



#### **DoD Maintenance**

### FACT BOOK



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

Defense maintenance is big business, costing more than \$84 billion (including wartime supplemental funding) in FY2007 and involving more than 650,000 military and civilian maintainers who—along with several thousand commercial firms—support approximately 280 ships, 14,000 aircraft, 800 strategic missiles, and 370,000 ground combat and tactical vehicles.

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.

It also includes the winners of the 2007 Phoenix Award, 2008 Secretary of Defense field-level and depot-level maintenance awards, and the past winners of the Robert T. Mason Award for Depot Maintenance Excellence.

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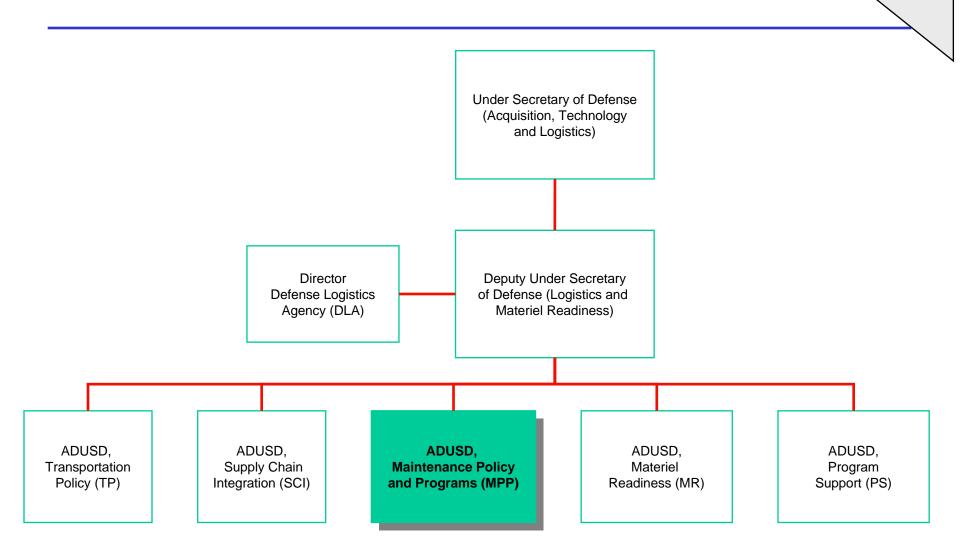
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#### **OSD Logistics Organization**

Overview



DoD view

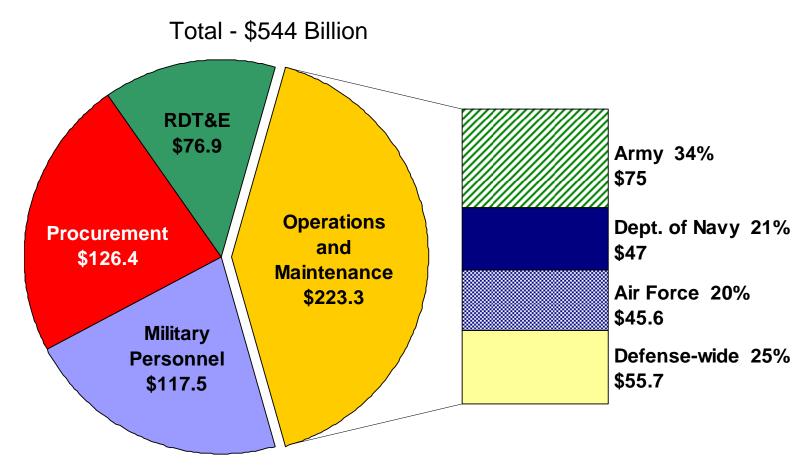
#### ADUSD(MPP) Mission Statement

The Assistant Deputy Under Secretary of Defense for Maintenance Policy and Programs

- 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 and military equipment maintenance programs and related resources within the Department of Defense.
- Establishes and maintains maintenance policies and programs that are managerially and technologically sound, and are adequately resourced to maintain the desired levels of weapon system and military equipment readiness to accomplish the Department's missions.

