

Part II

DoD Response to Information Requested by the House Armed Services Committee About DoD's Organic Depot Maintenance Activities

Executive Summary

In its report to accompany the National Defense Authorization Act for Fiscal Year 2007,¹ the House of Representatives Committee on Armed Services requested the Department of Defense to submit a report to the congressional defense committees by March 1, 2007, on the Department's depot maintenance strategy. The committee's report also requested selected information about DoD's organic depot maintenance activities. This information is presented in the following sequence for clarity of the response, and is keyed to the HASC # indicated in the Foreword.

Section

- A. The identification of workloads by depot and commodity group that are currently being performed in the depots [HASC # 3(b)]
- B. An assessment of the extent to which current facilities will continue to be used [HASC #1]
- C. Future planning for core capability [HASC #3(a)]; including an assessment of the extent to which the appropriate work is being performed in the depots to maintain core capability [HASC #2]
- D. Current workforce breakdown and a personnel requirements strategy for maintaining the required workforce [HASC #4]
- E. Planned equipment and facility improvements and the associated funding stream, by depot with distinction made for what is planned as a replacement and what will provide capability for a new system [HASC #5], including
 - a specification of statutory, regulatory or operational impediments, if any, to achieving a strategy that enables a capital investment in facilities, equipment, processes and personnel of an amount not less than six percent of the actual total revenue [HASC #6]; and
 - a description of the benchmarks established by each depot for capital investment and the relationship of the benchmarks to applicable performance methods used in the private sector [HASC #7]

¹ House of Representatives Report 109-452, *The Report of the House of Representatives Committee on Armed Services on the National Defense Authorization Act for Fiscal Year 2007*, May 5, 2006, p. 297.

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Overview

The Military Services currently operate 22 organic depot maintenance activities. These are shown in Figure 1 below. With the exception of the activities operated by the Space and Naval Warfare Systems Command (SPAWAR), all organic depot maintenance activities have more than 400 direct labor personnel. In fiscal year 2007, almost 78,000 DoD depot maintenance employees will accomplish more than 88 million hours of organic depot-level maintenance work on a wide variety of commodities.

Figure 1. Organic Maintenance Depots



A. Depot Maintenance Workload [HASC #3(b)]

Table 1 shows the FY2004–2011 organic depot maintenance workload trend in direct labor hours (DLH) from the perspective of the agent Military Service (i.e., the organizational activity that supports depot-level maintenance for a variety of customers, which may include its own Service, other Services, and other Federal Agencies). FY2007 data is based on the President’s Budget submission, and FY2008–2011 data is derived from the Military Services’ FY2006-2011 Program Objectives Memorandum (POM) submissions.

The workload data shown in Table 1, and reflected throughout the remainder of Part II, does not include depot maintenance requirements associated with resetting the force in support of Operations Iraqi and Enduring Freedom that have been funded through supplemental appropriations.

Table 1. Organic Depot Maintenance Workload by Service (in DLH 000)

	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Army	15,759	20,525	20,177	18,474	18,336	18,757	17,805	17,660
Navy	50,661	49,765	49,078	47,385	45,052	41,595	41,219	46,415
NAVSEA	37,503	36,329	35,663	34,259	31,926	28,469	28,093	33,289
NAVAIR	12,769	12,904	12,884	12,604	12,604	12,604	12,604	12,604
SPAWAR	389	531	531	522	522	522	522	522
Air Force	24,004	24,428	23,213	23,897	23,897	23,897	23,897	23,897
Marine Corps	2,326	2,073	1,862	1,454	1,454	1,454	1,454	1,454
DoD Total	92,750	96,790	94,330	91,210	88,740	85,703	84,375	89,427

Notes: NAVAIR, NAVSEA, and SPAWAR totals are subsets of the Navy total. Due to rounding, figures may not add exactly.

Workload by Depot Maintenance Activity

Workload information for fiscal years 2004–2011 for each organic depot maintenance activity is provided in appendices 1 through 4.

Workload by Commodity Group

Table 2 presents the FY2004–2011 trend for total DoD organic depot maintenance workload by major commodity.

Table 2. Organic Depot Maintenance Workload by Major Commodity (in DLH 000)

Commodity Grouping	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Aircraft	31,692	32,541	33,479	32,910	32,795	33,215	32,263	32,117
Ground Vehicles	6,404	9,553	8,610	7,867	7,867	7,867	7,867	7,867
Sea Ships	35,670	34,561	33,917	32,605	30,276	26,796	26,417	31,608
Communication/Electronic Equipment	4,900	5,772	4,802	4,596	4,610	4,602	4,611	4,606
Support Equipment	1,193	1,269	1,281	1,217	1,217	1,217	1,217	1,217
Ordnance, Weapons, & Missiles	3,810	4,028	3,508	3,485	3,446	3,470	3,458	3,459
Software	2,682	2,674	2,574	2,640	2,640	2,640	2,640	2,640
Fabrication	1,527	1,859	1,948	1,781	1,780	1,788	1,796	1,805
Fleet/Field Support	3,546	3,147	2,894	2,895	2,895	2,895	2,895	2,895
Special Interest Items	134	145	136	135	135	135	135	135
Other	1,192	1,241	1,183	1,079	1,079	1,078	1,078	1,078
DoD Total	92,750	96,790	94,330	91,210	88,740	85,703	84,375	89,427

Note: Due to rounding, figures may not add exactly.

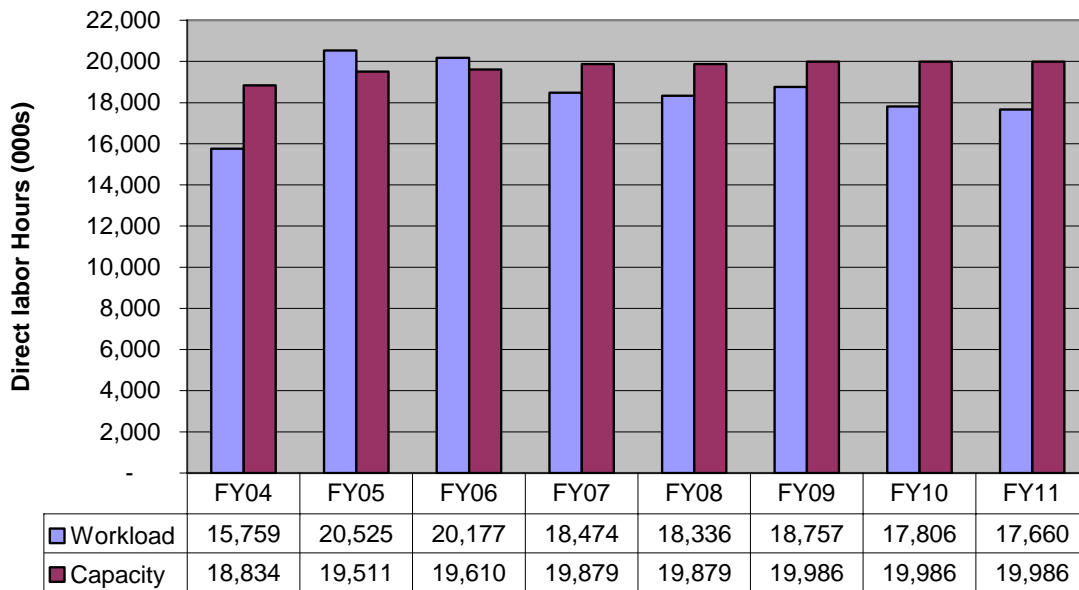
B. Continued Use of Current Facilities [HASC #1]

