/Ro panamax containerships.

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 serving one of the graving docks. 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-2001 the total labor force was approximately 720 and will reach about 1,000 by mid-year 2002.

**EXHIBIT 14** 



33

#### National Steel and Shipbuilding Company

National Steel and Shipbuilding Company (NASSCO), the largest shipbuilder on the West Coast, participates in both commercial and U.S. Navy shipbuilding, conversion, and repair markets. The current company was formed 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.

NASSCO has designed and constructed commercial tankers, ore-bulk-oil carriers, very large crude carriers (VLCCs) up to 209,000 dwt, product carriers, a 1,910 TEU containership, in addition to various Navy auxiliary ships including ADs, AFSs, AOEs, and Strategic Sealift RO/RO's. NASSCO conversion projects include the conversion of two 90,000 dwt tankers to 1,000 bed Navy hospital ships (T-AHs), strategic sealift and maritime pre-positioning ships (T-AK/T-AKRs), and three Maersk Line L-Class containerships to Strategic Sealift Large Medium Speed RO/RO's (LMSRs).

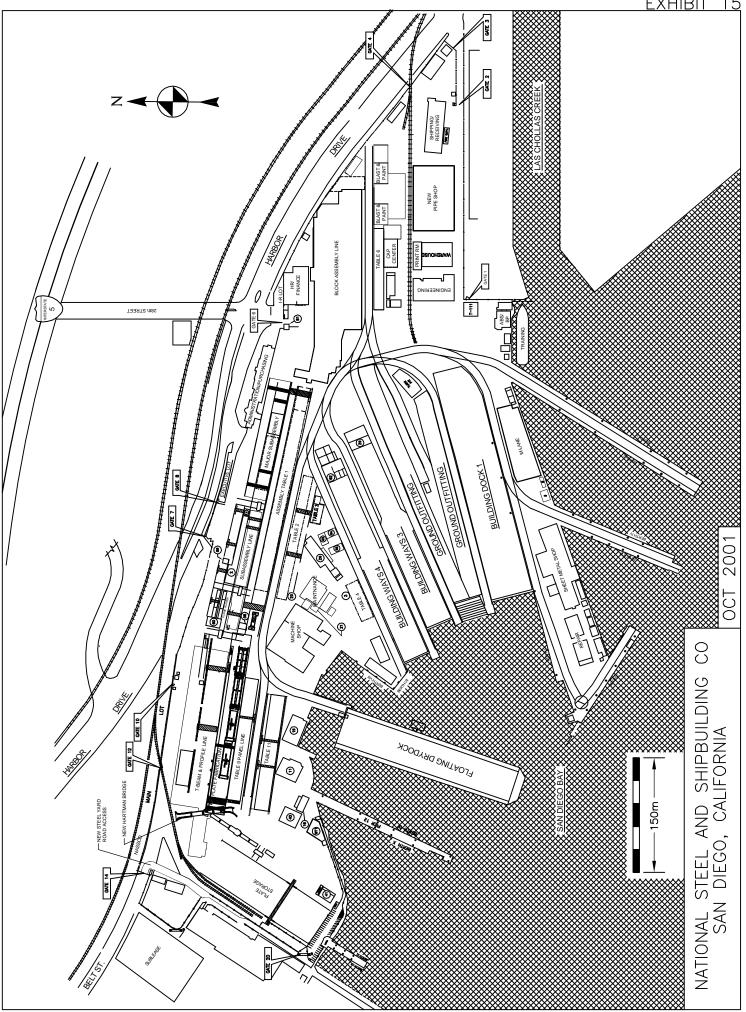
As of October 1, 2001 NASSCO's backlog included the design and construction of the last of eight LMSRs for the Navy, two diesel-electric powered Ro/Ro trailerships for Totem Ocean Trailer Express's (TOTE) Alaskan service, and four large double-hull crude carriers for BP Alaska Shipping. NASSCO has multi-year contracts for the repair and maintenance of the Navy's San Diego-based CG -47s, DD-963s, LHAs, and LHDs.

NASSCO's ship construction facilities include a graving dock that can accommodate vessels up to 303 meters by 52 meters and two inclined building ways for up to panamax–size vessels (290 meters by 34 meters). Two new cranes have been installed that can provide lifts up to 306 metric tons and multi-lifts up to 714 metric 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 44,706 metric tons for ships up to 290 meters by 41 meters.

During 2001-2002, General Dynamics and NASSCO are investing over \$85 million in facilities upgrades to increase steel throughput and reduce construction duration. In addition to the two new 300-metric ton cranes, an automated block assembly line, T-beam and profile line, and pipe shop are being constructed. This will in crease 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-2001, the total labor force was about 2,900.





#### 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.

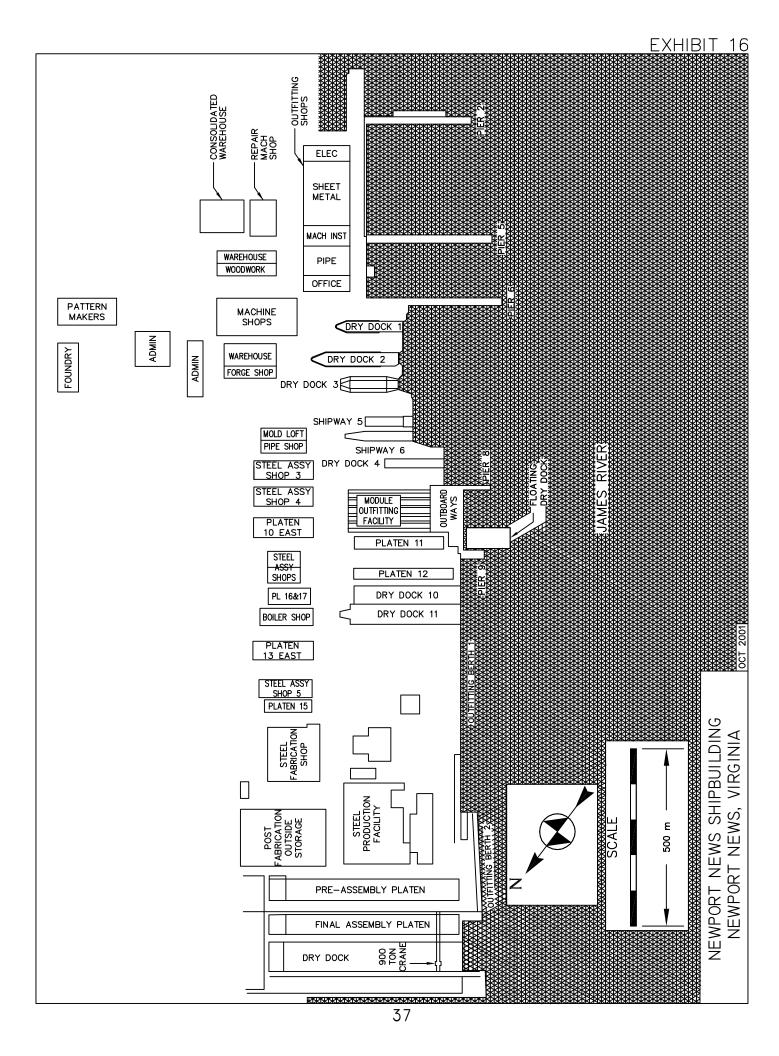
With vast facilities located on more than 223 hectares along two miles of waterfront in Newport News, Virginia, the company had the capability to design, build and maintain every class of ship in the U.S. Navy's fleet.

Included in Newport News's major facilities are

<u>Docks</u> - There are eight docking facilities. 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 construction of two major ships in the dry dock. A 900-metric ton gantry crane, one of the largest in the Western Hemisphere, can handle completely outfitted assemblies. Dry Docks 10 and 11, which are serviced by a 310-metric ton gantry crane, can be used for construction work, but are used primarily for ship overhaul, repair and deactivation. Dry Docks 1-4 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 piers at the MOF.

As of mid-2001 the labor force at Newport News was approximately 17,000.



#### Northrop Grumman Ship Systems, Avondale Operations

Northrop Grumman Ship Systems, Avondale Operations (Avondale) is located on the west bank of the Mississippi River approximately 22 kilometers upriver from New Orleans, LA. Since 1938, Avondale has constructed a full range of Navy and commercial ships, as well as Coast Guard ships (cutters and icebreaker/research vessels) and offshore drilling rigs, platforms, jackets, and production modules. It has the distinction of being the only American shipyard to have constructed LASH (lighter aboard ship) vessels.

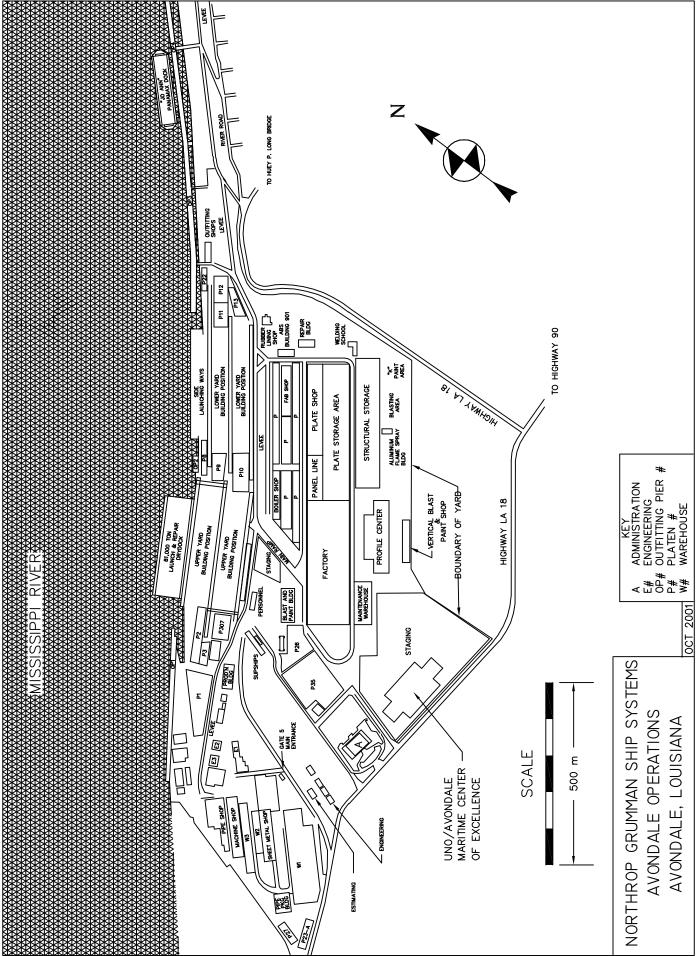
Avondale also maintains an active repair department for commercial and naval vessels.

Avondale's orderbook as of October 1, 2001, consisted of LMSRs (T-AKRs), three amphibious transport dock ships (LPDs), and four 131,623 dwt product carriers with additional options.

Avondale totals 108 hectares and contains three outfitting docks equipped with supporting shops and over 1,431 meters of pier space. The upper yard shipbuilding area has two large positions to accommodate vessels up to 311 meters in length by 53 meters beam. The major part of one ship can be erected along with the stern section of a second ship on 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 lifting capacity of 82,296 metric tons. The lower yard shipbuilding area with side-launching capabilities was recently upgraded by adding new building ways in line with the existing launching ways. The new ways were added at Position 2. New launching skids were also constructed that extended to the end of the launching ways. This allows vessels to be rolled out directly onto Avondale's 81,000-ton floating drydock for launching. The new ways can accommodate vessels up to 366 meters in length by 53 meters beam. Up to five vessels, greater than 213 meters length overall (LOA) can be constructed simultaneously in the lower yard shipbuilding area. A 13,000-ton panamax floating drydock, which can accommodate ships up to 229 meters by 35 meters and has a lifting capacity of 19,000 metric tons, is moored downriver alongside an outfitting dock.

Northrop Grumman Ship Systems, Avondale Operations has a facility located at Gulfport, MS, capable of building vessels 137 meters long by 27 meters beam.

In mid-2001, the total employment was about 5,902.



#### Northrop Grumman Ship Systems, Ingalls Operations

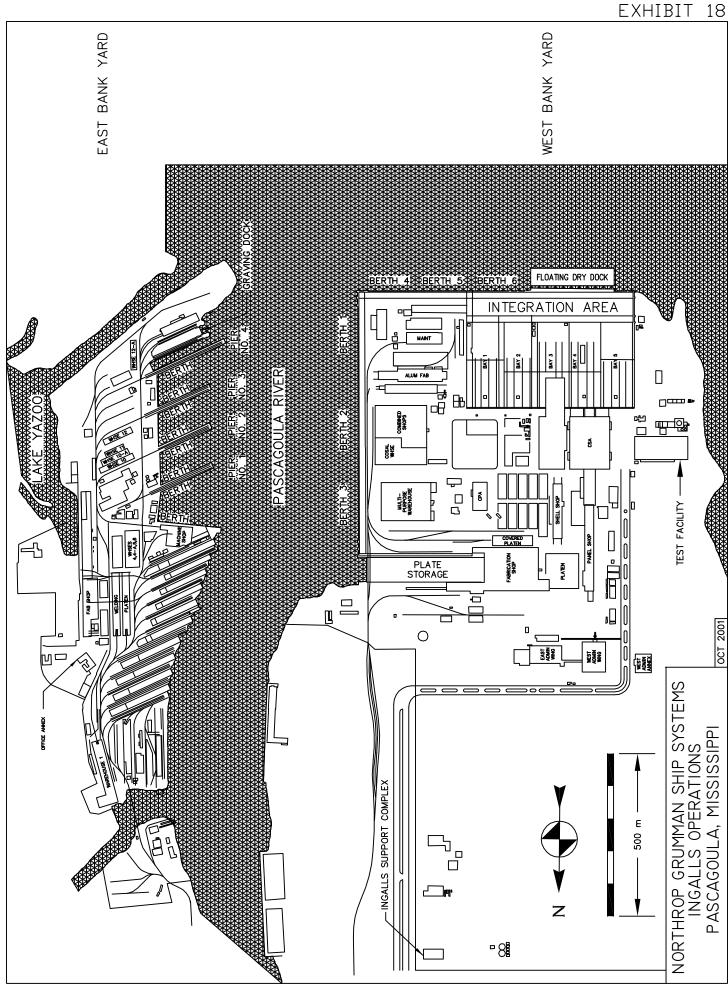
Northrop Grumman Ship Systems, Ingalls Operations (Ingalls) is located on the Gulf of Mexico in Pascagoula, MS. Ingalls is a diversified shipbuilding facility experienced in the design, engineering, construction, modernization, conversion, overhaul and fleet support of Navy warships and auxiliaries, as well as commercial ships and mobile offshore drilling rigs. Since 1975, Ingalls has delivered to the U.S. Navy 81 major surface combatant ships. Ingalls has also delivered three SAAR 5 corvettes to the Government of Israel.

As of October 2001, Ingalls had nine under construction new AEGIS guided missile destroyers (DDG-51 class) and two 1,700 oceangoing pas senger cruise ships for American Classic Cruises for service in Hawaii.

Ingalls' 243 hectare West Bank facility, completed in 1970, is geared to assembly -line construction, in lieu of conventional inclined shipbuilding ways. Fabricated steel and subassemblies are brought from the 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 processing lines, each of which can produce 5,447 metric ton modules. After assembly and outfitting, the modules are moved to an integration area where they are erected into a complete ship. The ship is then moved to a floating drydock (resting on a submerged grid) which is subsequently floated and moved to a deep-water area where it is ballasted and the ship launched. The drydock can launch or recover a maximum ship size of 305 meters by 53 meters and 37,500 long tons. (Approximately 1,432 meters of berthing space, serviced by cranes up to 272 metric tons, are available for outfitting. A 16,721 square meters of the shipyard's slab area is roofed to increase the amount of early outfitting performed.) Modern pipe production facilities, a machinery packaging facility, and a new blast and paint station in the steel fabrication complex are also available. Ingalls' current facility and technology improvements include a new robotics welding capability and a composite facility. In August 1997, Ingalls announced plans to invest \$130 million in a major facilities program to enhance capacity for both military and commercial work. This program was completed in 2000.