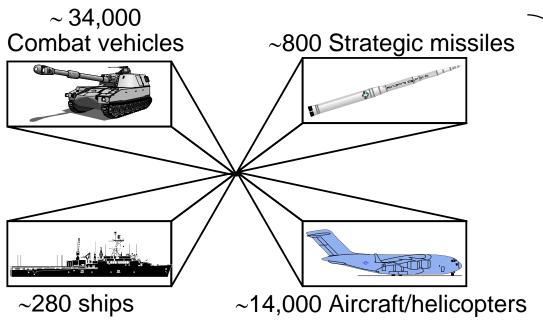
### FY2008 Appropriations for the Department of Defense\*

Overview



<sup>\*</sup> Does not include military construction, family housing, revolving and management funds, and some FY2008 supplemental appropriations.

### Systems Supported by DoD Maintenance



- + ~ 336,000 Tactical vehicles
- + Communications/electronics equipment
- + Support equipment
- + Other systems

#### Maintained by:

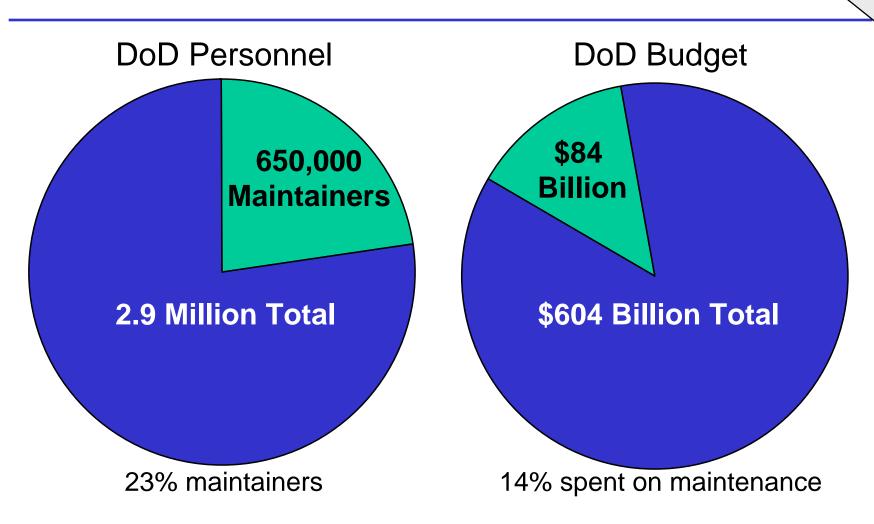
- 650,000 DoD personnel
- Private-sector companies

*Maintenance cost:* ~\$84 billion (FY2007)

DoD's military equipment is valued at ~\$345 billion

### Scope of DoD Maintenance—FY2007

Naintenance



### Levels of DoD Maintenance







**Organizational** 

**Intermediate** 

**Depot** 

Increasing *volume* of maintenance

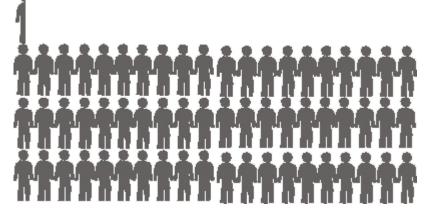
More frequent tasks that require less facilitization/skills

Less frequent tasks that require more facilitization/skills

Increasing *complexity* of maintenance

### Personnel Strength of Field- and Depot-Level Maintenance

Maintenance Workforce



Includes 29,000 National Guard technicians and 51,000 other civilian maintainers.

