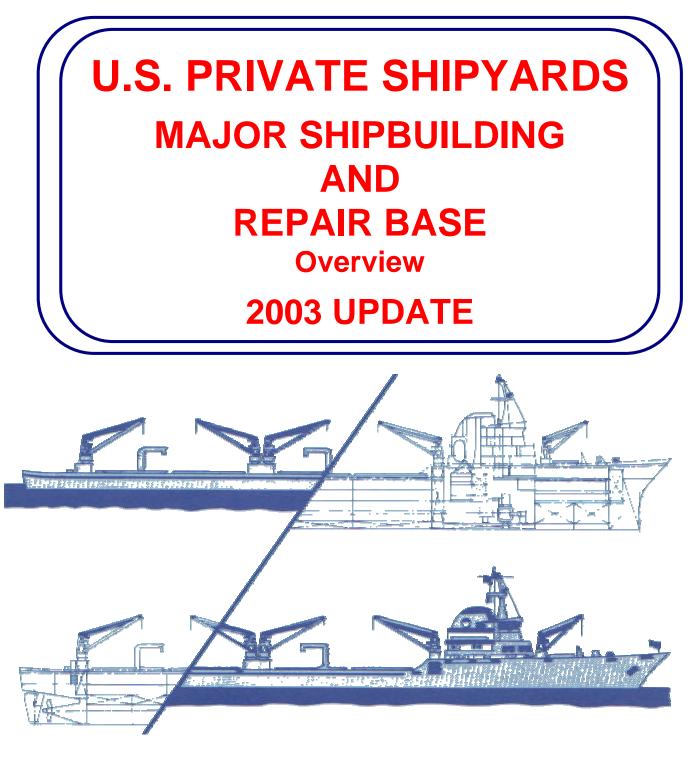


U.S. Department of Transportation

## Maritime Administration

Washington, D.C. 20590

Office of Shipbuilding and Marine Technology



# **U.S. PRIVATE SHIPYARDS**

# MAJOR SHIPBUILDING AND REPAIR BASE

**OCTOBER 2003** 

# **OVERVIEW**

Prepared by Maritime Administration Office of Shipbuilding and Marine Technology

# INTRODUCTION

# This is an Overview of the 2003 Report on Survey of the U.S. Shipbuilding and Repair Industry.

The Report is the result of the Maritime Administration's (MARAD) 2003 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 2003, the Major Shipbuilding and Repair Base saw a decrease of four shipyards, a decrease of two shipbuilding or repair positions and an increase of approximately 400 production workers.

If you have any questions or want to receive a copy of the <u>2003 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) and over in length, and are currently engaged in the construction of naval ships and/or major oceangoing merchant vessels 122 meters (400 feet) and over in length.

## 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 and over in length, 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 and over in length. *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 and over in length. *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}).

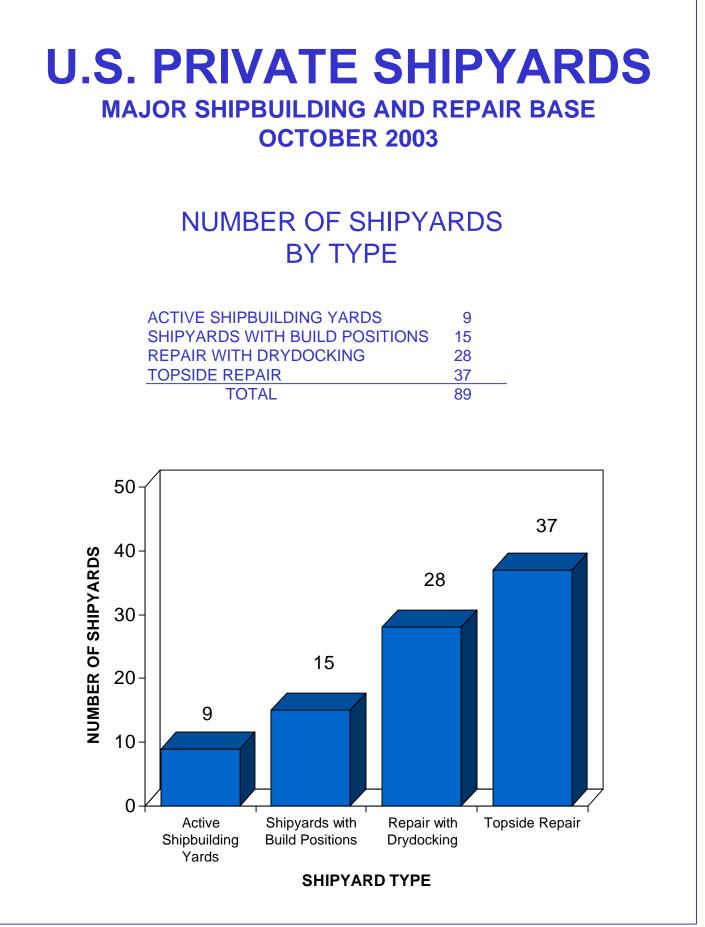
#### <u>NOTE</u>

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.