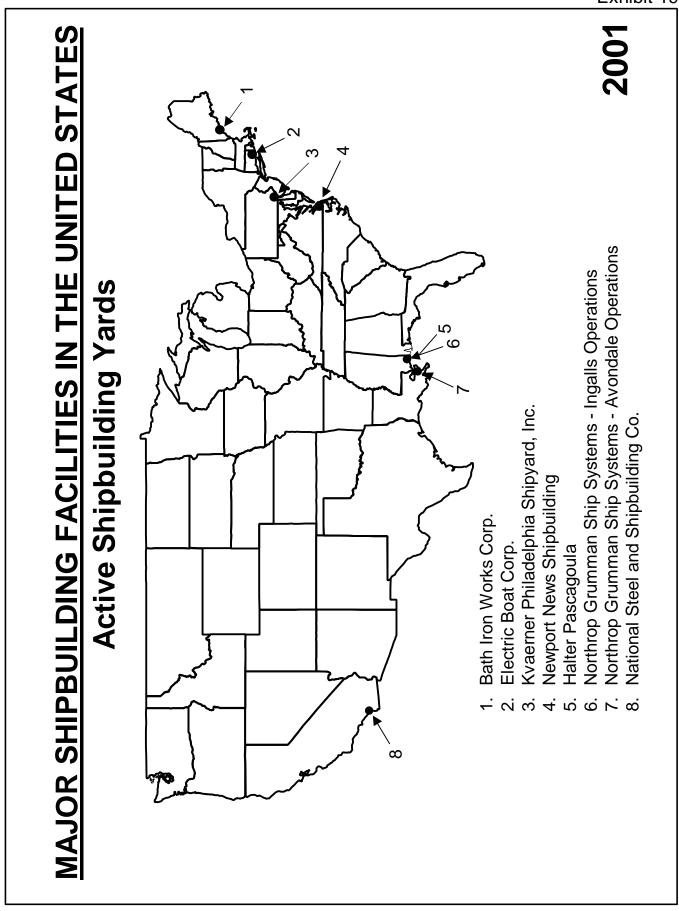
Ingalls' older East Bank facility has been in operation since 1938. Although there are six inclined shipways and a graving dock at East Bank, they were all taken out of service in 1989, along with three piers. One pier remains providing 457 meters of berthing space serviced by cranes with up to 54 metric tons of capacity for outfitting and topside repair.

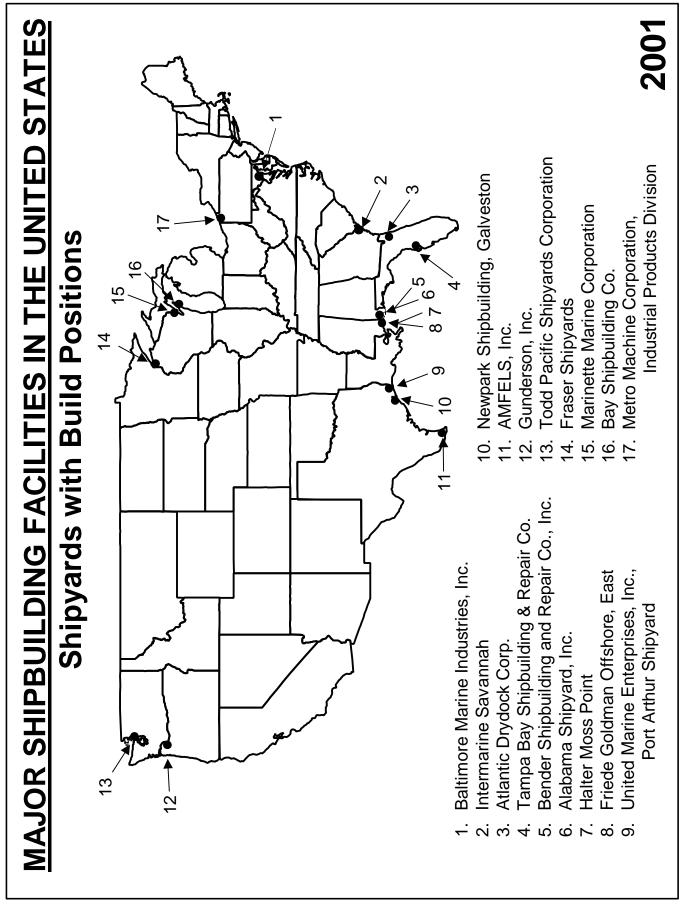
As of mid-2001, Ingalls employed a total labor force of approximately 10,100.

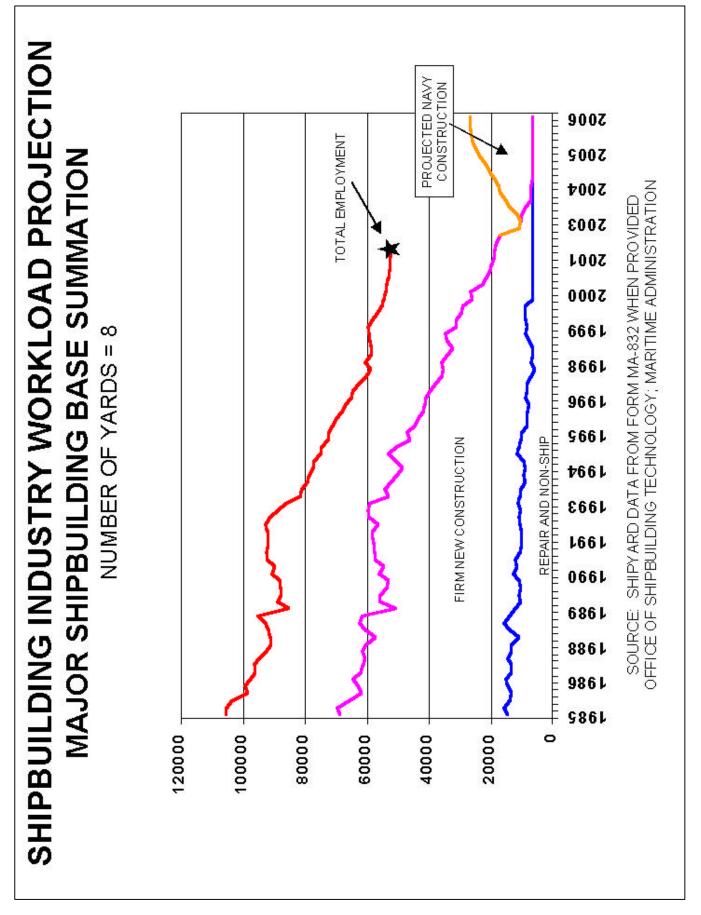


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# SHIPBUILDING INDUSTRY AND ACTIVITIES 2001







#### **U.S. COMMERCIAL SHIPBUILDING ORDERBOOK**

At the end September 2001, the orderbook for commerical oceangoing ships consisted of one 1,580 GT Coastal Cruise Ship at Atlantic Marine, Jacksonville, FL; two 8,500 GT containerships at Bender Shipbuilding, Mobile AL; one 32,000 GT containership at Kvaerner Philadelphia, Philadelphia, PA; two 37,237 GT car/truck carriers at Halter Marine, Pascagoula, Pascagoula, MS; two 60,885 GT Roll-on/Roll-off's (RO/RO's) and four 106,968 GT product tankers at National Steel Shipbuilding, San Diego, CA; four 88,187 GT crude carriers at Northrop Grumman Ship Systems, Avondale Operations, New Orleans, LA; and two 72,000 GT cruise ships at Northrop Grumman Ship Systems, Ingalls Operations, Pascagoula, MS. The orderbook has a total estimated value of over \$3.2 billion.

Exhibit 22

#### U.S. COMMERCIAL ORDERBOOK (as of October 1, 2001)

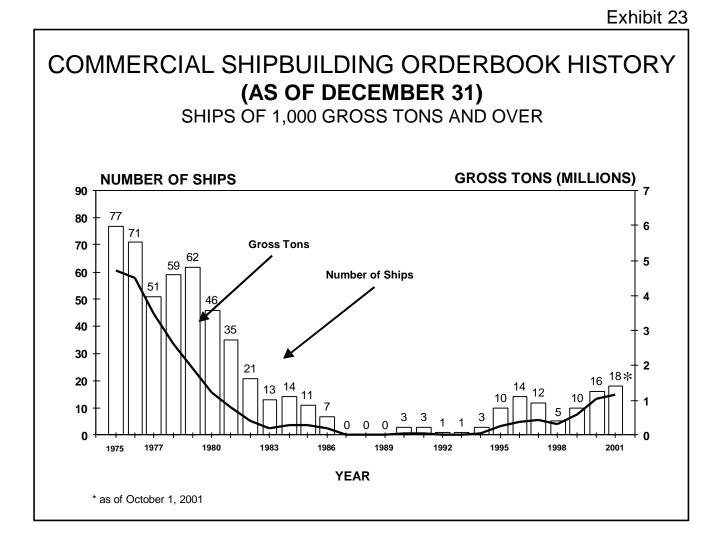
SHIPYARD	NUMBER	SHIPTYPE	GROSS TONS	CONTRACT DATE	LAST DELIVERY DATE	CON PRIC	ROXIMATE TRACT E illions)
Atlantic Marine,		Coastal					
Jacksonville	1	Cruise Ship	1,580	05/06/1999	01/31/2002	\$	37.0
Bender Shipbuilding	2	Containership	8,500	07/17/2001	06/13/2003	\$	69.0
Halter Marine, Pascagoula	a 2	Car/Truck Carrier	37,237	12/14/1999	06/24/2002	\$	139.5
Kvaerner, Philadelphia	1	Containership	32,000	01/24/2000	05/23/2002	\$	81.0
National Steel	2	RO/RO	60,884	12/06/1999	04/03/2003	\$	300.0
National Steel	4	Product Tanker	106,968	09/15/2000	06/30/2006	\$	840.0
Northrop Grumman,							
Avondale	4	Crude Carrier	88,187	06/30/1997	05/31/2004	\$	732.5
Northrop Grumman,							
Ingalls	2	Cruise Ship	72,000	03/09/1999	N/A	\$	1,047.0
	18 Ships					\$ 3	3,245.9

# **U.S. COMMERCIAL SHIP CONSTRUCTION**

The U.S. orderbook, as of October 1, 2001, for commercial shipbuilding had reached a level not seen in more than two decades. The orderbook consisted of 18 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

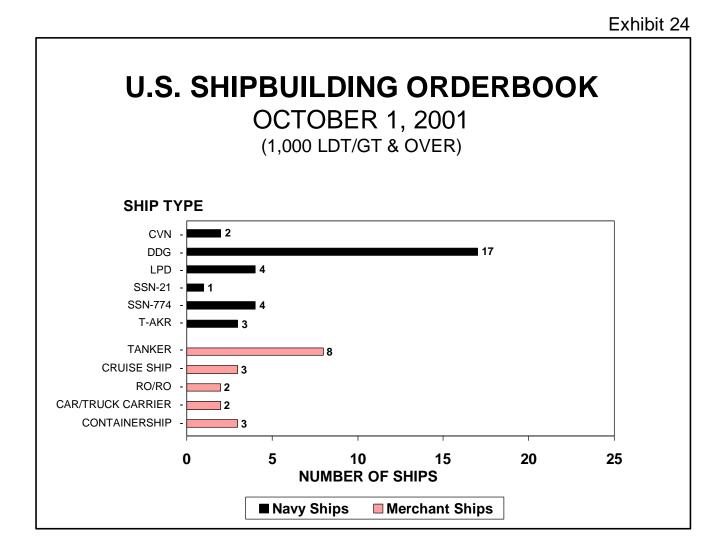
The exhibit below (Exhibit 23) shows the end year commercial ship construction orderbook since 1975.



# OVERALLU.S. SHIPBUILDING ORDERBOOK

As of October 1, 2001, ships on order or under construction in U.S. private shipyards totaled 31 naval and 18 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.

Ten shipyards had contracts for the construction of naval and commercial vessels. The naval shipbuilding orderbook, which was comprised of six different types of vessels, included 23 ships scheduled for delivery in 2003 and later. Seven shipyards had orders for a total of 18 commercial ships, six are scheduled to be delivered during 2002, four in 2003, three in 2004 and one each during 2005 and 2006.



# OVERALL NEW U.S. SHIPBUILDING ORDERS

In the nine months ending October 1, 2001, U.S. shipyards received orders for the construction of four new oceangoing commercial vessels and one new naval vessel (Exhibit 25).

On, February 27, 2001 Northrop Grumman Ship Systems, Avondale Operations received a follow-on award to their current crude carrier contract with Polar Tankers, bringing the total contract to 5 vessels, one of which has already been delivered. September 21 brought National Steel Shipbuilding a follow-on award for a product tanker, bringing the total under contract to four for British Petroleum. Bender Shipbuilding has entered the commercial oceangoing shipbuilding market with the contract for two 355 45-ft TEU containerships.

	<b>as of</b> (1,000 GT		r <b>1, 2001</b> and OVE	ER)		
SHIPYARD	DESIGN TYPE	APPROX CONTRA PRICE (in Million	CT ESTIMA		CONTRACT AWARD DATE	ESTIMATE DELIVERY DATE
COMMERCIAL SHIPS						
Northrop Grumman, Avondale	Tanker	\$ 205	5 88,187	LDT	02/27/2001	05/31/2004
Bender Shipbuilding	Containership	\$ 34	,		07/17/2001	06/15/2003
Bender Shipbuilding	Containership	\$ 34	,		07/17/2001	06/15/2003
National Steel	Tanker 4 Ships	\$ 210. \$ 484.	,		09/21/2001	06/30/2006
NAVAL SHIPS						
Newport News	CVN 77	\$ 3,800	0 91,487	GT	01/26/2001	03/31/2008
	1 Ship	\$ 3,800	0 91,487	GT		

# U.S. COMMERCIAL SHIP DELIVERIES

During the first nine months of 2001, U.S. shipyards delivered two commercial oceangoing ships (Exhibit 26). Atlantic Marine, Jacksonville delivered the first of two coastal cruise ships to American Classic Voyages and Northrop Grumman Ship Systems, Avondale Operations delivered the first of a series of crude carriers.

Exhibit 26

#### COMMERCIAL OCEANGOING VESSELS DELIVERED - 2001 October 1, 2001

#### (1,000 GT and OVER)

SHIPYARD	DESIGN TYPE	VESSEL NAME	GROSS TONS	CONTRACT DELIVERY DATE	PRICE (IN Millions)
Atlantic Marine,	Coastal				
Jacksonville Northrop Grumman	Cruise Ship	CAPE MAY LIGHT	1,580	04/08/2001	\$37.0
Ship Systems, Avondale	Crude Tanker	POLAR ENDEAVOR	88,187	05/03/2001	\$166.0
	2 Ships		89,767		\$203.0

## U.S. NAVAL SHIP DELIVERIES

During the first nine months of 2001, U.S. private shipyards delivered 8 new naval vessels, 1,000 LDT and larger. The naval vessels delivered totaled approximately 194,309 LDT and had an initial contract value of approximately \$2.7 billion (Exhibit 27).

Three different types of naval ships were delivered by four shipyards: 3 - guided missile destroyers (DDG); 4 - vehicle cargo ships (T-AKR) and 1 - amphibious transport ship (LHD).