~605,000 field-level maintainers

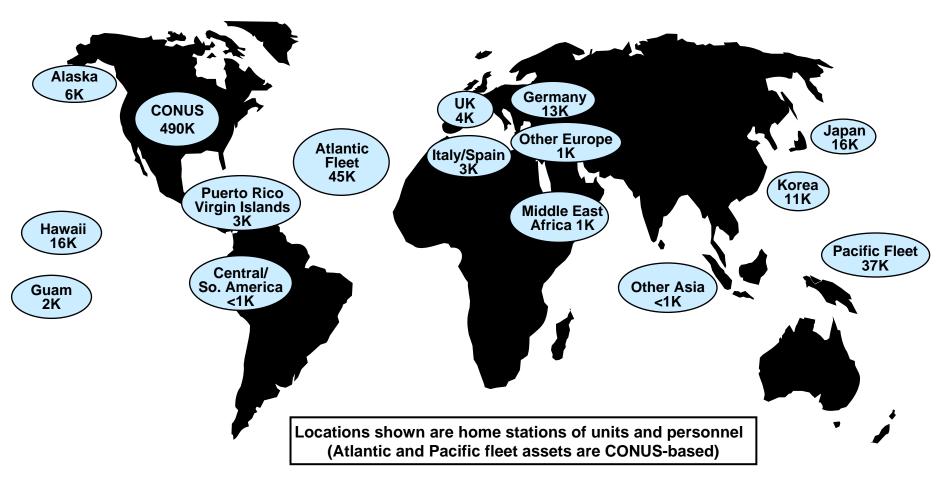


~75,000 depot-level personnel

Includes 30,000 engineers, scientists, analysts, supply specialists, and other civilian non-maintainers essential to maintenance production.

#### **DoD Maintainers**

Worldwide\*

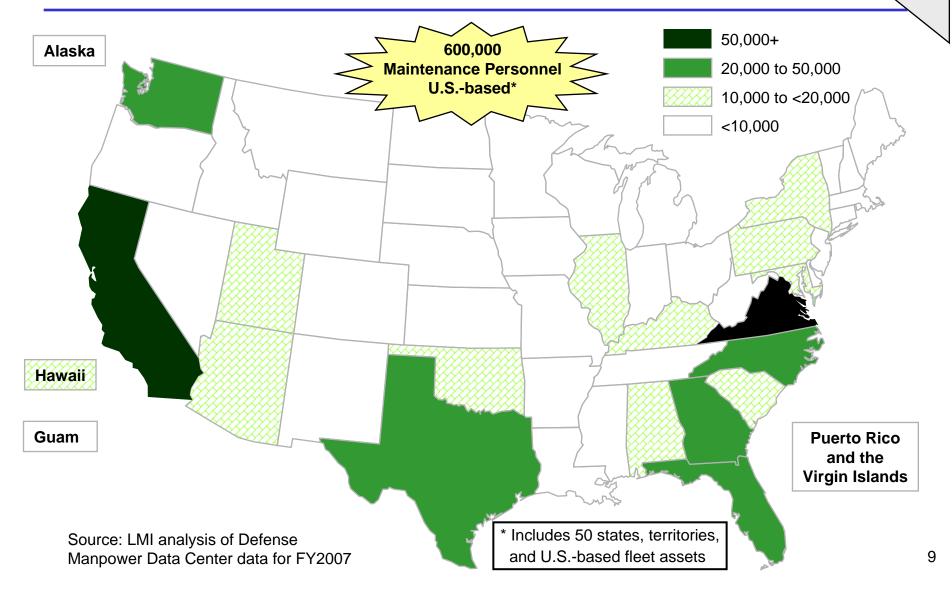


<sup>\*</sup> Numbers shown are approximate and in 000s (K).

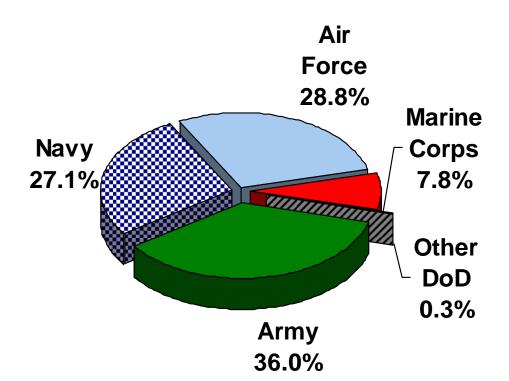
Source: LMI analysis of Defense Manpower Data Center data for FY2007