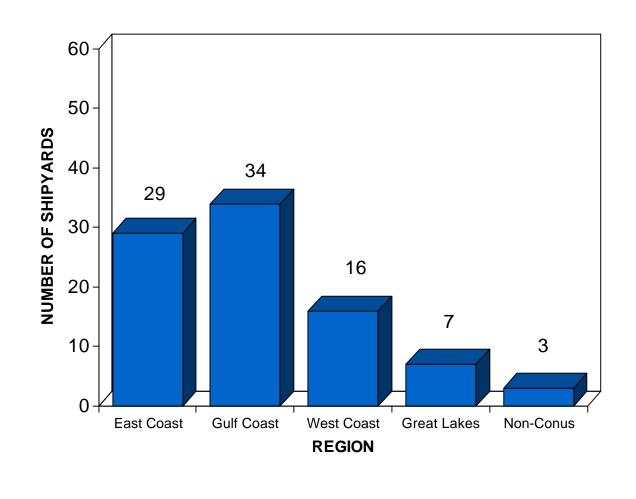
For graving docks, the maximum ship length is determined by allowing a 0.6 meter clearance at each end between the ship and the inside of the dock at the floor. The maximum beam was determined by allowing a 0.6 meter clearance on each side between the ship and each side of the dock entrance at the sill,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



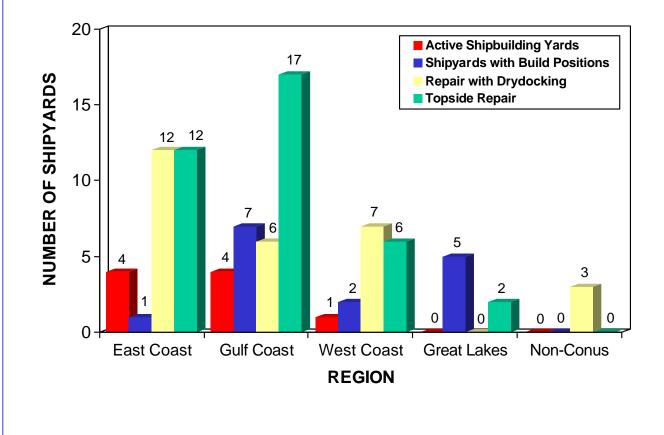
# NUMBER OF SHIPYARDS BY REGION

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



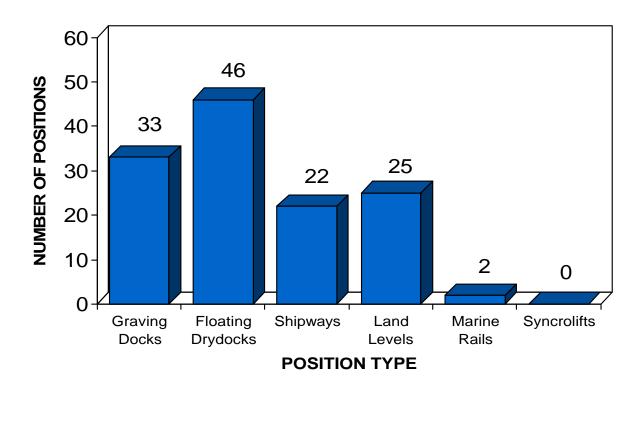
# NUMBER OF SHIPYARDS BY TYPE AND REGION

