



DoD Maintenance FACT BOOK

2011

The *Fact Book's* cover shows the two sides of the coin of the Office for the Deputy Assistant Secretary of Defense for Maintenance . The bottom view, the reverse side of the coin, is a representation of the phoenix, the symbol shared by the award of the same name that is presented annually to the top field-level maintenance unit. The iconic phoenix is surrounded by the seals for the Joint Staff, Army, Navy, Air Force, and Marine Corps.



ACQUISITION, TECHNOLOGY
AND LOGISTICS

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
(LOGISTICS AND MATERIEL READINESS)
3500 DEFENSE PENTAGON
WASHINGTON DC 20301-3500

DoD maintenance consumes a considerable amount of the total DoD resource allocation—about \$83.7 billion in FY2010.

It required the combined effort of approximately 657,000 military and civilian maintainers and thousands of commercial firms—all devoted to the maintenance of roughly 13,900 aircraft, 800 strategic missiles, 350,000 ground combat and tactical vehicles, 283 ships, and myriad other DoD weapon systems to maintain strategic materiel readiness.

The *DoD Maintenance Fact Book* contains a broad range of information about DoD maintenance capabilities and programs that span major depots and shipyards as well as intermediate- and organizational-level units throughout the world.

This 2011 Fact Book also identifies the winners of the 2010 Phoenix Award and 2011 Secretary of Defense field-level maintenance awards, and the current and past winners of the Robert T. Mason Award for Depot Maintenance Excellence.

Table of Contents

DoD Overview

OSD Logistics Organization	1
OSD Maintenance Mission Statement	2
FY2011 Funding for the Department of Defense	3

Maintenance Overview

Systems Supported by DoD Maintenance	4
Scope of DoD Maintenance—FY2010	5
Levels of DoD Maintenance	6

Maintenance Workforce

Personnel Strength of Field- and Depot-Level Maintenance	7
DoD Maintainers Worldwide.	8
DoD Maintainers by State and Territory.	9
DoD Maintainers by Military Service	10
DoD Maintainers by Personnel Category	11
Active Duty Maintainers.	12
National Guard and Reserve Maintainers	13
DoD Civilian Maintainers.	14

Field-Level Maintenance

Major Intermediate Maintenance Activities, Active Component	15
Major Intermediate Maintenance Activities, Reserve Component	16

Table of Contents

Depot-Level Maintenance

Major Depot-Level Activities by Location	17
Major Depot-Level Activities by Category	18
Organic-Commercial Mix of DoD's Depot Maintenance Workload	19

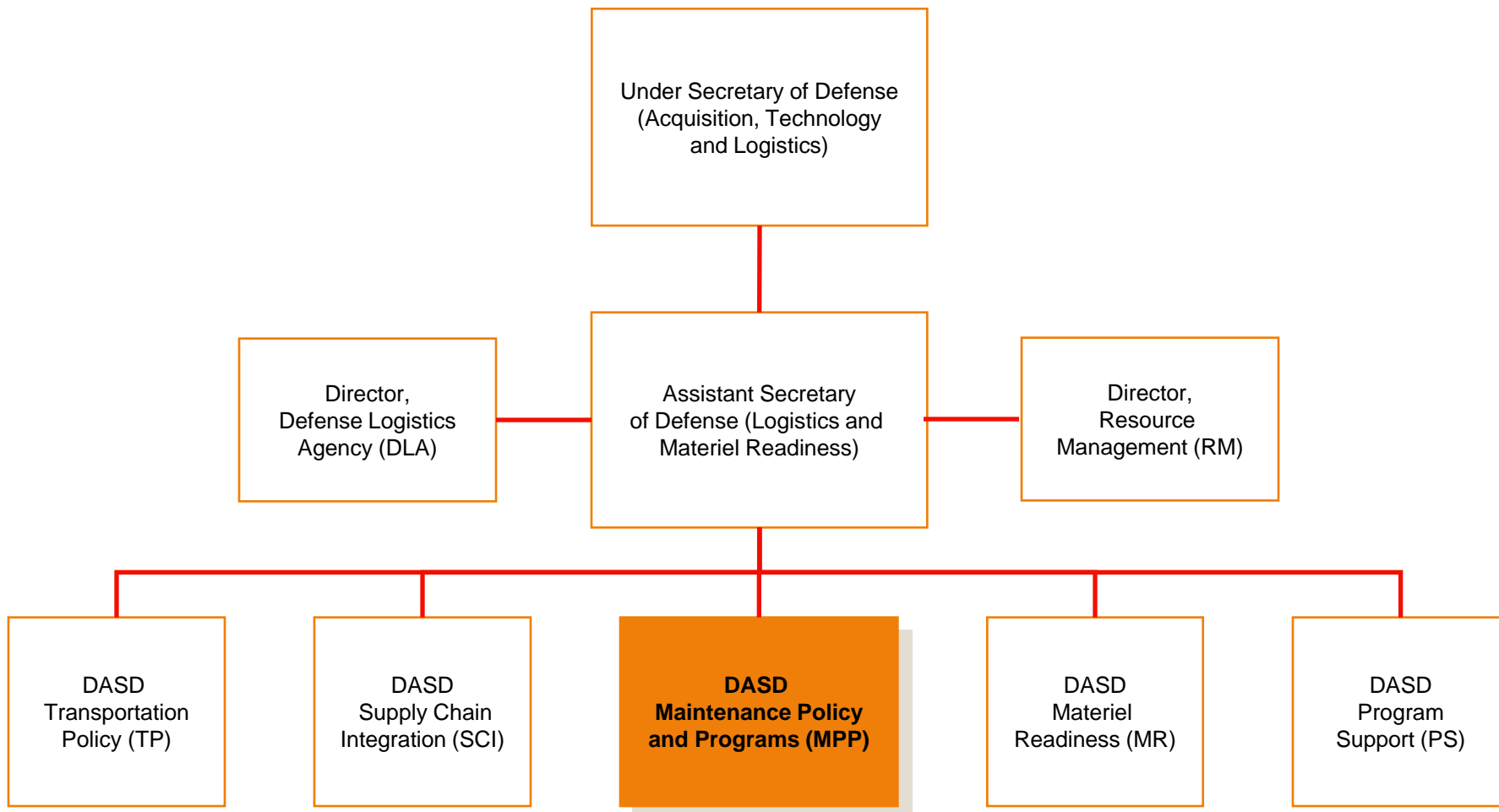
DoD Maintenance Awards

2010 Phoenix Award Winner	20
Past Winners of the Phoenix Award for Field-Level Maintenance.	21
2011 Secretary of Defense Field-Level Maintenance Award Winners	22
2011 Robert T. Mason Award for Depot Maintenance Excellence.	23
Past Winners of the Robert T. Mason Award	24

