



NSRP

*Art Divens
Executive Director,
Amphibious Warfare and Sealift Office*

September 15, 2009

2009 Major Milestones

DDG 1000

- DDG 1000 Start Fab

LCS

- LCS 3 and 4 Construction Contract Awards,
- LCS 3 Keel Laid
- LCS 2 commenced Builder's Trials

DDG 51

- Restarted Program
- Delivered DDG 105 and 108
- DDG 111 Keel Laid
- DDG 107 Christened
- DDG 103 and DDG 106 Christened

LHD 8

- Completed Builder's/Acceptance Trials and Delivered
- Arrived in Homeport Monday

LHA 6

- Keel Laid

LPD 17

- LPD 20 Commissioned
- LPD 21 Delivered
- LPD 26 LLTM Contract Awarded

T-AKE

- T-AKE 8 and 9 Christened
- T-AKE 7 and 8 Delivered
- T-AKE 11 Keel Laid

JHSV

- Awarded Long Lead Time Material Contracts for JHSV 2 and 3

MLP

- Awarded Preliminary Design Contract

Small Boats

- First two USS Arizona Memorial Ferries Delivered
- Offered two FMS cases to Iraqi Navy
- Four RHIBs Delivered to Philippines
- Three RCBs Delivered to RIVGRU
- Two RABs Delivered to RIVGRU

2009 Accomplishments

From Cradle

3 Christenings

WALLY SCHIRRA (T-AKE 8)
GRAVELY (DDG 107)
MATTHEW PERRY (T-AKE 9)

6 Deliveries

CARL BRASHEAR (T-AKE 7)
MAKIN ISLAND (LHD 8)
WAYNE E. MEYER (DDG 108)
DEWEY (DDG 105)
NEW YORK (LPD 21)
WALLY SCHIRRA (T-AKE 8)

3 Commissionings

GREEN BAY (LPD 20)
STOCKDALE (DDG 106)
TRUXTUN (DDG 103)

109 FMS Deliveries

111 Small Boat Deliveries



In-Service



CY09 CNO AVAILABILITIES

| CLASS | PMA | DPMA | EDPMA | SRA | DSRA | EDSRA |
|--------------------------------------|-----|------|-------|-----|-----------|-------|
| CG 47 | | | | 4 | 1 | 4 |
| DDG 51 | | | | 16 | 3 | |
| FFG 7 | | | | 9 | 4 | |
| LCC 19 | | | | 2 | | |
| LHA 1 | 1 | 1 | | | | |
| LHD 1 | 1 | 1 | | 1 | | |
| LPD 4 | 2 | | | 1 | | |
| LSD 41 | 1 | | 3 | 1 | | |
| LSD 49 | 2 | | | | | |
| MCM 1 | 4 | | 1 | 1 | | |
| MHC 51 | | | | | | |
| LPD 17 | 1 | | | | | |
| PC 1 | | 4 | | | | |
| TOTAL CY09 CNO AVAILABILITIES | | | | | 71 | |

to Grave

5 Decommissionings

TARAWA (LHA 1)
KITTY HAWK (CV 63)
SATURN (T-AFS 10)
CONCORD (T-AFS 5)
NASHVILLE (LPD 13)

1 Transfer

HIGGINS (T-AO 190) To Chile

4 Dismantling Awards

AUSTIN (LPD 4)
SAIPAN (LHA 2)
FORT FISHER (LSD 40)

4 Fleet Sink Exercises

O'BANNON (DD 987)
YFRT 520
CONOLLY (DD 979)
SPICA (T-AFS 9)



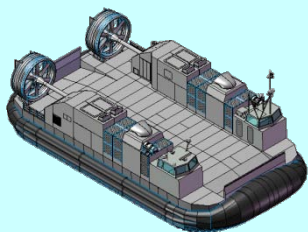
Tomorrow's Navy in Design and Construction

Technology Development

MLP



SSC



T-AGOR



System Development & Demonstration

LCS



JHSV



T-AGS 66



Production & Deployment

LPD 17



T-AKE 1



DDG 51



LHA 6



LHD 8



DDG 1000



T-AGM 25



Fleet Support

LHA/LHD



LSD/LPD



CG 47



DDG 51



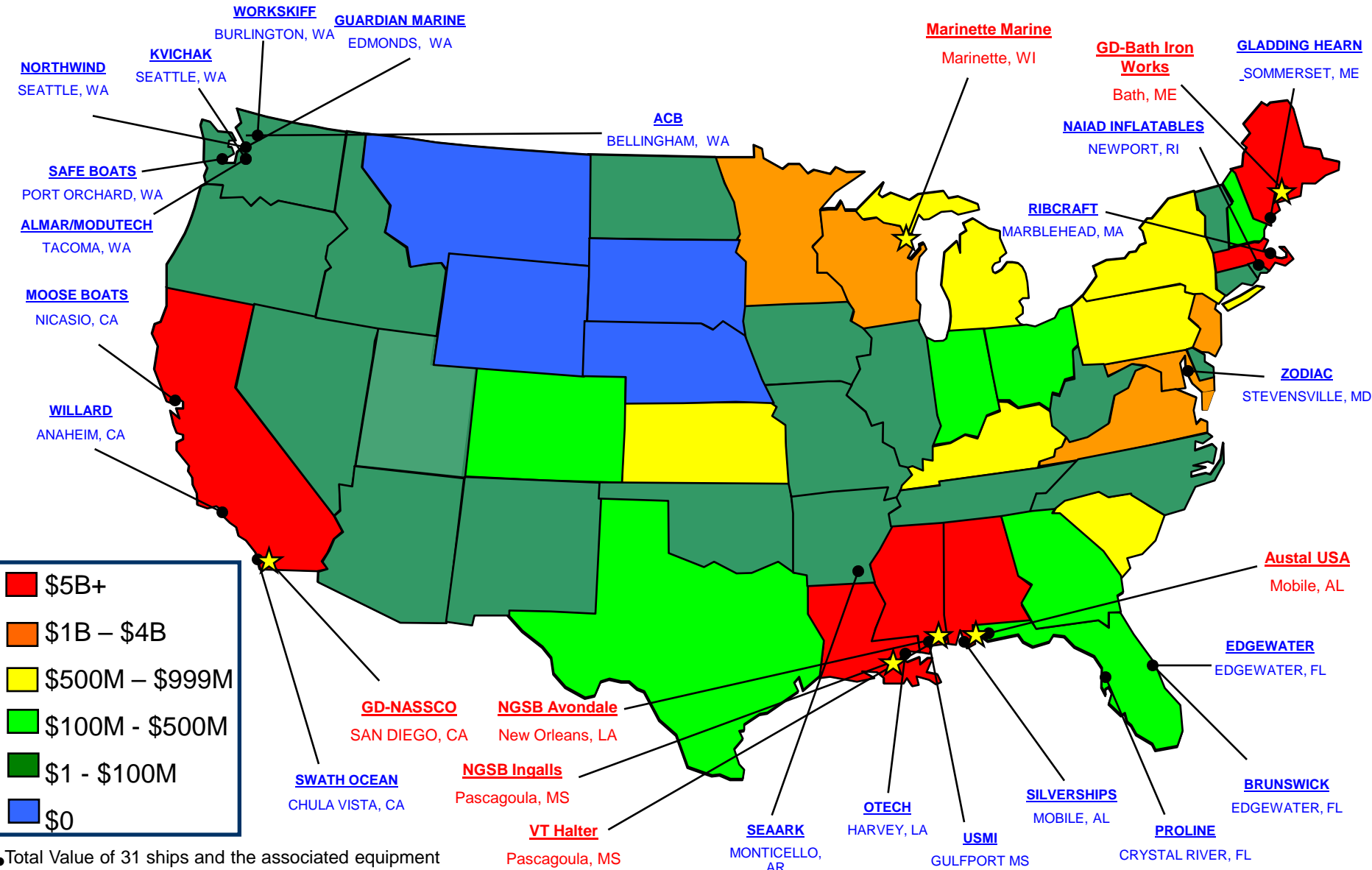
Combatants



Amphibious and Auxiliary

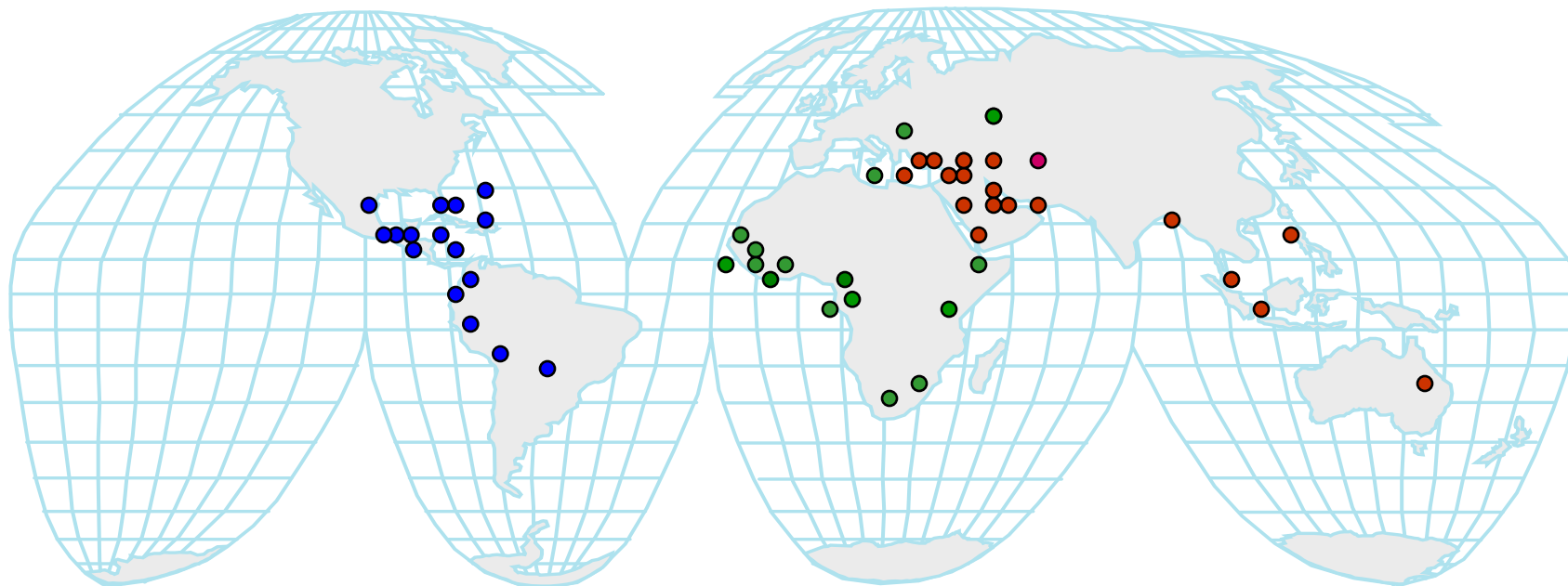


Where We Do Business



● Total Value of 31 ships and the associated equipment appropriated, under contract and delivering during FY09.