VES		Der 1, 2001		2001		
SHIPYARD	SHIP CLASS and HULL NUMBER	ESTIMATED VESSEL NAME	, LDT	DELIVERY DATE	CO PRI	PROXIMATE NTRACT CE Villions)
Northrop Grumman, Avondale	T-AKR 303	MENDONCA	34,408	01/30/2001	\$	206.4
Northrop Grumman, Ingalls	DDG 82	LASSEN	8,344	02/05/2001	\$	369.4
National Steel	T-AKR 315	WATKINS	36,114	03/05/2001	\$	227.0
Northrop Grumman, Ingalls	LHD 7	IWO JIMA	28,233	04/06/2001	\$	795.4
Bath Iron Works	DDG 83	HOWARD	8,344	06/22/2001	\$	348.0
Northrop Grumman, Avondale	T-AKR 304	PILILAAU	34,408	07/24/2001	\$	211.1
National Steel	T-AKR 316	POMEROY	36,114	08/14/2001	\$	195.0
Northrop Grumman, Ingalls	DDG 84	BULKELEY	8,344	08/18/2001	\$	329.5
	8 Ships		194,309		\$	2,681.8

## 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 72 new ships and the conversion of 36 existing vessels. The initial contract value for these vessels totaled approximately \$10.4 billion.

During the first nine months of 2001, there were no new orders for T-ships placed with U.S. shipyards.

During this same period, deliveries included four military sealift ships (T-AKR) two by National Steel Shipbuilding, San Diego, CA and two by Northrop Grumman Ship Systems, Avondale Operations, New Orleans, LA.

As of October 1, 2001, three T-ships were under construction or on order at two shipyards (Exhibit 28). The value of this orderbook is approximately \$680 million.

	HULL NUMBER	VESSEL NAME	DATE		RICE /lillions)
Northrop Grumman, Avondale Northrop Grumman, Avondale National Steel	T-AKR 305 T-AKR 306 T-AKR 317	BRITTIN BENAVIDEZ - unnamed -	01/16/2002 08/12/2002 09/17/2002	\$ \$ \$	210.0 227.0 230.0
	3 Ships			\$	667.0

# PROJECTED U.S. NAVY SHIPBUILDING PLAN

The U.S. Navy shipbuilding plan for fiscal years 2002 - 2007 includes the construction of 40 new ships and 2 nuclear aircraft carrier refuelings (Exhibit 29). More than \$40 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 2002 - 2006 shipbuilding program represents an increase in the amount of new shipbuilding work available to the nation's industrial base when compared with Navy programs for the past several years. This program, with an average of six and a half new ships per year, represents a 11.2 percent decrease in the quantity of ships being procured as compared to the 2000-2005 plan, as well as representing a 66 percent reduction in the quantity of ships to be procured compared with the 19 ships per year average for Navy programs during the 1980s.

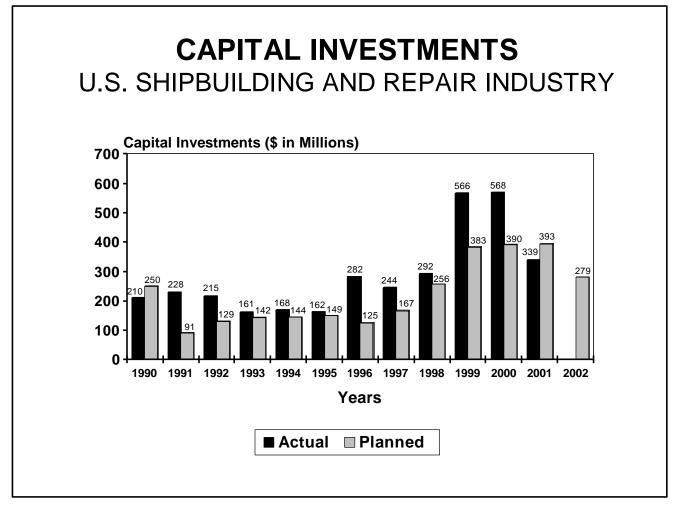
The Navy's plan includes the construction of 13 guided missile destroyers (DDG-51), six attack submarines (SSN) and 5 amphibious transport ships (LPD). These three shipbuilding programs will probably utilize more than 85 percent of the available new construction funding.

				DING 02 - 2		N	
Ship Class	2002	2003	2004	2005	2006	2007	Total
New Constructio	<u>n</u>						
CVN	-	-	-	-	-	1	1
SSN-774	1	1	1	1	1	1	6
DD-21	-	-	-	1	-	-	1
DDG-51	3	2	2	2	2	2	13
LHD	-	-	-	-	-	1	1
LPD	-	1	-	1	2	1	5
T-AKE	1	1	2	2	2	2	10
JCC(X)	-	-	-	-	1	2	3
Total	5	5	5	7	8	10	40
Conversion							
CVN (Refueling)	1	-	-	1	-	-	2
Submarine (Refuelin	ng) 2	2	1	1	5	6	17
Total	3	2	1	2	5	6	19

### CAPITAL INVESTMENT IN U.S. SHIPBUILDING

During FY 2001, the U.S. ship construction and ship repair industry invested more than \$339 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.

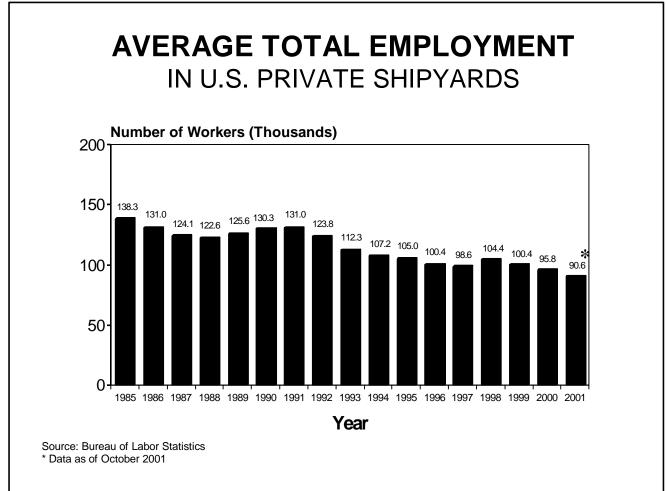
In 2002, the industry plans to spend about \$279 million in the upgrade and expansion of facilities, according to data received by the Maritime Administration. The industry's capital investments since 1970 have totaled approximately \$8.0 billion. The actual expenditures between 1985 and 2001, with the exception of 1990 and 2001, have consistently exceeded those planned.



#### <u>TOTAL EMPLOYMENT IN</u> 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 2001 was 90,600 (Exhibit 31). This total reflects a decrease of 5.0 percent, from 2000 revised average total employment for the shipbuilding and repairing industry. This decrease continues the decline in employment since 1991 with the exception of an increase during 1998.

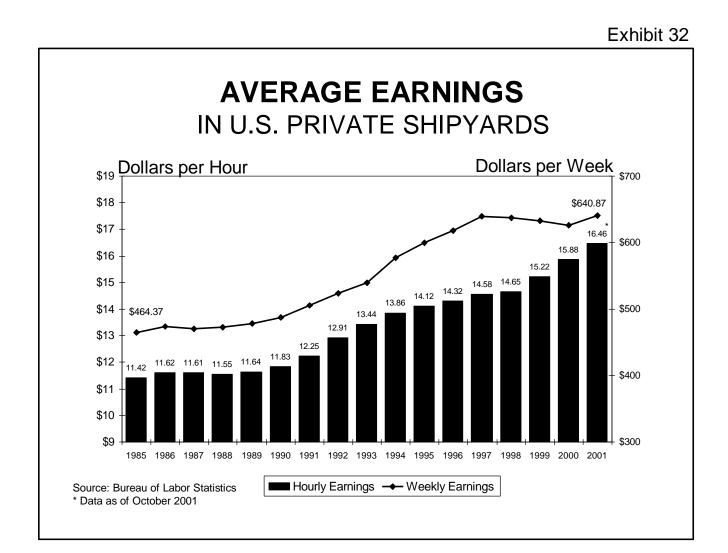
According to the data published by the BLS, total average employment in the shipbuilding and repair industry has decreased steadily since 1991 and is projected to be at the lowest level in 50 years. Since the early 1980's, the long-term trend for employment in the U.S. private shipbuilding and repair business has been lower, despite increases experienced during 1989-1991, in 1998. The 2001 employment level in the U.S. shipbuilding and repairing industry is down 53 percent from the 1982 level of 171,600 people.



#### <u>AVERAGE EARNINGS IN</u> <u>U.S. PRIVATE SHIPYARDS</u>

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 2001 show an increase from \$11.42 to an average of \$16.46 (Exhibit 32). During the same period, the average weekly earnings rose from \$464.37 to \$640.87.



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# SHIPYARD ACTIVITY REPORT SUMMARY

	TOTAL		52	317	44	360	773			•	1			-		774	
	Other Vessels		34	136	16	12	198					ı			~	ACT	
	T-Ships			з	з		9			-			-	•	DING NAV	R CONTR/	
2001	Govt.*		4	16	5	11	36			-	1		-	٢	TS EXCLUI	ELS UNDE	
YARD ORDERBOOK AS OF OCTOBER 1, 2001	Ore/Bulk			·	·		0			•		·	-	•	T PROJEC	RED VESS	
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AS OF	Tug / Barge	SHIPS UNDER CONSTRUCTION	13	154	14	337	518		SHIPS UNDER CONVERSION	-		ı	-	•	٥ <u></u>	IMBER OF	
300K /	Barge Carrier	HIPS UNDE							ONU SAIHS	•	-		-	•		TOTAL NU	
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SHIPY,	Cargo							-				ı		1			
	Area	-	East Coast	Gulf Coast	West Coast	Great Lakes and Inland	τοται			East Coast	Gulf Coast	West Coast	Great Lakes and Inland	TOTAL			

# SHIPYARD ACTIVITY REPORT SUMMARY

<ul> <li>Kessels</li> <li>Conrad Shipyard, Inc.</li> <li>(essels</li> <li>ad Barge</li> <li>bakota Creek Industries, Inc.</li> <li>1 Deck Barge</li> <li>2 Car/Passenger Ferries</li> <li>1 Freight Boat</li> <li>1 Plotor Shipyards New York</li> <li>6 Passenger Ferries</li> <li>5 1 Motor Yacht</li> <li>1 Fisheries Research Vessel</li> <li>1 Fisheries Research Vessel</li> <li>1 Kvict Barges</li> <li>1 Cutter Dredge</li> <li>1</li> </ul>	CONTRACTS FOR NE	EW VESSELS (October 2000 – September 2001)	- September 2001)
d Repair Co., Inc.       f Reeport Shipbuilding, Inc.       4         d Repair Co., Inc.       1 Catamaran         fessels       1 Catamaran         ressels       1 Catamaran         sion       1 Catamaran         atige       1 Catamaran         sion       1 Catamaran         arge       Gladding-Hearn Shipbuilding         arge       Culf County Shipbuilding         arge       Ulf County Shipbuilding         arge       Ulf County Shipbuilding         arge       Ulf County Shipbuilding         ators, LLC       1 Research Vessel         ulf Crawboar       1 Swath Cruise Ship         Gulf County Shipbuilding       Lef A         ators, LLC       3 Double-Hulled Oil Tank Barges         ators, LLC       3 Double-Hulled Oil Tank Barges         ators, LLC       1 ATB Barge         ats       Halter Marine Inc., Halter Pascagoula         1 ARE Parge       Arbiter Pascagoula         2 Power Generating Barges       Marrie         ats       Halter Marine Inc., Halter Moss Point         1 ARB Barge       3 ATB Tugs         2 ATB Barge       2 ATB Barges         2 ATB Barges       2 ATB Barges	тттт0000лш со. inc. LCC Barges ir Co.	rad Shipyard, Inc. 1 Deck Barge cota Creek Industries, Inc. 2 Car/Passenger Ferries ecktor Shipyards Connecticut 1 Freight Boat 1 Yacht ecktor Shipyards New York 6 Passenger Ferries 1 Motor Yacht 1 Pilot Boat 1 Fisheries Research Vessel 1 Motor Yacht 1 Pilot Boat 2 Tugs 2 Tugs 2 Tugs 6 Past Ferries 1 Cutter Dredge eport Shipbuilding 7 Pilot Boats 7 County Shipbuilding 7 Pilot Boats 7 County Shipbuilding 7 Pilot Boats 7 Creath 1 Cattamaran 6 County Shipbuilding 7 Pilot Boats 7 Pilot Boats 7 Pilot Boats 7 Pilot Boats 7 Pilot Boats 8 Partol Craft 1 Crewboat 1 Crewboat 1 Crewboat 1 Crewboat 1 Crewboat 1 Crewboat 1 Crewboat 1 Crewboat 1 Crewboat 1 County Shipbuilding 7 Pilot Boats 7 Pilot Boats 8 Partol Craft 1 Crewboat 1 Crewboat 1 County Shipbuilding 7 Pilot Boats 8 Pilot Barge 1 County Carrier 1 Cownty Vessel 1 Crewboat 1 Crewboat 1 Crewboat 1 Crewboat 1 Crewboat 1 Crewboat 1 County Shipbuilding 7 Pilot Boats 8 ATB Barge 1 Research Vessel 1 ATB Barge 1 Rolfsort Support Vessel 1 ATB Barge 1 Rolfsort Vessel 1 ATB Barge 1 Rolfsort Support Vessel 1 ATB Barge 1 ATB Barg	Houma Fabricators Inc. 6 Offshore Supply Vessels 1 Inland Towboat Intermarine, Savannah 6 Yachts Jeffbaut, LLC 5 Jeffbaut, LLC 5 Inland Tow Boats John Bludworth Shipyard, LLC 5 Inland Tow Boats 5 Inland Tow Boats 6 I Dinner Cruise Boat 1 Dinner Cruise Boat 7 Catamaran Ferry 4 Aluminum Catamarans 3 Patrol/Fire Boats 9 Oil Recovery Barges 1 Pilot Boat 1 Jackup Rig Main Iron Works 1 Jackup Rig Main Iron Works 1 Tow 1 Jackup Rig Main Iron Works 1 Tow 2 Tractor Tugs Marine Builders 1 Dinner Cruise Boat 1 Dinner Cruise Boat 8 Push Boats 6 Push Boats 1 Dinte Cruise Boat Marine Builders 1 Dinter Cruise Boat Marinette Marine Corporation 3 Seagoing Bouy Tenders 2 Ocean Tugs