Reference

Acronyms	25
Explanatory Notes.	27

OSD Logistics Organization



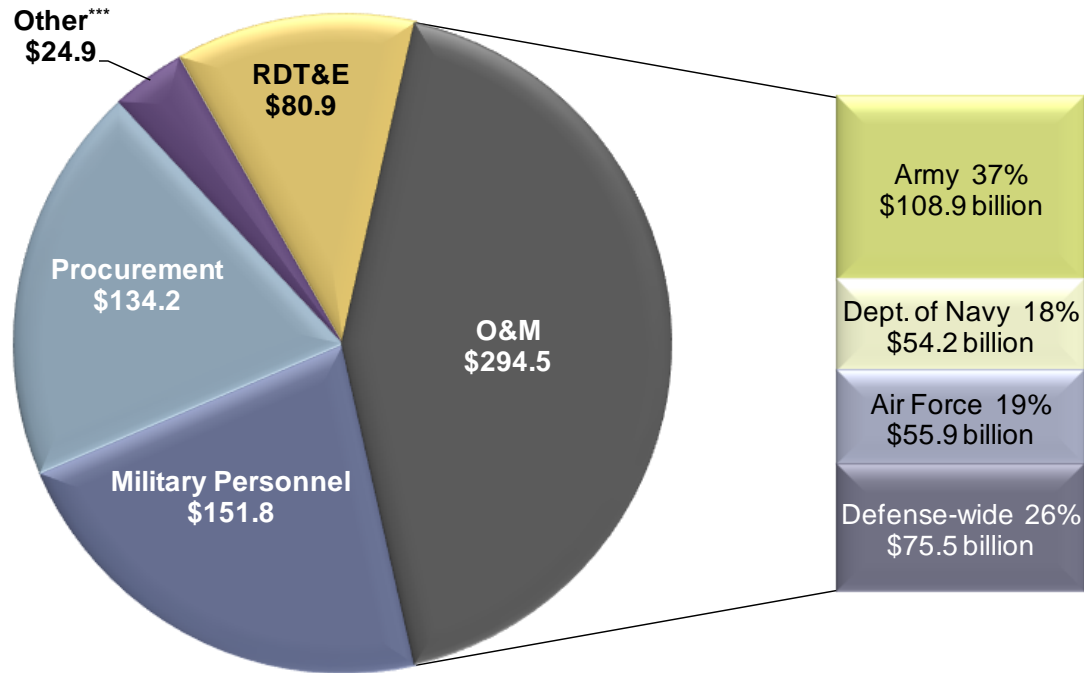
OSD Maintenance Mission Statement

The Deputy Assistant Secretary of Defense for Maintenance

- serves as the principal advisor for policies and procedures for maintenance support of major weapon systems and military equipment;
- provides the functional expertise for centralized maintenance policy and management oversight for all weapon systems, military equipment maintenance programs, and related resources within the Department of Defense; and
- establishes and maintains materiel maintenance policies and programs that are managerially and technologically sound and adequately resourced to maintain the desired levels of weapon system and military equipment readiness to accomplish the Department's missions.

FY2011 Funding for the Department of Defense*

Total obligation authority: \$686.3 billion**



* Based on FY2011 Continuing Resolution for the Department of Defense

** Includes Base and Overseas Contingency Operations (\$159 billion) Continuing Resolution as of the February 2011 President's Budget Request

*** Includes military construction, family housing, and revolving and management funds

Systems Supported by DoD Maintenance

39,000
Combat Vehicles



800 Strategic Missiles



283 Ships



13,900 Aircraft

- + 311,000 tactical vehicles
- + Communications/electronics equipment
- + Support equipment
- + Other systems

Maintained by:

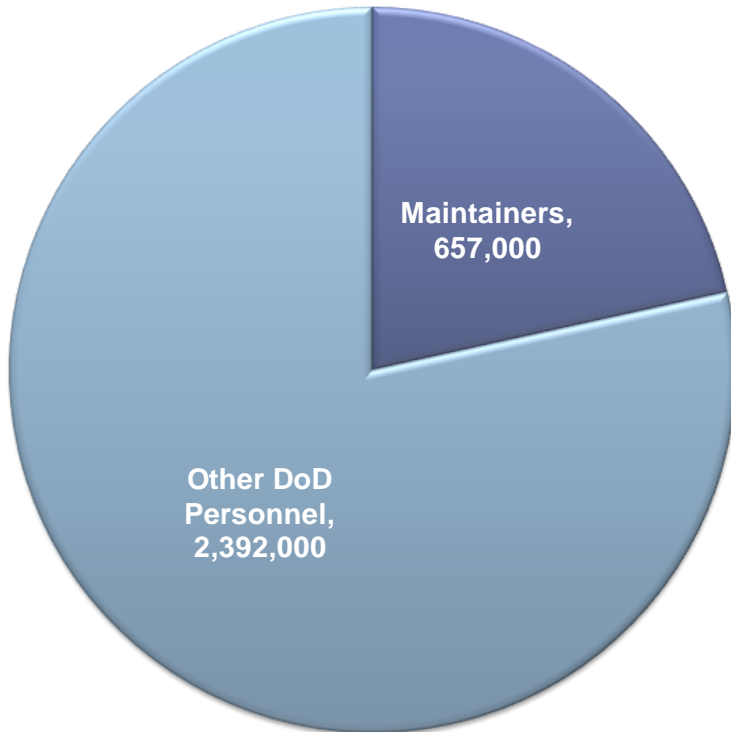
- 657,000 DoD personnel
- Private-sector companies

Maintenance cost:

\$83.7 billion

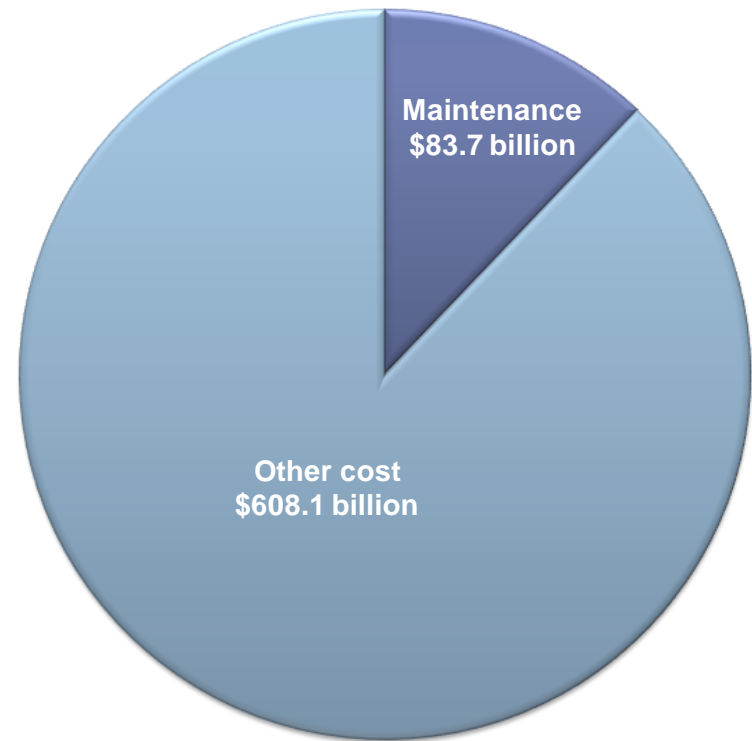
Scope of DoD Maintenance—FY2010

DoD Personnel
(Total = 3.049 million)



22% maintainers

DoD actual spending
(Total = \$691.8 billion)