Where We Do Business continued



LATIN AMERICA

Belize
Bolivia
Bahamas
Colombia
Dominican Republic
Ecuador
El Salvador
Guatemala
Haiti
Honduras
Jamaica
Mexico
Nicaragua
Panama
Paraguay
Peru

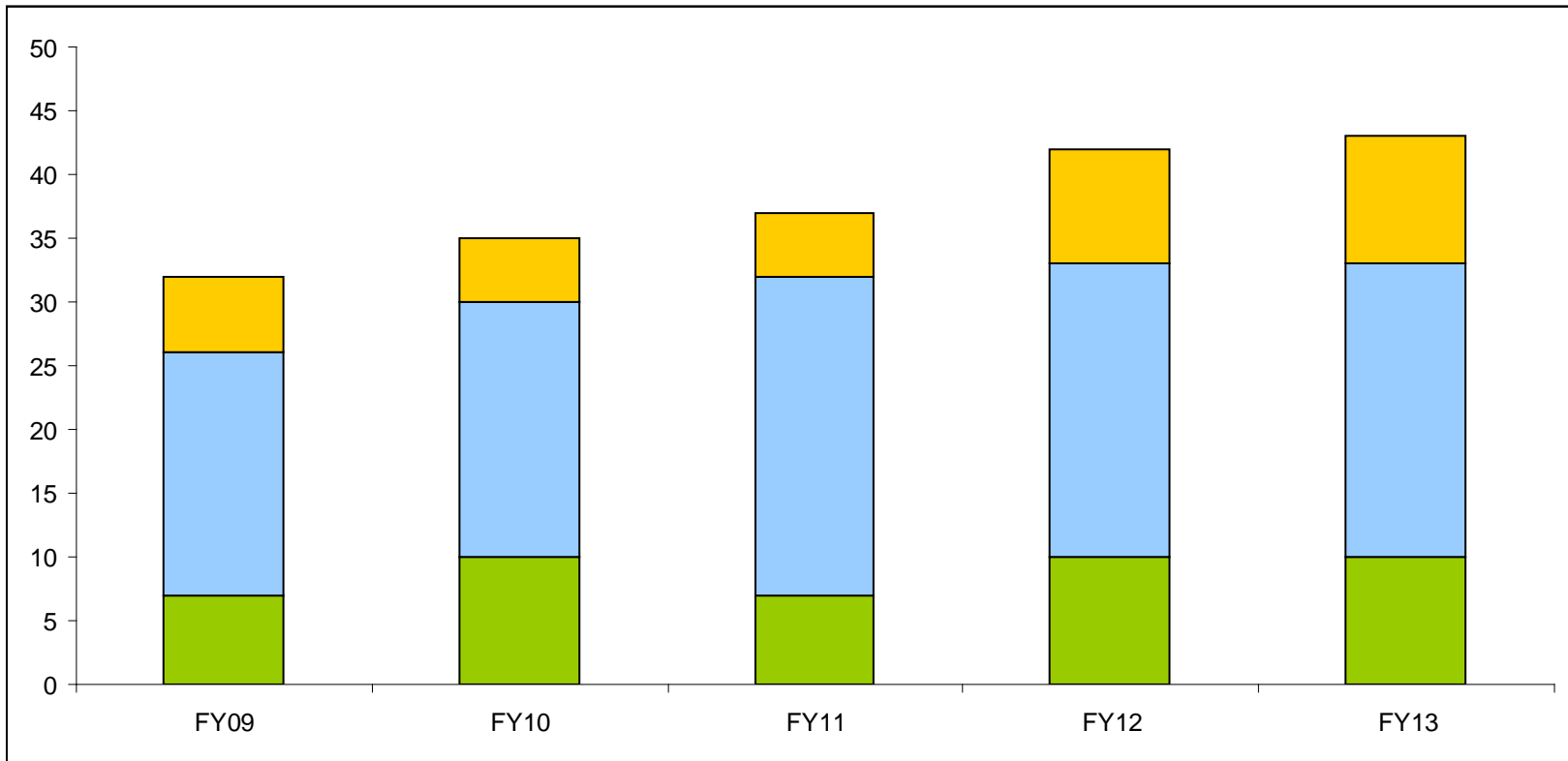
EUROPE AND AFRICA

Albania
Botswana
Cameroon
Djibouti
Gambia
Gabon
Georgia
Ghana
Cape Verde
Guinea Bissau
Mozambique
Rwanda
Sao Tome
Senegal
Sierra Leone
Tunisia
Ukraine

MIDDLE EAST AND ASIA

Australia
Azerbaijan
Bahrain
Bangladesh
Egypt
Iraq
Israel
Jordan
Kazakhstan
Kuwait
Lebanon
Malaysia
Oman
Philippines
Saudi Arabia
Sri Lanka
Thailand
Uzbekistan
Yemen

Shipbuilding is Growing Across the FYDP

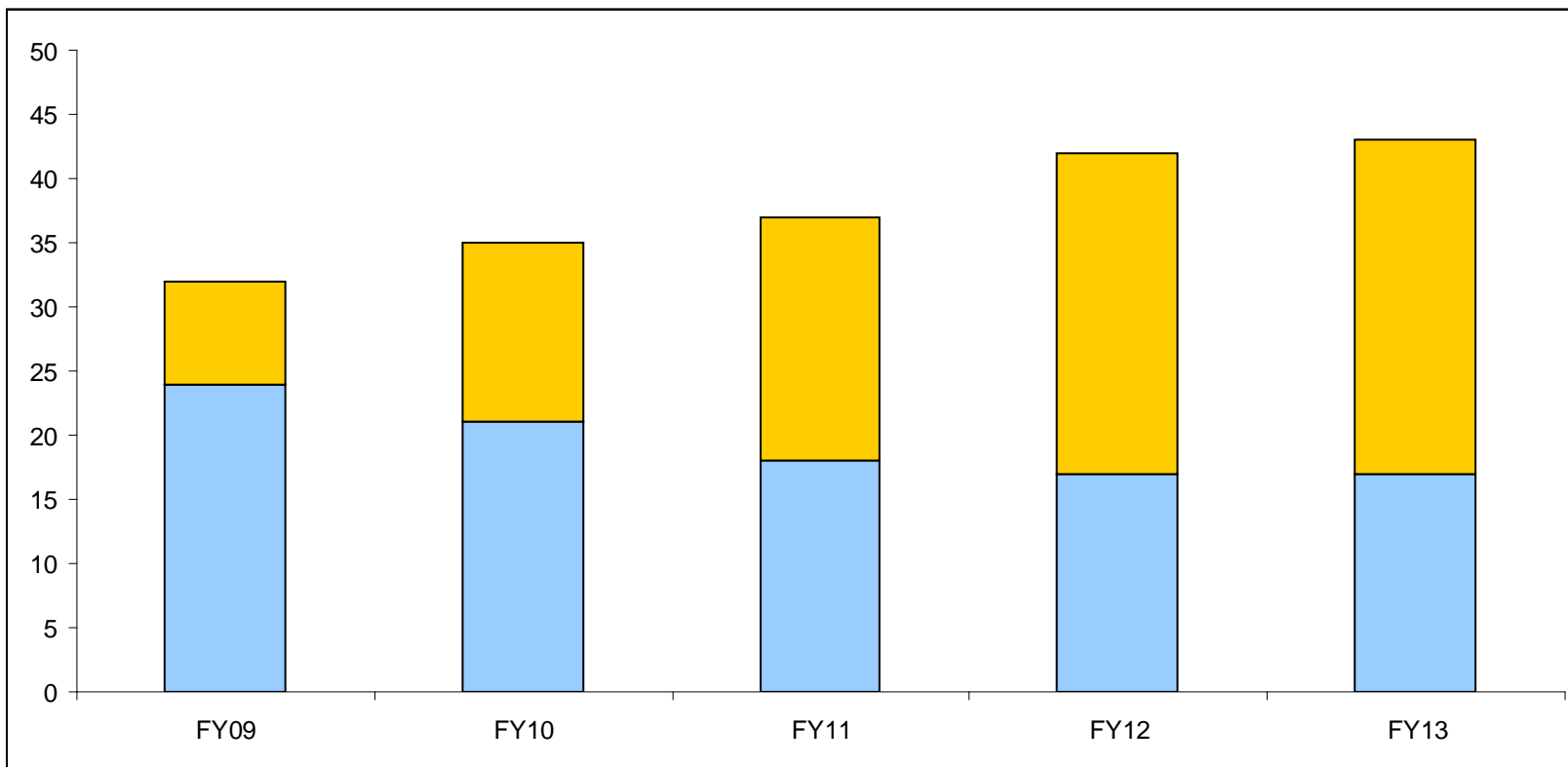


*Based on FY09 FYDP

- Yearly procurement numbers include major U.S. warships
- Includes MSC and special mission ships (e.g., T-AKE, MLP, T-AGM)
- Includes Egyptian FMC
- Does not include the ~100 average per year procurement of small boats and craft for U.S. and Foreign navies
- Does not include aircraft carriers or submarines