### DoD Maintainers by State and Territory





### DoD Maintainers by Military Service

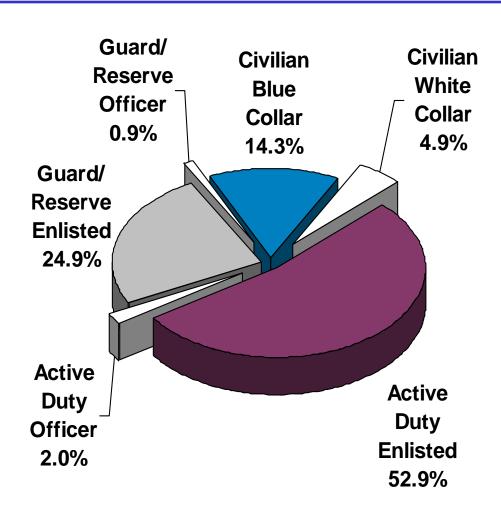


Army	234,000
Navy	176,000
Air Force	187,000
Marine Corps	51,000
Other DoD	2,000
Total DoD Maintainers	650,000

#### DoD Maintainers

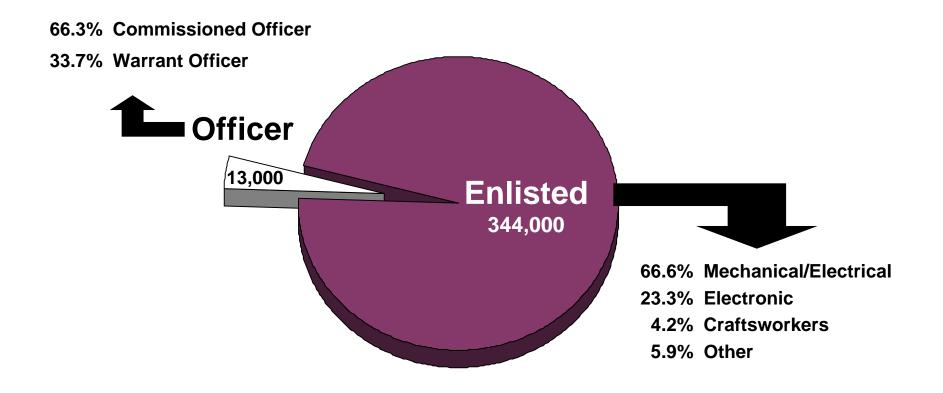
by Personnel Category





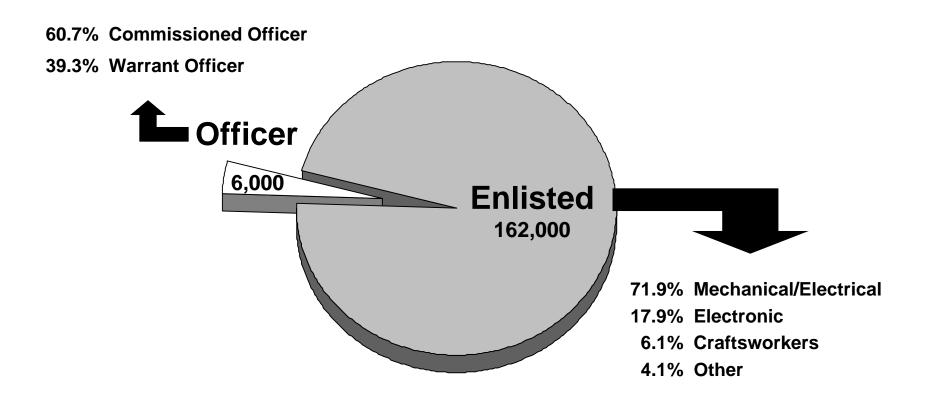
Active Duty Enlisted	344,000
<b>Active Duty Officer</b>	13,000
Guard/Reserve Enlisted	162,000
Guard/Reserve Officer	6,000
Civilian Blue Collar	93,000
Civilian White Collar	32,000
Total DoD Maintainers	650,000