12% spent on maintenance

Levels of DoD Maintenance



Field

Depot

Organizational

Intermediate

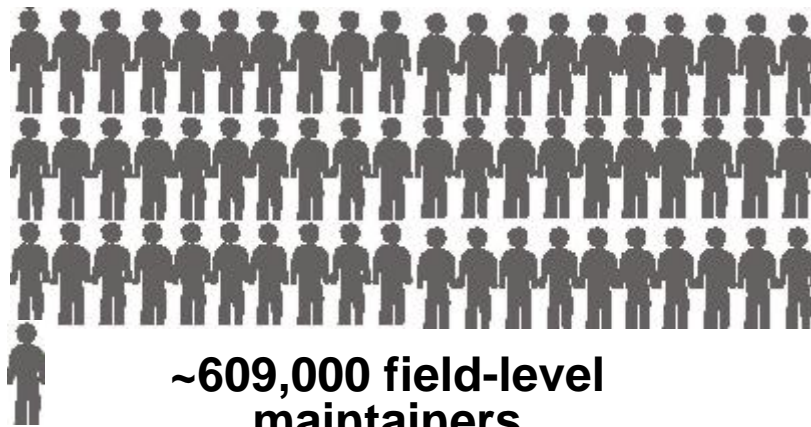
Increasing **volume** of maintenance

More frequent tasks that require less facilitization and skills

Less frequent tasks that require more facilitization and skills

Increasing **complexity** of maintenance

Personnel Strength of Field- and Depot-Level Maintenance



**~609,000 field-level
maintainers**

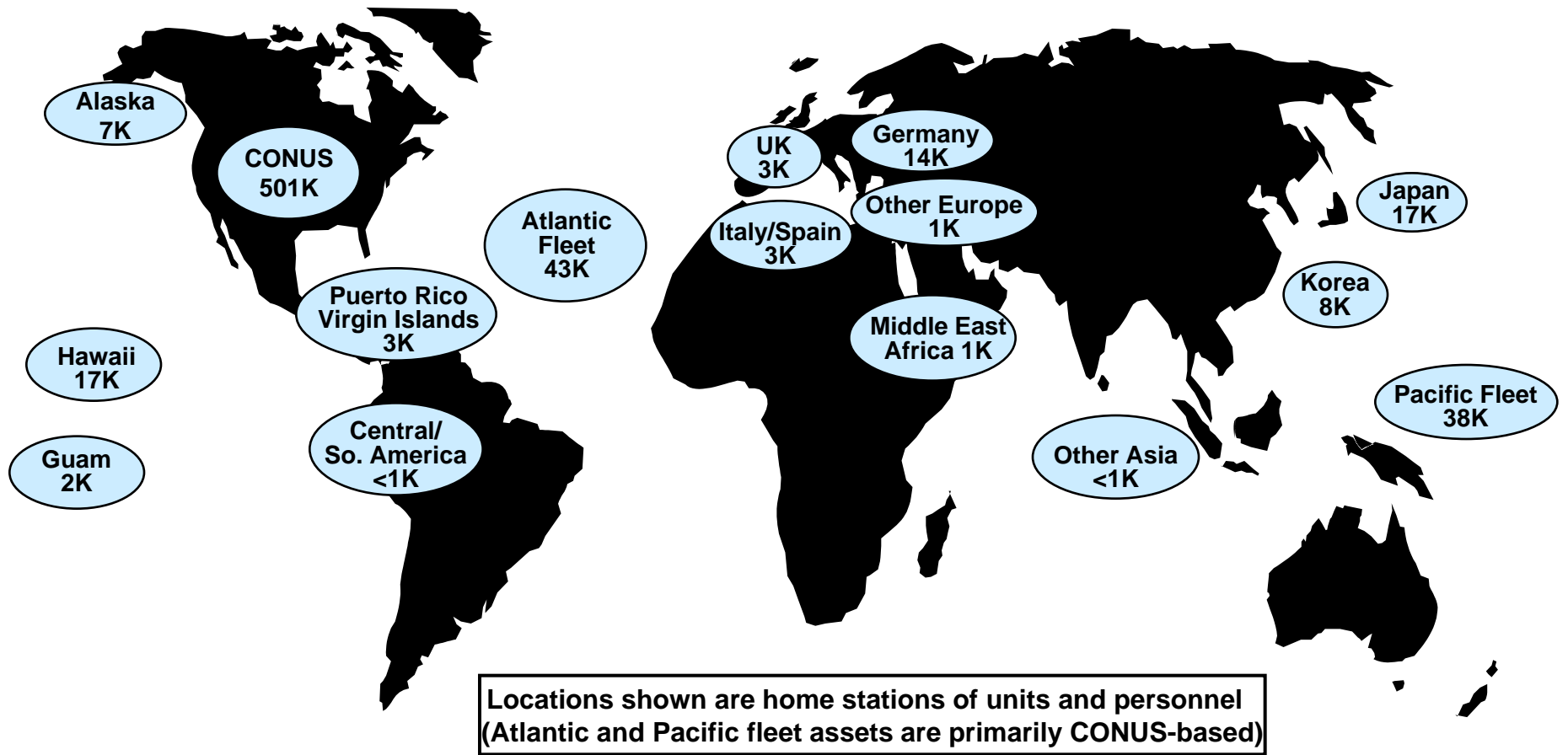
**Includes approximately 29,000
National Guard technicians,
6,000 Reserve technicians, and
49,000 other civilian maintainers.**



**~80,000 depot-level
personnel**

**Includes approximately 32,000
engineers, scientists, analysts, supply
specialists, and other civilian non-
maintainers essential to maintenance
production.**