CONTRACTS FOR N	R NEW VESSELS (October 2000 – September 2001) (CONTINUED)	- September 2001)
Master Boat Builders 8 Shrimpers 6 Offshore Supply Vessels Mississippi Marine Corp. 1 Showboat Modutech Marine, Inc. 1 Crewboat National Steel Shipbuilding 1 Product Tanker National Steel Shipbuilding 2 Crew/Supply Boats Nichols Brothers 1 Steel Boat 1 Cargo Box Barge Palmer Johnson Inc. 4 Motor Yachhs 2 Platform Supply Vessels Rockland Marine 1 Deck Barge 1 Deck Barge 8 Rodriguez Boat Builders, Inc. 2 Shrimpers 8 Seark Marine, Inc. 6 Work Boats 8 Strimpers 8	Senesco 1 Drydock 5 Deck Barges 1 Fuel Barge 1 Construction Barge 1 Construction Barge 1 Dipper Dredge Barge 1 Dipper Dredge Barge 1 Dyster Cultivator Barge Multiple Pier Floats Serodino Inc. 1 Towboat Serodino Inc. 1 Towboat Serodino Inc. 1 Towboat Serodino Inc. 1 Towboat Serodino Inc. 2 Crew/Supply Boats 2 Crew/Supple Barges 2 Crew/Supple Barges 2 Crew/Supple Barges 2 Crew/Supple Barges 1 Trinity Port Allen 1 Rake Barges 2 Crew/Supple Barges 2	Verret Shipyard 1 Tow Boat Washburn & Doughty Assoc., Inc. 1 Offshore Motor Vessel 1 Z-Drive Tug Zidell Marine Corporation 1 Petroleum Barge

ptember 2001)	Intermarine Savannah 2 Motor Yachts J.M. Martinac Shipbuilding Corp. 1 Sailing Ship Jeffboat, LLC 88 Rake Barges 15 Rake Hopper Barges 15 Rake Hopper Barges 9 Rake Open Hopper Barges 7 Rake Tank Barges 9 Rake Open Hopper Barges 7 Rake Tank Barges John Budworth Shipyard 2 Pushboats Kody Marine, Inc. 3 Switchboats Kvichak Marine Industries, Inc. 8 Barges 5 Aluminum Catamarans 1 Excursion Boat 5 Aluminum Catamarans 1 Tug 1 Tug
ELIVERED (October 2000 – September 2001)	C & G Boat Works 1 Crewboat Conrad Shipyard, Inc. 5 Barges 2 Hopper Barges 1 Drydock Derecktor Shipyards New York 1 Ferry 1 Yacht Diversified Marine, Inc. 1 Z-Drive Tug Eastern Shipbuilding Group 1 Tug Freeport Shipbuilding Group 1 Tug Freeport Shipbuilding Inc. 1 Pilot Boat 1 Pilot Boat 6 Cladding-Hearn Shipbuilding 4 Ferries 0 Crew/Supply Boats 1 Pilot Boat Caldding-Hearn Shipbuilding 4 Ferries 1 Pilot Boat Craft, Inc. 9 Crew/Supply Boats Gunderson, Inc. 1 Pilot Boat 2 Tugboats 1 Pilot Boat 2 Pushboats 1 Ording Rig 1 Oceanographic Survey (T-AGOS) Hope Services, Inc. 2 Pushboats 1 Orilling Rig 1 Orieling Rig
VESSELS DE	A & B Industries 1 Tow Boat 1 Tug Alabama Shipyard, Inc. 1 Dump Scow Alaska Ship and Drydock 1 Ferry Allen Marine 2 Ferries American Shipyard Co., LLC 2 Passenger Ferries Amherst Industries Amherst Industries 1 TLP Amherst Industries 1 Dock Barge Alantic Marine – Jacksonville 1 TLP Amherst Industries 1 Dock Barge Alantic Marine – Jacksonville 1 TLP Amherst Industries 1 Dock Barge Alantic Marine – Jacksonville 1 TLP Amherst Industries 1 Dock Barge Barges Barges 1 Utility Vessels 1 Well Taxi 2 Tow Boats 1 Utility Vessels 1 Utility Vessels 1 Dick Barges 1 Utility Vessels 1 Dock Barges 1 Utility Vessels 1 Utility Vessels 1 Direck Barges 1 Utility Vessels 1 Reeaux's Bay Craft, Inc. 4 Crewboats 1 Breaux's Bay Craft, Inc.

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VESSELS DELIVERED (October 2000 – September 2001) (CONTINUED)	- September 2001)
Master Marine Inc.Master Marine Inc.Tightseeing Boat1 Offshore Supply Vessel1 Sightseeing Boat1 Sightseeing Boat1 Lirtboat2 T-AKR's (Sealift)Newpark Shipbuilding, Pelican Island2 T-AKR's (Sealift)Newpark Shipbuilding, Pelican Island1 CrewSupplyNewpark Shipbuilding, Pelican Island3 BargesNichos Brothers Boat Builders, Inc.1 BargeNichos Brothers Boat Builders, Inc.1 BargeNichos Brothers Boat Builders, Inc.1 BargeNichos Brothers Boat Builders, Inc.2 Catamaran FerriesSuthers Boat1 BargeNordale Operations2 Catamaran FerriesSuthers Boat1 BargeNordale Operations3 TugsStrewSuppy Boats1 Drude Tarker1 Landing Craft1 Drude Tarker1 CrewSuppy Boats1 Drude Tarker1 Offshore Supply Vessel1 Drude Tarker1 Offshore Suppy Boats1 Drude Tarker1 Orbohe-Skinned Rake Tark Barges2 Druble-Skinned Boat1 Orbohe-Skinned Rake Tark Barges2 Druble-Skinned Boat1 Orbohe-Skinned Rake Tark Barges3 Tugs2 Double-Skinned Rake Tark Barges1 Druboat1 Orbohe-Skinned Rake Tark Barges1 Druboat5 Boarhopper Barges2 Shrimpers5 Boarhopper Barges3 Survey Boals5 Boarhopper Barges3 Survey Boals6 Tark Barges3 Survey Boals5 Boarhopper Barges3 Survey Boals6 Tark Barges3 Survey Boals5 Barges4 Di Spill Response5 B	United States Marine, Inc. 14 Rigid Inflatable Boats 1 Monohull Medium Boat Verret Shipyard 1 Towboat Western Towboat Company 1 Tug I Barge ges

# APPENDIX A

# **STANDARD FORM 17**

# FACILITIES AVAILIABLE FOR THE CONSTRUCTION OR REPAIR OF SHIPS

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		_		FACILITIESAVA	ILABLET	IESAVAILABLEFUN I HE CONSTRUCTION NETAINUT SHITS		NUL SHILS		Expires Aug 31, 1999
MAVSEA MARTI & MARTI Coordinant	DEPARTMENT OF THE NAVY (MAVSEASYSCOM) & MARTINE ADMINISTRATION and Conversion (DOD-DOC) and Conversion (DOD-DOC)	NOU	The public report sources, gatheric aspect of this co Operations and R provision of law.	The public reporting buttern for this collection of information is estimated to average 4 hours per response, including the time for reviewing instructions, evending available sources, gathening and maintaining the data reviewing the collection of information. Sand comments regarding the volte event of the maintaining the data reviewing instructions, evending available estimates or available estimated to available of the collection of information. Sand comments regarding the volte estimate or available estimates for information for the maintaining the superson of information. Sand comments regarding the volte estimates of available estimates for information for the score (0703-0006), 1215, befineted by the subject score of the collection of information in the subject score for the subject score for the subject score for the subject score available estimates for information in the subject score available estimates for short the subject score available estimates for short score available estimates for short as the subject score available for score available estimates for short score available estimates for short estimates for short score available estimates for short estinates for short estimates for short estimates for short es	vation is estimated and completing an sations for reducin Davis Highway, 5 ensity for fising FE	1 to average 4 hours per response d avviverage the collection of in o the builden. So Department of bithe 1204, Anington, VA 2223 bithe 1204, with a collection of in truphy commerced for the collection of the commerced for the collection of the truphy commerced for the collection of the commerced for the collection of the commerced for the collection of the collection of the collection of the commerced for the collection of the collectio	e. including the time for formation. Send commen Defense, Washington Hea 02.4502. Respondents s 02.4502. Respondents s THE AppROPRIATE DEPA THE AppROPRIATE DEPA	reviewing instructions, seen ts regarding this bunden est dquarters Services, Dirotor hould be aware that notwich stighty a Durrently velid OMR RTMENT OF DEFENSE OFF	ching existing data imate or sny other alte for information standing any other 8 control number. ICE OR MARITIME	DATE
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					BUILDI	BUILDING WAYS (M.L.W.)				
NO.	LAUNCHING			MAXIMUM SHIP SIZE	DEPTH O	L	CONDITION	CRA	CRANES SERVING WAY	
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DRYDOCKS (Mean HIGH Water)         (List building docks under building ways)           MAXIMUM SHIP SIZE         LENGTH         CLEAR WIDTH         DEPTH/DRAFT           ACCOMMODATED         OVERALL         AT COPING (3D): AT VEEL BLOCKS;         AT TOP;         AT WIDTH         DOFER           ACCOMMODATED         OVERALL         AT COPING (3D): AT VEEL BLOCKS;         AT TOP;         AT KEEL BLOCKS (AD)         OVER BL         DOFER           ACCOMMODATED         OVERALL         AT COPING (3D): AT VEEL BLOCKS;         AT TOP;         AT KEEL BLOCKS (AD)         AT COPING (3D): AT VEEL BLOCKS;         AT TOP;         AT KEEL BLOCKS (AD)         DOFER BL           ACCOMMODATED         OVERALL         AT TOP;         AT TOP;         AT KEEL BLOCKS (AD)         AT KEEL BLOCKS (AD)         AT TOP;         AT TOP; </td <td></td> <td></td> <td>USE.</td> <td></td> <td>REACH</td>			USE.											REACH
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						_								
Fresh water - F.W G.P.M P.S.I. Steam - S - P/HR - P.S.I. Electric power - E-V-AC-AWP Salitary sew Salt water - S.W G.P.M P.S.I. Air - A - C.F.M P.S.I. Electric power - E-V-DC-AMP Salitary sew	GEN	D (Abbreviations o Fresh water - F. Salt water - S.)	V G.P.M P.S.I. W G.P.M P.S.I.		Steam - S Air - A	- P/HR - P.S	S.I.		Electric pov Electric pov	ver - E-V-AC	C-AMP		Fire protect Sanitary se	Fire protection - FP - G.P.M P.S.I Sanitary sewer - SS - Yes or No

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Indicate materials as steel, aluminum, reinforced plastic, wood, plywood, sheet metal, etc. SHOP OR YARD CRANES <i>I5 tons or over)</i> And CRANES         I5 tons or over)           And CRANES         I5 tons or over)           And CRANES         I5 tons or over)           And CRANE         If tons or over)           Indicate materials as steel, aluminum, reinforced plastic, wood, plywood, sheet metal, etc.         If tons or over)           Indicate materials         If to solver)         If to solver)           Indicate material         If to solver)         If to solver)           Indicate material         If to solver)         If to solver)           Indicate material         If to solver)         If the solver)         If the solver)           Indicate material         If to solver)         If the solver)         If the solver)         If the solver)	RIGGER			いたない	and the second second				
SHOP OR YARD CRANES         (5 tons or over)           MAX.         HEIGHT         STATIONARY. RAIL OR MOBILE           NAX.         HEIGHT         AREA/SHOP SERVICED         TYPE         AREA/SHOP SERVICED         AREA/SHOP SERVICED           SPAN         OF HOOK         TYPE         CAP.         MAX.         CAPACITY         BOOM         HEIGHT         AREA/SHOP           SPAN         OF HOOK         TYPE         Kard         REACH         AREA/SHOP SERVICED         AREA/SHOP         AREA/SHOP         AREA/SHOP           In the control         TYPE         Kard         AREACH         AREA/SHOP         AREA/SHOP <t< td=""><td>NOTE: Indicate mat</td><td>terials as steel, aluminun</td><td>wood, ph</td><td>/ood, sheet met</td><td>al, etc.</td><td></td><td></td><td></td><td></td></t<>	NOTE: Indicate mat	terials as steel, aluminun	wood, ph	/ood, sheet met	al, etc.				
MAX.     HEIGHT     AREA/SHOP SERVICED     TYPE     CAP.     MAX.     CAPACITY     BOOM     HEIGHT     AREA SERVICED       SPAN.     OF HOOK     TYPE     (Stot. tons)     REACH     AT REACH     LENGTH     HINGE       Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     AREA SERVICED       Image: SPAN.       Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.       Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.       Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.       Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.       Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.       Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.       Image: SPAN.     Image: SPAN.     Image: SPAN.     Image: SPAN.		BRIDGE TYPE		HOP OR YARD (	CHANES (5 ton		IONARY, RAIL OR MOBIL	щ	
		HEIGHT OF HOOK	AREA/SHOP SERVICED			CAPACITY AT REACH		AREA SERVICED	HGT, DF HOOK ABOVE BASE AT OUT REACH

hears, 400 storage) (List dimensions for each area, plus type material stored)			RAW STEEL STORAGE (Sq. ft.) WELDING AND ASSEMBLY (Sq. ft.)	LOPED	IG LOCAL ORDIN	LIMITATIONS IMPOSED BY BODEPTY ZONING CLASSIFICATION	YARD LAYOUT - PLEASE FURNISH A PLOT PLAN OF YARD OR PLANT,
bending rolls, 10' plate si							
capacities of all important shops in maximum work piece size, e.g., 30' plate bending rolls, 10' plate shears, 400 ton Hydraulic press, 30' plate fumace, engine lathe 36" x 20" b.c., etc.)							
n snops in maximum voin plate fumace, engine lath							
ton Hydraulic press, 30							

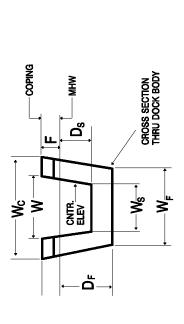
VES NO RESTRICTIONS (Specify projects and state effect and estimated											DF SF 129 DESCRIPTION OF TYPES OF WORK NORMALLY SUBCONTRACTED rois, or is sy individuals	2	TRANSPORTA-		DGE stures/	
	MOBILIZATION - SHIFTS										RNS ONLY LISTED IN ITEM 6 OF SF 129 one or more intermediary controls, or is Common ownership of stock by individuals	E TO NEAREST AIRPORT - IDENTIFY	ND, FOR OVERLAND T	M.L.W.)	L AND VERTICAL BRI	
	CURRENT NO. SHIFTS										LIATED CONCERNS ONL lifectly through one or m reporting firm. Common	DISTANCE TO NEARES	un Dimensions of Lox ations imposed by local o	RICTIONS (Indicate all at M.L.W.)	MINIMUM HORIZONTAL AND VERTICAL BRIDGE CLEARANCES TO TIDEWATER (Identify structures)	tity locks)
	CURRENT									); REPAIR (	MENT OF ALL AFF that directly, or inv in control with, the ation.)	DAD CONNECTION	ABLE AND MAXIM Not to exceed limit	NAVIGATIONAL RESTRICTIONS	ATER	D TIDEWATER (Iden
	EMPLOYMENT	MANAGEMENT, ADMINISTRATION	PROFESSIONAL. ENGINEERING	PROFESSIONAL. TECHNICAL	PRODUCTION, SKILLED	PRODUCTION, SEMISKILED	PRODUCTION, UNSKILLED	NONPRODUCTION	TOTAL	CONSTRUCTION ( ); REPAIR ( ).	APPROXIMATE TOTAL EMPLOYMENT OF ALL AFFILLATED CONCERNS ONLY LISTED IN ITEM 6 OF SF 129 (NOTE: An affiliate is a concern that directly, or indirectly through one or more intermediary controls, or is controlled by, or is under common control with, the reporting firm. Common ownership of stock by individu does not in itself constitute affiliation.)	DISTANCE TO NEAREST RAILROAD CONNECTION DISTANC	LARGEST CONVEYANCE AVAILABLE AND MAXIMULIN DIMENSIONS OF LOAD, FOR OVERLAND TRANSPORTA. TION OF FINISHED PRODUCTS (Not to exceed limitations imposed by local ordinances)	NA	MINIMUM CHANNEL TO TIDEWATER	LIMITING LOCK DIMENSIONS TO TIDEWATER (Identify locks)

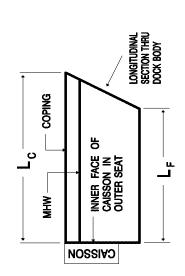
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material, if other than steel, (8) special annealing, heat treating, or stress relieving problems encountered, if steel, plus, (9) any other important problems resolved.) (NOTE: If no previous construction experience give detailed description of major conversion or industrial manufacturing work considered comparable to ship or boat construction.)					
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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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# **GRAVING DOCK NOMENCLATURE**





	Mean High Water	Depth of Dock from MHW to Floor	Depth of Dock from MHW to Sill	Length of Dock at Coping	Length of Dock at Floor	Width of Dock at Top of Entrance	Width of Dock at Coping or	maximum clear width above Dock Floor	Width at Dock Floor	Width of Dock at Entrance (Sill)	Freeboard. Distance from MHW to	top of coping. Indicate if part of	Freeboard may be superflooded.
	•	•	•	•	•	•	•		•	•	•		
KEY	MHM	DF	Ds	г С	۔ ب	3	د ۲		٧F	۷s	ш		

