SHIPBUILDING & SHIPBREAKING
November 2016

US Navy Shipbuilding and the Machinists Union

Agenda

- Introduction to the IAM

- Trends in US Shipbuilding

- New Technology in Action

International Association of Machinists and Aerospace Workers

William W. Winpisinger Education and Technology Center

- Training over 89,000 members since 1981

- Specialized courses designed to engage and energize our members in:
  - Organizing
  - Collective Bargaining
  - Arbitration
  - Leadership
  - Safety and Health
  - And many other staff courses

The Machinists Union

- Over 345,000 active members throughout the United States and Canada
- IAMAW membership is broken down into 7 territories:
  - Headquarters, Eastern, Midwest, Southern, Western, Transportation and Canada
- Industry Sectors within the territories:
  - Aerospace, Air Transportation, Automotive, Metalworking and Machinery, Public Sector and Utilities, Railroad, Shipbuilding, Wood and Paper
- Shipbuilding accounts for approximately 1.6% of our total membership

AFL-CIO

- Union umbrella for labor
- Inter-Union Coordinated Bargaining Committee to improve the good and welfare of all union members
- Building alliances with other affiliated labor unions for collective power in organizing, collective bargaining, political action and safety on the job

Golden Age of US Shipbuilding

70+ Years Ago

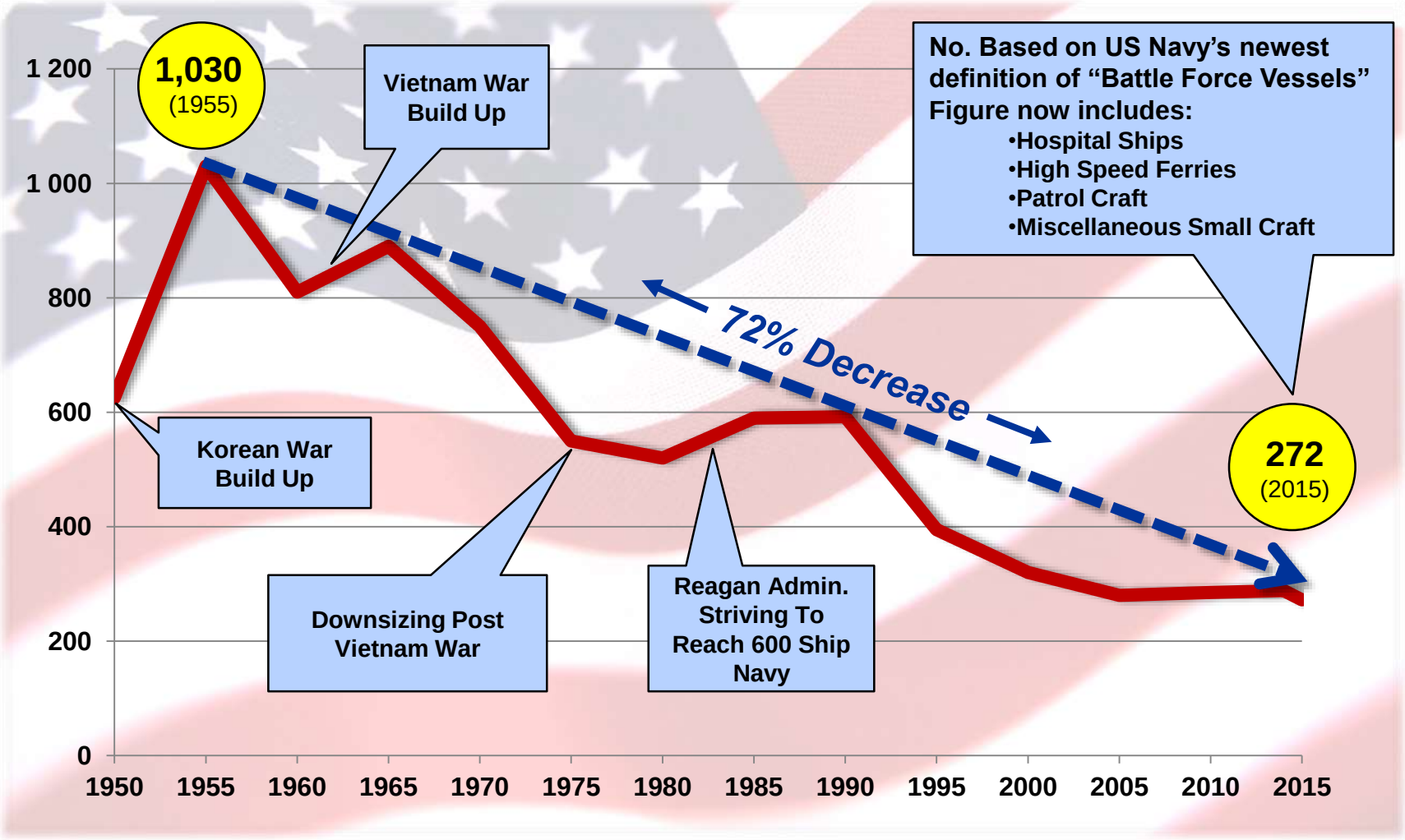
- The US shipbuilding industry set the benchmark for shipyard efficiency around the world during WWII
- During WWII, thirty US shipyards constructed nearly 6,000 ships including:
  - 2,680 Liberty Ships
    - 236 built in South Portland
  - 550 Victory Ships
  - 1,141 C-Class Ships
  - 709 T-Class Tankers
  - 778 miscellaneous class ships
- These ships equated to more than 95% of the world's tonnage at the time, making the early 1940s the peak of US shipbuilding efficiency to date

