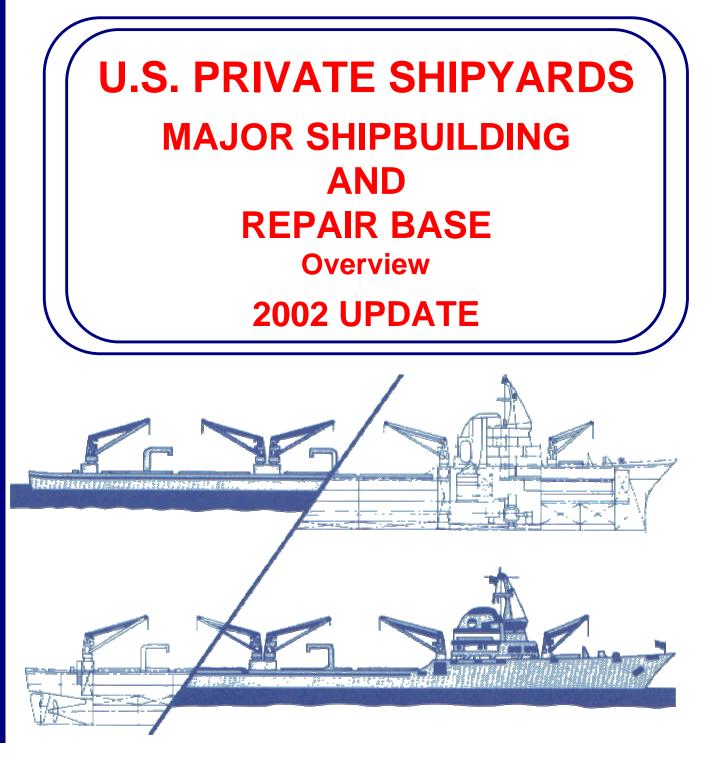


U.S. Department of Transportation

#### Maritime Administration

Washington, D.C. 20590

Office of Shipbuilding and Marine Technology



# **U.S. PRIVATE SHIPYARDS**

# MAJOR SHIPBUILDING AND REPAIR BASE

**OCTOBER 2002** 

# **OVERVIEW**

Prepared by Maritime Administration Office of Shipbuilding and Marine Technology

## INTRODUCTION

# This is an Overview of the **2002 Report on Survey of the U.S. Shipbuilding** and Repair Industry.

The Report is the result of the Maritime Administration's (MARAD) 2002 survey of the U.S. marine construction and repair industry.

The shipyard classifications and definitions 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 375 feet (114 meters) or greater would be included in the Major Shipbuilding and Repair Base. This shipyard capability parameter was increased to 400 feet (122 meters) in 1985. The term "Major Shipbuilding and Repair Base" used in this Overview is synonymous with the Shipyard Mobilization Base referred to in the SYMBA. There are, of course, many more shipyards active in shipbuilding than those described in this Overview, please note that only those shipyard facilities which meet the above definition have been included.

During 2002, the Major Shipbuilding and Repair Base saw an increase of one shipyard, a decrease of two shipbuilding or repair positions and a decrease of approximately 2,000 production workers.

If you have any questions or want to receive a copy of the <u>2002 Report on</u> <u>Survey of the U.S. Shipbuilding and Repair Industry</u>, please contact the Office of Shipbuilding and Marine Technology, Attention Daniel Seidman at (202) 366-1888 or by e-mail at Daniel.Seidman@MARAD.DOT.GOV.

Additional information on the Shipbuilding Industry can be found on the National Maritime Resource and Education Center (NMREC) website at http://www.marad.dot.gov/NMREC

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## SHIPYARD CLASSIFICATION DEFINITIONS

#### Active Shipbuilding Yards

The Active Shipbuilding Yards is 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 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/or drydocking vessels less than 122 meters in length*.

#### **GENERAL REQUIREMENTS**

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

#### <u>NOTE</u>

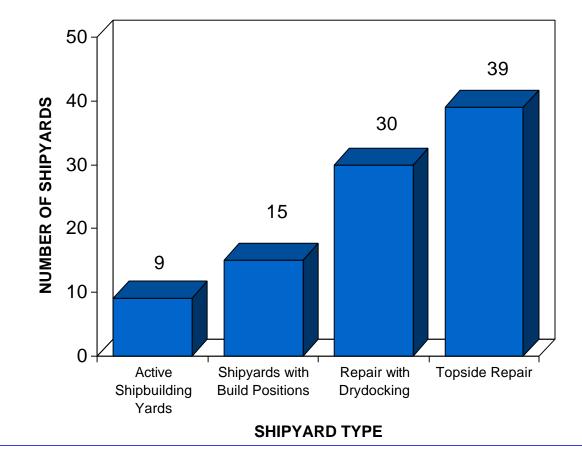
The following criteria were developed to establish the maximum ship size that could be accommodated in each drydock:

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.