	REMARKS	(e.g. indicate dimensions of pits in dock floor)	
TRICAL	(NESSEL)	HERTZ	
ABLE ELEC	SERVICE (SHORE POWER TO VESSEL)	SAMPS	
AVAIL	(SHORE	NOLTS	
	STANDARD	L <sub>c</sub> × W <sub>c</sub> × D <sub>s</sub> D <sub>F</sub>	
v⊃ ⊓	шкг	005_00L	
SNC	FREEBOARD	Ľ	
DOCK BODY DIMENSIONS	DEPTH	MHW DF	
DOCK BOI	WIDTH	COPING W <sub>C</sub>	
	WIE	FLOOR WF	
NSIONS	DEPTH	MHW Ds	
ENTRANCE DIMENSIONS	WIDTH	M COPING	
ENTR	M	SILL SILL	
	LENGTH		
		FLOOR LF	
		GRAVING DOCK IDENTIFIER	

2001 SURVEY

REMARKS	(Indicate existence of hauling blocks, if end selection can be lowered, and max. length of ship DD can accommodate).	2001 SURVEY
SERVICE ESSEL)	HERTZ	
AVAILABLE ELECTRICAL SERVICE (SHORE POWER TO VESSEL)	AMPS	
AVAILABL (SHORE	VOLTS	
	NORMAL KEEL BLOCK HEIGHT	
	LIFT CAPACITY (TONS)	
	CLEAR WIDTH BETWEEN WINGWALLS	
	MAXIMUM DEPTH OVER BLOCKS	
	MAXIMUM LENGTH OF PONTOON	
	FLOATING DRYDOCK IDENTIFIER	

# FLOATING DRYDOCK CHARACTERISTICS SUMMARY

## APPENDIX B

# MAJOR U.S. SHIPBUILDING,

# REPAIR (WITH DRYDOCKIING),

# AND TOPSIDE REPAIR FACILITIES

### MAJOR U.S. 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.

### Shipyards With Build Positions

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 (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. *These shipyards may also be capable of constructing vessels less than 122 meters in length.* 

### **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 ships of 122 meters in length or over. *These shipyards may also be capable of constructing and/ordrydocking 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}).

### <u>NOTE</u>

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.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	Ū	1/ Type of work usually engaged in
Chinyard Nama	LLLand Level Position		2/ Employment - Mid 2001
Shipyard Name	GDGraving Drydock	Longest	
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway		Longthe and in Materia
	SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### EAST COAST

### Active Shipbuilding Yards

Bath Iron Works Corp. 700 Washington Street Bath, ME 04530	213       X       26       SW         219       X       34       SW         219       X       39       SW         232       X       40       SW         259       X       40       SW         366       X       40       SW         244       X       40       FD	259 899	<ul> <li><u>1/</u> Construction, repair and conversion.</li> <li><u>2/</u> 6,823</li> </ul>
Electric Boat Corporation 75 Eastern Point Road Groton, CT 06340-4989	(4) 134 X 10 SW 174 X 24 LL 151 X 20 GD 180 X 26 GD 183 X 27 GD	229 1,067	<ul> <li><u>1/</u> Construction of submarines for the U.S. Navy.</li> <li><u>2/</u> 9,239</li> </ul>
Kvaerner Philadelphia Shipyard, Inc. Philadelphia Naval Business Center Philadelphia, PA 19112	(2) 330 X 43 GD	<u>200</u> 200	<u>1/</u> New construction. <u>2/</u> 720

Shipyard Name and Address       LLLand Level Position       2/       Employment - Mid 2001         GDGraving Drydock       Longest       2/       Employment - Mid 2001         MRMarine Railway       Lengths are in Meters       Lengths are in Meters		<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
Shipyard Name     GDGraving Drydock     Longest       and Address     FDFloating Drydock     Total Linear       MRMarine Railway     Lengths are in Meters		SWShipway	-	1/ Type of work usually engaged i
and Address FDFloating Drydock Total Linear MRMarine Railway Lengths are in Meters				2/ Employment - Mid 2001
MRMarine Railway		GDGraving Drydock	Longest	
Lengths are in Meters		FDFloating Drydock	Total Linear	
SL-Syncrolift Lengths are in meters		MRMarine Railway		Low with a sure in Martana
SESyncroint		SLSyncrolift		Lengths are in Meters
TRTravel Lift		TRTravel Lift		

### EAST COAST

### Active Shipbuilding Yards

Newport News Shipbuilding 4101 Washington Avenue Newport News, VA 23607-2770	<ul> <li>(4) 183 X 12 LL</li> <li>139 X 21 GD **</li> <li>159 X 21 GD **</li> <li>197 X 27 GD **</li> <li>262 X 31 GD **</li> <li>292 X 37 GD *</li> <li>334 X 41 GD *</li> <li>661 X 75 GD *</li> <li>195 X 41 FD</li> </ul>	<u>509</u> 2,972	<ol> <li>Construction, repair and conversion.</li> <li>2/ 16,968</li> </ol>
			<ul><li>* Used for construction.</li><li>** Used for repair and overhaul.</li></ul>

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks	
	SWShipway		1/ Type of work usually engaged ir	ı
	LLLand Level Position		2/ Employment - Mid 2001	
Shipyard Name	GDGraving Drydock	Longest		
and Address	FDFloating Drydock	Total Linear		
	MRMarine Railway		Longtho are in Matero	
	SLSyncrolift		Lengths are in Meters	
	TRTravel Lift			

### EAST COAST

Atlantic Dry Dock Corp. 8500 Heckscher Drive Jacksonville, FL 32226-2400	137 X 23 SW 76 X 12 SW 189 X 26 FD 137 X 23 MR 76 X 12 MR	<u>310</u> 502	<ul> <li><u>1/</u> Construction, repair and overhaul of small and medium size vessels.</li> <li><u>2/</u> 781</li> </ul>
			AFDM-7 "Sustain" ex Navy dock
Baltimore Marine Industries, Inc. 600 Shipyard Road Baltimore, MD 21219	(2) 244 X 32 SW 351 X 58 GD 269 X 40 FD	<u>360</u> 1,594	<ul> <li><u>1/</u> Conversion and repair with major shipbuilding capability.</li> <li><u>2/</u> 500</li> </ul>
Intermarine Savannah 301 N. Lathrop Ave. Savannah, GA 31415	55 X 12 LL 152 X 17 GD * 56 X 12 MR	<u>244</u> 457	<u>1/</u> Construction and repair. <u>2/</u> 253
			* Can accomodate ship up to 366 meters in length.

### Other Shipyards with Building Positions

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway		1/ Type of work usually engaged in
Shipyard Name	LLLand Level Position GDGraving Drydock	Longest	2/ Employment - Mid 2001
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### EAST COAST

Bayonne Dry Dock & Repair Corporation Brooklyn Navy Yard, Bldg #386 Bayonne, NJ 07002	323 X 42 GD		<ul> <li><u>1/</u> General ship repair with drydocking.</li> <li><u>2/</u> 54</li> </ul>
Caddell Dry Dock & Repair Co., Inc. P.O. Box 327			<u>1/</u> General ship repair.
Staten Island, NY 10310	101       X       18       FD         137       X       25       FD         55       X       15       FD         55       X       15       FD         78       X       16       FD         78       X       20       FD         80       X       13       FD	<u>169</u> 770	<u>2/</u> 185
Colonna's Shipyard, Inc.			<u>1/</u> General ship repair.
400 East Indian River Road Norfolk, VA 23523	195 X 25 FD 104 X 18 MR 110 X 21 MR 56 X 13 MR 64 X 11 MR	 1,545	<u>2/</u> 297
Detyens Shipyards, Inc., Main Yard 1670 Drydock Avenue, Building 236		640	<u>1/</u> General ship repair and conversion.
North Charleston, SC 29405-2121	178 X 28 GD * 185 X 29 GD * 226 X 32 GD *	1,913	<u>2/</u> 500
			<ul> <li>Leased from Charleston Naval Shipyard Redevelopment Association.</li> </ul>

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway		1/ Type of work usually engaged in
Shipyard Name	LLLand Level Position GDGraving Drydock	Longest	2/ Employment - Mid 2001
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway		Lengths are in Meters
	SLSyncrolift TRTravel Lift		

### EAST COAST

Detyens Shipyards, Inc., Wando Division 2383 Hwy 41 Mt. Pleasant, SC 29466	152 X 20 FD <u>122</u> 545	<u>1/</u> General ship repair. <u>2/</u> 95
Eastern Technical Enterprises, Inc. Drydock No. 4, Brooklyn Navy Yard Brooklyn, NY 11205	105 X 18 GD 213 219 X 34 GD 213	<u>1/</u> General ship repair. <u>2/</u> 41
Economic Development & Industrial Corp. of 43 Hawkins St. Boston, MA 02210	Boston 351 X 34 GD 49 49	<u>1/</u> General ship repair. <u>2/</u> 0
GMD Shipyard Corp. Brooklyn Navy Yard, Bldg. #386 Brooklyn, NY 11205	(2) 332 X 43 GD $\frac{233}{503}$	<u>1/</u> General ship repair. <u>2/</u> 136
Metro Machine Corp. 200 Ligon Street Norfolk, VA 23501	206 X 29 FD 239 885	<ul><li><u>1/</u> General ship repair and conversion.</li><li><u>2/</u> 470</li></ul>
Metro Machine Corporation - Philadelphia Di Philadelphia Naval Business Center Philadelphia, PA 19112	vision 219 X 24 GD <u>341</u> 300 X 34 GD 1,195	<ul> <li><u>1/</u> General ship repair and conversion.</li> <li><u>2/</u> 222</li> </ul>

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	Ũ	1/ Type of work usually engaged in
Shipyard Name and Address	LLLand Level Position GDGraving Drydock	Longest	2/ Employment - Mid 2001
	FDFloating Drydock	Total Linear	
	MRMarine Railway		Longtho are in Matero
	SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### EAST COAST

Norfolk Shipbuilding & Drydock Corp., Berkeley 750 West Berkley Avenue Norfolk, VA 23501-2100	229 X 29 FD 305 X 48 FD	442	<u>1/</u> Ship repair and conversion. <u>2/</u> 1,000
North Florida Shipyard, Inc. P.O. Box 3255 Jacksonville, FL 32206	122 X 17 FD		<u>1/</u> Ship repair and conversion. <u>2/</u> 496

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	Ũ	1/ Type of work usually engaged in
	LLLand Level Position		2/ Employment - Mid 2001
Shipyard Name	GDGraving Drydock	Longest	<u> </u>
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway		Longthe and in Materia
	SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### EAST COAST

### Topside Repair Yards

American Shipyard Co. LLC 1 Washington Street Newport, RI 02840-0943	91 X 19 SW 24 X 7 TR 46 X 12 TR 21 X 20 FD 91 X 19 MR	<u>366</u> 954	<u>1/</u> General ship repair. <u>2/</u> 76
Associated Naval Architects, Inc. 3400 Shipwright Street Portsmouth, VA 23703	37 X 11 MR 37 X 12 MR 40 X 12 MR 72 X 15 MR	<u>137</u> 439	<ul> <li><u>1/</u> General ship repair and overhaul.</li> <li><u>2/</u> 85</li> </ul>
Marine Hydraulics International, Inc. 543 East Indian River Road Norfolk, VA 23523		<u>183</u> 457	<u>1/</u> General ship repair. <u>2/</u> 224
Metal Trades, Inc. 1210 Truxtun Avenue, Bldg. 2 N. Charleston, SC 29405	23 X 10 TR 23 X 9 MR 63 X 18 MR 91 X 18 MR	<u>320</u> 831	<u>1/</u> General ship repair. <u>2/</u> 212
Moon Engineering Co., Inc. 2 Harper Avenue Portsmouth, VA 23707-0909		244 1,037	<u>1/</u> General ship repair. <u>2/</u> 145

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway		1/ Type of work usually engaged in
<b>.</b>	LLLand Level Position		2/ Employment - Mid 2001
Shipyard Name	GDGraving Drydock	Longest	
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway		Longthe and in Materia
	SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### EAST COAST

### Topside Repair Yards

Norfolk Shiprepair & Drydock Corp. Foot of Claiborne Avenue Norfolk, VA 23504	137 X 22 MR 78 X 12 MR	<u>183</u> 1,106	<u>1/</u> General ship repair. <u>2/</u> 199
Promet Marine Services Corp. 242 Allens Avenue Providence, RI 02905	46 X 10 TR	<u>183</u> 366	<u>1/</u> General ship repair. <u>2/</u> 40
Reynolds Shipyard Corp. 200 Edgewater Street Staten Island, NY 10305		<u>134</u> 134	<u>1/</u> General ship repair. <u>2/</u> 10
Steel Style, Inc. 401 S. Water Street Newburgh, NY 12550	43 X 15 MR 91 X 30 MR	<u>183</u> 335	<u>1/</u> General ship repair. <u>2/</u> 15
The General Ship Repair Corp. 1449 Key Highway Baltimore, MD 21230	30 X 15 LL 61 X 18 FD	<u>146</u> 271	<u>1/</u> General ship repair. <u>2/</u> 50
The Hinckley Company One Little Harbor Landing Portsmouth, RI 02871	(2) 24 X 5 MR 40 X 9 MR	 	<u>1/</u> General ship repair. <u>2/</u> 220

	(LOA X Beam) SWShipway LLLand Level Position	Berths/Piers Usable Length	<u>1/</u>	Type of work usually engaged in
Shipyard Name	GDGraving Drydock	Longest	<u>2/</u>	Employment - Mid 2001
and Address	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	L	engths are in Meters
GULF COAST				
	Active Shipbuild	ling Yards		
Halter Marine, Inc. Halter Pascagoula				construction of ships, oil rigs

5110 Washington Avenue		and repair.
Pascagoula, MS 39568-1328	160 X 32 SW 229 X 30 SW	<u>274</u> 762 <u>2/</u> 136
Northrop Grumman Ship Systems, Avon Mail Station 91 Avondale, LA 70150-0280	265 X 38 SW * 311 X 53 SW *** (2) 265 X 38 LL ** (2) 311 X 53 LL ** 229 X 35 FD *	1/Modular ship construction, conversion, and repair.5211,4312/2/5,388
	305 X 66 FD **	<ul> <li>* Upper main yard.</li> <li>** Lower main yard. Can accomodate ship up to 366 meters in length.</li> <li>*** Westwego Plant.</li> </ul>
Northrop Grumman Ship Systems, Inga P.O. Box 149 Pascagoula, MS 39568-0149	lls Operations (5) 259 X 53 LL * 488 X 53 LL * 305 X 53 FD *	1/         Construction, repair and conversion.           792
		<ul> <li>West Bank can only launch ship up to 259 X 53 meters. Land Level Positions constrained by launching capability.</li> </ul>

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway		1/ Type of work usually engaged in
Shipyard Name	LLLand Level Position GDGraving Drydock	Longest	2/ Employment - Mid 2001
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway		Lengths are in Meters
	SLSyncrolift TRTravel Lift		