The following five figures summarize the funded organic depot-level maintenance workload and depot maintenance baseline capacity² and utilization for each of the Military Services for fiscal years 2004–2011.

Workload, capacity, and utilization information for each organic depot maintenance activity are provided in the appendices 1 through 4.

As depicted in Figures 2-6, and Appendices 1-4, DoD anticipates that each of DoD’s 22 depot maintenance activities will be adequately workloaded throughout and beyond the FYDP period.

Figure 2. Army Total Depot Maintenance Workload and Capacity



² Throughout this report, ‘capacity’ data reflects depot baseline capacity index, which is computed using a standard single shift, 40-hour work week.

Figure 3. Total Shipyard Depot Maintenance Workload and Capacity

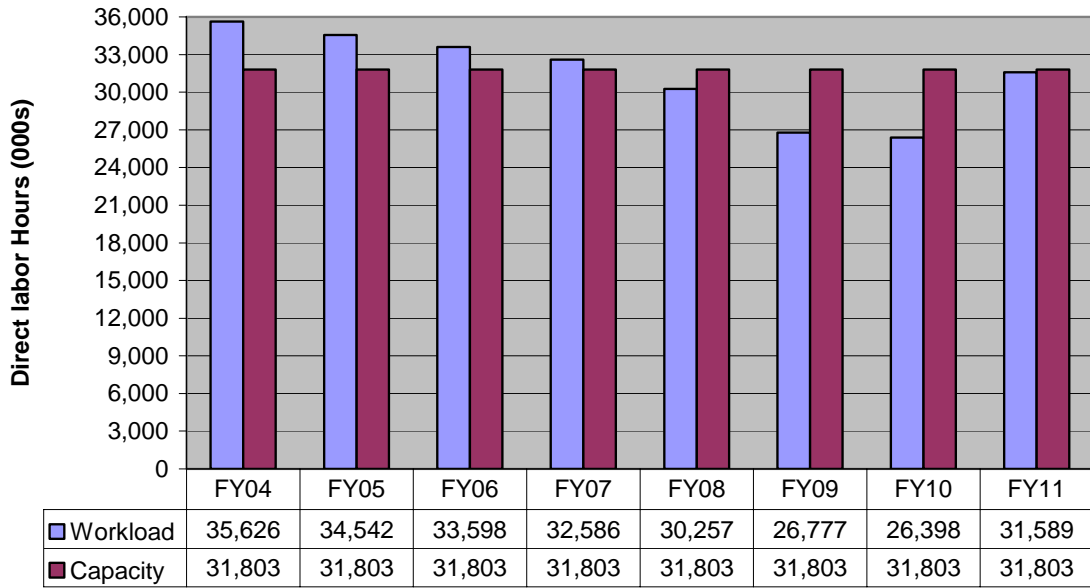


Figure 4. Total Naval Aviation Depot Maintenance Workload and Capacity

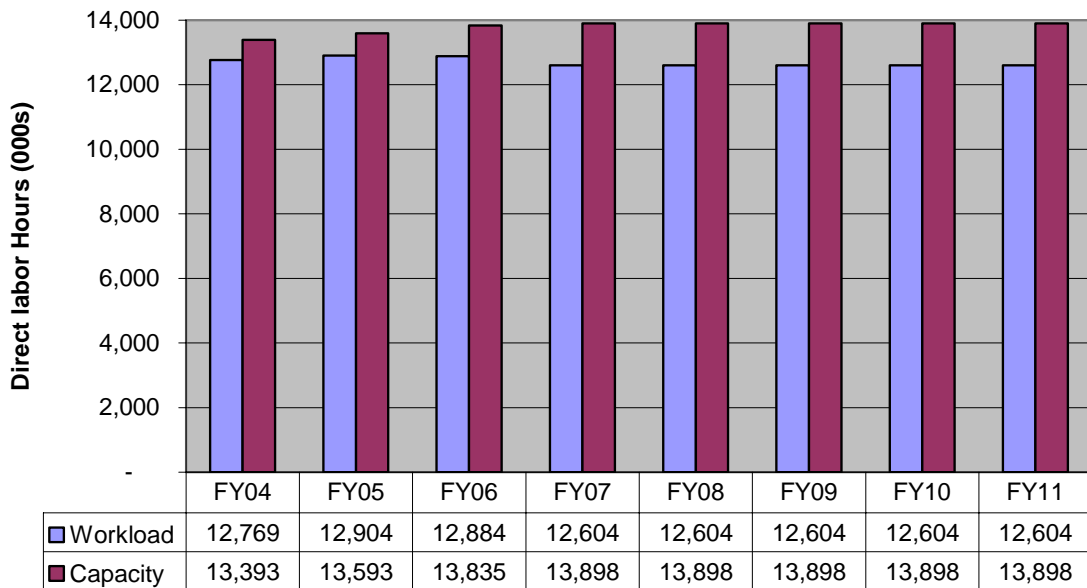


Figure 5. Marine Corps Depot Maintenance Workload and Capacity

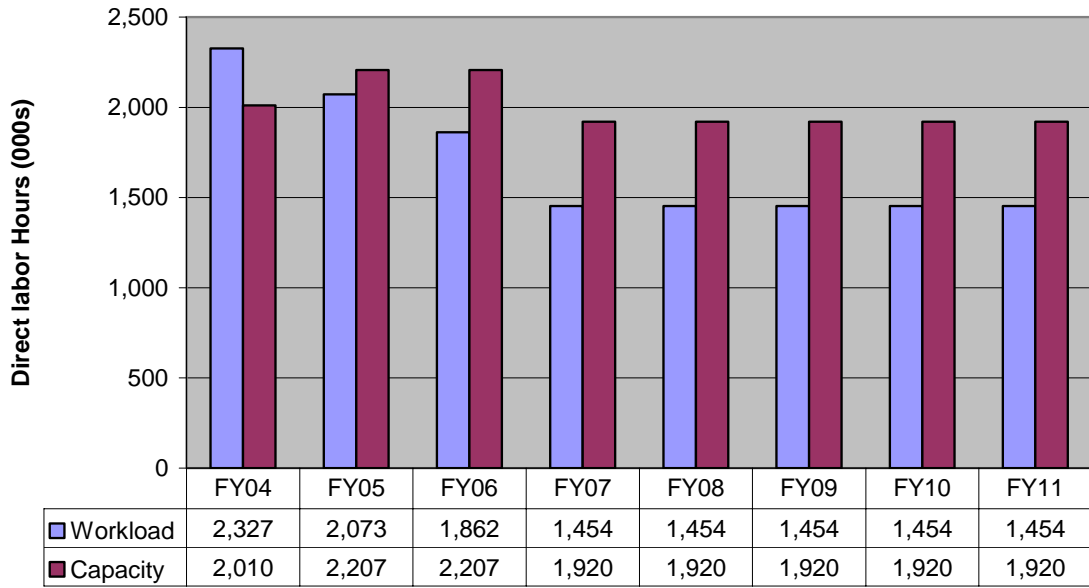
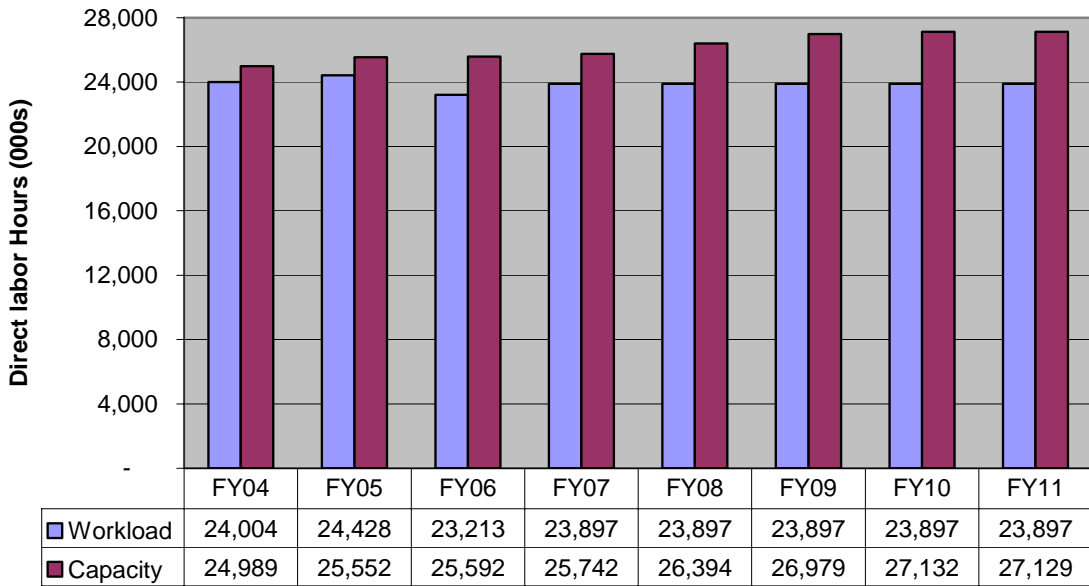


Figure 6. Air Force Total Depot Maintenance Workload and Capacity



C. Core Depot Maintenance Capability [HASC #3(a) & #2]

Future Planning for Core Capability [HASC #3(a)]

DoD's efforts to ensure the organic depot maintenance infrastructure is capable of sustaining future core requirements are described in Section C of the DoD *Depot Maintenance Strategic Plan* (see Part I of this report).

Assessment of Core Sustaining Workload [HASC #2]

DoD computes depot maintenance core requirements biennially. Table 3 shows the results of these calculations for Fiscal Year 2007 and the organic depot maintenance workload for the same fiscal year funded by the Services as depicted in Table 1.

Each Military Service has certified their funded workload is adequate and appropriate to sustain core depot-level maintenance and repair capabilities.

Table 3. FY 2007 Core Requirement and Sustaining Workload (in thousands of DLHs)

	Core Capability Requirement	Total Funded Workload
Army	15,494	18,474
Navy	33,642	47,385
NAVSEA	25,517	34,259
NAVAIR	7,519	12,604
SPAWAR	606	522