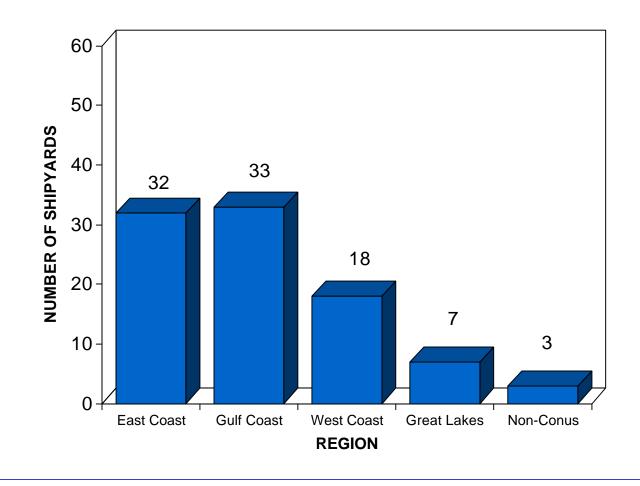
There are several types of floating drydocks and graving docks, and under certain circumstances additional clearance would be necessary between the ship and the dock body. Permissible ship sizes requiring additional clearance may be determined by simple calculation from the above criteria.

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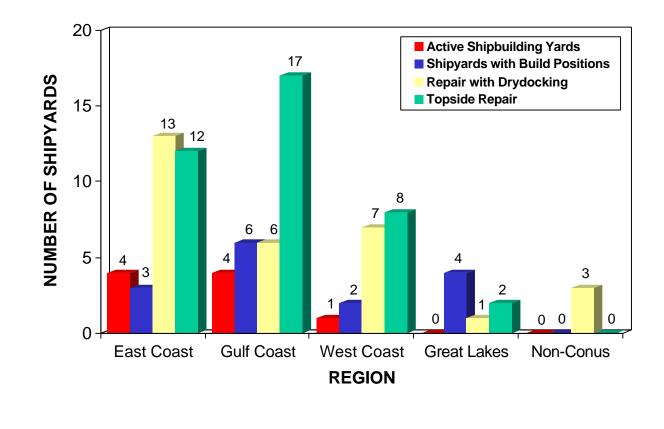
## NUMBER OF SHIPYARDS BY REGION

EAST COAST	32
GULF COAST	33
WEST COAST	18
GREAT LAKES	7
NON-CONUS	3
TOTAL	93



## NUMBER OF SHIPYARDS BY TYPE AND REGION

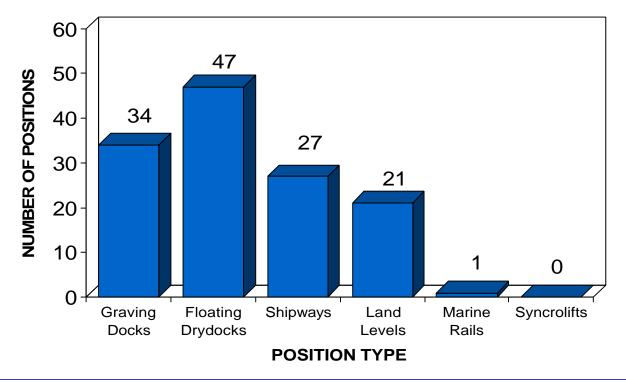
	ACTIVE			
	SHIPBUILDING	SHIPYARDS WITH	<b>REPAIR WITH</b>	TOPSIDE
	YARDS	BUILD POSITIONS	DRYDOCKING	REPAIR
EAST COAST	4	3	13	12
GULF COAST	4	6	6	17
WEST COAST	1	2	7	8
GREAT LAKES	0	4	1	2
NON-CONUS	0	0	3	0
TOTAL	9	15	30	39