SS Jeremiah O'Brien – Constructed in Portland one of two remaining Liberty Ships and is currently a museum in San Francisco

South Portland Shipyard – 13 July 1942

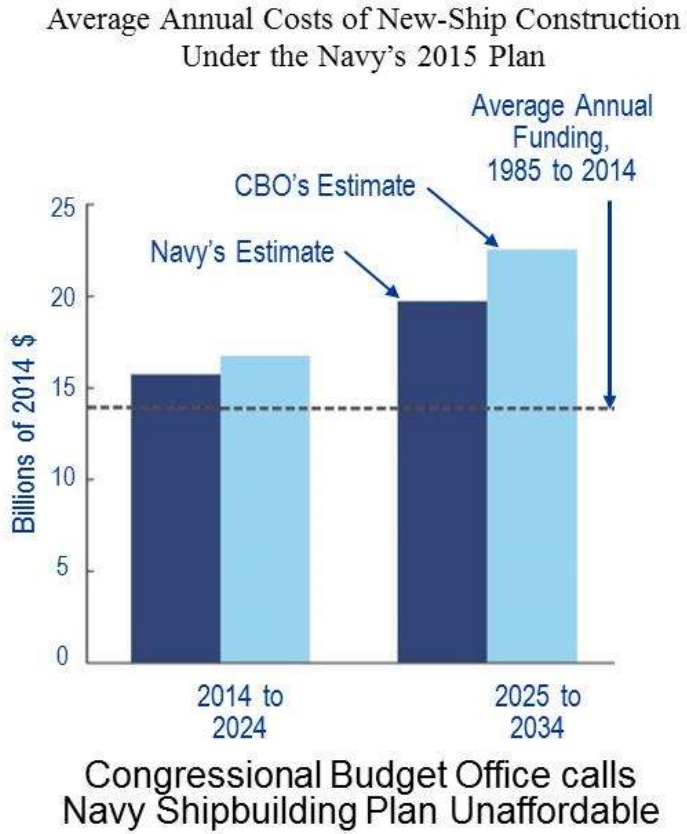
Significant Decrease in US Navy Fleet

Decrease in naval fleet size reduces annual shipbuilding requirement



Rising Cost of Naval Shipbuilding
Restricts Number of Ships Built

- Navy plans to buy 264 ships from FY2015 to FY2044; average cost $21B/year compared to average historical funding of ~$14B/year
- Congressional Budget Office (CBO) calls plan unaffordable; required funding over 30% higher than average annual Navy shipbuilding budget
  - ↗ Navy plans to buy 65 destroyers; CBO states Navy can afford only 45
  - ↗ If sequestration limits imposed, 3 destroyers will be deleted from plan between now and 2019
- Coast Guard Offshore Patrol Cutter (OPC) Program (25 ships) will cost over $12B; largest ever Coast Guard acquisition program