Air Force	19,857	23,897
Marine Corps	1,466	1,454
DoD Total	70,459	91,210

D. Depot Maintenance Workforce [HASC #4]

Table 4 summarizes the approximate composition of DoD’s depot maintenance workforce for fiscal year 2007. About 64 percent of the civilian workforce is “blue collar” artisans and equipment operators. The “white collar” employees at depot maintenance activities consist of engineers, technicians, and management and administrative support personnel.

Table 4. Composition of the FY2007 Depot Maintenance Workforce

Labor Category	Civilian	Military	Combined
Direct	50,200	1,190	51,390
Indirect	25,740	840	26,580
DoD Total	75,940	2,030	77,970

The total size of the depot maintenance workforce is projected to be essentially unchanged during fiscal years 2007–2011. Maintaining these employment levels will necessitate replacing normal turnover including retirement losses ranging from 3 to 6 percent of each Military Service’s depot maintenance workforce.

No single human capital strategy will work for all depots because of the differences among them in demographic profiles, occupational composition, and regional labor pool conditions. The following are examples of the various techniques that are being used by maintenance depots to acquire new employees with requisite skills and abilities:

- Hiring of skilled technicians based on projected workforce attrition over the next 12 months
- Vocational education partnerships with local high schools and regional technical schools, also known as youth apprenticeship programs
- Development of an on-site factory-like training facility in which depot employees provide technical training and state-certified educators provide related job skills training
- Cooperative education programs with colleges and universities that offer engineering degrees
- Maintenance production specialist internships, which combine classroom, on-the-job training (OJT), and structured job assignments tailored to develop mid-level managers
- Active recruiting of non-commissioned and warrant officers nearing retirement
- Nationwide recruiting for hard-to-attract specialties, such as information technology, or vanishing skills, such as pattern making.