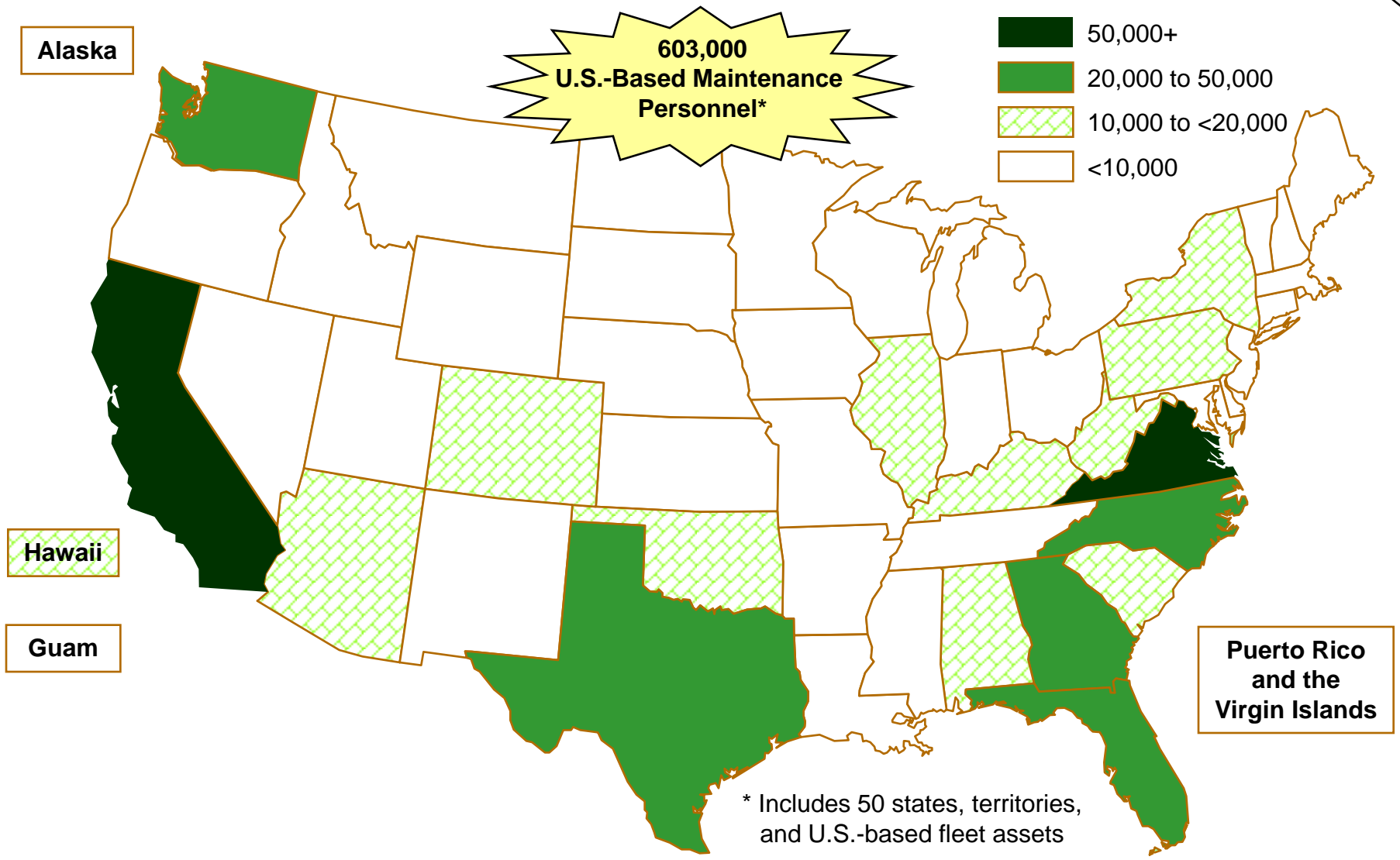
DoD Maintainers Worldwide



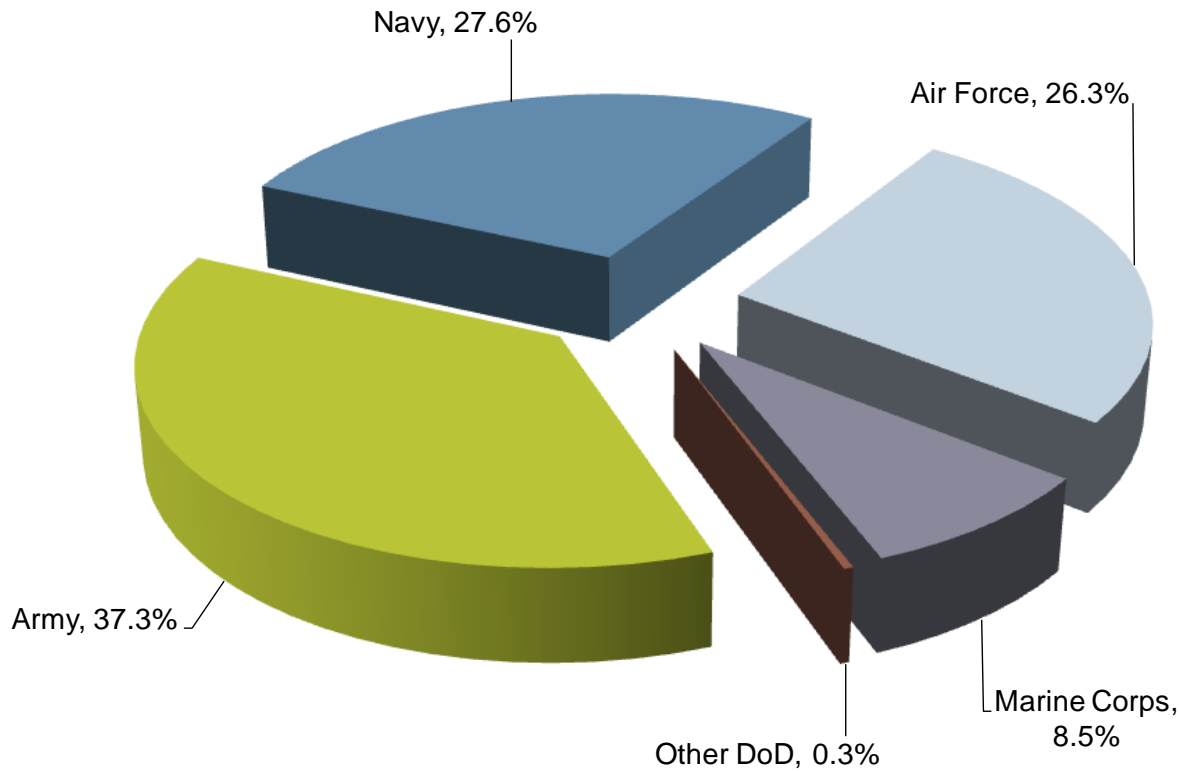
Numbers shown are approximate

DoD Maintainers by State and Territory

Maintenance
Workforce



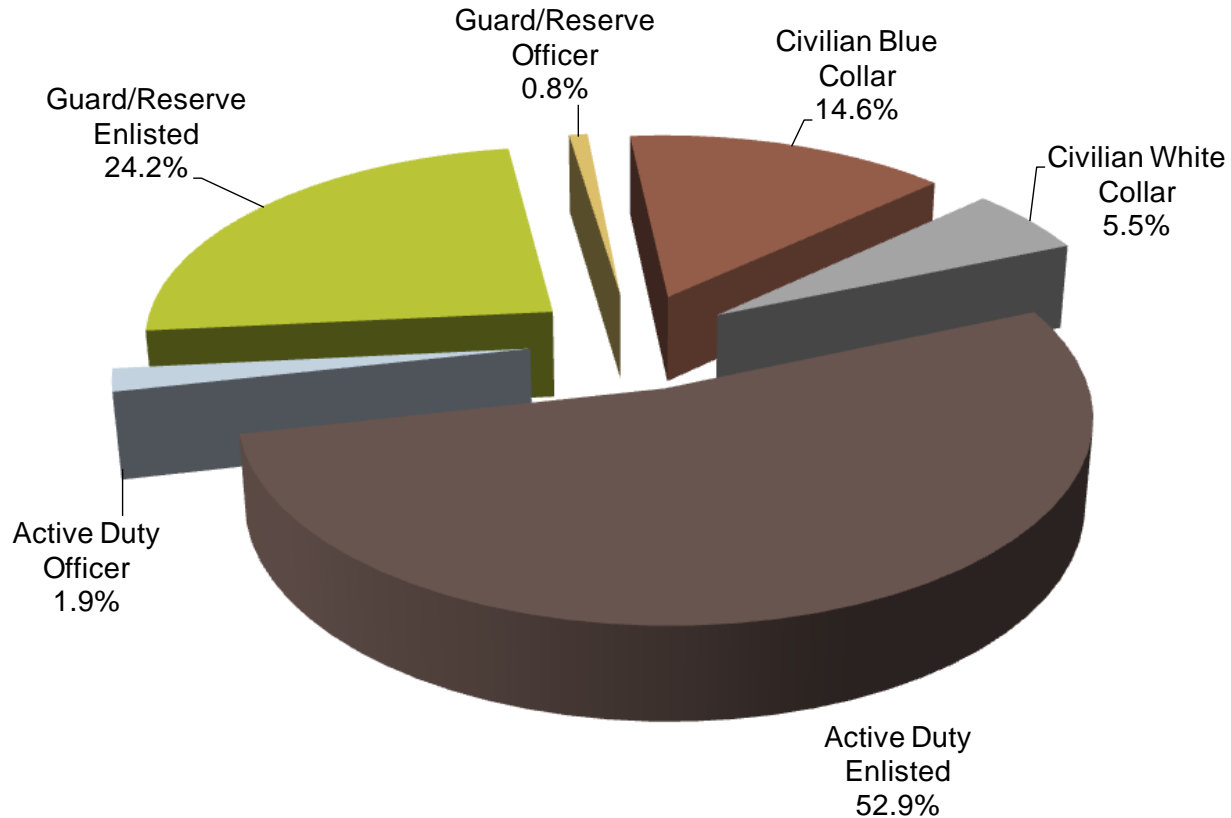
DoD Maintainers by Military Service



Army	245,000
Navy	181,000
Air Force	173,000
Marine Corps	56,000
Other DoD	2,000
Total DoD Maintainers	657,000

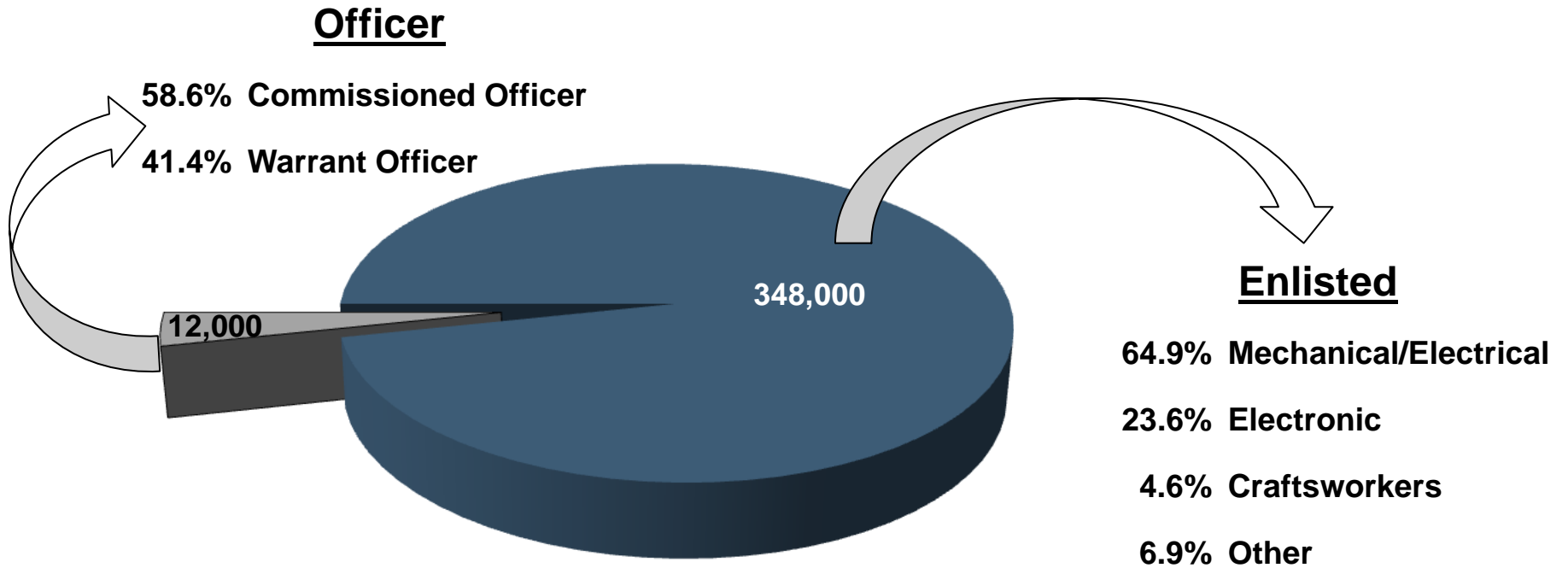
