MAJOR U.S. SHIPBUILDING AND REPAIR BASE
Overview
2001 UPDATE
U.S. PRIVATE SHIPYARDS

MAJOR SHIPBUILDING
AND REPAIR BASE

OCTOBER 2001

OVERVIEW

Prepared by
Maritime Administration
Office of Shipbuilding and Marine Technology
INTRODUCTION

This is an Overview of the 2001 Report on Survey of the U.S. Shipbuilding and Repair Industry.

The Report is the result of the Maritime Administration's (MARAD) 2001 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 1962 Shipyard Mobilization Base Analysis (SYMBA). SYMBA established 1962 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.

If you have any questions or want to receive a copy of the 2001 Report on Survey of the U.S. Shipbuilding and Repair Industry, 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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SUMMARY SHIPYARD 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 ships of 122 meters in length or over.

Additional classification information is provided at the conclusion of this Overview.
NUMBER OF SHIPYARDS BY TYPE

ACTIVE SHIPBUILDERS 8
SHIPYARDS WITH BUILD POSITIONS 17
REPAIR WITH DRYDOCKING 30
TOPSIDE REPAIR 37
TOTAL 92
U.S. PRIVATE SHIPYARDS
MAJOR SHIPBUILDING AND REPAIR BASE
OCTOBER 2001

NUMBER OF SHIPYARDS
BY REGION

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAST COAST</td>
<td>30</td>
</tr>
<tr>
<td>GULF COAST</td>
<td>35</td>
</tr>
<tr>
<td>WEST COAST</td>
<td>17</td>
</tr>
<tr>
<td>GREAT LAKES</td>
<td>7</td>
</tr>
<tr>
<td>NON-CONUS</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>92</strong></td>
</tr>
</tbody>
</table>

![Bar Chart]

- Number of shipyards by region:
  - East Coast: 30
  - Gulf Coast: 35
  - West Coast: 17
  - Great Lakes: 7
  - Non-Conus: 3

**Total**: 92 shipyards
U.S. PRIVATE SHIPYARDS
MAJOR SHIPBUILDING AND REPAIR BASE
OCTOBER 2001

NUMBER OF SHIPYARDS
BY TYPE AND REGION

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

![Bar chart showing number of shipyards by region and type.]
U.S. PRIVATE SHipyards
Major Shipbuilding and Repair Base
October 2001

Number of Build and Repair Positions

<table>
<thead>
<tr>
<th>Position Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graving Docks</td>
<td>35</td>
</tr>
<tr>
<td>Floating Drydocks</td>
<td>40</td>
</tr>
<tr>
<td>Shipways</td>
<td>30</td>
</tr>
<tr>
<td>Land Levels</td>
<td>20</td>
</tr>
<tr>
<td>Marine Rails</td>
<td>1</td>
</tr>
<tr>
<td>Syncrolifts</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>132</strong></td>
</tr>
</tbody>
</table>

Bar chart showing the number of positions for each type:
- Graving Docks: 35
- Floating Drydocks: 46
- Shipways: 30
- Land Levels: 20
- Marine Rails: 1
- Syncrolifts: 0
U.S. PRIVATE SHIPYARDS
MAJOR SHIPBUILDING AND REPAIR BASE
OCTOBER 2001

NUMBER OF BUILD AND REPAIR POSITIONS
BY REGION

<table>
<thead>
<tr>
<th>Region</th>
<th>Graving Docks</th>
<th>Floating Docks</th>
<th>Shipways</th>
<th>Land Levels</th>
<th>Marine Rails</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAST COAST</td>
<td>24</td>
<td>11</td>
<td>13</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>GULF COAST</td>
<td>4</td>
<td>16</td>
<td>11</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>WEST COAST</td>
<td>1</td>
<td>15</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>GREAT LAKES</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>NON-CONUS</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>35</td>
<td>46</td>
<td>30</td>
<td>20</td>
<td>1</td>
</tr>
</tbody>
</table>

[Bar chart depicting the number of positions by region and category]
U.S. PRIVATE SHIPYARDS
MAJOR SHIPBUILDING AND REPAIR BASE
OCTOBER 2001

NUMBER OF PRODUCTION WORKERS
BY REGION
(in Thousands)

<table>
<thead>
<tr>
<th>Region</th>
<th>Workers (Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAST COAST</td>
<td>20.8</td>
</tr>
<tr>
<td>GULF COAST</td>
<td>18.9</td>
</tr>
<tr>
<td>WEST COAST</td>
<td>5.3</td>
</tr>
<tr>
<td>GREAT LAKES</td>
<td>1.2</td>
</tr>
<tr>
<td>NON-CONUS</td>
<td>0.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>46.6</td>
</tr>
</tbody>
</table>

![Bar Chart]

- East Coast: 20.8
- Gulf Coast: 18.9
- West Coast: 5.3
- Great Lakes: 1.2
- Non-Conus: 0.4

TOTAL: 46.6
U.S. PRIVATE SHIPYARDS
MAJOR SHIPBUILDING AND REPAIR BASE
OCTOBER 2001

NUMBER OF SHIPYARDS
BY REGION

1982 vs. 2001

<table>
<thead>
<tr>
<th>Region</th>
<th>1982</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAST COAST</td>
<td>41</td>
<td>30</td>
</tr>
<tr>
<td>GULF COAST</td>
<td>33</td>
<td>35</td>
</tr>
<tr>
<td>WEST COAST</td>
<td>27</td>
<td>17</td>
</tr>
<tr>
<td>GREAT LAKES</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>NON-CONUS</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>110</td>
<td>92</td>
</tr>
</tbody>
</table>
# U.S. Private Shipyards