  - ↗ Today, Coast Guard averages $1.4B in annual acquisition funding; it needs $2.5B annually to fund all planned acquisition programs, including OPC



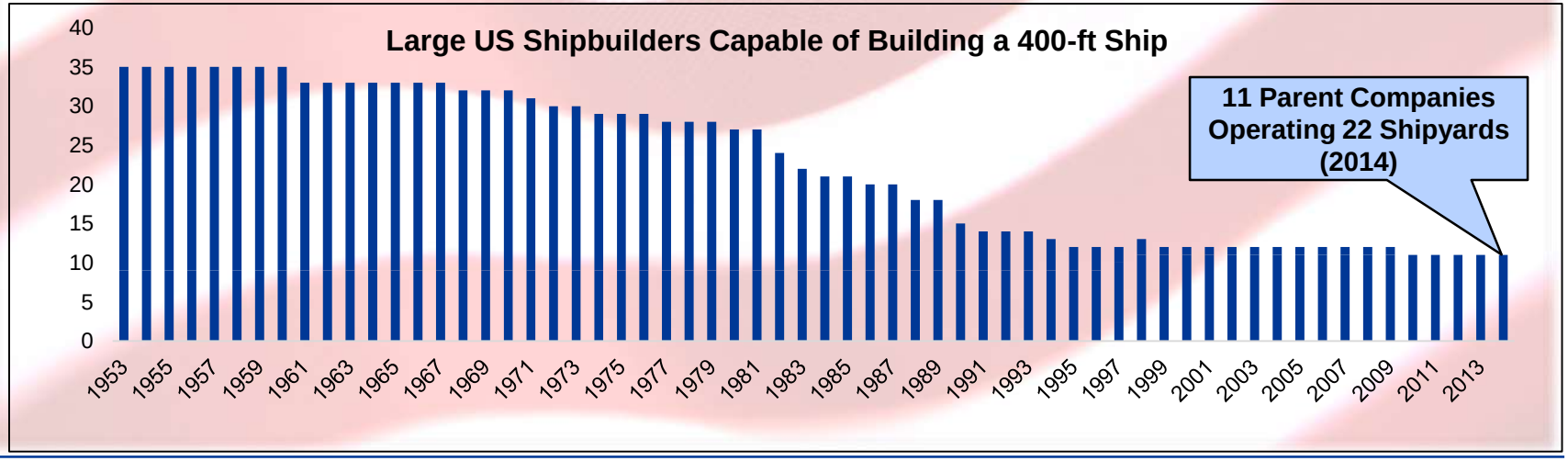
"…the three most important things about the offshore patrol cutter... [are] ...affordability, affordability, affordability."– Admiral Robert J. Papp, Jr

Decline in Large US Shipbuilders

11 Companies Operating 22 Shipyards

Active Large Commercial and Naval US Shipbuilders

Parent Company	Shipyard
1) Aker Philadelphia	Aker Philadelphia
2) Austal	Austal USA
3) BAE Systems	BAE Systems Southeast - Alabama BAE Systems Southeast - Florida
4) Bollinger Shipyards	Bollinger Lockport Bollinger Marine Fabricators
5) Edison Chouest Offshore	North American Shipbuilding La Ship Gulf Ship Tampa Ship
6) Vigor Industrial	Vigor Seattle
7) Fincantieri USA	Bay Shipbuilding Marinette Marine
8) General Dynamics	Bath Iron Works Electric Boat NASSCO
9) Huntington Ingalls	Newport News Ingalls Shipbuilding
10) Keppel O. & M.	AMFELS
11) VT Halter Marine	VTHM Pascagoula VTHM Moss Point VTHM Escatawpa