DoD Maintainers by Personnel Category

Maintenance
Workforce



Active Duty Enlisted	348,000
Active Duty Officer	12,000
Guard/Reserve Enlisted	159,000
Guard/Reserve Officer	6,000
Civilian Blue Collar	96,000
Civilian White Collar	36,000
Total DoD Maintainers	657,000

Active Duty Maintainers



National Guard and Reserve Maintainers

Maintenance
Workforce

Officer

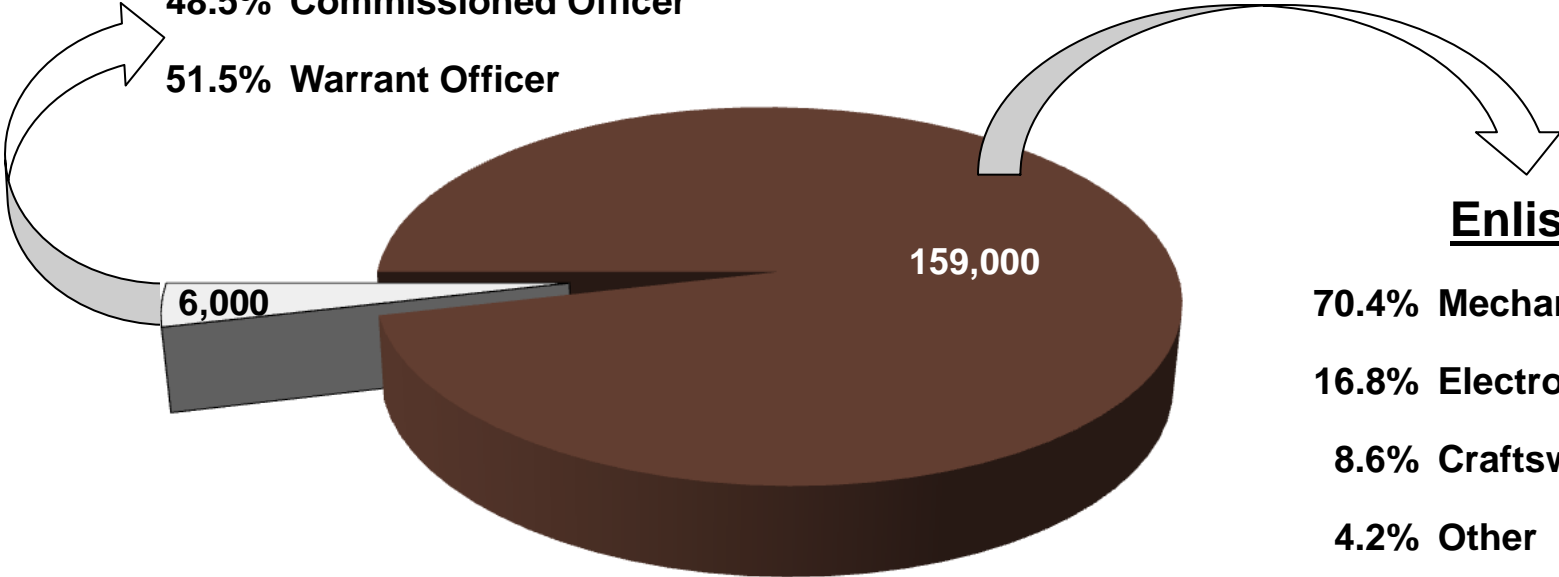
48.5% Commissioned Officer
51.5% Warrant Officer