### Active Duty Maintainers

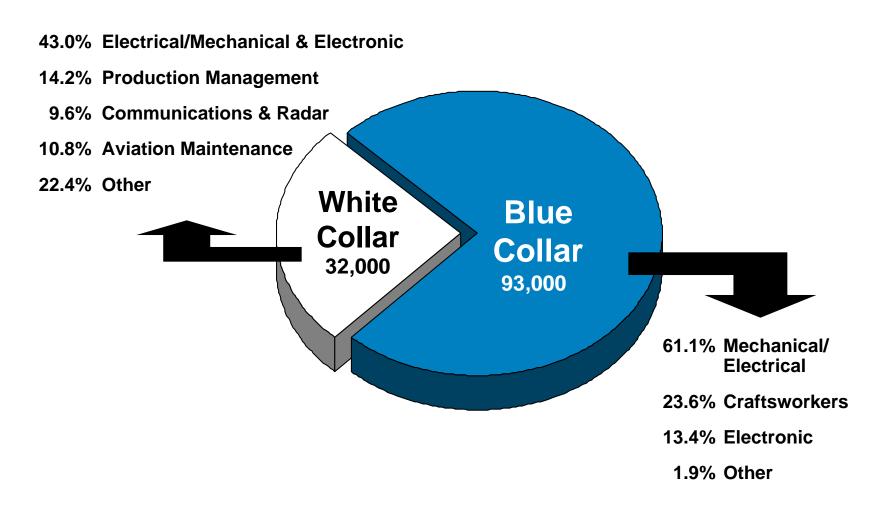


### National Guard and Reserve Maintainers

Maintenance Workforce



### DoD Civilian Maintainers



### Major Intermediate Maintenance Activities\*



#### Army

- 14 aviation field- and sustainment-level repair sites
- 64 field-level maintenance companies
- 19 sustainment-level maintenance activities (company level and larger)

#### Navy

- 12 shore-based aircraft intermediate maintenance departments (AIMDs) organized into 6 fleet readiness centers (FRCs)
- 22 shipboard AIMDs
- 9 ship/submarine intermediate maintenance facilities (IMFs)

#### Air Force

59 aircraft and missile maintenance groups (MXGs)

#### Marine Corps

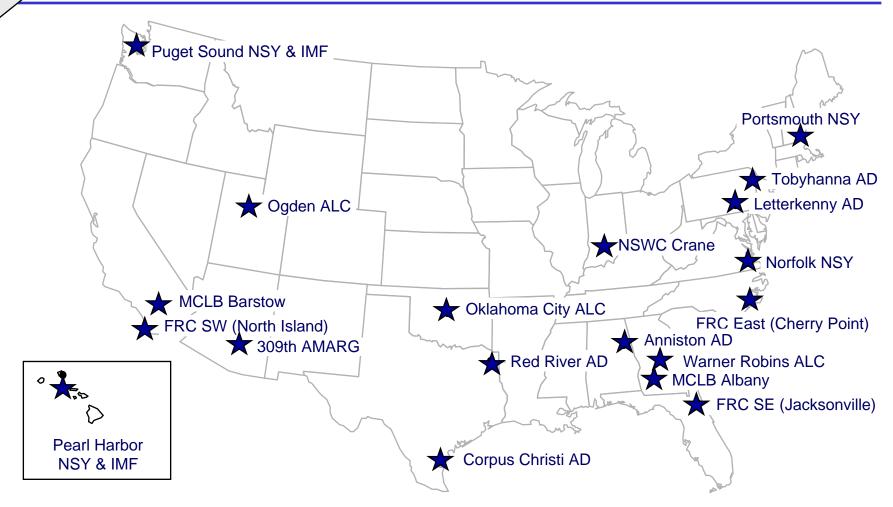
- 11 marine aviation logistics squadrons (MALS)
- 3 maintenance battalions.

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<sup>\*</sup> Excludes National Guard, Reserve, and provisional units.

Maintenance Maintenance

### Major Depot-Level Activities\* by Location



<sup>\*</sup> Activities with 400 or more depot-level maintainers.