US Shipyard Consolidation

US Navy Vessel Construction Shipyards Only

1965

- Brooklyn NSY
- Mare Island NSY
- Philadelphia NSY
- Portsmouth NSY
- Puget Sound NSY
- Alabama Shipbuilding
- Avondale Industries
- Bath Iron Works
- Bethlehem San Francisco
- Bethlehem Sparrows Point
- Defoe Shipbuilding
- GD Electric Boat
- GD Quincy
- Ingalls Shipbuilding
- Lockheed Shipbuilding
- National Steel & Shipbuilding
- Newport News Shipbuilding
- New York Shipbuilding
- Todd San Pedro
- Todd Seattle

1985

- Alabama Shipbuilding
- Avondale Industries
- Bath Iron Works
- GD Electric Boat
- Halter Marine
- Ingalls Shipbuilding
- Lockheed Shipbuilding
- National Steel & Shipbuilding
- Newport News Shipbuilding
- Peterson Builders
- Todd San Pedro
- Todd Seattle

Parent Company location:

- Australia
- United States
- Italy
- United States
- Singapore

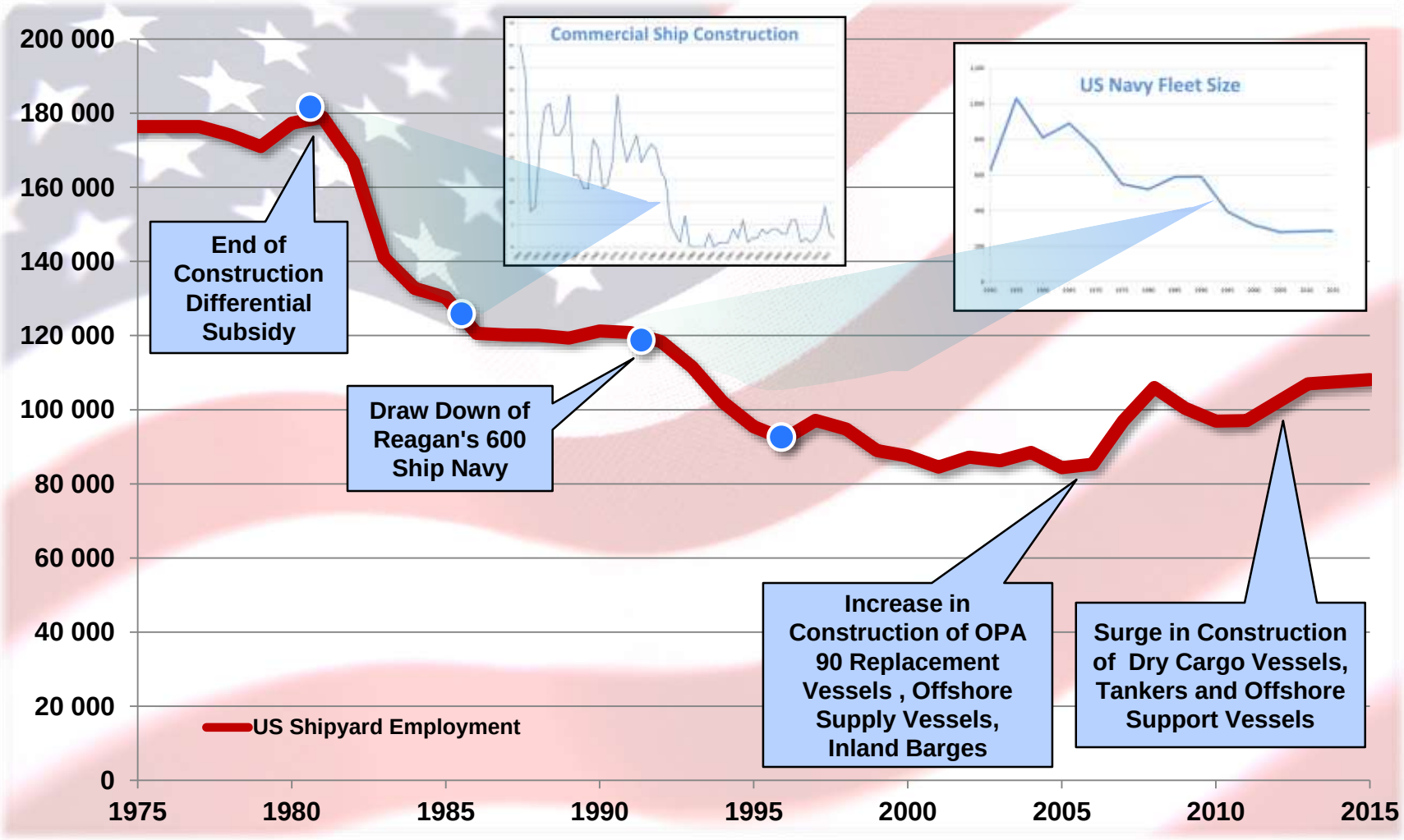
2015

- Austal USA
- GD Bath Iron Works
- GD Electric Boat
- GD National Steel & Shipbuilding
- Marinette Marine
- HII Ingalls
- HII Newport News
- VT Halter Marine

60% reduction in Navy new construction shipyards since the height of Vietnam and the Cold War

US Shipyard Employment

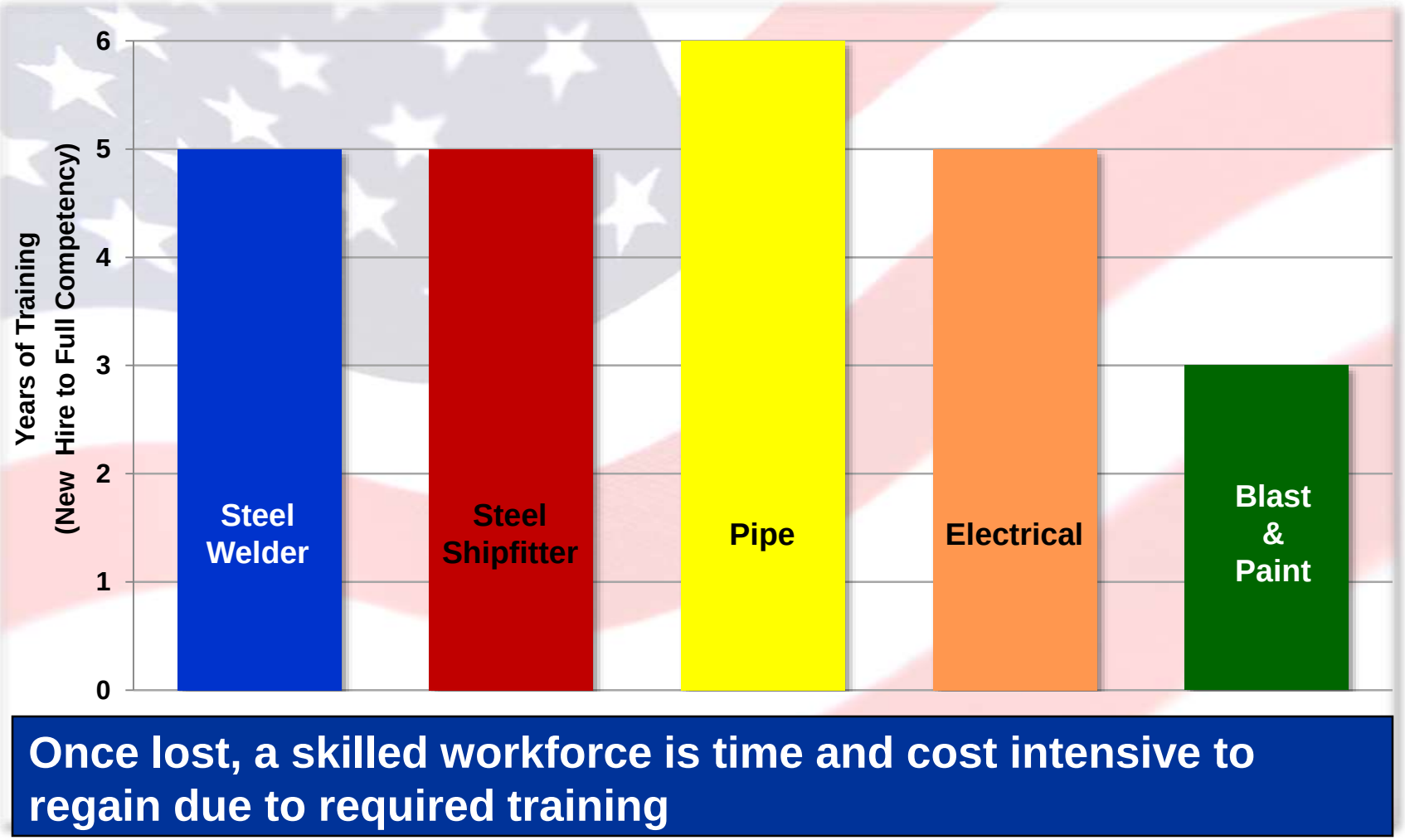
Follows Commercial and Naval Ship Construction and Repair Trends