### **GULF COAST**

### Other Shipyards with Building Positions

Alabama Shipyard, Inc. P.O. Box 3201 Mobile, AL 36652	290 X 50 LL	<u>328</u> 642	<ul> <li><u>1/</u> Conversion, repair and major shipbuilding capability.</li> <li><u>2/</u> 649</li> </ul>
AMFELS, Inc. 20000 Highway 48 Brownsville, TX 78523	335 X 122 LL 183 X 30 FD	<u>610</u> 610	<ul> <li><u>1/</u> Offshore oil rigs with major shipbuilding capability.</li> <li><u>2/</u> 1,604</li> </ul>
Bender Shipbuilding and Repair Co., Inc. 265 South Water Street Mobile, AL 36603	122 X 24 SW (2) 34 X 12 SW 61 X 13 SW 61 X 14 SW (2) 76 X 14 SW 106 X 16 FD 119 X 14 FD 167 X 27 FD 196 X 36 FD	<u>258</u> 1,151	<ul> <li><u>1/</u> Construction, repair and conversion of ships and small vessels.</li> <li><u>2/</u> 985</li> </ul>
Friede Goldman Offshore East 600 Louise Street Pascagoula, MS 39581	165 X160 SW 111 X 60 FD	<u>610</u> 610	<ul> <li><u>1/</u> Repair and modification to oil rigs.</li> <li><u>2/</u> 1,615</li> </ul>
Halter Moss Point 5801 Elder Ferry Road Moss Point, MS 39562	110 X 23 LL 122 X 30 LL	<u>    140</u> 288	<ul> <li><u>1/</u> Construction, repair and conversion.</li> <li><u>2/</u> 162</li> </ul>

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	-	1/ Type of work usually engaged in
Shipyard Name	LLLand Level Position GDGraving Drydock	Longest	2/ Employment - Mid 2001
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### **GULF COAST**

Newpark Shipbuilding, Galveston 6800 Harborside Drive Galveston, TX 77554	183 X 30 SW 102 X 12 FD 24 X 9 FD 56 X 12 FD 61 X 12 FD 61 X 21 FD	<u>305</u> 777	<ul> <li><u>1/</u> Construction, repair and conversion.</li> <li><u>2/</u> 250</li> </ul>
Tampa Bay Shipbuilding & Repair Com 1130 McClosky Blvd. Tampa, FL 33605	pany (2) 227 X 37 GD 273 X 45 GD	<u>229</u> 421	<ul> <li><u>1/</u> Full service conversion and repair facility.</li> <li><u>2/</u> 325</li> </ul>
United Marine Enterprise, Inc. Port Arth P.O. Box 22077 Beaumont, TX 77720	ur Shipyard 122 X 61 LL	<u>488</u> 488	<ul> <li><u>1/</u> Construction and repair of ships and offshore vessels.</li> <li><u>2/</u> 168</li> </ul>

### Other Shipyards with Building Positions

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway		1/ Type of work usually engaged in
Shipyard Name	LLLand Level Position GDGraving Drydock	Longest	2/ Employment - Mid 2001
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway		Lengths are in Meters
	SLSyncrolift TRTravel Lift		

### **GULF COAST**

Atlantic Marine - Mobile P.O. Box 3202 Mobile, AL 36652	213 X 26 FD 305 X 49 FD	<u>345</u> 962	<ul> <li><u>1/</u> Ship repair and conversion.</li> <li><u>2/</u> 781</li> </ul>
Bollinger Gulf Repair P.O. Box 8126 New Orleans, LA 70182-8126	152       X       23       SW         91       X       15       SW         107       X       26       FD         122       X       34       FD         133       X       18       FD         229       X       32       FD         67       X       15       FD	<u>549</u> 549	<ul> <li><u>1/</u> Construction and repair of offshore oil vessels and barges.</li> <li><u>2/</u> 125</li> </ul>
Bollinger Houston 8114 Hockley Houston, TX 77262-5065	213 X 27 SW 122 X 24 FD * 33 X 16 FD 37 X 12 FD 43 X 16 FD 52 X 16 FD 67 X 24 FD	<u>152</u> 335	<u>1/</u> General ship repair. <u>2/</u> 94
FGO Texas D.O.C. Yard 2500 Martin Luther King Blvd Port Arthur, TX 77640	240 X 37 FD	<u>206</u> 206	<ul> <li>* Two drydocks are combined.</li> <li><u>1/</u> Construction, conversion and repair of offshore vessels.</li> <li><u>2/</u> 148</li> </ul>

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	-	1/ Type of work usually engaged in
Shipyard Name	LLLand Level Position GDGraving Drydock	Longest	2/ Employment - Mid 2001
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### **GULF COAST**

Gulf Marine Repair Corp. 1200 Sertoma Drive Tampa, FL 33605	107 X 24 FD	<u>366</u>	<u>1/</u> Ship repair and overhaul.
	168 X 24 FD 61 X 15 FD	141	<u>2/</u> 145
Halter Port Bienville P.O. Box 529			1/ Barge construction and repair.
Lake Shore, MS 39558	122 X 30 SW 183 X 30 SW 152 X 40 GD	<u>305</u> 305	<u>2/</u> 152
International Ship Repair & Marine S 1616 Penny Street	ervices, Inc		<u>1/</u> General ship repair.
Tampa, FL 33605-6058	145 X 29 FD 198 X 29 FD 76 X 13 FD 76 X 29 FD	549 1,158	<u>2/</u> 212
	76 X 29 FD 76 X 32 FD		

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers	Remarks
	SWShipway	0	1/ Type of work usually engaged in
Shipyard Name	LLLand Level Position	Longoot	2/ Employment - Mid 2001
and Address	GDGraving Drydock FDFloating Drydock	Longest Total Linear	
	MRMarine Railway		Lengths are in Meters
	SLSyncrolift		Lenguis are in meters
	TRTravel Lift		

### **GULF COAST**

### Topside Repair Yards

Boland Marine & Mfg. Co., Inc. P.O. Box 53287 New Orleans, LA 70153		<u> </u>	<ul> <li><u>1/</u> General ship repair and conversion.</li> <li><u>2/</u> 75</li> </ul>
Bollinger Algiers, LLC P.O. Box 6068 New Orleans, LA 70114	107 X 20 FD 91 X 20 FD	<u>    122</u> 122	<ul> <li><u>1/</u> Repairs towboats, barges and vessels to 76 meters.</li> <li><u>2/</u> 26</li> </ul>
Bollinger Calcasieu PO Box 129 Sulphur, LA 70664	26 X 9 SW 76 X 23 SW (2) 91 X 15 FD 91 X 16 FD 63 X 23 MR	<u>137</u> 408	<ul> <li><u>1/</u> Repair and drydocking of small vessels.</li> <li><u>2/</u> 96</li> </ul>
Bollinger Lockport, LLC 8365 Hwy 308 South Lockport, LA 70374-0250	(2) 76 X 30 SW 20 X 5 MR 20 X 7 MR 27 X 9 MR 37 X 10 MR 49 X 12 MR	<u>488</u> 488	<u>1/</u> General ship repair. <u>2/</u> 810

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	0	1/ Type of work usually engaged in
Shipyard Name	LLLand Level Position GDGraving Drydock	Longest	2/ Employment - Mid 2001
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### **GULF COAST**

### **Topside Repair Yards Bollinger Texas City** 1/ General ship repair. 2201 Dock Road, Dock 42 168 Texas City, TX 77590 55 X 24 FD 168 <u>2/</u> 73 67 X 16 FD 67 X 24 FD CBH Services, Inc. 1/ General ship repair. 200 Pier Pond 229 Orange, TX 77630 229 <u>2/</u> 60 Dixie Machine Welding & Metal Works, Inc. 1/ General ship repair. 1031 Annunciation Street 406 New Orleans, LA 70130 406 <u>2/</u> 57 FGO Texas Orange Yard 1/ Construction, conversion and repair to offshore vessels. 91 West Front Street 671 Orange, TX 77630 671 <u>2/</u> 564 Gulf Copper & Manufacturing Corp. 1/ General ship repair. P.O. Box 547 262 Port Arthur, TX 77640 76 X 18 SW 524 <u>2/</u> 82 Hendry Corp. 1/ General ship repair. 5107 S. Westshore Blvd. 305 Tampa, FL 33611 72 X 12 FD 305 <u>2/</u> 55

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	U U	1/ Type of work usually engaged in
Chinyard Nama	LLLand Level Position		2/ Employment - Mid 2001
Shipyard Name	GDGraving Drydock	Longest	
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway		
	SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### **GULF COAST**

### Topside Repair Yards

Houston Ship Repair, Inc., Brady Island Shi 8510 Cypress Street Houston, TX 77012	p Repair Facility	259 701	<ul> <li><u>1/</u> General ship repair and conversion.</li> <li><u>2/</u> 115</li> </ul>
Newpark Shipbuilding & Repair, Inc., Brady 8502 Cypress Street Houston, TX 77012	Island 46 X 22 FD 55 X 22 FD 68 X 26 FD 61 X 15 MR 91 X 21 MR	<u>305</u> 671	<ul> <li><u>1/</u> General ship repair and small vessel construction and repair.</li> <li><u>2/</u> 200</li> </ul>
Newpark Shipbuilding & Repair, Inc., Pasad 1600 North Witter Pasadena, TX 77506	lena 24 X 9 FD 36 X 15 FD 49 X 20 FD 61 X 22 FD 68 X 20 FD	<u>305</u> 777	<ul> <li><u>1/</u> General ship repair and small vessel construction and repair.</li> <li><u>2/</u> 150</li> </ul>
Newpark Shipbuilding, Pelican Island 2920 Newpark Rd. Galveston, TX 77554	116 X 32 FD	<u>343</u> 998	<u>1/</u> General ship repair. <u>2/</u> 350
Northrop Grumman Ship Systems, Avonda 5100 River Road Avondale, LA 70094	le Operations, Algiers Divisior	588 1,081	<ul> <li><u>1/</u> Ship conversion, repair and overhaul.</li> <li><u>2/</u> 7</li> </ul>

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	g	1/ Type of work usually engaged in
Shinyard Nama	LLLand Level Position		2/ Employment - Mid 2001
Shipyard Name	GDGraving Drydock	Longest	
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway		Leventhe and in Materia
	SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### **GULF COAST**

Topside Repair	Yards
----------------	-------

Orange Shipbuilding Co., Inc. 710 Market Street Orange, TX 77631-1670	91 X 23 SW	<u>183</u> 259	<ul> <li><u>1/</u> General ship repair and small vessel construction.</li> <li><u>2/</u> 120</li> </ul>
Sabine Shipyard, Inc. Box 405 Sabine Pass, TX 77655		<u>    163    </u> 227	<u>1/</u> Repairs offshore oil rigs. <u>2/</u> 5

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	Ū	1/ Type of work usually engaged in
<b>.</b>	LLLand Level Position		2/ Employment - Mid 2001
Shipyard Name	GDGraving Drydock	Longest	<u> </u>
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway		Leventhe and in Matana
	SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### WEST COAST

### Active Shipbuilding Yards

National Steel & Shipbuilding Co. P.O. Box 85278		305	1/ Construction, repair and conversion.
San Diego, CA 92186-5278	(2) 290 X 34 SW 303 X 41 GD * 290 X 42 FD	2,210	<u>2/</u> 2,925
			NASSCO Longbuilder
			<ul> <li>Graving dock and piers at U.S.</li> <li>Naval Station, San Diego.</li> </ul>

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u>	
	SWShipway	-	1/ Type of work usually engaged	in
Shipyard Name	LLLand Level Position	Longoot	2/ Employment - Mid 2001	
and Address	GDGraving Drydock	Longest		
and Address	FDFloating Drydock	Total Linear		
	MRMarine Railway		Longtho are in Motoro	
	SLSyncrolift		Lengths are in Meters	
	TRTravel Lift			
				-

### WEST COAST

### Other Shipyards with Building Positions

		-	
Gunderson, Inc. 4350 Northwest Front Avenue Portland, OR 97210	223 X 32 SW	335	1/ Construction, repair and conversion.
	223 × 32 300	335	<u>2/</u> 135
Todd Pacific Shipyards Corp.			1/ Repair and conversion with
1801 16th Avenue, S.W.		407	major shipbuilding capabilitiy.
Seattle, WA 98134	(2) 137 X 18 SW	427	
	128 X 19 FD	1,834	<u>2/</u> 792
	198 X 26 FD		
	287 X 41 FD		
			<ul> <li>Max. ship size is 137 X 29 meters using two 137 X 18 meter SWs.</li> </ul>

Shipyard Name and Address       LLLand Level Position       2/       Employment - Mid 2001         Shipyard Name and Address       GDGraving Drydock       Longest       2/       Employment - Mid 2001         WRMarine Railway       MRMarine Railway       Lengths are in Meters		<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
Shipyard Name     GDGraving Drydock     Longest       and Address     FDFloating Drydock     Total Linear       MRMarine Railway     Lengths are in Meters		SWShipway	-	1/ Type of work usually engaged in
and Address FDFloating Drydock Total Linear MRMarine Railway Lengths are in Meters	Shinward Nama			2/ Employment - Mid 2001
MRMarine Railway		GDGraving Drydock	Longest	
Lengths are in Meters	and Address	FDFloating Drydock	Total Linear	
Lengths are in Meters		MRMarine Railway		Low other and in Matana
SLSyncrolift		SLSyncrolift		Lengths are in Meters
TRTravel Lift		TRTravel Lift		

### WEST COAST

Bellingham Bay Shipyard, LLC 201 Harris Street Bellingham, WA 98225-7018	122 X 17 FD 61 X 13 FD 37 X 11 MR	<u>213</u> 351	<u>1/</u> Ship and vessel repair. <u>2/</u> 62
Cascade General, Inc. 5555 North Channel Avenue, Bldg 71 Portland, OR 97217	182 X 26 FD 247 X 34 FD	427 4,002	<u>1/</u> General ship repair. <u>2/</u> 706
Lake Union Drydock Co. 1515 Fairview Avenue, East Seattle, WA 98102-3791	122 X 17 FD 73 X 14 FD	<u>381</u> 750	<ul> <li><u>1/</u> General ship repair and conversion.</li> <li><u>2/</u> 107</li> </ul>
MAR COM, Inc. 8970 N. Bradford Street Portland, OR 97203	91 X 15 SW 91 X 23 SW 126 X 17 FD	<u>122</u> 174	<ul> <li><u>1/</u> General ship repair and construction.</li> <li><u>2/</u> 146</li> </ul>
San Francisco Drydock, Inc. Foot of 20th Street San Francisco, CA 94120	186 X 26 FD 290 X 44 FD	<u>250</u> 809	<u>1/</u> Ship repair and overhaul. <u>2/</u> 250

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	Ũ	1/ Type of work usually engaged in
Shinyard Nama	LLLand Level Position		2/ Employment - Mid 2001
Shipyard Name	GDGraving Drydock	Longest	
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway		Longtha are in Motore
	SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### WEST COAST

Southwest Marine, Inc., San Diego Division Foot of Sampson Street San Diego, CA 92170-3308	126 X 19 FD 200 X 31 FD	<u>213</u> 604	<ol> <li>Ship repair, overhaul and conversion.</li> <li>670</li> <li>Graving dock at Naval Station can be leased as required.</li> </ol>
Southwest Marine, Inc., San Pedro Division P.O. Box 3600 Terminal Island, CA 90731-7331	122 X 17 FD 209 X 27 FD	<u>201</u> 769	<ul> <li><u>1/</u> Ship repair, overhaul and converision.</li> <li><u>2/</u> 72</li> </ul>

<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u>
SWShipway	0	1/ Type of work usually engaged in
LLLand Level Position	Longost	2/ Employment - Mid 2001
FDFloating Drydock	Total Linear	
MRMarine Railway		Lengths are in Meters
SLSyncrolift TRTravel Lift		
	(LOA X Beam) SWShipway LLLand Level Position GDGraving Drydock FDFloating Drydock MRMarine Railway SLSyncrolift	(LOA X Beam)       Berths/Piers         Usable Length         SWShipway         LLLand Level Position         GDGraving Drydock       Longest         FDFloating Drydock       Total Linear         MRMarine Railway       SLSyncrolift