- Delivering
- Executing
- New Start

The Model is Changing

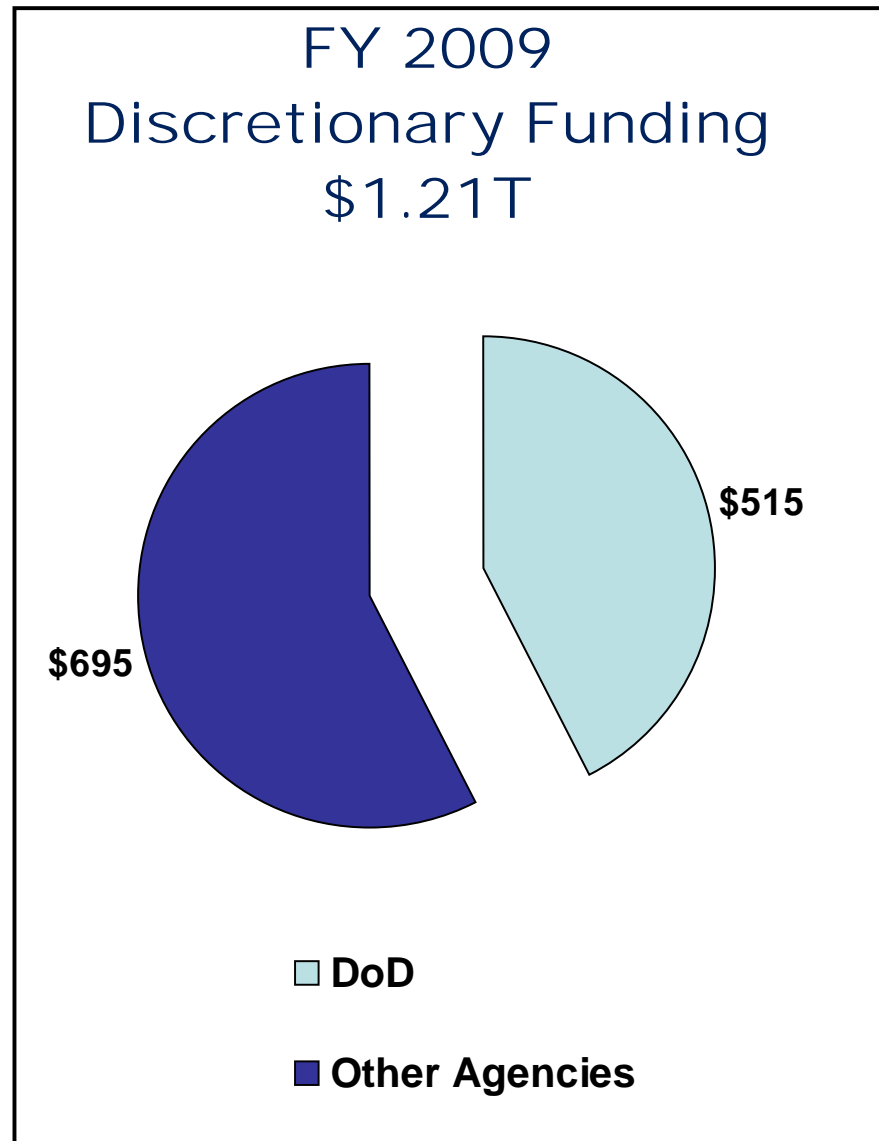
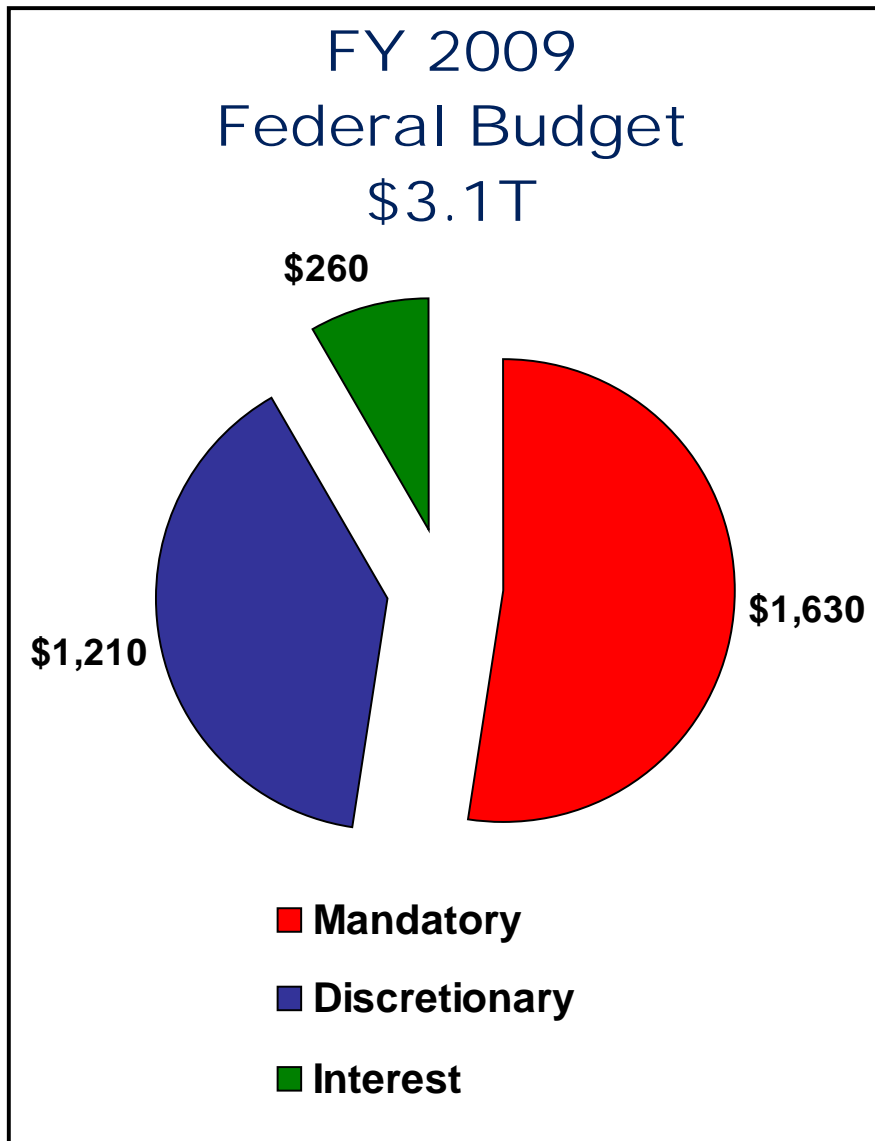


*Based on FY09 FYDP

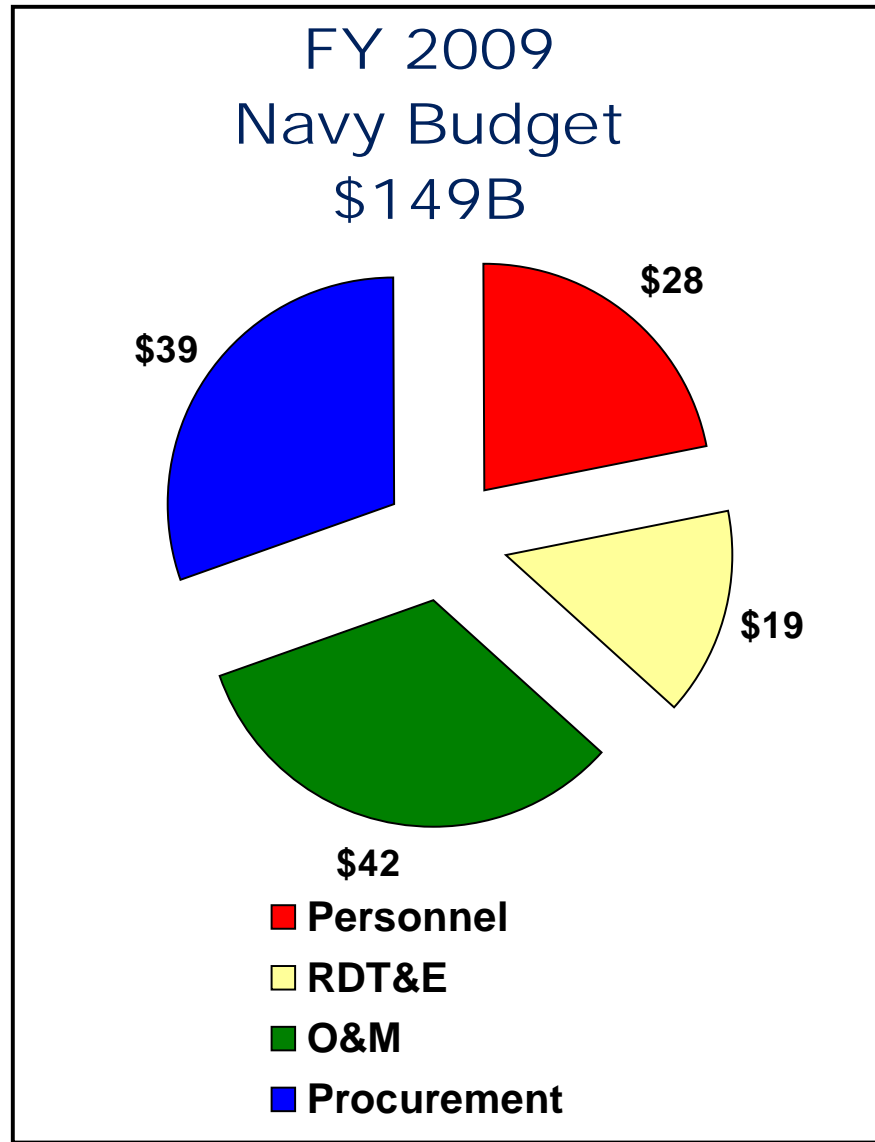
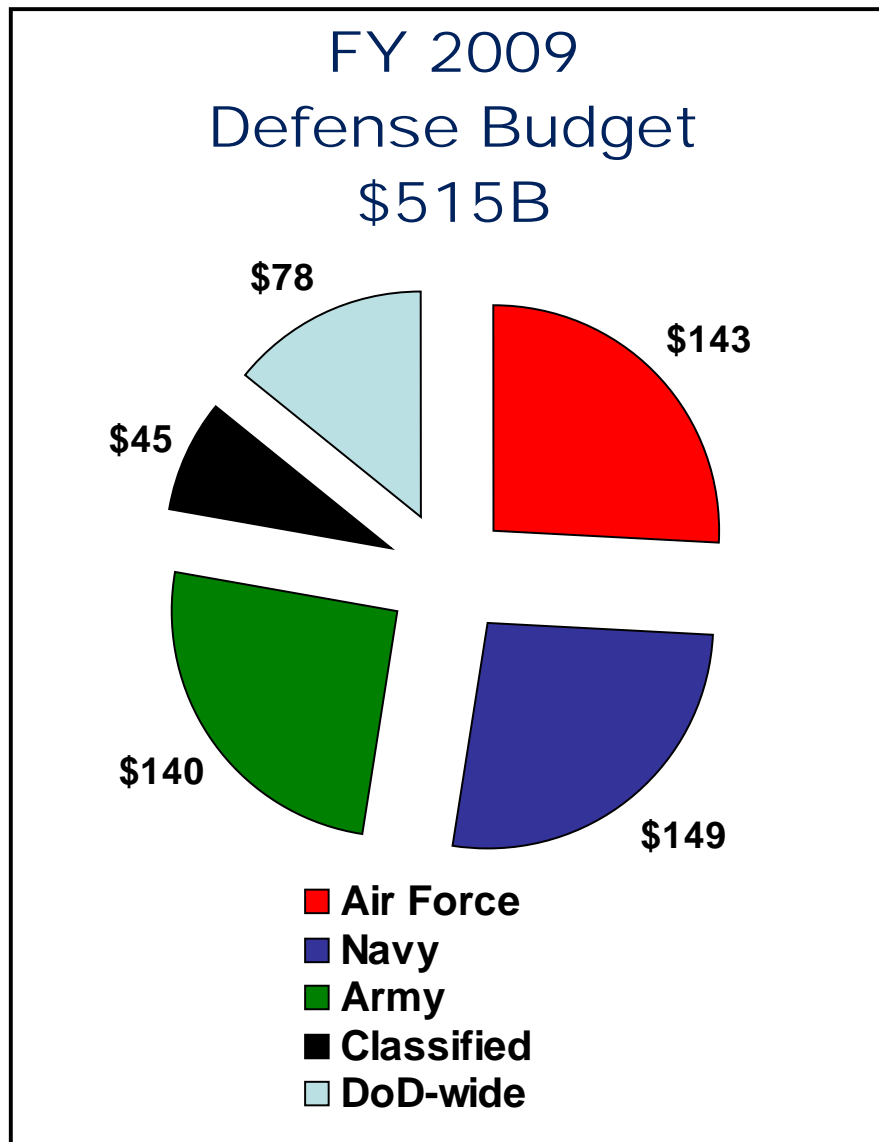
- Yearly procurement numbers include major U.S. warships
- Includes MSC and special mission ships (e.g., T-AKE, MLP, T-AGM)
- Includes Egyptian FMC
- Does not include the ~100 average per year procurement of small boats and craft for U.S. and Foreign navies
- Does not include aircraft carriers or submarines