# OCTOBER 2002

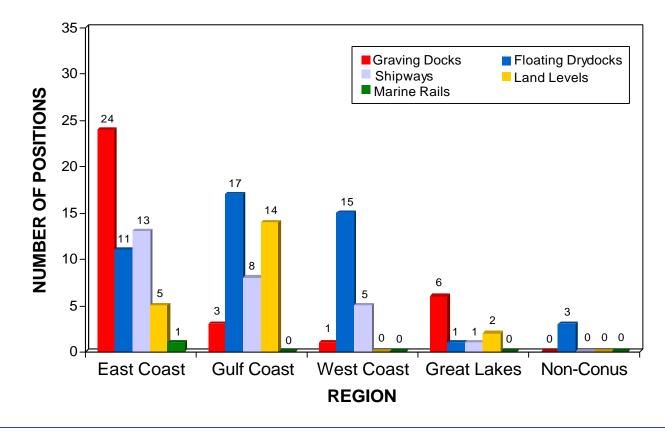
## NUMBER OF BUILD AND REPAIR POSITIONS

GRAVING DOCKS	34
FLOATING DRYDOCKS	47
SHIPWAYS	27
LAND LEVELS	21
MARINE RAILS	1
SYNCROLIFTS	0
TOTAL	130



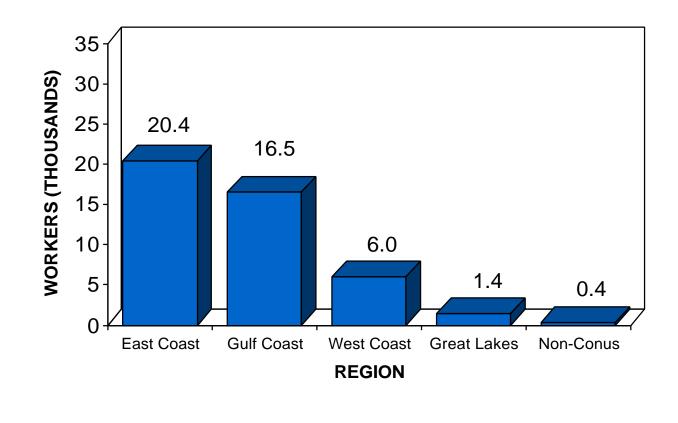
## NUMBER OF BUILD AND REPAIR POSITIONS BY REGION

	GRAVING DOCKS	FLOATING DOCKS	SHIPWAYS	LAND LEVELS	MARINE RAILS
EAST COAST	24	11	13	5	1
GULF COAST	3	17	8	14	0
WEST COAST	1	15	5	0	0
GREAT LAKES	6	1	1	2	0
NON-CONUS	0	3	0	0	0
TOTAL	34	47	27	21	1



### NUMBER OF PRODUCTION WORKERS BY REGION (in Thousands)

EAST COAST	20.4
GULF COAST	16.5
WEST COAST	6.0
GREAT LAKES	1.4
NON-CONUS	0.4
TOTAL	44.7

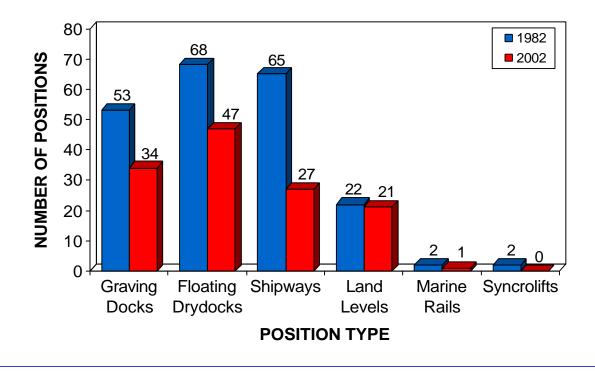


#### **U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE OCTOBER 2002** NUMBER OF SHIPYARDS **BY REGION** 1982 vs. 2002 EAST COAST **GULF COAST** WEST COAST **GREAT LAKES NON-CONUS** TOTAL 982 NUMBER OF SHIPYARDS 10-East Coast West Coast **Great Lakes Gulf Coast** Non-Conus REGION

# NUMBER OF BUILD AND REPAIR POSITIONS

## 1982 vs. 2002

	1982	2002
GRAVING DOCKS	53	34
FLOATING DRYDOCKS	68	47
SHIPWAYS	65	27
LAND LEVELS	22	21
MARINE RAILS	2	1
SYNCROLIFTS	2	0
TOTAL	212	130