6,000

159,000

Enlisted

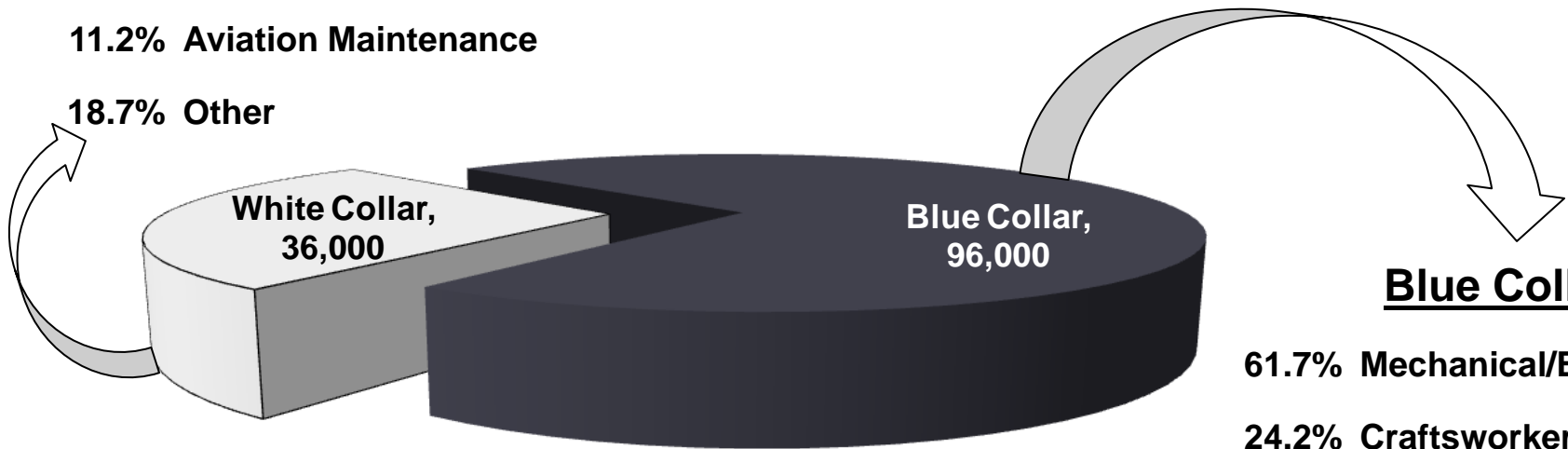
70.4% Mechanical/Electrical
16.8% Electronic
8.6% Craftworkers
4.2% Other



DoD Civilian Maintainers

White Collar

- 43.0% Electrical/Mechanical & Electronic
- 17.4% Production Management
- 9.7% Communications & Radar
- 11.2% Aviation Maintenance
- 18.7% Other



Blue Collar

- 61.7% Mechanical/Electrical
- 24.2% Craftworkers
- 12.5% Electronic
- 1.7% Other

Major Intermediate Maintenance Activities, Active Component

Field-Level
Maintenance

- **Army**
 - 51 aviation maintenance companies
 - 263 ground maintenance companies
 - 1 watercraft maintenance company
- **Navy**
 - 12 shore-based aircraft intermediate maintenance departments (AIMDs) located within 6 fleet readiness centers (FRCs)
 - 6 shore-based overseas AIMDs
 - 21 shipboard AIMDs
 - 8 ship/submarine intermediate maintenance activities (IMAs)
- **Air Force**
 - 60 aircraft, missile, and munitions maintenance groups (MXGs)
- **Marine Corps**
 - 11 marine aviation logistics squadrons (MALs)
 - 3 maintenance battalions

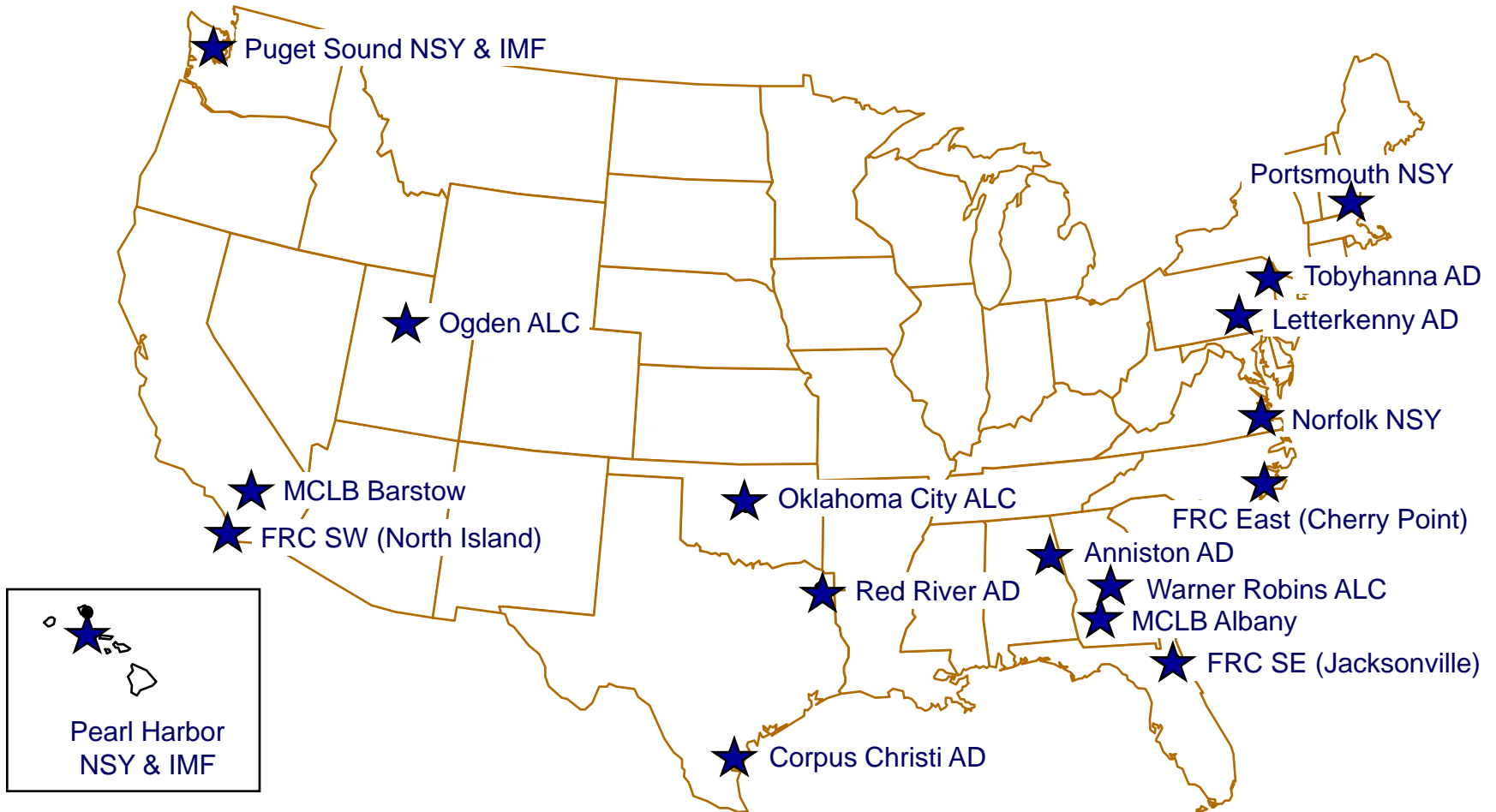
Major Intermediate Maintenance Activities, Reserve Components