### Major Depot-Level Activities by Category and Number\*

Maintenance

#### Principal categories of major organic depot:

- Shipyard Navy (4)
- Vehicle and Armament Army/Marine Corps (4)
- Aviation Army/Navy/Air Force (7)
- Missile Army (1)
- Communications and Electronics Army (1)

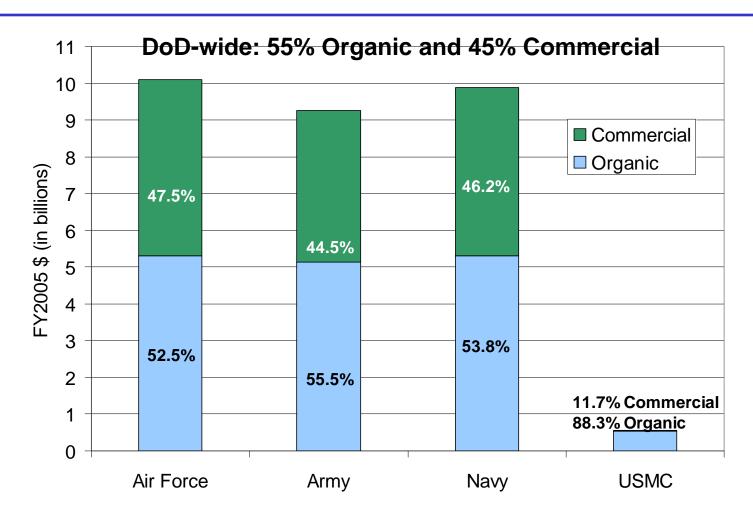
#### Others:

- Storage and Reclamation (aircraft removed from active inventories) – Air Force (1)
- Warfare Center (includes missile flight and launcher systems and nuclear weapons security systems) – Navy (1)

<sup>\*</sup> Numbers exclude arsenals, laboratories, and field maintenance facilities.

Maintenance Maintenance

### Organic-Commercial Mix of DoD Depot Maintenance Workload



Source: DUSD(L&MR) Distribution of DoD Depot Maintenance Workloads: Fiscal Years 2007 through 2009, April 2008

#### Workload Distribution

#### by Major System Category

Maintenance

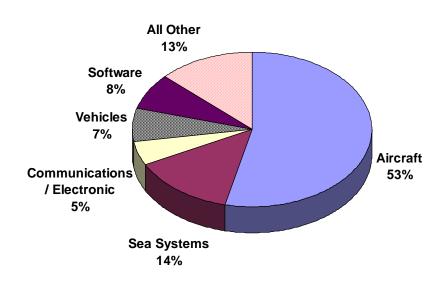
### by DoD Organic Depots

(Direct Labor Hours)

# Vehicles 13% Vehicles 13% Communications / Electronic 6% Sea Systems

33%

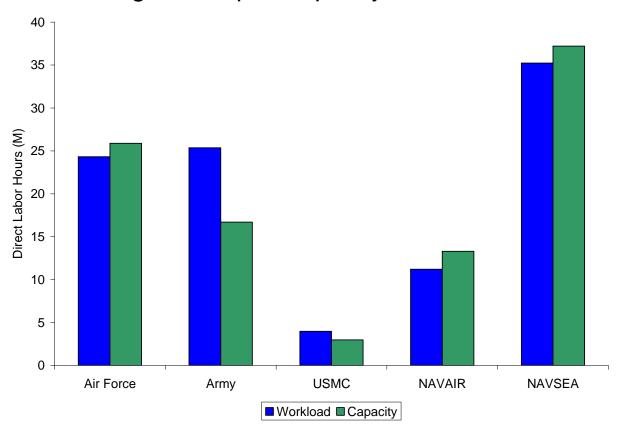
#### Depot Maintenance Performed by Defense Contractors (Cost)



Depot Maintenance

### Capacity Utilization of Organic Depot Maintenance\*

Overall Organic Depot Capacity Utilization: ~104%



<sup>\*</sup> FY2007 estimated data for DoD's 19 major depots; capacity metrics are based on single-shift operations without overtime or surge.