www.shipbuildinghistory.com
www.bls.gov

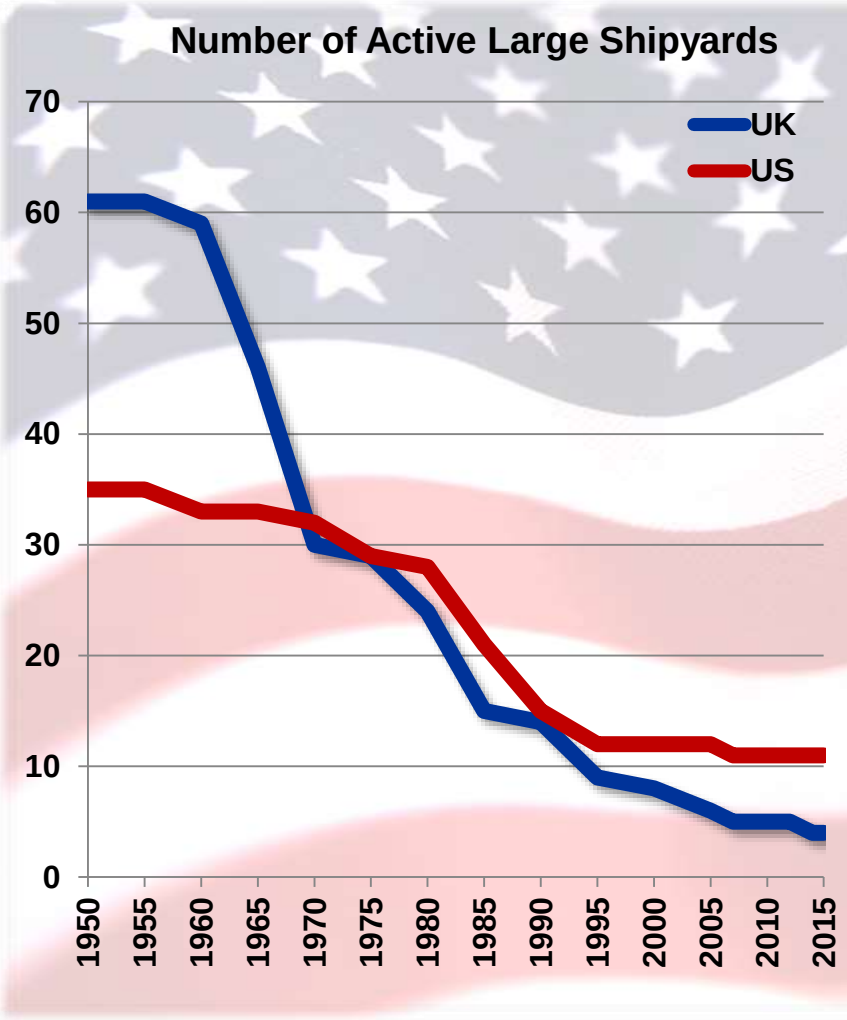
Shipbuilding Skilled Labor

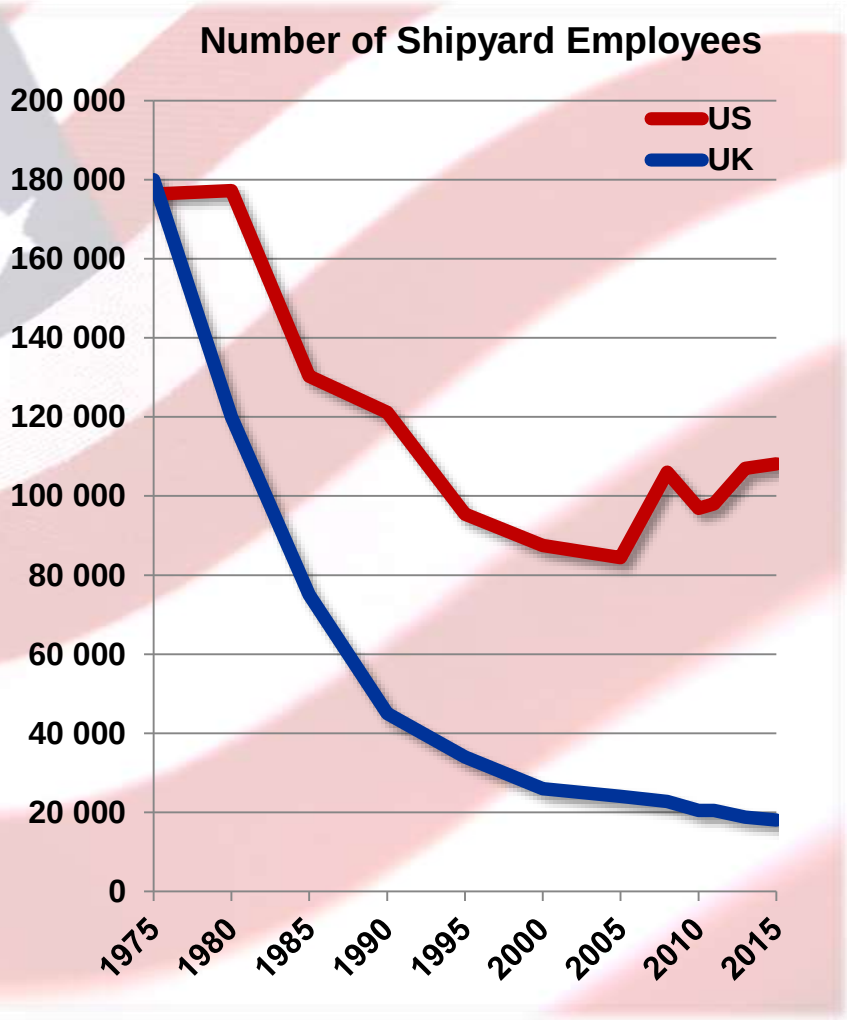
Requires ~5 years to Train



Once lost, a skilled workforce is time and cost intensive to regain due to required training

Will US Shipbuilding Follow the Same Path as the UK?