- **Army National Guard**
 - Maintenance companies: 31 aviation, 233 ground
 - Approximately 15,500 civilian maintainers primarily assigned to field maintenance shops, training equipment set sites, and aviation support facilities in each state or territory
 - 4 aviation classification and repair depots (AVCRADs)
- **Army Reserve**
 - Maintenance companies: 3 aviation, 39 ground, 1 watercraft
 - Approximately 3,000 civilian maintainers assigned across the four regional support commands, working primarily at dispersed equipment concentration sites (ECSs), or area maintenance support activity (AMSA) locations.
- **Navy Reserve** - 4 shore-based AIMDs
- **Air National Guard/Air Force Reserve**
 - 116 aircraft, missile, and munitions MXGs.
- **Marine Corps Reserve**
 - 3 MALs
 - 1 maintenance battalion

Excludes provisional units

Major Depot-Level Activities by Location

Depot-Level
Maintenance



Major Depot-Level Activities

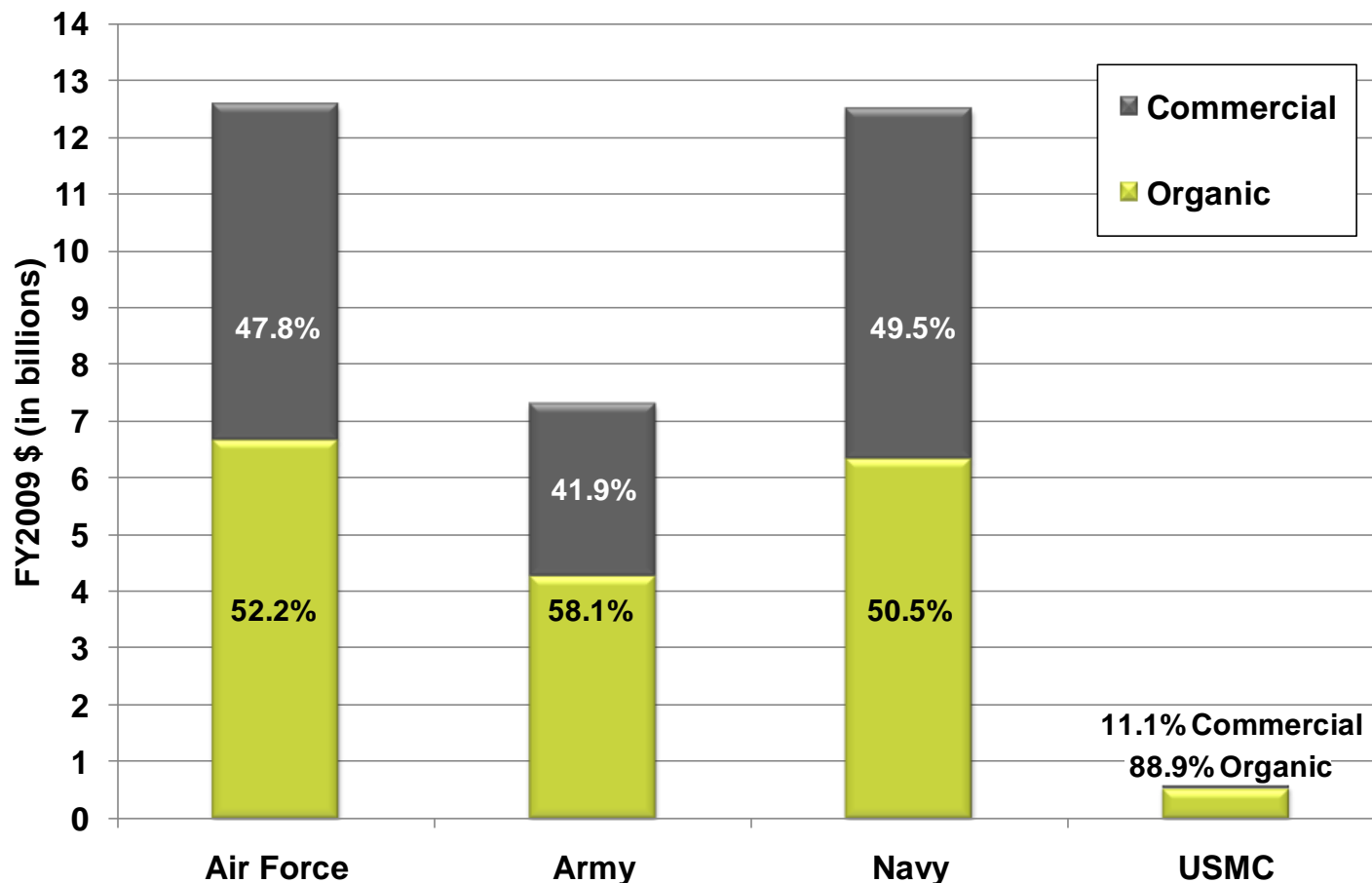
by Category

- Shipyard – Navy (4)
- Vehicle and Armament
 - Army (2)
 - Marine Corps (2)
- Aviation
 - Army (1)
 - Navy (3)
 - Air Force (3)
- Missile – Army (1)
- Communications and Electronics – Army (1)

Organic-Commercial Mix of DoD's Depot Maintenance Workload

Depot-Level
Maintenance

DoD-wide: 53.7% Organic and 46.3% Commercial



2010 Phoenix Award Winner

The Highest Award for Field-Level Maintenance in DoD

**Winner: Marine Aviation Logistics Squadron 40,
2nd Marine Aircraft Wing
Marine Corps Air Station Cherry Point
United States Marine Corps**

While deployed to Afghanistan, MALS-40 supported the 2nd Marine Expeditionary Brigade:

- Provided intermediate-level maintenance, supply, and ordnance support at 3 operating bases for 79 aircraft from 14 tactical squadrons
- Inside 177 mobile maintenance facilities, sustained aviation repair capabilities for 271 systems with 350 pieces of support equipment
- Enabled 2nd MEB to log over 35,000 flight hours and conduct almost 30,000 sorties in a hostile environment
- Issued more than 60,000 aviation parts and 500,000 rounds of ammunition, and built more than 1,400 bombs and rockets



Past Winners of the Phoenix Award for Field-Level Maintenance

2009	1 st Squadron, 3 rd Armored Cavalry Regiment, USA
2008	1 st Special Operations Maintenance Group, USAF
2007	1 st Maintenance Battalion, USMC
2006	3D Materiel Readiness Battalion, USMC
2005	3 rd Battalion, 7 th Field Artillery Regiment, USA
2004	Combat Service Support Battalion 10, Air Ground Combat Center, USMC
2003	3 rd Battalion, 7 th Infantry Regiment, USA
2002	USS ENTERPRISE (CVN 65), USN
2001	USS DWIGHT D. EISENHOWER (CVN 69), USN
2000	555 th Fighter Squadron, USAF
1999	Shore Intermediate Maintenance Activity, Naval Station Norfolk, VA, USN
1998	68 th Transportation Battalion, USA
1997	1 st Maintenance Battalion, USMC
1996	48 th Fighter Wing, USAF
1995	51 st Maintenance Battalion, USA
1994	1 st Maintenance Battalion, 1 st Force Service Support Group (FMFPAC), USMC
1993	Shore Intermediate Maintenance Activity, Charleston, SC, USN
1992	Marine Fighter Attack Squadron 235, USMC
1991	Marine Aviation Logistics Squadron 16, USMC
1990	1 st Battalion, 29 th Infantry Regiment, USA
1989	363 rd Tactical Fighter Wing (TAC), USAF
1988	USS ACADIA (AD 42), USN
1987	50 th Tactical Fighter Wing (USAFE), USAF
1986	416 Bombardment Wing (SAC), USAF
1985	USS JOHN F. KENNEDY (CV 67), USN

2011 Secretary of Defense Field-Level Maintenance Award Winners

Small Category



**Marine Tactical Electronic Warfare Squadron 1
Marine Corps Air Station Cherry Point, North Carolina, USMC**



**Strike Fighter Squadron ONE FOUR THREE
Naval Air Station Oceana, Virginia, USN**

Medium Category



**D Company, 6-101 Aviation Regiment, 101st Combat Aviation Brigade
Fort Campbell, Kentucky, USA**



**Fleet Readiness Center Southwest
Naval Base Coronado, California, USN**

Large Category



**1st Maintenance Battalion
Camp Pendleton, California, USMC**



**31st Maintenance Group
Aviano Air Base, Italy, USAF**

2011 Robert T. Mason Award for Depot Maintenance Excellence

**Winner: KC-135 Programmed Depot Maintenance Team
Oklahoma City Air Logistics Center
Tinker Air Force Base, Oklahoma
United States Air Force**

During 2010, the KC-135 Programmed Depot Maintenance Team:



- Produced a record 55 aircraft, with a 21 percent decrease in the average number of flow days
- Made significant achievements in every segment of the production line, including numerous kitting programs that improved materiel availability and technician efficiency, and continuous process improvements that affected maintenance procedures
- Performed extraordinary maintenance feats to keep the 50+-year-old jets flying nearly 50,000 annual sorties
- Achieved early production of 31 aircraft and a record fourth quarter surge of 18 aircraft, which allowed Air Mobility Command (AMC) support for multiple deployed operations

Past Winners of the Robert T. Mason Award

- 2010** Emergent Repair Program
Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility
Joint Base Pearl Harbor, Hickam, Hawaii
- 2009** Mine-Resistant, Ambush-Protected Vehicle Program
Red River Army Depot, Texarkana, Texas
- 2008** H-1 Aircraft Production Program
Fleet Readiness Center East
Marine Corps Air Station Cherry Point, North Carolina
- 2007** Dedicated Design and Prototype Effort
Marine Corps Maintenance Center, Albany, Georgia
- 2006** High Mobility Multipurpose Wheeled Vehicle (HMMWV) Recapitalization Program,
Red River Army Depot, Texarkana, Texas
- 2005** Vehicle Armor Protective Kits Program,
Marine Corps Maintenance Center, Albany, Georgia

Acronyms

AD	Army Depot
AIMD	Aircraft Intermediate Maintenance Department
ALC	Air Logistics Center
AMC	Air Mobility Command
AMSA	Area Maintenance Support Activity
AVCRAD	Aviation Classification and Repair Depot
CONUS	Continental United States
DASD	Deputy Assistant Secretary of Defense
DLA	Defense Logistics Agency
DoD	Department of Defense
ECS	Equipment Concentration Site
FMFPAC	Fleet Marine Force, Pacific
FRC	Fleet Readiness Center
FY	Fiscal Year
HMMWV	High Mobility Multipurpose Wheeled Vehicle
IMA	Intermediate Maintenance Activity
MALS	Marine Aviation Logistics Squadron
MCLB	Marine Corps Logistics Base
MEB	Marine Expeditionary Brigade
MPP	Maintenance Policy and Programs
MR	Materiel Readiness
MRAP	Mine-Resistant, Ambush-Protected

Acronyms (Cont.)

MXG	Maintenance Group
NSY	Naval Shipyard
OCO	Overseas Contingency Operations
OSD	Office of the Secretary of Defense
PS	Program Support
RDT&E	Research, Development, Test, and Evaluation
RM	Resource Management
SAC	Strategic Air Command
SCI	Supply Chain Integration
SE	Southeast
SW	Southwest
TAC	Tactical Air Command
TP	Transportation Policy
UK	United Kingdom
USA	United States Army
USAF	United States Air Force
USAFE	United States Air Forces in Europe
USMC	United States Marine Corps
USN	United States Navy
USS	United States Ship

Explanatory Notes

- All facts and statistics depicted in the *DoD Maintenance Fact Book* relate to materiel maintenance, a category that *includes* maintenance of weapon systems and related components and equipment but *excludes* maintenance of real property, installations, and utilities. The cost of materiel maintenance in FY2010, including overseas contingency operations (OCO), was \$83.7 billion.
- As depicted on page 6, DoD materiel maintenance is performed at several levels, ranging in complexity from daily system inspections to rapid removal and replacement of components to complete overhaul or rebuild of a weapon system. The following terms are used throughout the *Fact Book*:
 - **Depot level** for the most complex and extensive work.
 - **Intermediate level** for less complex maintenance performed by operating unit back-shops, base-wide activities, or consolidated regional facilities.
 - **Organizational level** for more time-sensitive work performed in the field, on the flight line, or at the equipment site.
 - **Field level** signifying the combination of the organizational and intermediate levels.

Explanatory Notes (continued)

- All financial charts in the *Fact Book*, unless otherwise noted, depict FY2010 year-end data.
- An electronic version of this document, as well as other information about the responsibilities and functions of the DoD Maintenance Policy and Programs office, is located on the following website:
<http://www.acq.osd.mil/log/mpp/>.
- This document is published for information only. It does not constitute official DoD correspondence.

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