DoD’s plans of action for developing and reshaping the civilian workforce to address current and projected gaps in critical skills and competencies are addressed in the report to Congress required by Section 1122 of the Fiscal Year 2006 National Defense Authorization Act (Public Law 109-163).

E. Capital Investment in Equipment and Facilities [HASC #5, 6 & 7]

Each Military Department will establish an annual depot maintenance capital investment funding target that is equal to not less than 6 percent of its combined funded core-sustaining workload no later than fiscal year 2009.

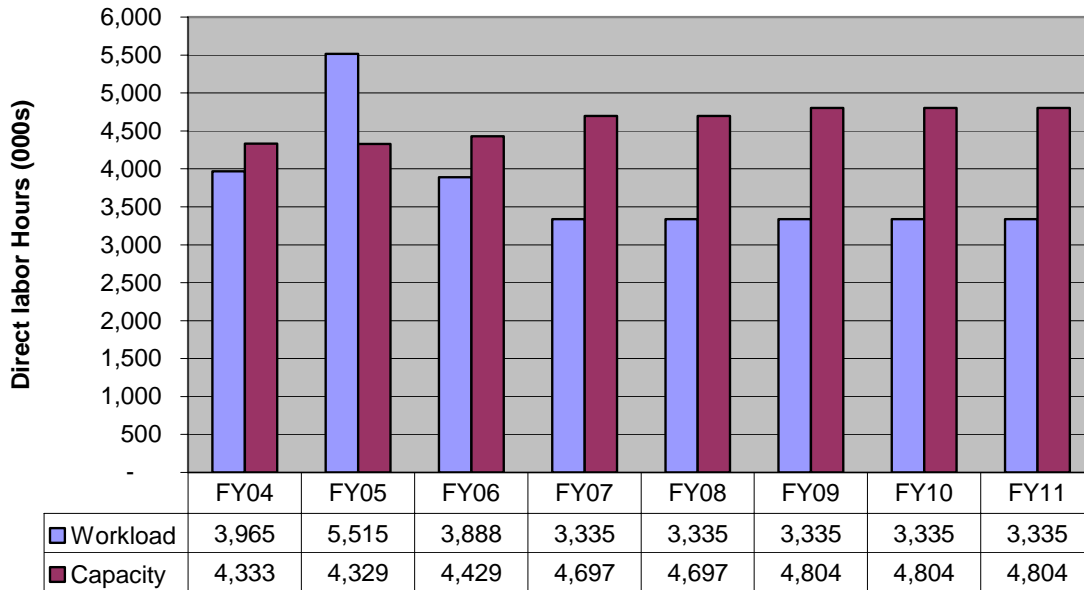
The following information is addressed in the report to Congress required by Section 332 of the National Defense Authorization Act for Fiscal Year 2007 (Public Law 109-364):

- DoD's planned investment in equipment and facilities improvements, with associated funding, at specific depot maintenance activities, with distinction being made for what is planned as a replacement and what will provide capability for a new system [HASC #5].
- Statutory, regulatory, or operational impediments, if any, to achieving a strategy that enables a capital investment in facilities, equipment, processes, and personnel of an amount no less than 6 percent of the actual total revenue [HASC #6].
- The benchmarks established by each depot for capital investment and the relationship of the benchmarks to applicable performance methods used in the private sector [HASC #7].

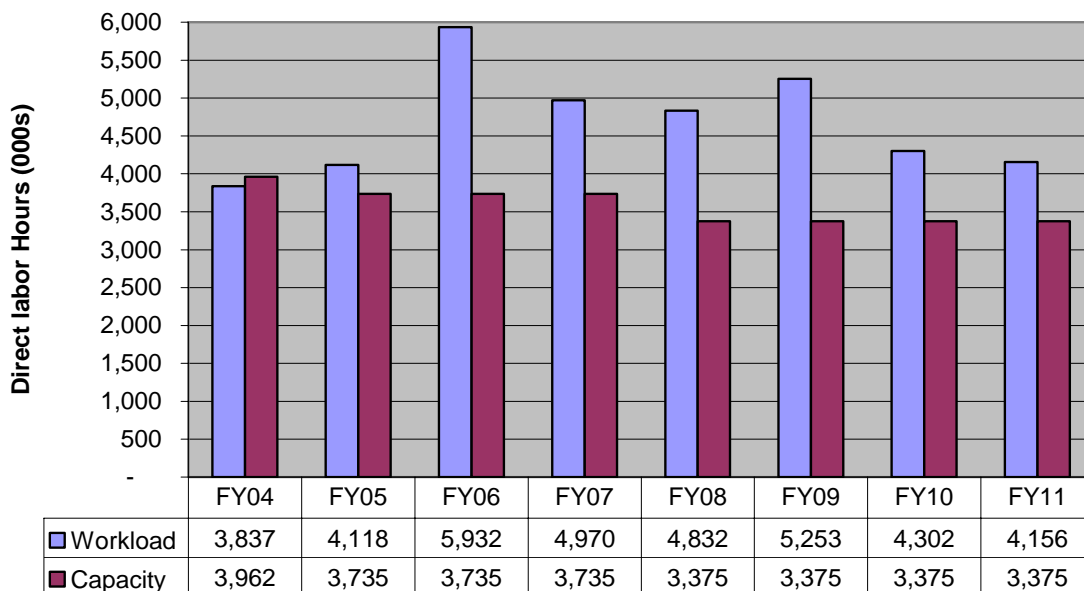
Appendix 1

Army Depot Maintenance Activities

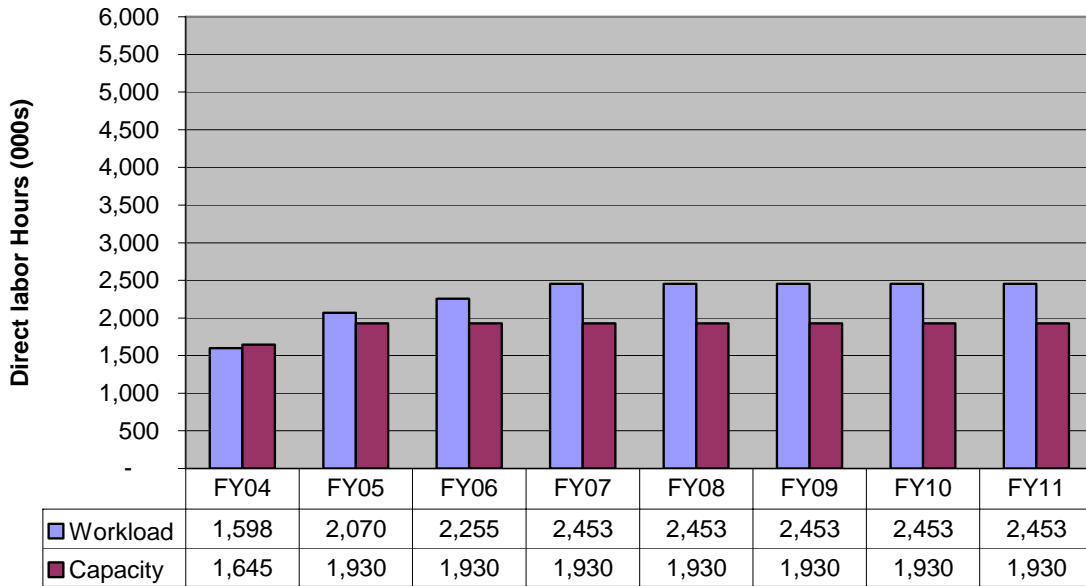
Anniston Army Depot Workload and Capacity