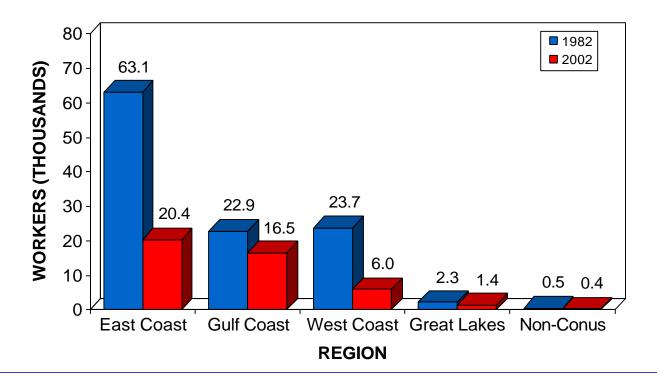
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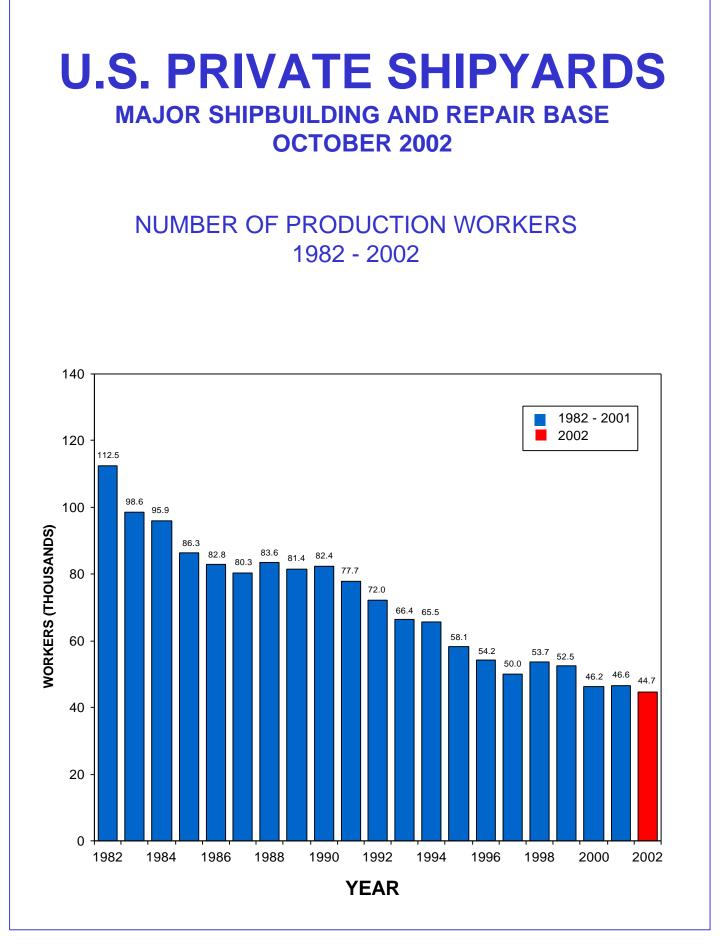
# NUMBER OF PRODUCTION WORKERS BY REGION

(in Thousands)

## 1982 vs. 2002

	<u>1982</u>	<u>2002</u>
EAST COAST	63.1	20.4
GULF COAST	22.9	16.5
WEST COAST	23.7	6.0
GREAT LAKES	2.3	1.4
NON-CONUS	0.5	0.4
TOTAL	112.5	44.7





#### U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (93)

#### EAST COAST

#### Active Shipbuilding Yards (4)

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

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

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

#### Repair with Drydocking (13)

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 North Florida Shipyard, Inc. - Jacksonville, FL SPEEDE Shipyard, LLC - Norfolk, VA

#### U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (93) (Continued)

#### **EAST COAST** (Continued)

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

Associated Naval Architects, Inc. - Portsmouth, VA Kerney Service Group, Inc. - Norfolk, VA Marine Hydraulics International, Inc. - Norfolk, VA Metal Trades, Inc. - Hollywood, SC Moon Engineering Company, Inc. - Portsmouth, VA Newport Shipyard - Newport, RI Norfolk Shiprepair & Drydock Corporation - Norfolk, VA 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 = 32 Yards

#### U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (93) (Continued)

#### **GULF COAST**

#### Active Shipbuilding Yards (4)

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

#### **Shipyards with Build Positions (6)**

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

#### **Repair with Drydocking** (6)

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

#### U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (93) (Continued)

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

#### 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 Buck Kreihs Company, Inc. - New Orleans, LA CBH Services, Inc. - Orange, TX Dixie Machine Welding & Metal Works, Inc. - New Orleans, LA 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, Brady Island Inc. - Houston, TX Newpark Shipbuilding, Pasadena, Inc. - Pasadena, TX Newpark Shipbuilding, Pelican Island, Inc. - Galveston, TX Orange Shipbuilding Company, Inc. - Orange, TX Sabine Shipyard, Inc. - Sabine Pass, TX Signal International Texas, LP, Orange Yard - Orange, TX

**Gulf Coast Total = 33 Yards** 

#### U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (93) (Continued)

#### 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)

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

#### **Topside Repair (8)**

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 Everett Shipyard, Inc. - Everett, WA Foss Shipyard dba Foss Maritime Company - Seattle, WA Pacific Fisherman, Inc. - Seattle, WA San Pedro Boat Works - San Pedro, CA

#### West Coast Total = 18 Yards

#### U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (93) (Continued)

#### **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** 

#### U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (93) (Continued)

#### **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**