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



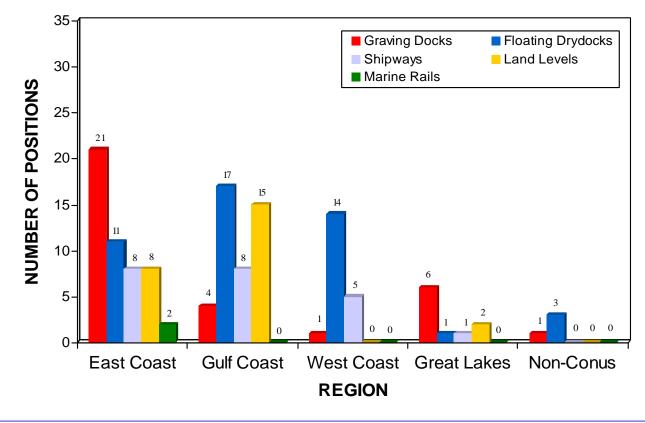
# NUMBER OF BUILD AND REPAIR POSITIONS

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



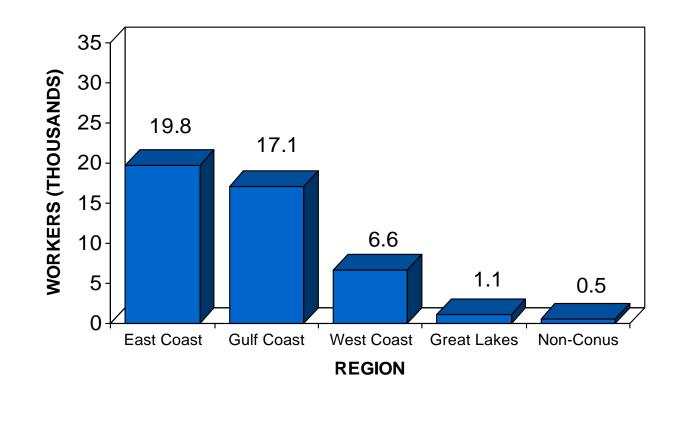
# NUMBER OF BUILD AND REPAIR POSITIONS BY REGION

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



# NUMBER OF PRODUCTION WORKERS BY REGION (in Thousands)

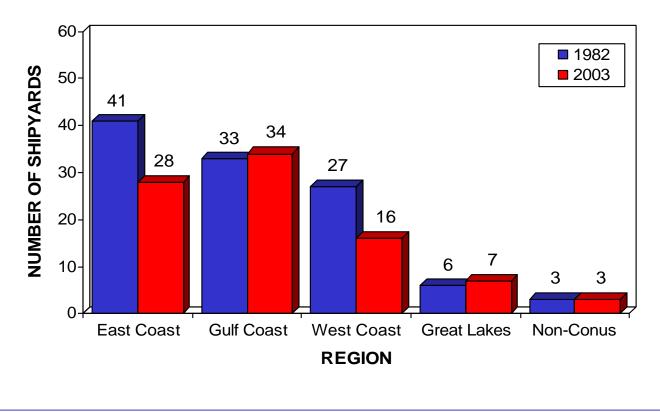
EAST COAST	19.8
GULF COAST	17.1
WEST COAST	6.6
GREAT LAKES	1.1
NON-CONUS	0.5
TOTAL	45.1



# NUMBER OF SHIPYARDS BY REGION

# 1982 vs. 2003

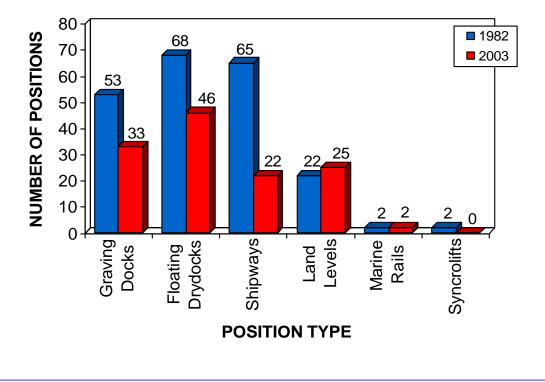
	1982	2003
EAST COAST	41	29
GULF COAST	33	34
WEST COAST	27	16
<b>GREAT LAKES</b>	6	7
NON-CONUS	3	3
TOTAL	110	89



# NUMBER OF BUILD AND REPAIR POSITIONS

# 1982 vs. 2003

	1982	2003
GRAVING DOCKS	53	33
FLOATING DRYDOCKS	68	46
SHIPWAYS	65	22
LAND LEVELS	22	25
MARINE RAILS	2	2
SYNCROLIFTS	2	0
TOTAL	212	128