 Mid Tier Shipyards
 Big 4 Shipyards

FY09 Federal Budget

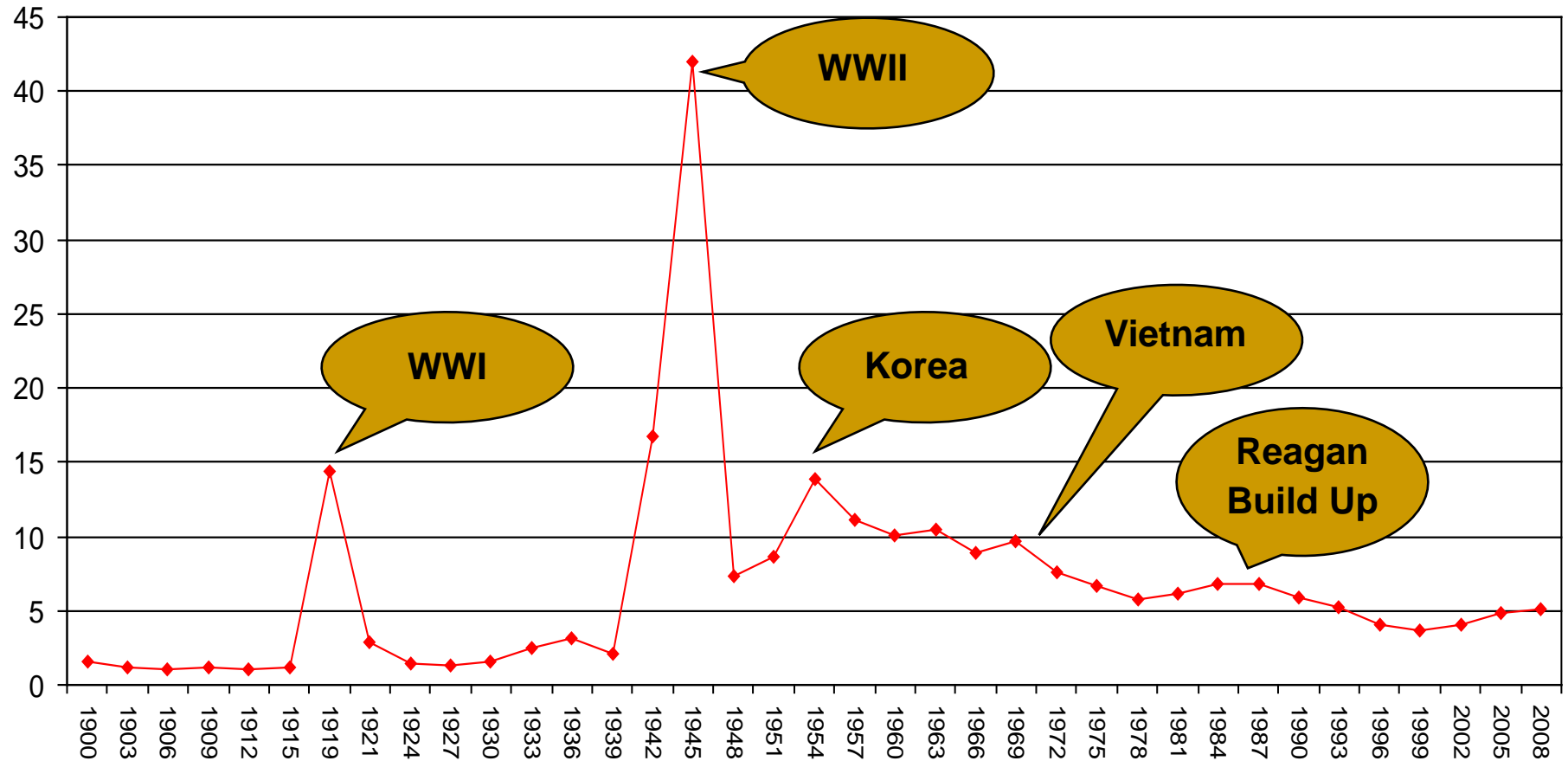


FY09 Federal Budget continued



■ Numbers rounded ■ Represents PB09, not enacted ■ Figures provided by OMB

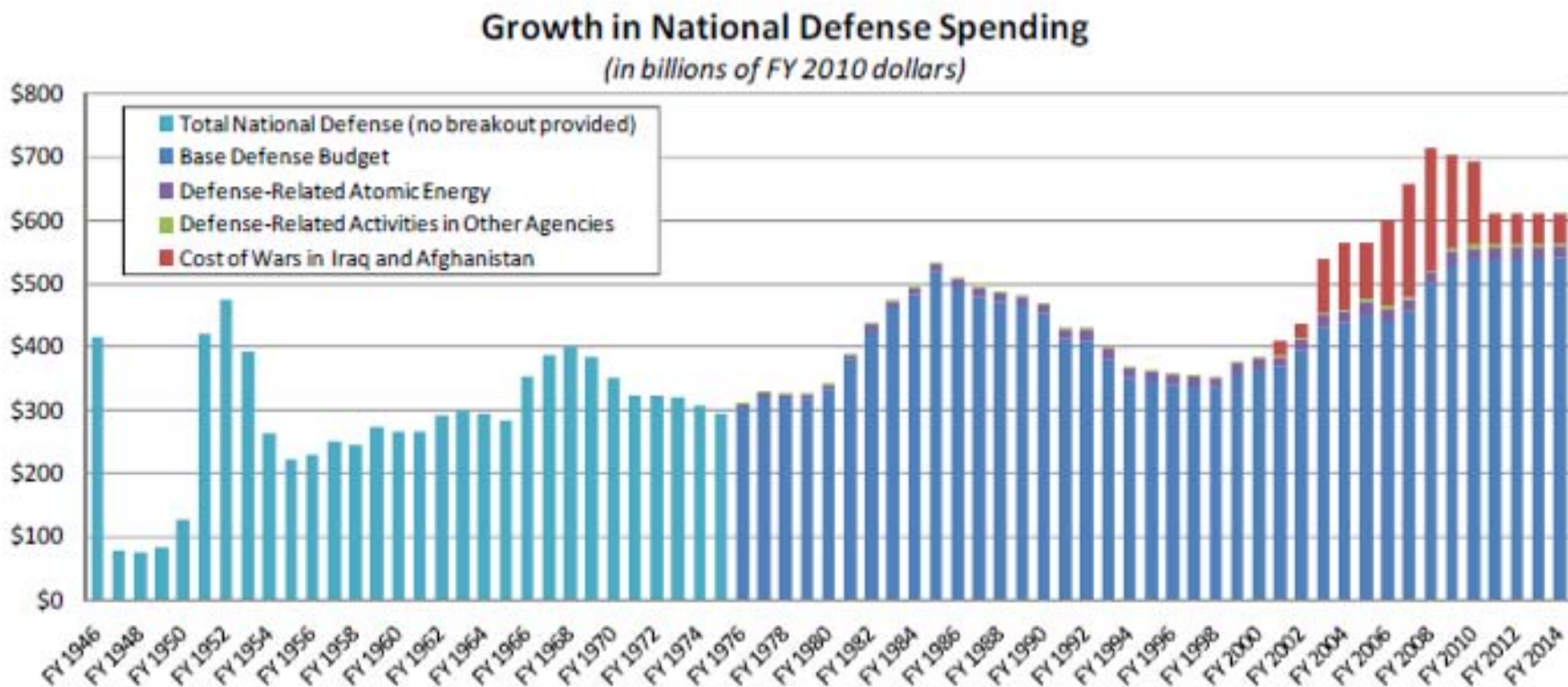
National Defense as a Percentage of GDP



■ Figures provided by OMB

Overview of the FY10 Budget Request

- \$668B requested for DoD (\$538B base + \$130B for wars)
- Additional \$25B for defense activities in other agencies
- Maintains historically high level of funding in base budget



Shipbuilding in the News

“Taylor Calls for Changes in Navy’s LCS, DDG Programs”

- Mississippi Press

“Gator Oil Leaks: What Went Wrong?”