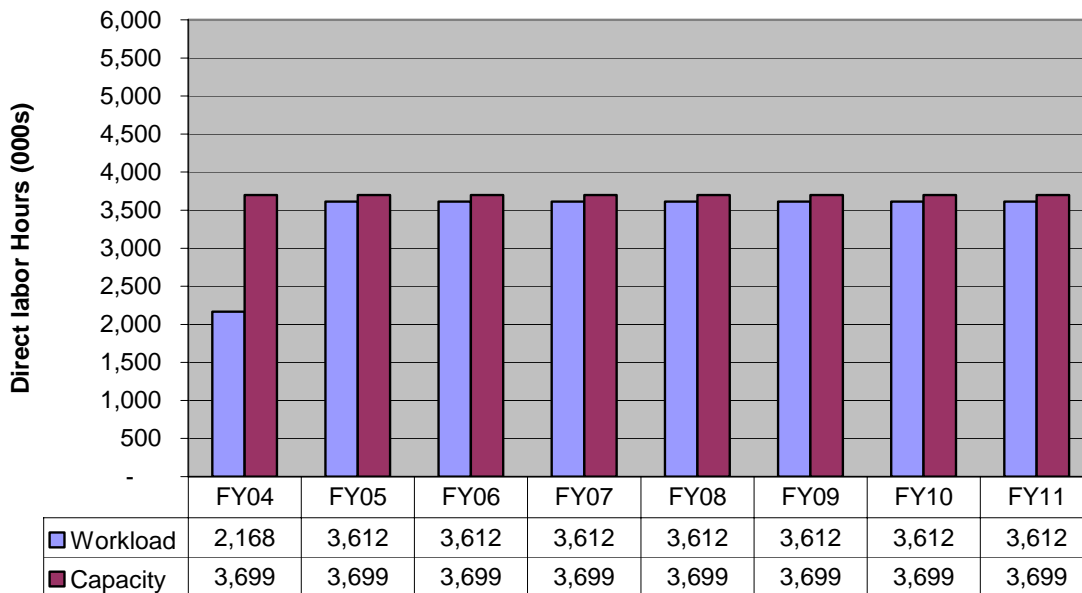
Corpus Christi Army Depot Workload and Capacity



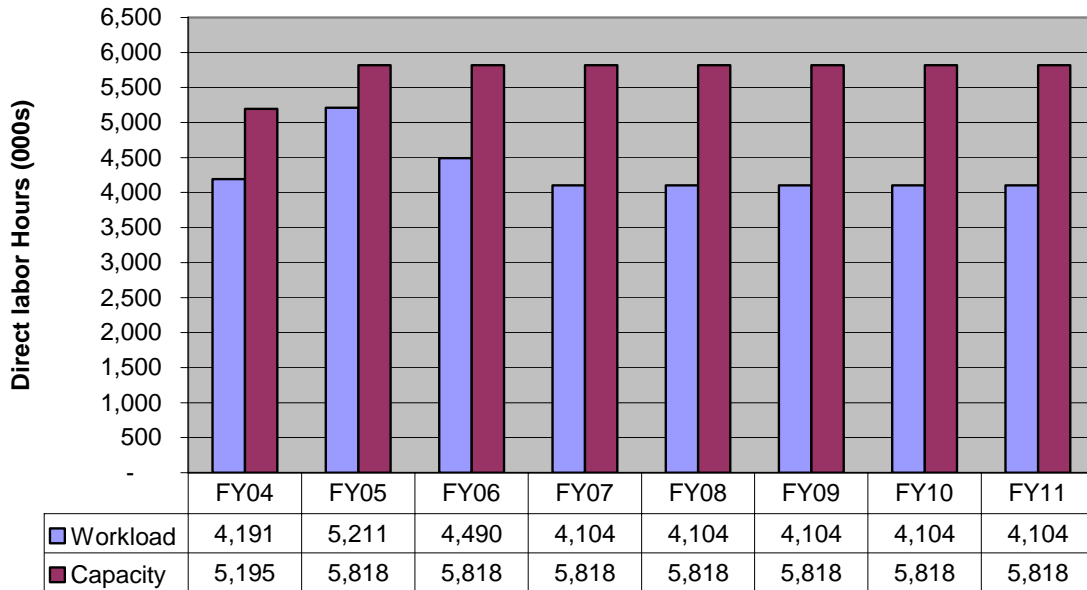
Letterkenny Army Depot Workload and Capacity



Red River Army Depot Workload and Capacity



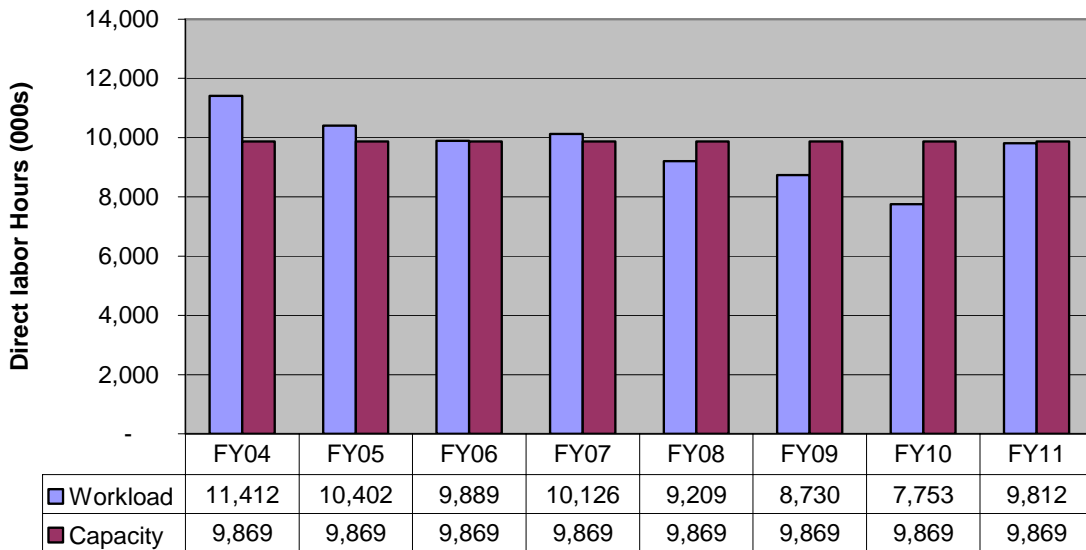
Tobyhanna Army Depot Workload and Capacity