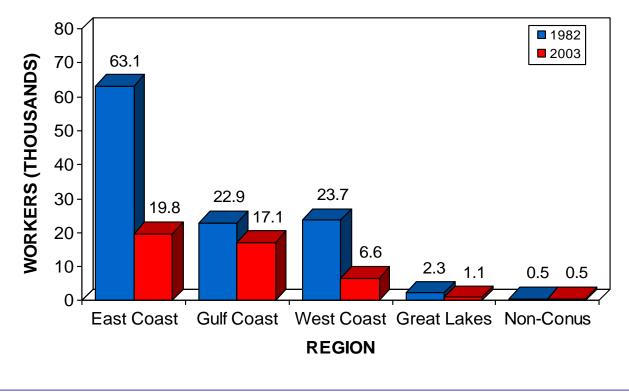


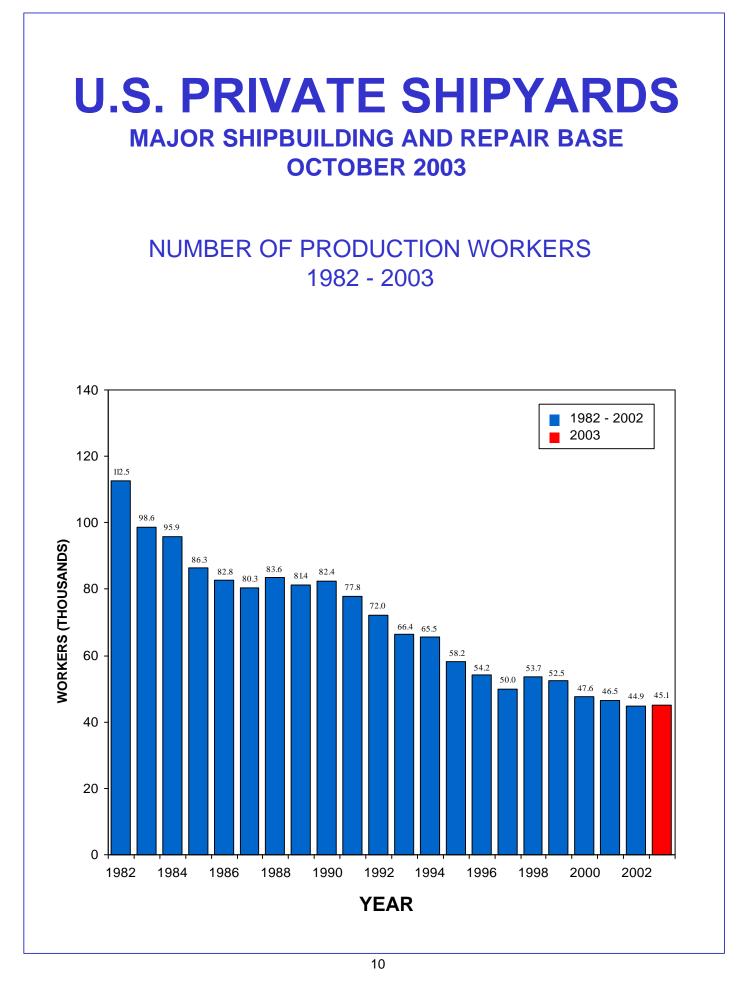
# NUMBER OF PRODUCTION WORKERS BY REGION

(in Thousands)

# 1982 vs. 2003

	<u>1982</u>	<u>2003</u>
EAST COAST	63.1	19.8
GULF COAST	22.9	17.1
WEST COAST	23.7	6.6
GREAT LAKES	2.3	1.1
NON-CONUS	0.5	0.5
TOTAL	112.5	45.1





## U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (89)

## EAST COAST

### Active Shipbuilding Yards (4)

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

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

Atlantic Dry Dock Corporation - Jacksonville, FL

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

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

#### Topside Repair Yards (12)

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

## U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (89)

## EAST COAST

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

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

## EAST COAST TOTAL = 29 Yards

## U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (89)

### **GULF COAST**

#### Active Shipbuilding Yards (4)

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

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

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

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

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

### Topside Repair Yards (17)

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

## U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (89)

## **GULF COAST**

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

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

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

## U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (89)

### WEST COAST

### Active Shipbuilding Yards (1)

National Steel and Shipbuilding Company - San Diego, CA

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

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

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

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

#### Topside Repair Yards (6)

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

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

## U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (89)

## **GREAT LAKES**

### Other Shipyards with Building Positions (5)

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

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

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

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

## U.S. PRIVATE SHIPYARDS MAJOR SHIPBUILDING AND REPAIR BASE (89)

## **NON-CONUS**

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

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

## **NON-CONUS TOTAL = 3 Yards**