**Major Shipbuilding and Repair Base**

**October 2001**

## Number of Build and Repair Positions

### 1982 vs. 2001

<table>
<thead>
<tr>
<th>Position Type</th>
<th>1982</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graving Docks</td>
<td>53</td>
<td>35</td>
</tr>
<tr>
<td>Floating Drydocks</td>
<td>68</td>
<td>46</td>
</tr>
<tr>
<td>Shipways</td>
<td>65</td>
<td>30</td>
</tr>
<tr>
<td>Land Levels</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Marine Rails</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Syncrolifts</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>212</td>
<td>132</td>
</tr>
</tbody>
</table>

### Graph

- **X-axis**: Position Type
- **Y-axis**: Number of Positions

- **Legend**:
  - 1982
  - 2001
U.S. PRIVATE SHIPYARDS
MAJOR SHIPBUILDING AND REPAIR BASE
OCTOBER 2001

NUMBER OF PRODUCTION WORKERS
BY REGION
(in Thousands)

1982 vs. 2001

<table>
<thead>
<tr>
<th>Region</th>
<th>1982</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAST COAST</td>
<td>63.1</td>
<td>20.8</td>
</tr>
<tr>
<td>GULF COAST</td>
<td>22.9</td>
<td>18.9</td>
</tr>
<tr>
<td>WEST COAST</td>
<td>23.7</td>
<td>5.3</td>
</tr>
<tr>
<td>GREAT LAKES</td>
<td>2.3</td>
<td>1.2</td>
</tr>
<tr>
<td>NON-CONUS</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>112.5</strong></td>
<td><strong>46.6</strong></td>
</tr>
</tbody>
</table>

![Bar chart showing number of production workers by region in thousands for 1982 vs. 2001.](chart.png)
U.S. PRIVATE SHIPYARDS
MAJOR SHIPBUILDING AND REPAIR BASE
OCTOBER 2001

NUMBER OF PRODUCTION WORKERS
1982 - 2001

<table>
<thead>
<tr>
<th>YEAR</th>
<th>1982-2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>112.5</td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>98.6</td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>95.9</td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>86.3</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>82.8</td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>83.6</td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>81.4</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>77.7</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>72.0</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>66.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>58.1</td>
<td>46.6</td>
</tr>
</tbody>
</table>
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}).

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

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

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

There are several types of floating drydocks and graving docks, and under certain circumstances additional clearance would be necessary between the ship and the dock body. Permissible ship sizes requiring additional clearance may be determined by simple calculation from the above criteria.
MAJOR U.S. PRIVATE SHIPBUILDING & REPAIR FACILITIES (92)

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 Corp. - 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
MAJOR U.S. PRIVATE SHIPBUILDING & REPAIR FACILITIES (92)
(Continued)

EAST COAST (Continued)

Topside Repair (11)

American Shipyards Co., LLC - Newport, RI
Associated Naval Architects, Inc. - Portsmouth, VA
Marine Hydraulics International, Inc. - Norfolk, VA
Metal Trades, Inc. - Hollywood, SC
Moon Engineering Co., Inc. - Portsmouth, VA
Norfolk Shiprepair & Drydock Corp., - Norfolk, VA
Promet Marine Services Corporation - Providence, RI
Reynolds Shipyard Corporation - Staten Island, NY
Steel Style, Inc. - Newburgh, NY
The General Ship Repair Corp., Baltimore, MD
The Ted Hood Company - Portsmouth, RI

East Coast Total = 30 Yards
MAJOR U.S. PRIVATE SHIPBUILDING & REPAIR FACILITIES (92)
(Continued)

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 Co., Inc. - Mobile, AL
Friede Goldman Offshore, East - Pascagoula, MS
Halter Moss Point - Moss Point, MS
Newpark Shipbuilding, Galveston, - Galveston, TX
Tampa Bay Shipbuilding & Repair Co. - 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 Corp. - Tampa, FL
Halter Port Bienville - Lakeshore, MS
International Ship Repair & Marine Service, Inc. - Tampa, FL
MAJOR U.S. PRIVATE SHIPBUILDING & REPAIR FACILITIES (92)
(Continued)

Gulf Coast (Continued)

Topside Repair (17)

Boland Marine & Manufacturing Co., 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
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
Northrop Grumman Ship Systems, Avondale Operations, Algiers Division, -
Avondale, LA
Newpark Shipbuilding & Repair, Inc., Brady Island - Houston, TX
Newpark Shipbuilding & Repair, Inc., Pasadena - Pasadena, TX
Newpark Shipbuilding & Repair, Inc., Pelican Island - Galveston, TX
Orange Shipbuilding Co., Inc. - Orange, TX
Sabine Offshore Services, Inc. - Sabine Pass, TX

Gulf Coast Total = 35 Yards
West Coast

Active Shipbuilding Yards (1)

National Steel & Shipbuilding Co. - San Diego, CA

Shipyards with Build Positions (2)

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

Repair (With Drydocking) (7)

Bellingham Bay Shipyards, LLC - Bellingham, WA
Cascade General, Inc. - Portland, OR
Lake Union Drydock Co. - 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 Co., Alameda - Alameda, CA
Bay Ship & Yacht Co., Richmond - Richmond, CA
Continental Maritime of San Diego, Inc. - San Diego, CA
Dakota Creek Industries, Inc. - Anacortes, WA
Foss Shipyards - 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 Co. - 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 Co., Toledo Shipyard - Toledo, OH

Topside Repair (2)
H. Hansen Industries - Toledo, OH
Nicholson Terminal & Dock Company - River Rouge, MI

Great Lakes Total = 7 Yards
MAJOR U.S. PRIVATE SHIPBUILDING & REPAIR FACILITIES (92)
(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