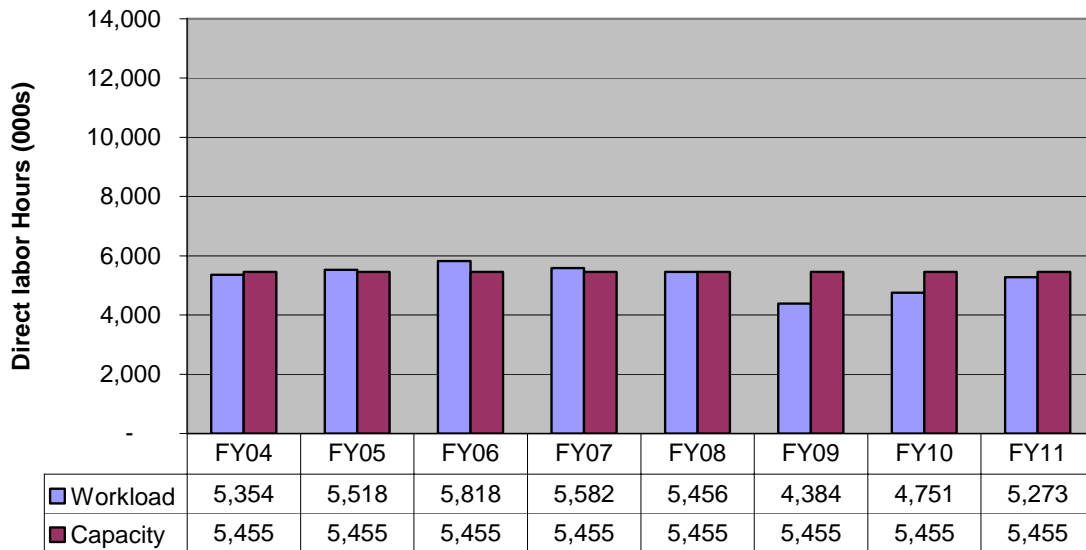
Appendix 2

Navy Depot Maintenance Activities

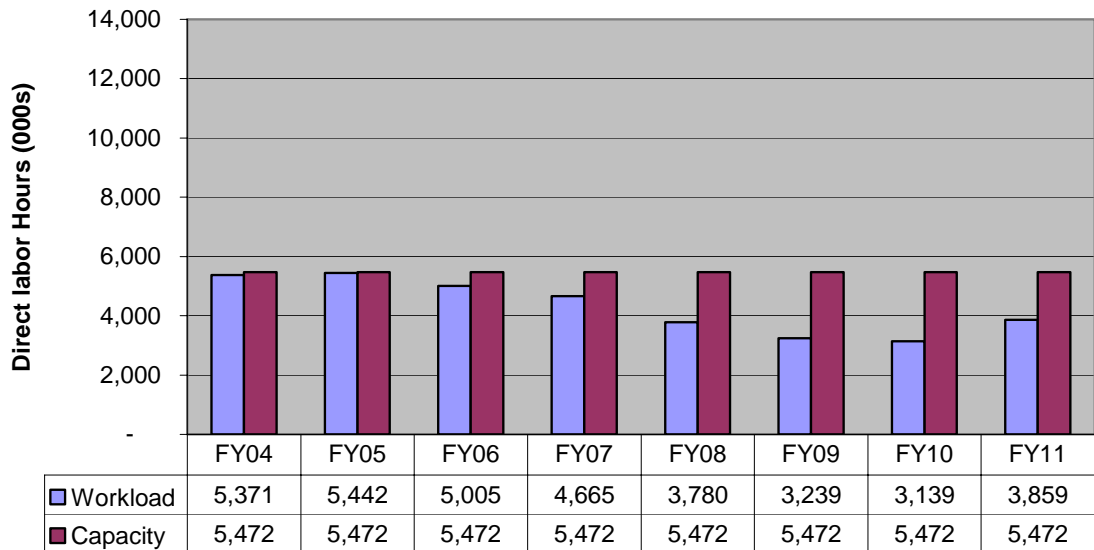
**Norfolk Naval Shipyard
Depot Maintenance Workload and Capacity**



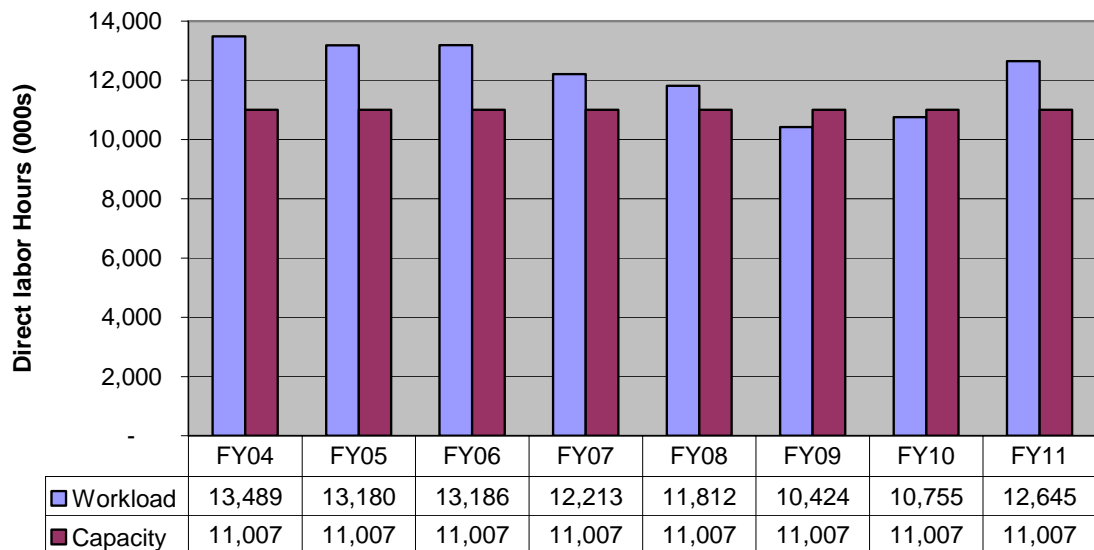
**Pearl Harbor Naval Shipyard and IMF
Depot Maintenance Workload and Capacity**