### WEST COAST

### Topside Repair Yards

Bay Ship & Yacht Co. Alameda 2900 Main Street Alameda, CA 94501	119 X 16 FD 49 X 9 FD	<u>213</u> 503	<u>1/</u> General ship repair. <u>2/</u> 156
Bay Ship & Yacht Co. Richmond 2900 Main Street Alameda, CA 94501	24 X 7 TR	<u>488</u> 892	<u>1/</u> General ship repair. <u>2/</u> 20
Continental Maritime of San Diego, Inc. 1995 Bay Front Street San Diego, CA 92113-2122		<u>213</u> 1,082	<ol> <li><u>1/</u> General ship repair.</li> <li><u>2/</u> 412</li> <li>Graving and floating docks at Naval Station can be leased as required.</li> </ol>
Dakota Creek Industries, Inc. P.O. Box 218 Anacortes, WA 98221	107 X 22 LL 107 X 24 FD 38 X 12 MR 107 X 22 SL	<u>    305    </u> 477	<u>1/</u> General ship repair. <u>2/</u> 250
Foss Shipyard d.b.a. Foss Maritime Company 660 West Ewing Street Seattle, WA 98119	61 X 13 FD 66 X 18 FD	<u>146</u> 715	<ul> <li><u>1/</u> Vessel repair, alteration, and overhaul.</li> <li><u>2/</u> 123</li> </ul>

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	0	1/ Type of work usually engaged in
Shipyard Name	LLLand Level Position GDGraving Drydock	Longest	2/ Employment - Mid 2001
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway		Lengths are in Meters
	SLSyncrolift TRTravel Lift		

### WEST COAST

### Topside Repair Yards

Pacific Fishermen, Inc. 5351 24th Avenue, N.W. Seattle, WA 98107	37 X 7 MR 152 45 X 10 MR 49 X 11 SL	
San Pedro Boat Works Berth 44, Outer Harbor San Pedro, CA 90731	11 X 9 SW       189         (2) 12 X 8 SW       189         14 X 8 SW       189         20 X 8 SW       20 X 8 SW         23 X 8 SW       23 X 8 SW         (7) 27 X 8 SW       61 X 12 SW         (2) 61 X 12 FD       50	

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	Ũ	1/ Type of work usually engaged in
Objessed News	LLLand Level Position		2/ Employment - Mid 2001
Shipyard Name	GDGraving Drydock	Longest	
and Address	FDFloating Drydock	Total Linear	
	MRMarine Railway		
	SLSyncrolift		Lengths are in Meters
	TRTravel 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)

Bay Shipbuilding Company 605 N. Third Avenue Sturgeon Bay, WI 54235	223 X 32 SW 305 X 32 GD 55 X 12 GD 195 X 21 FD	305 2,163	<ul> <li><u>1/</u> Ship construction, repair and conversion.</li> <li><u>2/</u> 350</li> </ul>
Fraser Shipyards, Inc. Third Street & Clough Avenue Superior, WI 54880	189 X 18 GD 252 X 25 GD	<u>274</u> 527	<ul> <li><u>1/</u> Construction, repair and conversion.</li> <li><u>2/</u> 43</li> </ul>
Marinette Marine Corporation 1600 Ely Street Marinette, WI 54143-0118	122 X 24 LL 46 X 15 LL (3) 76 X 15 LL 76 X 20 LL 91 X 20 LL 37 X 9 SL	<u>651</u> 651	<ul> <li><u>1/</u> Construction and repair of small vessels.</li> <li><u>2/</u> 781</li> </ul>
Metro Machine Corporation - Industria Foot of Holland Street Erie, PA 16507	I Products Division 305 X 32 GD	<u> </u>	<ul> <li><u>1/</u> Construction, repair and conversion.</li> <li><u>2/</u> 35</li> </ul>

SWShipway LLLand Level	Usable Length <u>1/</u> Type of work usually engaged in Position
LILand Level	Position
Shipyard Name GDGraving Di	<u>2/</u> Employment - Mid 2001
and Address FDFloating Dr	
MRMarine Ra	ilway
SLSyncrolift	Lengths are in Meters
TRTravel Lift	

### **GREAT LAKES**

### **Repair Yards with Drydock Facilities**

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

Toledo Ship Repair Co., Toledo Shipyard 2245 Front Street			<u>1/</u> Ship repair and conversion.
Toledo, OH 43605-1231	152 X 21 GD 223 X 22 GD	<u>183</u> 305	<u>2/</u> 200

Shipyard Name and Address	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway	C C	1/ Type of work usually engaged in
	LLLand Level Position GDGraving Drydock	Longest	2/ Employment - Mid 2001
	FDFloating Drydock	Total Linear	
	MRMarine Railway SLSyncrolift		Lengths are in Meters
	TRTravel Lift		

### **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	<u>1/</u> General ship repair. <u>2/</u> 49
Nicholson Terminal & Dock Co. P.O. Box 18066 River Rouge, MI 48218	69 X 16 FD	701 1,097	<u>1/</u> General ship repair. <u>2/</u> 9

#### MAJOR U.S. SHIPBUILDING AND REPAIR FACILITIES (Vessels 122 meters in Length and Over)

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	Remarks
	SWShipway		1/ Type of work usually engaged in
Shipyard Name	LLLand Level Position	Longoot	2/ Employment - Mid 2001
and Address	GDGraving Drydock FDFloating Drydock	Longest Total Linear	
	MRMarine Railway		Lengths are in Meters
	SLSyncrolift		Lenguis are in Meters
	TRTravel Lift		

## NON-CONUS

## Repair Yards with Drydock Facilities

Alaska Ship & Drydock, Inc. 3801 Tongass Avenue Ketchikan, AK 99901	137 X 32 FD	<u> </u>	<u>1/</u> Ship and vessel repair. <u>2/</u> 150
Honolulu Shipyards, Inc. P.O. Box 30989 Honolulu, HI 96820	122 X 29 FD 55 X 23 FD	<u>213</u> 213	<ul> <li><u>1/</u> General ship repair and overhaul.</li> <li><u>2/</u> 224</li> </ul>
Marisco, Ltd. 91-607 Malakole Road Kapolei, HI 96707	116 X 16 FD 152 X 24 FD *	<u>34</u> 34	<ul> <li><u>1/</u> General ship repair.</li> <li><u>2/</u> 111</li> <li>* Leased from Port Commission.</li> </ul>

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# 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 commercial and military 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 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).

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name	SWShipway LLLand Level Position GDGraving Drydock	Longest	
and Address	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

## EAST COAST

Chesapeake Shipbuilding Corp. 710 Fitzwater Street Salisbury, MD 21801			Construction of small excursion and passenger vessels.
Derecktor Shipyards Connecticut 837 Seaview Avenue Bridgeport, CT 06607-1607			Builds small boats.
Gladding-Hearn Shipbuilding One Riverside Avenue Somerset, MA 02726-0300	61 X 15 SW	<u>38</u> <u>38</u>	Construction of small vessels including catamaran ferries.
Southeastern New England Shipbuilding Co 10 MacNaught Street, P.O. Box 377 North Kingtown, RI 02852	rp. (SENESCO) (2) 91 X 30 SW		Builds barges.
Yank Marine Mosquito Landing Road Tuckahoe, NJ 08250			Builds and repairs small vessels.

	Maximum Ship Size (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Boatbuilding and Repair Companies

A & B Industries P.O. Box 1137 Amelia, LA 70340	30 X 9 SW 30 X 17 FD	70	Maritime vessel construction and repair.
Allied Shipyard, Inc. P.O. Box 1240 La Rose, LA 70373	(2) 22 X 8 SW 57 X 14 FD (2) 52 X 12 MR	55 258	Construction, repair and conversion of small vessels.
Austal USA PO Box 1049 Mobile, AL 36633			Builds ferry catamarans and small boats.
Bollinger Gretna 4640 Peters Road Harvey, LA 70058	152 X 29 GD 67 X 17 FD	<u>396</u> 743	Construction of small vessels.
Bollinger Larose, LLC P.O. Box 1410 Larose, LA 70373	107 X 15 FD 101 X 24 MR	229 527	Repair of small marine vessels.
Bollinger Marine Fabricators, LLC P.O. Box 1609 Amelia, LA 70340	91 X 46 SW	152 777	Construction and repair of small vessels.
Bollinger Morgan City, LLC P.O. Box 2628 Morgan City, LA 70381	122 X 30 FD		Repair of small boats.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest Total Linear	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Boatbuilding and Repair Companies

Bollinger Quick Repair, LLC 615 Destrehan Ave. Harvey, LA 70058	(2)	46 X 18 FD		Repair of small boats.
Breaux Brothers P.O. Box 550 Loreauville, LA 70552-0550				Construction of small boats.
Breaux's Bay Craft, Inc. P.O. Box 306 Loreauville, LA 70552				Construction of small boats.
C & G Boat Works 8685 E. Davenport Street La Batre, AL 36509-2115				Boat building and repair.
Conrad Shipyard, Inc. P.O. Box 790 Morgan City, LA 70381	(2)	46 X 15 SW 46 X 12 FD	610 774	Construction of small vessels.
Crumpler's Shipbuilding Company, Inc. P.O. Box 2067 Orange, TX 77631		46 X 14 FD	70 70	Boat building and refurbishing.
Eastern Shipbuilding Group P.O. Box 960 Panama City, FL 32402				Construction and repair of small vessels.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest Total Linear	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

Freeport Shipbuilding, Inc. P.O. Box 49 Freeport, FL 32439-0049	91 X 23 LL 30 X 9 MR		Construction of passenger vessels and work boats.
Friede Goldman Offshore, West 3400 Litton Road Pascagoula, MS 39568			Repair of offshore oil rigs.
GEO Shipyards P.O. Box 9622 New Iberia, LA 70562			Construction of small vessels.
Halter Marine Gulfport 13085 Seaway Road Gulfport, MS 39503	110 X 24 SW	52 52	Construction of barges and conversion of drill rigs.
Halter Marine Lockport Division 6130 Highway 308 Lockport, LA 70374	91 X 20 SW	70 280	Construction of small vessels.
Halter Panama City 6100 Halter Marine Drive Panama City, FL 32404	61 X 37 SW	128 128	Construction of small vessels.
Horizon Shipbuilding, Inc. 13980 Shell Road Bayou La Batre, AL 36509			Construction and repair of marine vessels.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest Total Linear	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Boatbuilding and Repair Companies

Houma Fabricators Inc. 1100 Oak St. Houma, LA 70363	91 X 23 SW	<u> </u>	Construction of small vessels.
Inland Boat Works 2842 E. Roundbunch Road Orange, TX 77630			Construction of small boats and barges.
Intracoastal City Drydock & Shipbuilding, Inc. 18938 Live Oak Road Abbeville, LA 70510			Repairs small boats.
John Bludworth Shipyard, LLC P.O. Box 2441 Corpus Christi, TX 78403	107 X 25 FD	<u> </u>	Barge construction and repair of small boats.
Kody Marine, Inc. 600 Peters Road Harvey, LA 70058-1705			Builds small boats.
LEEVAC Industries, LLC P.O. Box 1190 Jennings, LA 70546	(2) 128 X 27 SW 147 X 23 GD 91 X 18 FD	<u>305</u> 488	Construction, repair and conversion of small boats.
Mississippi Marine Corp. 2219 Harbor Front Road Greenville, MS 38702-0539	46 X 15 SW 122 X 18 FD		Construction and repair of inland and offshore marine vessels.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

Moss Point Marine, Inc. 7801 Trinity Drive Escatawapa, MS 39552	162 X 25 SW	328 328	Construction of barges and small vessels.
North American Shipbuilding Co. P.O. Drawer 580 Larose, LA 70373			Construction of small vessels.
Northrop Grumman Ship Systems - Av 13303 Industrial Seaway Road Gulfport, MS 39503	ondale Operations, Boat Division		Construction of small vessels.
Patti Shipyard, Inc. P.O. Box 271 Pensacola, FL 32507-1374	107 X 17 SW		Construction of vessels to 107 meters.
Quality Shipyards, L.L.C. P.O. Box 1817 Houma, LA 70361-1817	168 X 30 SW (2) 58 X 20 FD	374 695	Construction, repair and conversion of boats and barges.
Rodriguez Boat Builders, Inc. P.O. Box 842 Bayou La Batre, AL 36509	27 X 3 SW	<u>6</u> 6	Construction of small vessels.
SeaArk Marine, Inc. P.O. Box 210 Monticello, AR 71655			Builds aluminum boats in the 5-20 meter range.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Boatbuilding and Repair Companies

Seward Ship's Drydock, Inc. P.O. Box 944 Seward, AK 99664	4	07 X 40 X 07 X	SW TR SL	168 251	Conversion and repair of small vessels.
Sun State Marine Services, Inc. P.O. Box 1167, Reynolds Industrial Park Greencove, FL 32043					Construction and repair of vessels to 91 meters.
Trinity Madisonville Highway 21 Madisonville, LA 70447					Builds barges.
Trinity Nashville 101 Shelby Street Nashville, TN 37213					Builds barges.
Trinity Port Allen PO Box 108 Port Allen, LA 70767					Builds barges.
Vessel Repair, Inc. P.O. Box 2207 Port Arthur, TX 77643		84 X 20 69 X S			Repairs barges and small vessels.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock FDFloating Drydock	Longest Total Linear	
	MRMarine Railway SLSyncrolift TRTravel Lift		Lengths are in Meters

## Boatbuilding and Repair Companies

## WEST COAST

Al Larson Boat Shop 1046 South Seaside Avenue Terminal Island, CA 90731	34 X 8 SW 76 X 12 FD	<u>110</u> 387	Construction and repair of small vessels.
Kvichak Marine Industries, Inc. 469 NW Bowdoin Place Seattle, WA 98107		<u>76</u> 76	Aluminum vessel construction and repair.
MARCO Shipyard, Seattle 2300 W. Commodore Way Seattle, WA 98199	33 X 9 SW 37 X 11 FD 33 X 9 SL	49 244	Construction and repair of small vessels.
Marine Industries Northwest, Inc. P.O. Box 1275 Tacoma, WA 98401-1275	119 X 16 FD 61 X 15 MR	<u>110</u> 171	Repair and conversion of small boats.
Northlake Shipyard, Inc. 1441 North Northlake Way Seattle, WA 98103	58 X 12 FD		Repair of small vessels.
Southern Oregon Marine, Inc. (SOMAR) 155 East Market Avenue Coos Bay, OR 97420	107 X 30 SW 61 X 13 FD		Construction and repair of small vessels.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

## WEST COAST

Sundial Marine Tug & Barge Works, Inc. 5605 N.E. Sundial Rd. Troutdale, OR 97060	91 X 18 SW - 122 91 X 21 FD - 488	Construction and repair of barges and small vessels.
William E. Munson Company 17183 Bennett Road Mt. Vernon, WA 98273		Builds aluminum work boats up to about 12 meters.
Zidell Marine Corporation 3121 S.W. Moody Avenue Portland, OR 97201	104 X SW	Construction of barges and small boats.

	Maximum Ship Size (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest Total Linear	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## **Boatbuilding and Repair Companies**

## **GREAT LAKES**

Marine Builders, Inc. 208 Church Street Utica, IN 47130 Construction of small vessels.

46 X 9 SW

	Maximum Ship Size (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest Total Linear	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift		Lengths are in Meters

## Boatbuilding and Repair Companies

## <u>INLAND</u>

Jeffboat, LLC 1030 E. Market Street Jeffersonville, IN 41730	152 X 26 SW 61 X 19 FD	640 1,686	Construction of inland river type equipment, towboats, barges, etc.
McGinnis, Inc. P.O. Box 534 South Point, OH 45680			Repair of barges and towboats.
National Maintenance & Repair, Inc. Foot of Hawthorne Street Hartford, IL 62048-0038	18 X 16 FD		Builds and repair small vessels.
Serodino Inc. 100 Hamm Road Chattanooga, TN 37405			Buillds barges and small boats.
Trinity Caruthersville Highway 84 West Caruthersville, MO 63830			Builds barges.