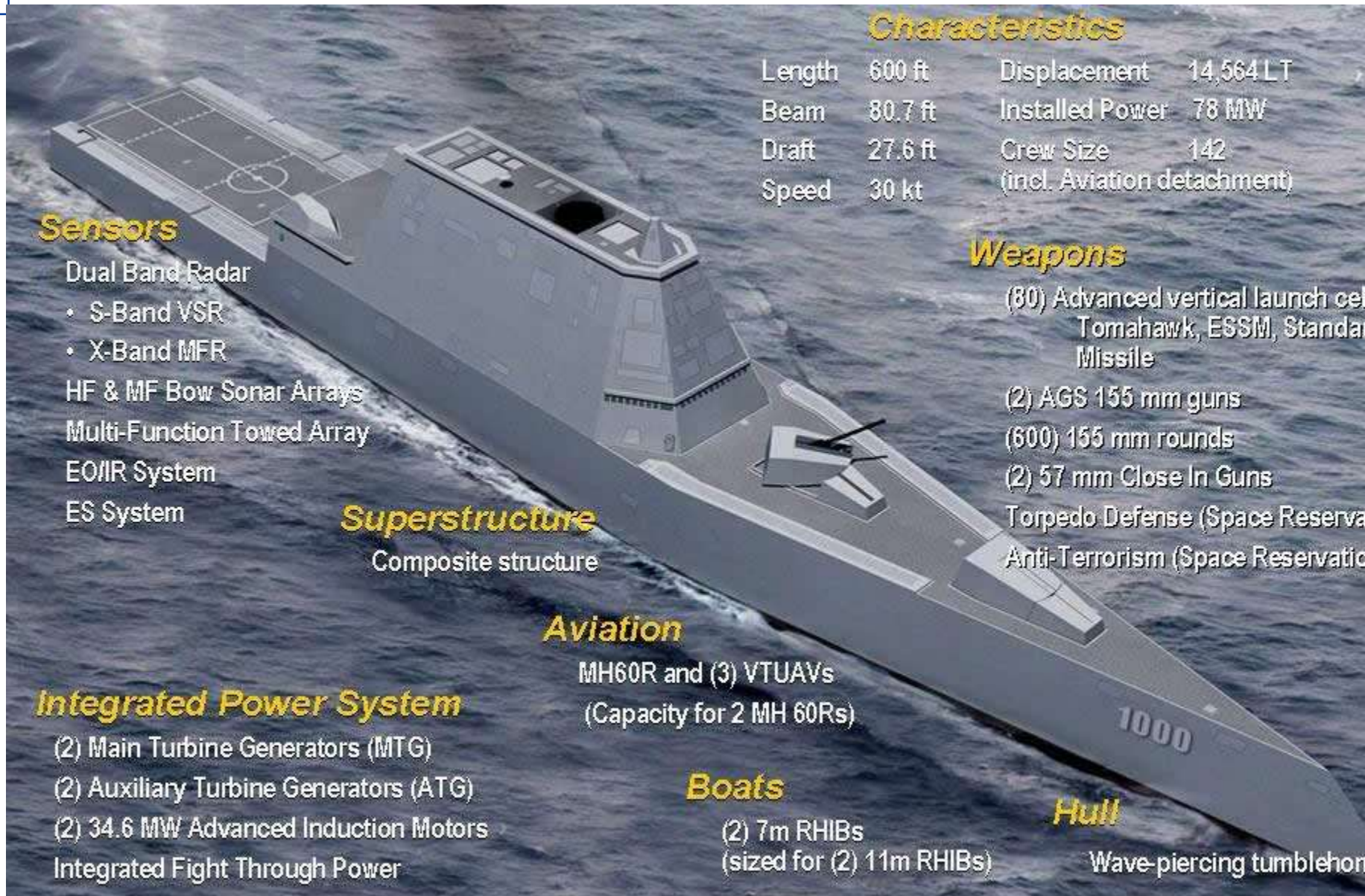




General Dynamics Bath Iron Works

DDG 1000 Zumwalt built by IAMAW

Local S6 and Local S7 members ~ Bath, Maine USA



The Making of the ZUMWALT

“A Bath-built ship is a ship built for war,” Admiral Harry B. Harris Jr., commander of the U.S. Pacific Command, said during the commissioning ceremony…. "If **Batman** had a ship, it would be the **USS Zumwalt**,"