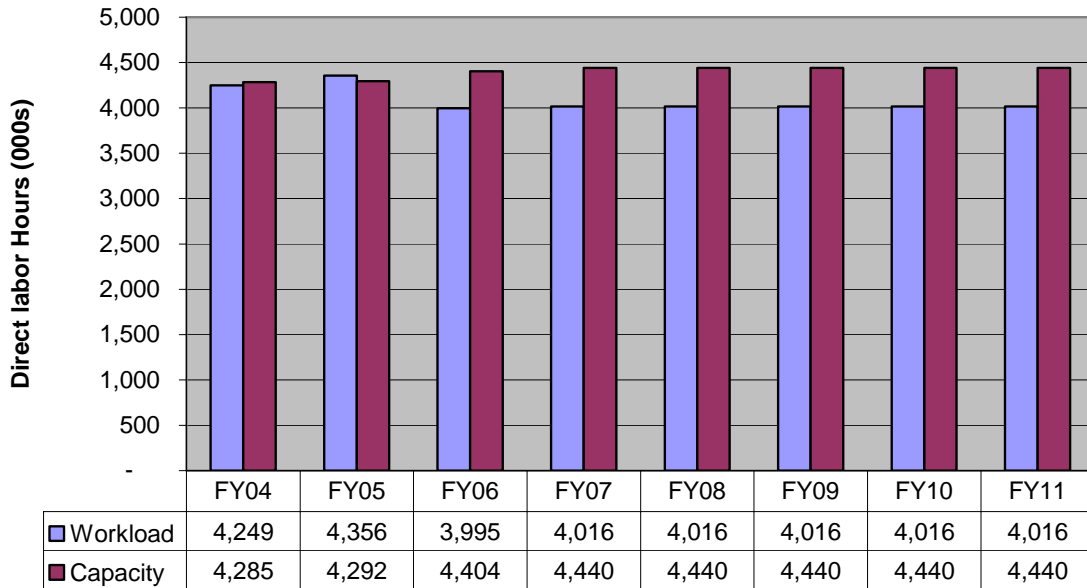
**Portsmouth Naval Shipyard
Depot Maintenance Workload and Capacity**



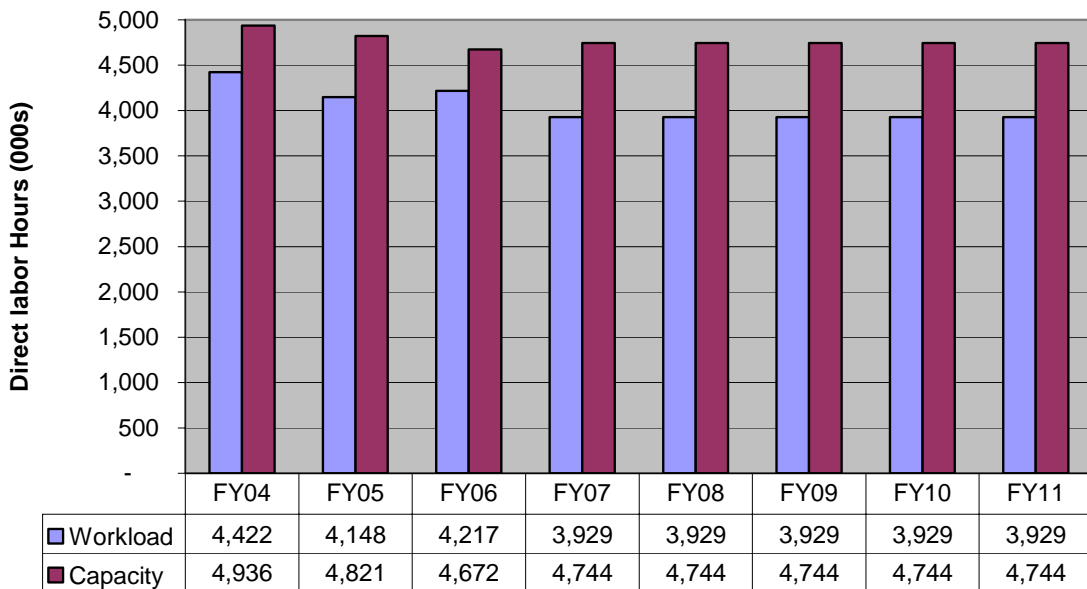
**Puget Sound Naval Shipyard and IMF
Depot Maintenance Workload and Capacity**



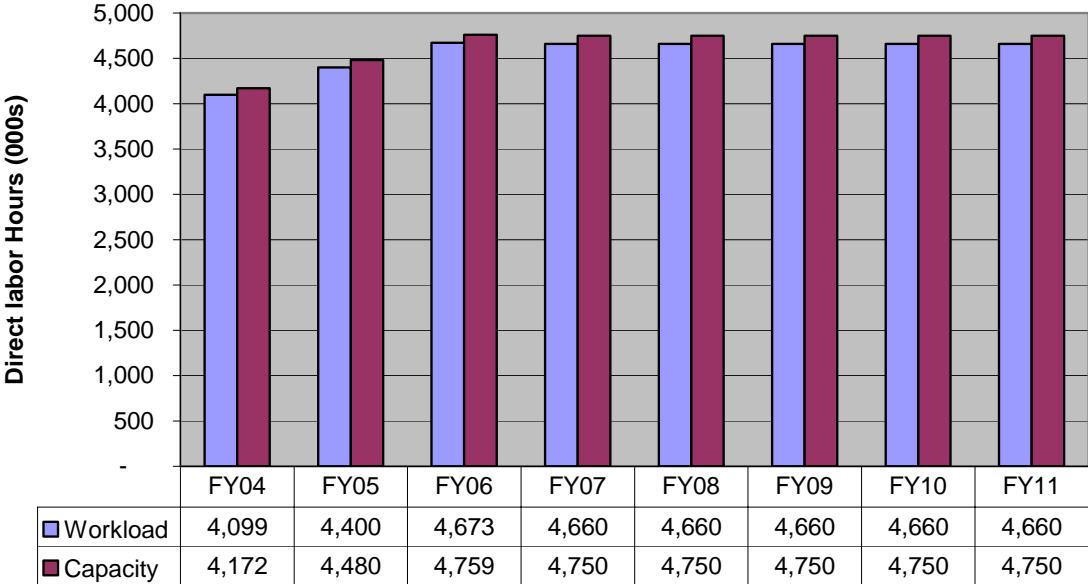
FRC East Depot Maintenance Workload and Capacity