- Navy Times

“Navy’s Shipbuilding Strategy Under Fire”

- National Defense Magazine

“Shipbuilding in Serious Disarray”

- San Diego Union Tribune

“Government Action Needed to Fix Troubled Shipbuilding Sector”

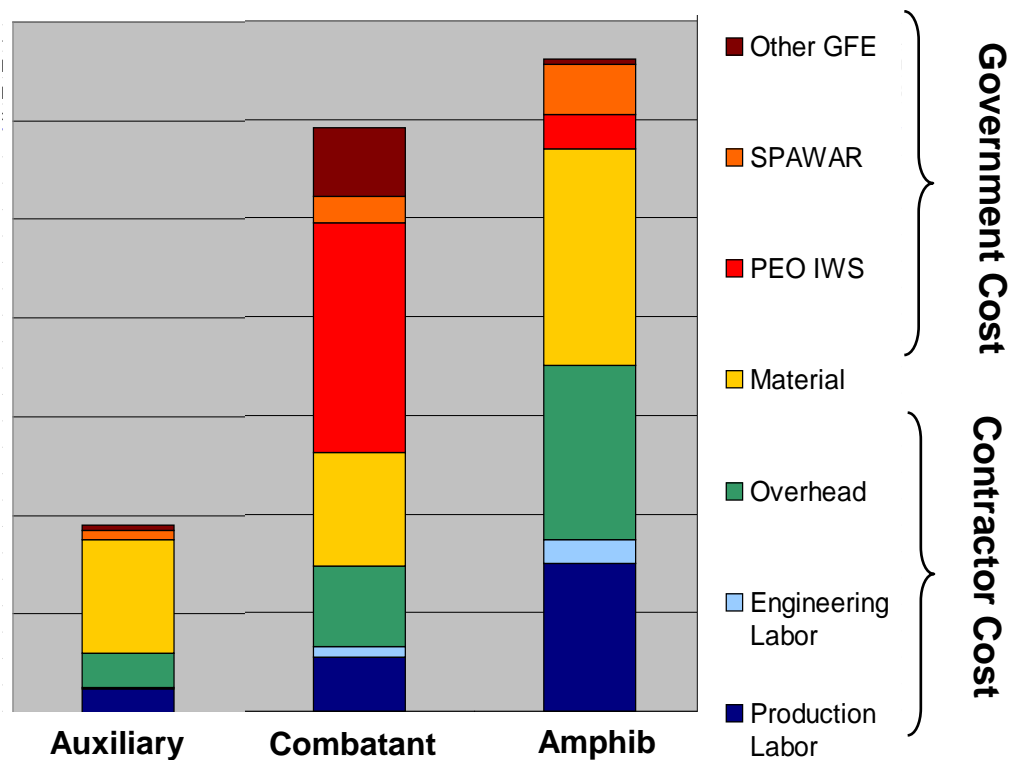
- National Defense Magazine

“Big Hit on LHD 8 Program Raises Execution, Management Concerns”

- Defense Daily

Multiple Factors in Acquisition Cost

Cost Components By Hull



Labor

Pipe
Electrical
Workforce stability
1st Time quality

Overhead

Workload
Governance

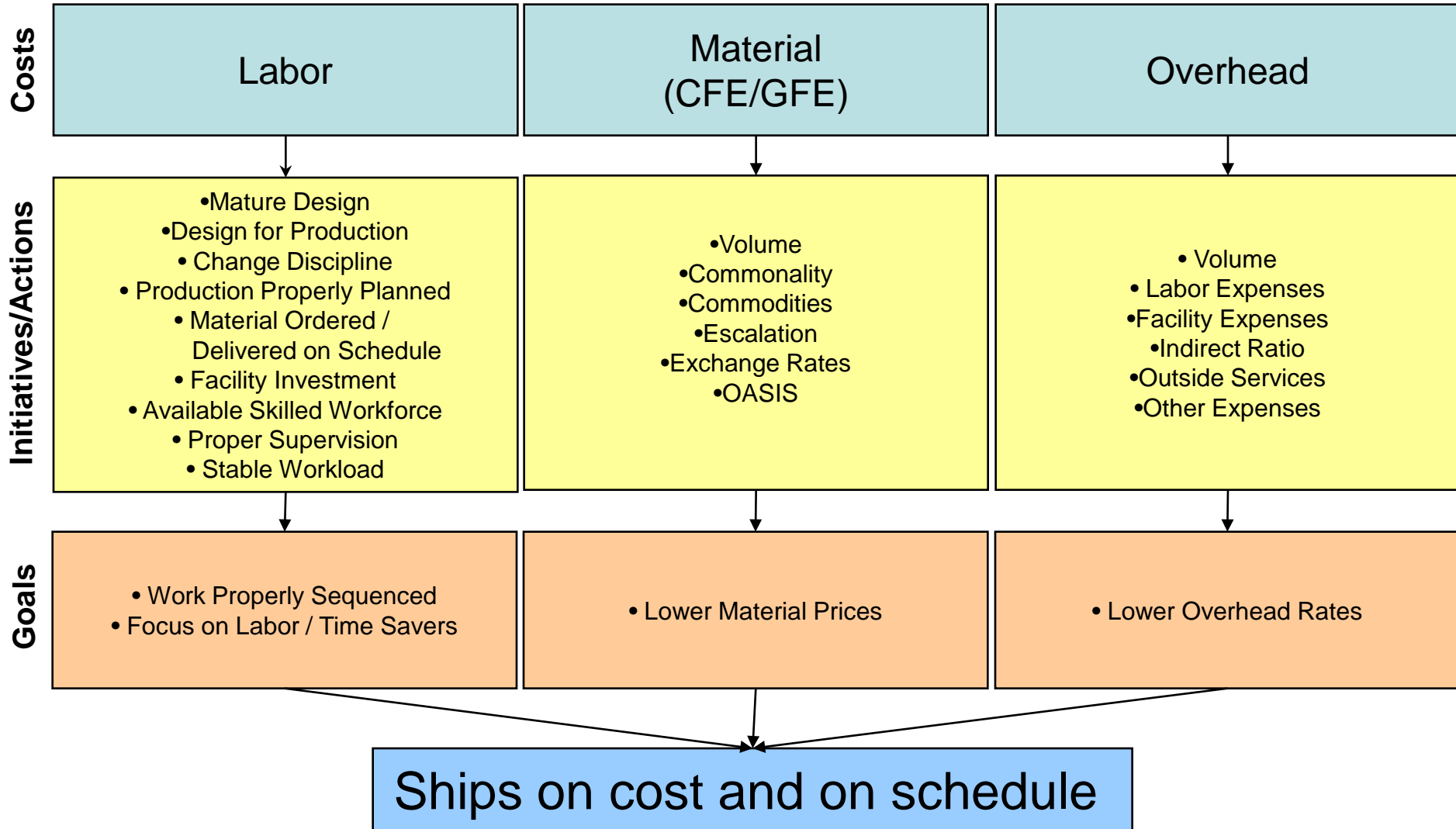
Material

Commonality
Class Standard
Bulk Buys
Commercial Standards

GFE

Bulk Buy
Requirements Discipline

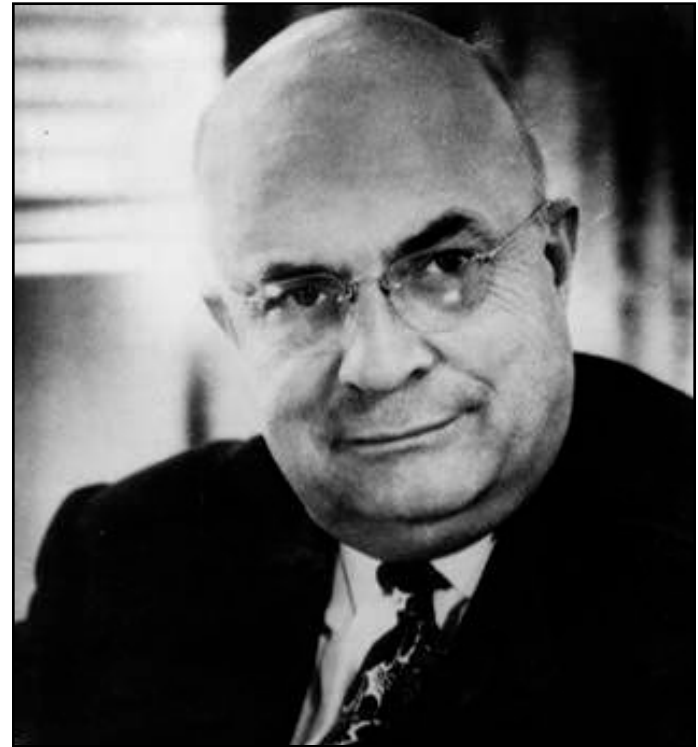
Shipbuilding Credibility



Get Back to Basics

- **Suit work to the worker**
- **Build your management team (choose well)**
- **Flow of materials and work**
- **Work smart, not hard**
- **Quality work costs less**
- **Worker participation in improvement**
- **Larger pre-fabricated and pre-outfitted sections possible were key to speed**

**BETTER. FASTER.
CHEAPER.**



“There is nothing that reasonable men undertake which can not be accomplished.”