#### 2007 Phoenix Award Winner

The Highest Secretary of Defense Award for Field-Level Maintenance



1st Maintenance Battalion I Marine Expeditionary Force Camp Pendleton, California United States Marine Corps

- In FY2006, the Battalion:
  - Installed fragmentation protection kits on 112 vehicles
  - Increased readiness rates for deployed I MEF equipment from 94 to 97 percent in 6 months
  - Conducted 825 Maintenance Support Team visits to I MEF garrison units
  - Detailed personnel to II MEF to fill Operation Iraqi Freedom shortfalls
  - Deployed 2 maintenance companies for separate 7-month rotational assignments to Iraq.

#### 2008 Secretary of Defense Field-Level Maintenance Award Winners

- 3rd Battalion, 43rd Air Defense Artillery Fort Bliss, Texas, USA
- 1st Special Operations Maintenance Group Hurlburt Field, Florida, USAF
- Fleet Readiness Center Northwest
   Naval Air Station Whidbey Island, Washington, USN
- 31st Aircraft Maintenance Squadron Aviano Air Base, Italy, USAF
- B Company, 610th Brigade Support Battalion Fort Riley, Kansas, USA
- Marine Fighter Attack Squadron 312
   Marine Corps Air Station Beaufort, South Carolina, USMC

#### Maintenance Awards

### 2008 Robert T. Mason Award for Depot Maintenance Excellence

Winner: H-1 Aircraft Production Program
Fleet Readiness Center East
MCAS Cherry Point, North Carolina

During FY2007, the FRC East H-1 Aircraft Production Program:

- Returned 52 H-1 aircraft to the warfighters
- Achieved 100 percent on-time delivery for aircraft directly supporting OIF/OEF operations
- Saved more than \$20 million through innovative logistics process solutions
- Completed 122 inspection and repair events, accumulating more than 7,800 hours in direct support of unplanned and unscheduled warfighter requirements.

Since 2004, FRC East also shortened H-1 turnaround time to 51 days, a 46 percent improvement.

### Past Robert T. Mason Awards for Depot Maintenance Excellence

**2007 Winner** Dedicated Design and Prototype Effort

Marine Corps Maintenance Center

Albany, Georgia

**2006 Winner** High Mobility Multipurpose Wheeled Vehicle

Recapitalization Program

Red River Army Depot

Texarkana, Texas

**2005 Winner** Vehicle Armor Protective Kits Program

Marine Corps Maintenance Center

Albany, Georgia

Reference

#### Acronyms

AIMD Aircraft Intermediate Maintenance Department

AD Army Depot

ADUSD Assistant Deputy Under Secretary of Defense

ALC Air Logistics Center

AMARG Aerospace Maintenance and Regeneration Group

CONUS Continental United States
DLA Defense Logistics Agency
DoD Department of Defense

DUSD(L&MR) Deputy Under Secretary of Defense for Logistics and Materiel Readiness

FRC Fleet Readiness Center

FY Fiscal Year

IMF Intermediate Maintenance Facility
MALS Marine Aviation Logistics Squadron

MCAS Marine Corps Air Station
MEF Marine Expeditionary Force
MCLB Marine Corps Logistics Base

MPP Maintenance Policy and Programs

MR Materiel Readiness MXG Maintenance Group

NSWC Naval Surface Warfare Center

NSY Naval Shipyard

Reference

#### Acronyms (Cont.)

OIF/OEF Operation Iraqi Freedom/Operation Enduring Freedom

OSD Office of the Secretary of Defense

PS Program Support

RDT&E Research, Development, Test, and Evaluation

SCI Supply Chain Integration TP Transportation Policy

UK United Kingdom USA United States Army

USAF United States Air Force

USMC United States Marine Corps

USN United States Navy

Reference

#### **Explanatory Notes**

- As depicted on page 6, DoD maintenance is performed at several levels of complexity, ranging from the 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 in operating unit backshops, base-wide activities, or in 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 is a term signifying the combination of the organizational and intermediate levels.
- All charts in this document show FY2007 year-end data unless otherwise noted.
- 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: <a href="http://www.acq.osd.mil/log/mpp/">http://www.acq.osd.mil/log/mpp/</a>.
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