	Maximum Ship Size (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock FDFloating Drydock	Longest Total Linear	
	MRMarine Railway SLSyncrolift TRTravel Lift	Total Ellea	Lengths are in Meters

## Vessel Repair Companies

## EAST COAST

Amherst Industries, Inc. 2 Port Amherst Drive Charleston, WV 25306	55 X 13 FD		Topside repairs to towboats, tugs and barges.
Anfrank Metal Fabricating Ind., Inc. The Brooklyn Navy Yard Brooklyn, NY 11205			General ship repair.
B & A Marine Co., Inc. 75 Huntington Street Brooklyn, NY 11231		229 229	General ship repair.
Davis Boat Works, Inc. 99 Jefferson Ave. Newport News, VA 23607	30 X 11 TR		Repair and conversion of small boats and vessels.
Lyon Shipyards, Inc. Foot of Brown Ave. Norfolk, VA 23501	91 X 23 FD 61 X 11 MR	107 555	General ship repair.
May Ship Repair Contracting Corp. 3075 Richmond Terrace Staten Island, NY 10303	122 X FD		General ship repair.
Thames Shipyard & Repair Co., Inc. Two Ferry Street New London, CT 06320	107 X 30 FD	<u>    122</u> 198	General ship repair.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest Total Linear	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift		Lengths are in Meters

## Vessel Repair Companies

Acadian Shipyard, Inc. Bourg-LaRose Highway Bourg, LA 70343	55 X 24 FD 91 X 17 MR		Repairs small boats.
Barnett Marine Inc. 2709 Concord Rd. Belle Chasse, LA 70037			Repairs barges and small boats.
Berwick Shipyard Corp. Box 168 Berwick, LA 70342			Drydocking & repair of commerical vessels up to 76 meters.
Bollinger Amelia Repair, LLC P.O. Box 2628 Morgan City, LA 70381	37 X 10 FD	<u>91</u> 183	Repair with drydocking of small vessels.
Bollinger Fourchon, LLC 106 Norman Doucet Drive Golden Meadow, LA 70357		<u>    107</u> 107	General ship repair.
Border Shipyards Inc. HC 70 Box 5 Brownsville, TX 78521			Repairs shrimp boats.
Burton Shipyard Inc. P.O. Box 278 Bridge City, TX 77611	49 X 15 FD		Repairs tugs, barges and offshore vessels.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock FDFloating Drydock	Longest Total Linear	
	MRMarine Railway SLSyncrolift TRTravel Lift		Lengths are in Meters

## Vessel Repair Companies

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Channel Shipyard Company, Inc. P.O. Box 926		Barge and tank cleaning.
Highlands, TX 77571		
David Industries, Inc.		Repair of barges and small
P.O. Box 425		vessels.
Cut Off, LA 70373		
Elmwood Drydock & Repair, Inc., Baton Rouge		Barge repair.
Mile Marker 225		
Baton Rouge, LA 70801	17 X 63 FD	
Elmwood Drydock & Repair, Inc., Convent		Barge repair.
158.5 Mile Marker		
Convent, LA 70723	17 X 63 FD	
Elmwood Drydock & Repair, Inc., Harvey		Barge repair.
Mile 5 Harvey Canal		
Harvey, LA 70059	15 X 43 FD	
Elmwood Drydock & Repair, Inc., Myrtle Grove		Barge repair.
55.0 Mile marker		
Myrtle Grove, LA 70083	22 X 61 FD	
Elmwood Drydock & Repair, Inc., Reserve		Barge repair.
135.0 LMR		
Reserve, LA 70084	17 X 61 FD	

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Vessel Repair Companies

Henry Marine Service, Inc. P.O. Box 7650 Mobile, AL 36577	(2) 59 X 11 FD	Topside repair to push boats.
Hudson Drydocks, Inc. P.O. Box 1781 Morgan City, LA 70381		Repair of small vessels.
Intercoastal Marine Repair, LLC P.O. Box 10647 Jefferson, LA 70181-0647	46 X 18 FD <u>381</u> 686	Barge repair.
Kiva Construction & Engineering, Inc. P.O. Drawer 40 Anahuac, TX 77514		Maintains their own fleet of tug boats.
Kremer Marine, Inc. 1408 Cowan Road Gulfport, MS 39507		Repairs vessels up to 20 meters.
L.M.S. Shipmanagement Inc. P.O. Box 58409 New Orleans, LA 70153-8409		Repairs company owned barges.
LA Dock Co. Baton Rouge Shipyard P.O. Drawer 770 Port Allen, LA 70767	53 X 11 FD	Repair of small vessels.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Vessel Repair Companies

McDonough Marine Service 1750 Clearview Parkway Metairie, LA 70001-2470			Repair to company owned barges only.
Ocean Technical Services, Inc. 1140 Peters Road Harvey, LA 70058		<u> </u>	Repair of small boats.
Plaquemine Point Shipyard 1070 River Road Sunshine, LA 70780	16 X 30 MR		Barge repair and cleaning.
Southwest Shipyard LP 18310 Market Street Channelview, TX 77530-3858	(2) 91 X 18 FD 91 X 18 MR	427 427	Repair tank barges.
T.T. Barge Services 83 Hickory Avenue Harahan, LA 70123			Barge maintenance and repair.
Texas Drydock, Inc., Offshore PO Box 3029 Gulfport, MS 39505-3029			Marine repair and manufacturing for offshore drilling industry.
Tri-Kat Marine, Inc. 1408 Cowan Road Gulfport, MS 39507			Repairs small boats.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest Total Linear	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift		Lengths are in Meters

## Vessel Repair Companies

Violet Dock Port, Inc. 6800 St. Bernard Highway Violet, LA 70092	610 1,798	Vessel lay-up.
Zimco Marine Inc. 400 Washington St. Port Isabel, TX 78578		Repairs small boats.

	Maximum Ship Size (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock FDFloating Drydock	Longest Total Linear	
	MRMarine Railway SLSyncrolift TRTravel Lift	rotal Elitear	Lengths are in Meters

## Vessel Repair Companies

## WEST COAST

Astoria Marine Construction Co. 92134 Front Road Astoria, OR 97103	15 X 5 MR		Repair of small vessels.
Duwamish Shipyard, Inc. 5658 West Marginal Way, S.W. Seattle, WA 98106	(2) 121 X 29 GD 41 X 10 FD	<u>56</u> 193	Ship repair, maintenance and conversion.
Stone Boat Yard, Inc. 2517 Blanding Avenue Alameda, CA 94501	21 X 6 TR 50 X 11 MR	274 320	Repair of small boats.
Ventura Harbor Boatyard Inc. 1415 Spinnaker Drive Ventura, CA 93001-4339		<u>55</u> 145	Boat maintenance and repair.

	Maximum Ship Size (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock FDFloating Drydock	Longest Total Linear	
	MRMarine Railway SLSyncrolift TRTravel Lift		Lengths are in Meters

## Vessel Repair Companies

## **GREAT LAKES**

Hannah Marine Shipyard Divison 13155 Grant Road Lemont, IL 60439 Barge cleaning.

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

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest Total Linear	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Vessel Repair Companies

C & C Marine Maintenance Co. 1500 State Street North		Barge repair.
Clairton, PA 15025		
Cleveland Ship Repair Co.		Topside and voyage repair work.
1874 Columbus Rd Rear		
Columbus, OH 44113-2411		
Great Lakes Towing Shipyard		Repair of small vessels.
1800 Terminal Tower		
Cleveland, OH 44113		
Hartley Marine Corp d.b.a. Walker Boat Y	ard, Inc	Repair and drydocking of towboats
P.O. Box 1400		and barges.
Paducah, KY 42002-1400	52 X 17 FD	
James Marine, Inc.		Repair of small vessels.
P.O. Box 2305		
Paducah, KY 42002-2305	15 X 14 FD	
Missouri Drydock & Repair Co.		Barge repair.
P.O. Box 700		
Cape Girardeau, MO 63701	(2) 76 X 16 FD	
Yager Marine Industries		Repair of barges and towboats.
5001 Highway 60 East		
Owensboro, KY 42303		

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock FDFloating Drydock	Longest Total Linear	
	MRMarine Railway SLSyncrolift TRTravel Lift		Lengths are in Meters

## Vessel Repair Companies

## NON-CONUS

Honolulu Marine, Inc. 123 Ahui Street			Repair and construction of small boats.
Honolulu, HI 96813	37 X 10 MR	61 61	

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest Total Linear	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

## EAST COAST

Blount-Barker Shipbuilding Corp. 461 Water Street Warren, RI 02885	69 X 15 SW	67 165	Designs and builds small vessels to 69 meters.
Boston Whaler, Inc. 4121 South U.S. Highway One Edgewater, FL 32141-7221			Builds fiberglass boats up to 10 meters in length.
Derecktor Shipyards New York 311 East Boston Post Road Mamaroneck, NY 10543	40 X 9 LL	48	New construction and repair of vessels up to 46 meters.
Ellicott International 1611 Bush Street Baltimore, MD 21230			Builds small dredges.
H & H Marine, Inc. U.S. Route 1 Steuben, ME 04680			Builds fiberglass lobster boats.
Patriot Marine Fabricating 24 Bay Parkway Waretown, NJ 28758			Builds aluminum boats to 12 meters.
Rockland Marine Corp. P.O. Box 309 Rockland, ME 04841	55 X 18 SW 46 X 15 FD	165 241	Builds barges.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

## EAST COAST

TEC Skanska P.O. Box 57 Norfolk, VA 23501	107 X 24 SW	<u>64</u> 128	Barge builder.
Washburn & Doughty Assoc., Inc. P.O. Box 226 East Boothbay, ME 04544			Boat builders and designers.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

Aker Gulf Marine FM1069 South Aransas, TX 78335			Fabricator of offshore oil/gas rigs.
Bay Fabrication Inc. P.O. Box 537 Ama, LA 70031-0537			Small craft builder.
Farmer's Marine Copper Works, Inc. P.O. Box 748 Galveston, TX 77553			Fabrication for oil rigs.
Gulf County Shipbuilding 511 Old Dynamite Dock Rd Port St. Joe, FL 32456-6365			Small boat construction.
Gulf Craft, Inc. 3904 Highway 182 Patterson, LA 70392			Builds small boats.
Harrison Bros. Dry Dock, Inc. P.O. Box 1843 Mobile, AL 36633-1843	40 X 11 FD	168 395	Builder of small boats and general vessel repair.
Hope Services, Inc. P.O. Box 9157 Houma, LA 70361			Builds OSVs, tugs and barges to 46 meters.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

Keith Marine Inc. P.O. Box 187 Palatka, FL 32178-0187		Builds small boats.
LeTourneau P.O. Box 2307 Longview, TX 75606	(2) 119 X 91 SW	Offshore oil rig construction.
Main Iron Works, Inc. P.O. Box 1918 Houma, LA 70361		Builds small boats.
Marine Inland Fabricators 1725 Buchanan Street Southport, FL 32409		Builds barges and small boats.
Master Boat Builders, Inc. P.O. Box 702 Bayou La Batre, AL 36509		Builds small boats.
Master Marine, Inc. P.O. Box 665 Bayou La Batre, AL 36509	29 X 7 SW	Boat building and repair.
Neuville Boat Works, Inc. 6402 Daspit Road New Iberia, LA 70560		Builds aluminum boats 12-43 meters.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock FDFloating Drydock	Longest Total Linear	
	MRMarine Railway SLSyncrolift TRTravel Lift	Total Ellea	Lengths are in Meters

#### Fabricators/Manufacturers of Maritime Vessels

#### **GULF COAST**

Oil States Skagit SMATCO 13111 Northwest Freeway, Suite 200 Houston, TX 77040

Premier Industries P.O. Box 1103 Port Sulphur, LA 70083

Progressive Industrial 1412 18th Avenue, Drive East Palmetto, FL 34221

Queen Craft Shipyard 3615 Calhoun Avenue Panama City, FL 32405

Red Fox Companies P.O. Drawer 10539 New Iberia, LA 70562

Royal Crown Yachts 5353 W. Tyson Avenue Tampa Bay, FL 33611-3225

Sea-Fab Inc. 4111 Cedar Street Pascagoula, MS 39567 Manufactures marine deck machinery.

Fabrication and drill rig conversions.

Builds tugs and OSVs.

Builds small boats.

Builds barges.

Builds small ferries and yachts.

Small boat construction.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest Total Linear	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Totar Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

Seacraft Shipyard Corp. P.O. Drawer 1550 Amelia, LA 70340-1550			Construction of small boats and ferries.
SEMCO P.O. Box 460 LaFitte, LA 70067-5314			Builds tug boats and OSVs.
Sneed Ship Building 2011 Dupont Drive Orange, TX 77630-7315			Construction and repair of inland marine vessels.
St. Augustine Marine 404 South Riberia St. Ste. A St. Augistine, FL 32084			Builds small boats.
Swiftships Shipbuilders, L.L.C. 1105 Levee Road, P.O. Box 2869 Morgan City, LA 70381	61 X 12 SW 56 X 10 TR	<u>305</u> 483	Builds small vessels.
Textron Marine and Land Systems Di 19401 Chef Menteur Hwy New Orleans, LA 70129	vision of Textron, Inc. (3) 69 X 15 LL	274 488	Builds small boats.
Thoma-Sea Boat Builders, Inc. P.O. Box 53 Bourg, LA 70343			Builds OSVs and tug boats.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock		
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

#### **GULF COAST**

United States Marine, Inc. 19807 Chef Meneur Hwy. New Orleans, LA 70129 Builds small aluminum and composite boats up to 25 meters.

Verret Shipyard 29120 Highway 75 Plaquemine, LA 70764-6101 Builds small boats.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

## WEST COAST

All American Marine, Inc. 220 Mckenzie Avenue Bellinghan, WA 98225-7039			Builds aluminum boats.
Allen Marine, Inc. 1512 Sawmill Creek Road Sitka, AK 99835-9703	20 X 7 TR	<u>366</u> 366	Construction of small boats and ferries.
Aluminum Marine Construction, Inc. (ALMAR) 2301 East Dock Street Tacoma, WA 98402			Builds aluminum boats up to 11 meters.
Diversified Marine, Inc. PO Box 83723 Portland, OR 97283-0723			Barge builder.
Modutech Marine, Inc. 2218 Marine View Drive Tacoma, WA 98422			Builds small boats.
Rozema Boat Works 11130 Bayview Edison Road Mount Vernon, WA 98273-8216			Builds small aluminum boats.
Thompson Metal Fabricators P.O. Box 5276 Vancouver, WA 98668			Barge builder.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock		
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

### WEST COAST

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

Willard Marine, Inc. 1250 North Grove Street Anaheim, CA 92806

Workskiff, Inc. 856 N. Hill Blvd Burlington, WA 98233 Builds small fiberglass boats.

Builds aluminum boats under 8 meters.

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest Total Linear	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

## **GREAT LAKES**

Basic Marine 440 North 10th Street Escanaba, MI 49829 Build and repairs barges and small boats.

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

	<u>Maximum Ship Siz</u> e (LOA X Beam)	Berths/Piers Usable Length	<u>Remarks</u> Type of work usually engaged in
Shipyard Name and Address	SWShipway LLLand Level Position GDGraving Drydock	Longest Total Linear	
	FDFloating Drydock MRMarine Railway SLSyncrolift TRTravel Lift	Total Linear	Lengths are in Meters

## Fabricators/Manufacturers of Maritime Vessels

### INLAND

Trinity Ashland City 1050 Trinity Road Ashland City, TN 37015 Builds barges.

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