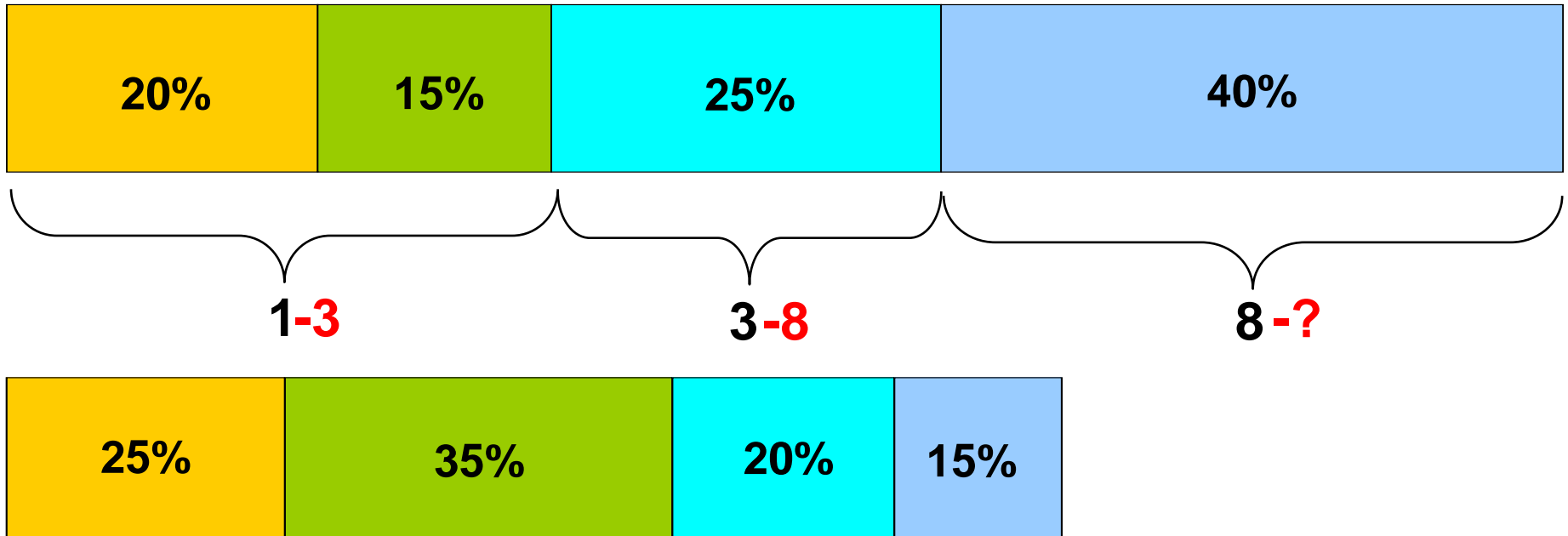
- Henry J. Kaiser

Types of Ships Built by Kaiser during WWII

| Types of Ships | Total Quantity | Shipyard |
|-------------------------------|------------------------|----------------------------------|
| British Cargo | 30 | Richmond 1 |
| Liberty Ships, EC2-S-C1 | 138, 351, 330, 2 (821) | Richmond 1, 2, Oregon, Vancouver |
| Victory Ships, VC2-S-AP2 | 43, 67 (110) | Richmond 1, 2 |
| Victory Ships, VC2-S-AP3 | 10, 99 (109) | Richmond 1, Oregon |
| Victory Transports, VC2-S-AP5 | 22, 34, 31 (87) | Richmond 2, Oregon, Vancouver |
| Troop Transports, C4-S-A1 | 30 | Richmond 3 |
| Troop Carriers, C4-S-A3 | 3, 20 (23) | Richmond 3, Vancouver |
| Troop Carriers, C4-S-A4 | 2 | Richmond 3 |
| Frigates | 12 | Richmond 4 |
| Coastal Cargo Ships | 24 | Richmond 4 |
| Tank Landing Ships (LST) | 15, 30 (45) | Richmond 4, Vancouver |
| Tankers | 147 | Swan Island |
| Escort Carriers (CVE) | 50 | Vancouver |

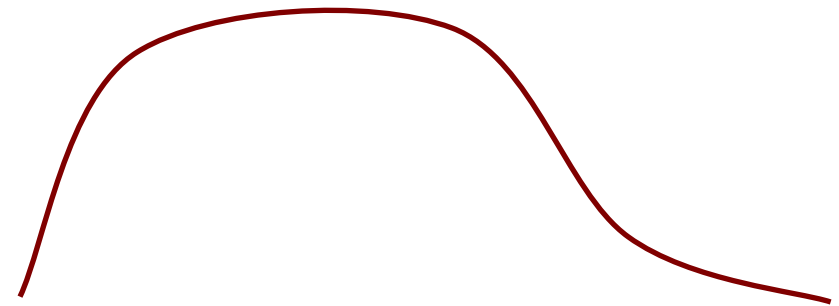
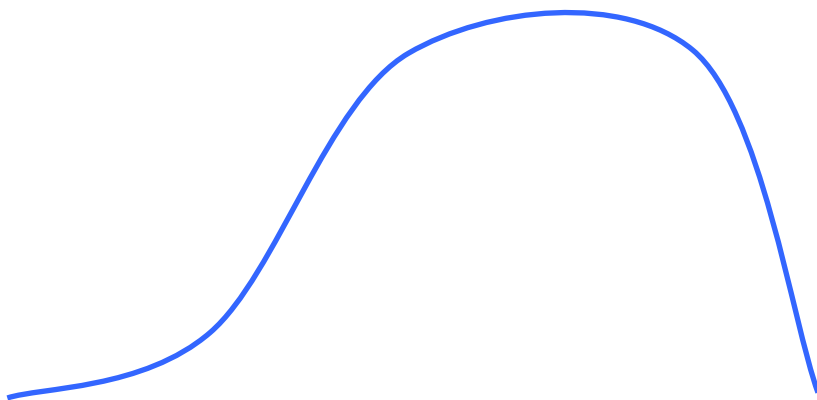
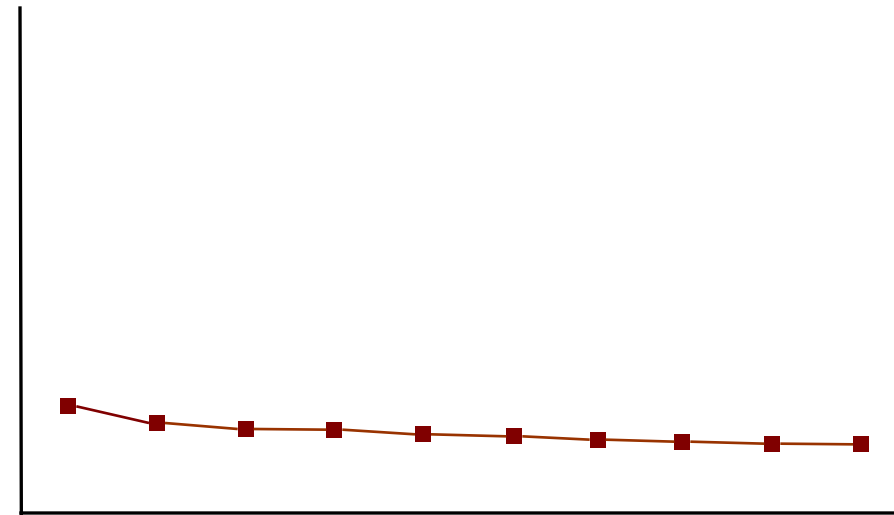
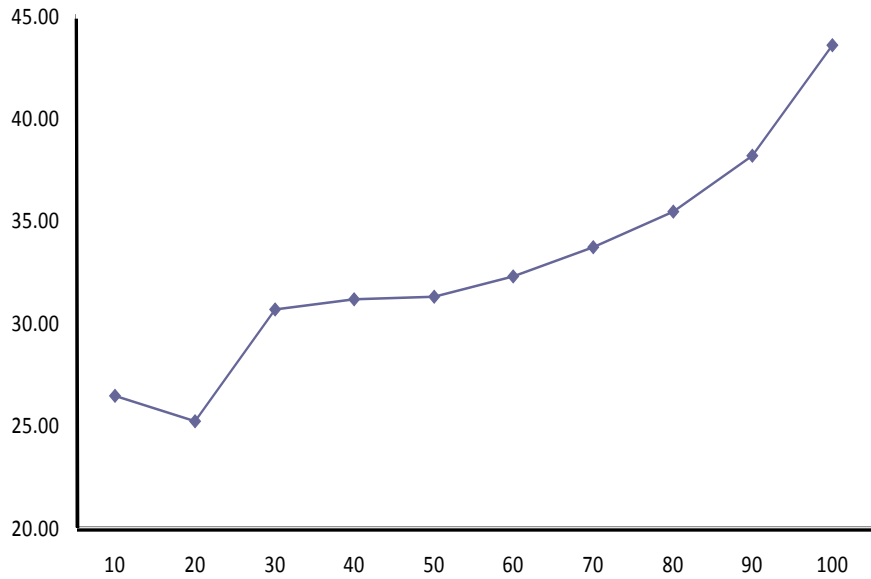
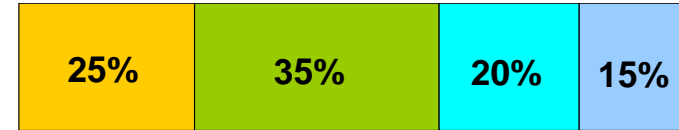
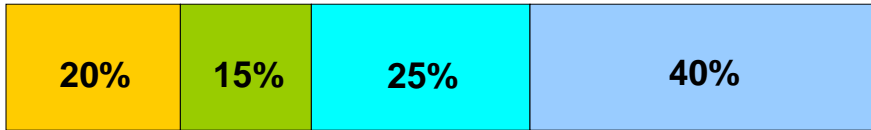
Total Number of Ships: 1,490

Work Allocation and Cycle Time



■ Fabrication ■ Pre-Outfit ■ On Ways ■ In Water

Total Actual Hours per One Percent Progress



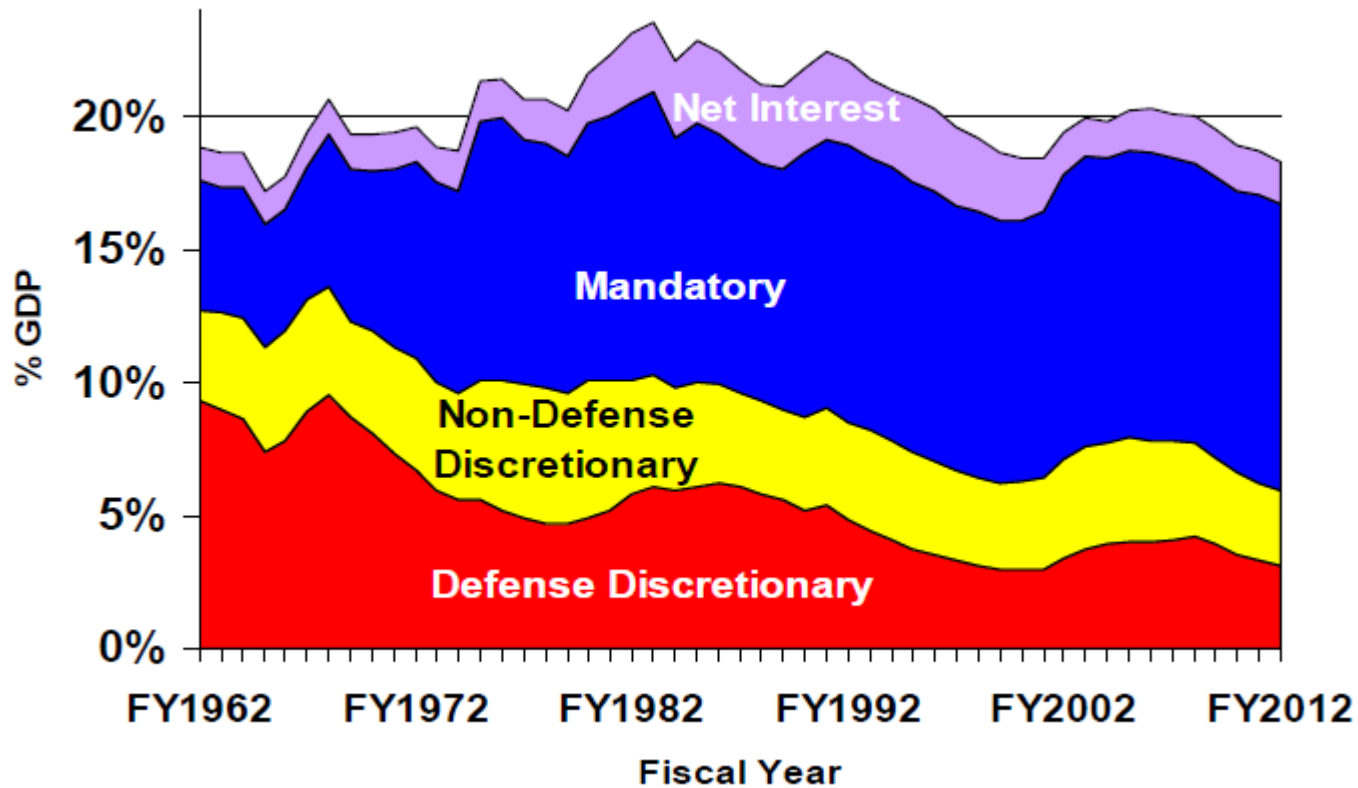
Shipbuilding: Moving Forward

- **Focused on restoring confidence in our ability to execute shipbuilding effectively**
- **Mature designs before beginning construction**
- **Production plans that yield success**
- **Rigor in executing those plans**
- **Build the first ship like a follow ship**
- **Measuring productivity improvements from unit to unit rather than ship by ship**
- **A ruthless drive for affordability and efficiency**
- **Funding design for affordability and capital improvement initiatives**
- **Measuring and evaluating performance of the companies, not the programs**
- **Managing shipbuilding as a business rather than a series of separate independent programs**

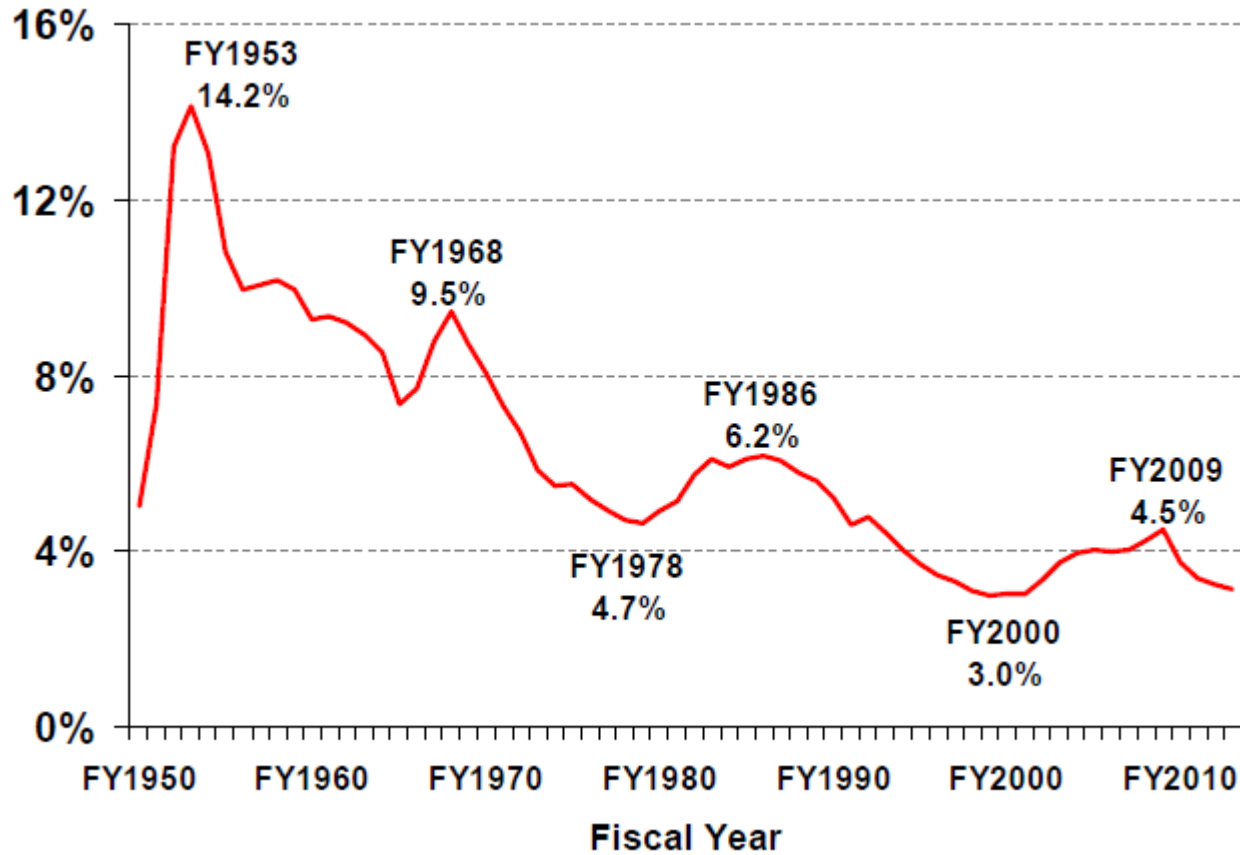
QUESTIONS?

BACKUP

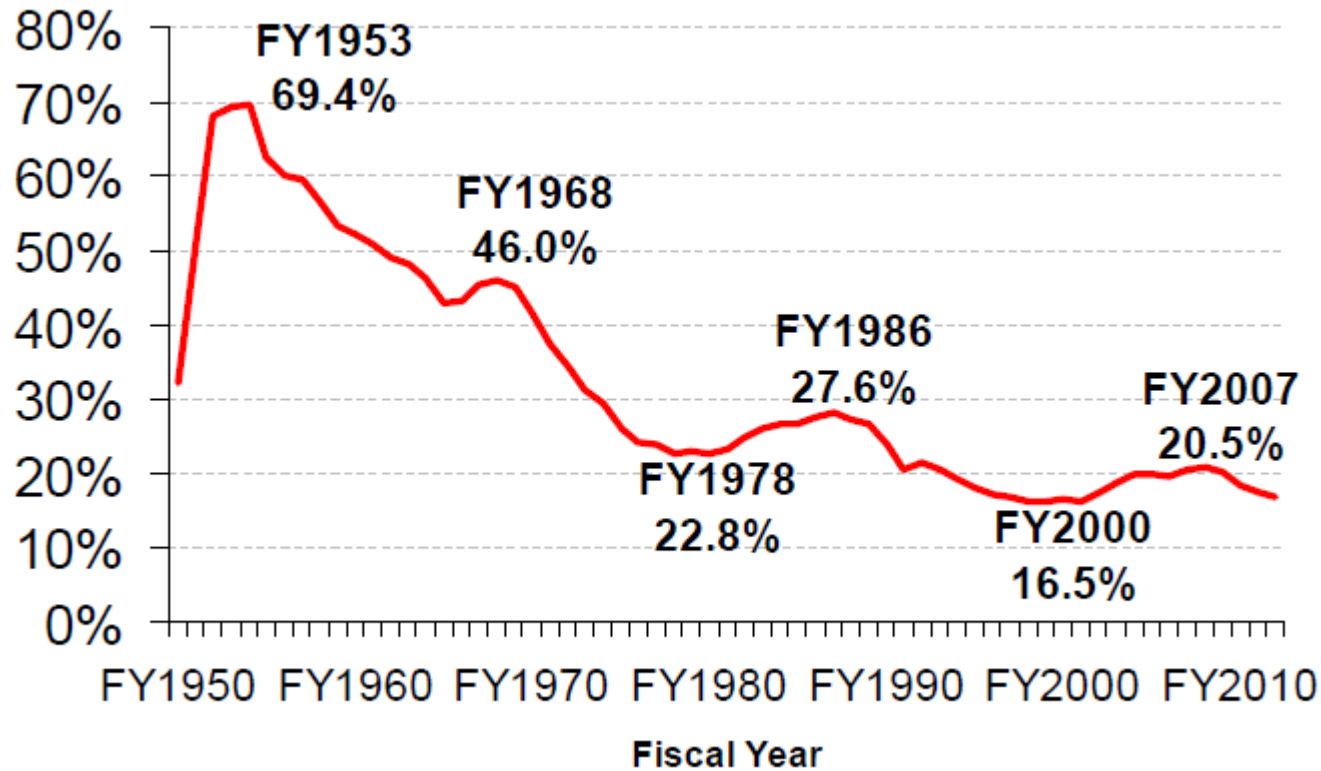
Federal Outlays by Category as % GDP (1962-2012)



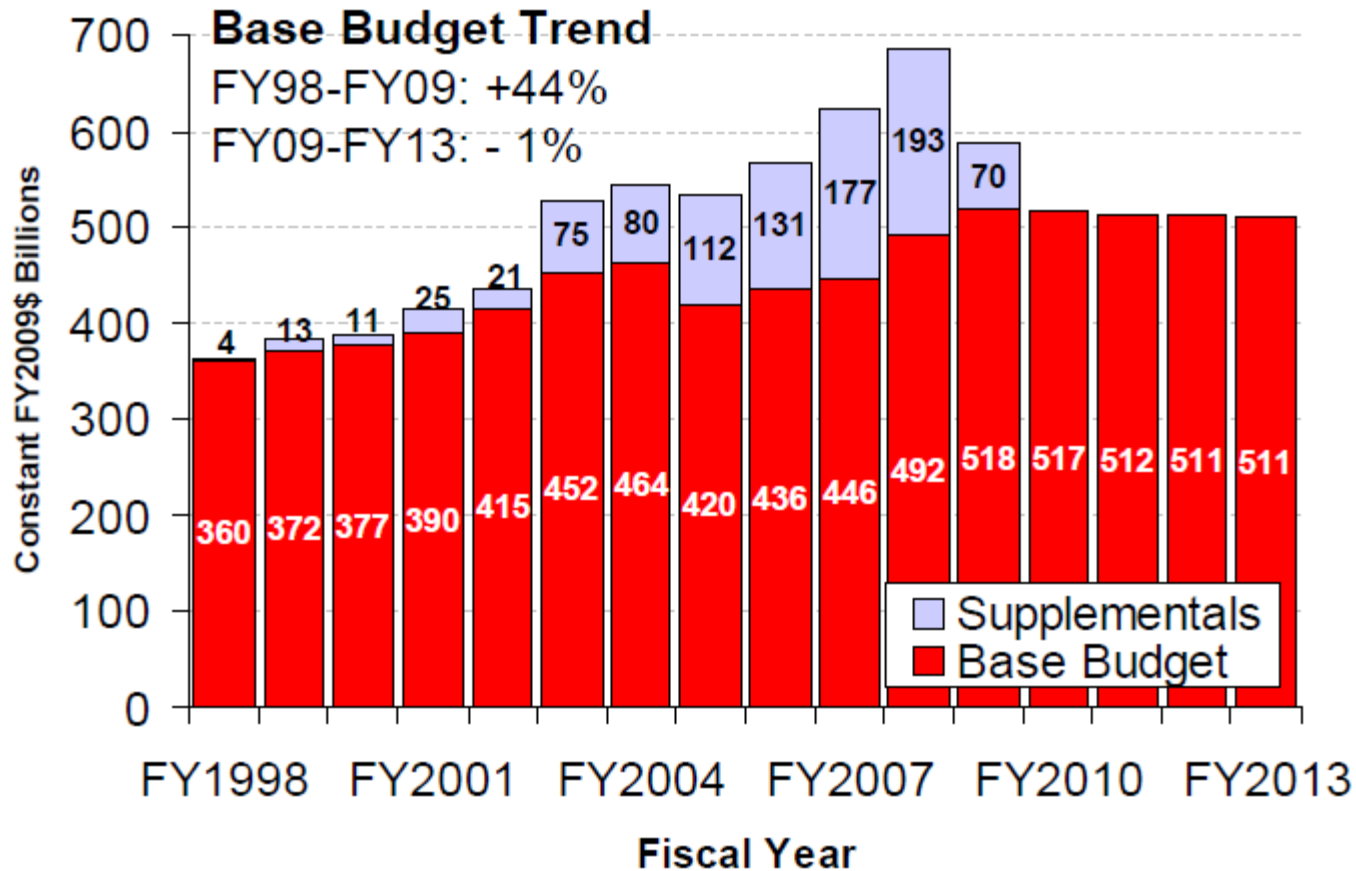
National Defense Outlays as % GDP (1950-2013)



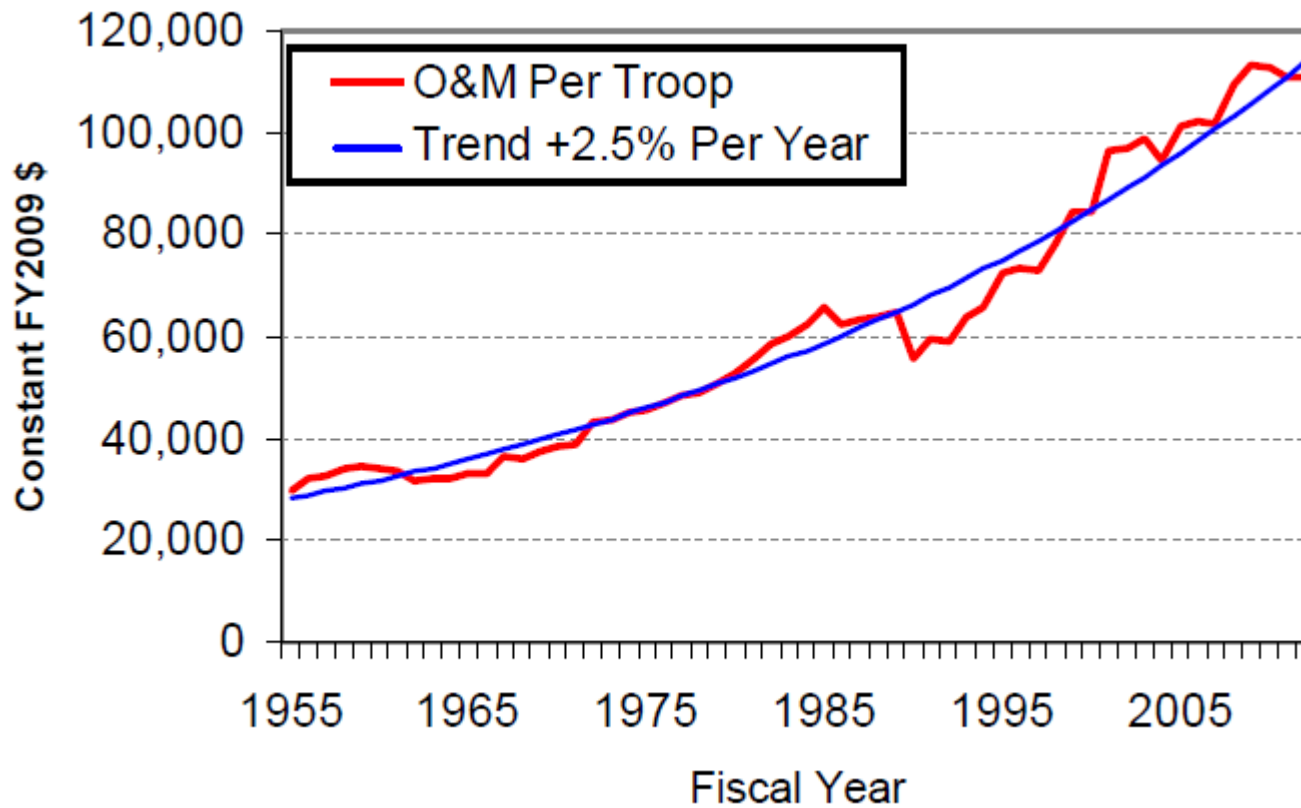
National Defense Outlays as % Federal Outlays (1950-2013)



Real Growth in DoD Base Budget (1998-2013)



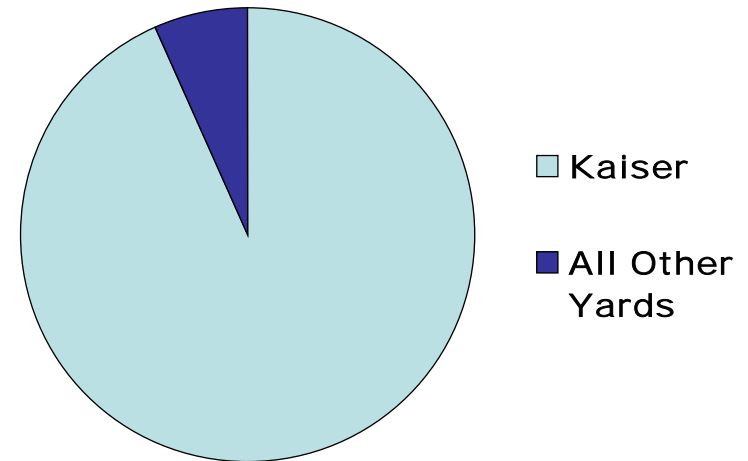
Total O&M Per Troop (1955-2013)



Henry J. Kaiser

- Kaiser's Richmond yard delivered 351 Liberty Ships
- Over the course of the war, Kaiser's yards built 1,490 Liberty Ships, troop transports, frigates, tank landing ships and escort carriers

Liberty Ships completed in 1 month or less

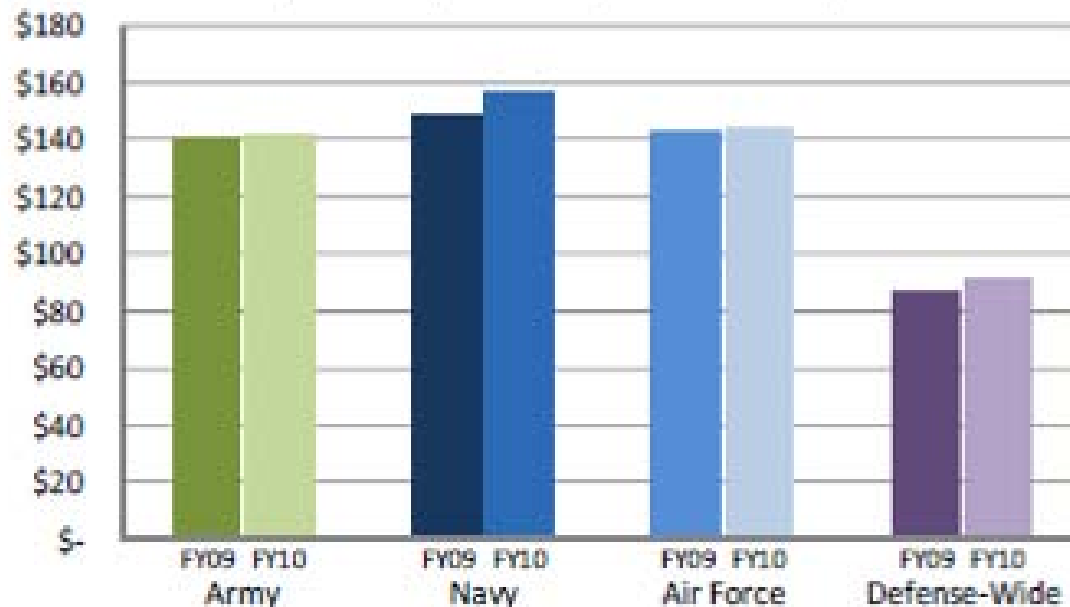


World Record

SS Robert E. Peary completed in 4 days, 15 hours, 29 minutes

Differences from Previous Years

**Comparison of FY09 / FY10 Base Discretionary Budgets
by Service (in billions of FY 2010 dollars)**



Funding for the Wars