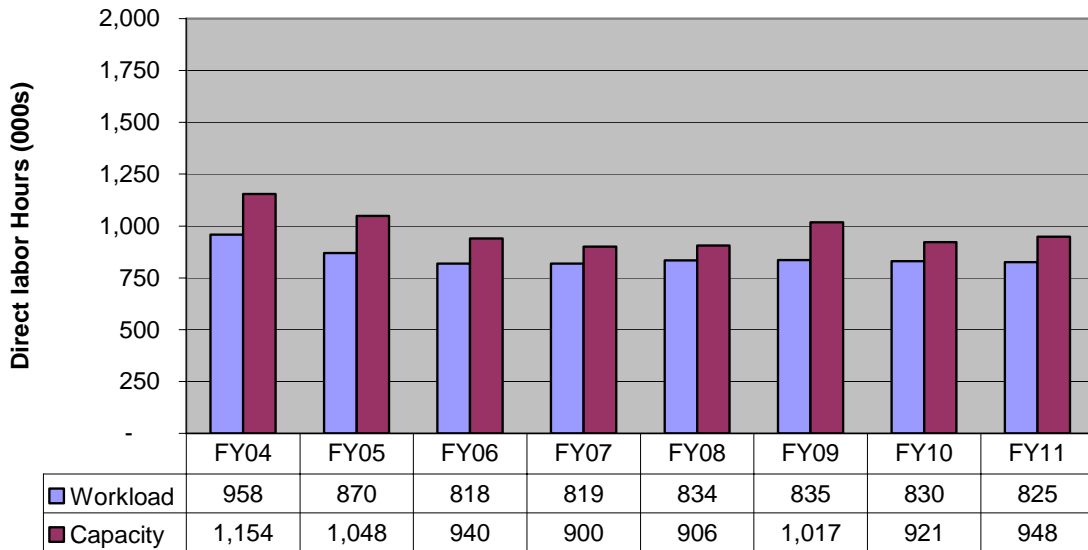
FRC Southeast Depot Maintenance Workload and Capacity



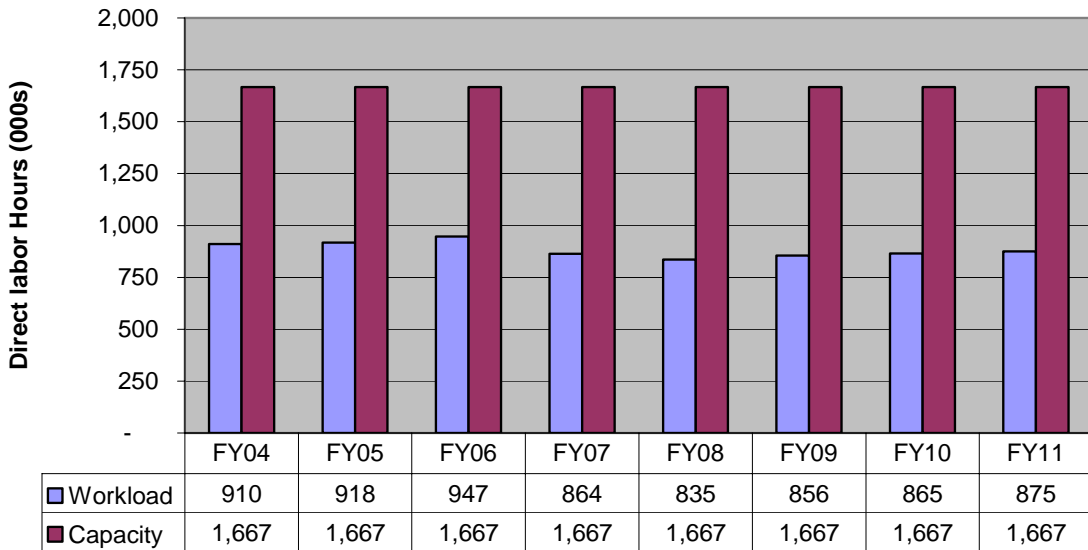
FRC Southwest Depot Maintenance Workload and Capacity



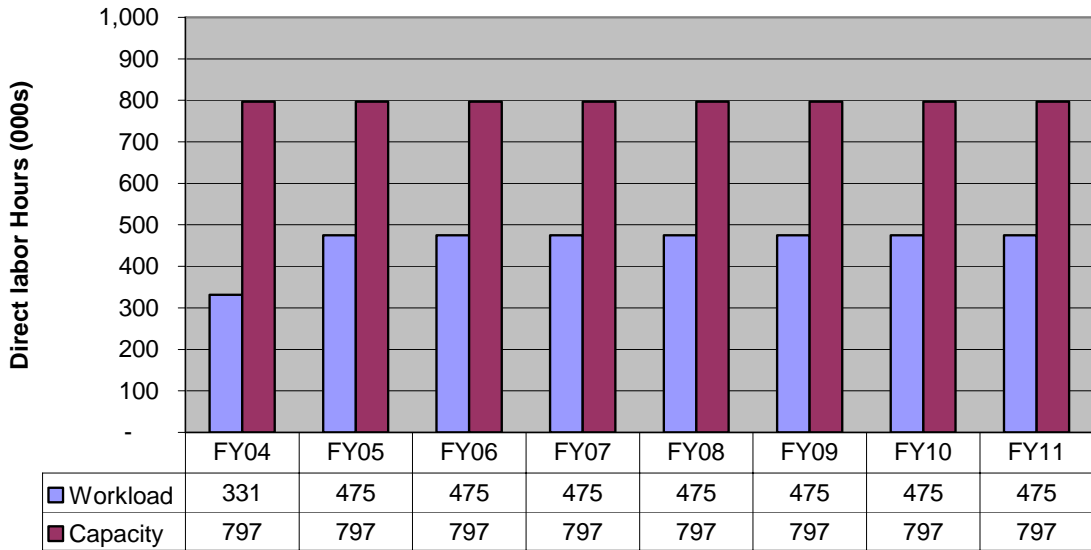
**Naval Surface Warfare Center - Crane
Depot Maintenance Workload and Capacity**



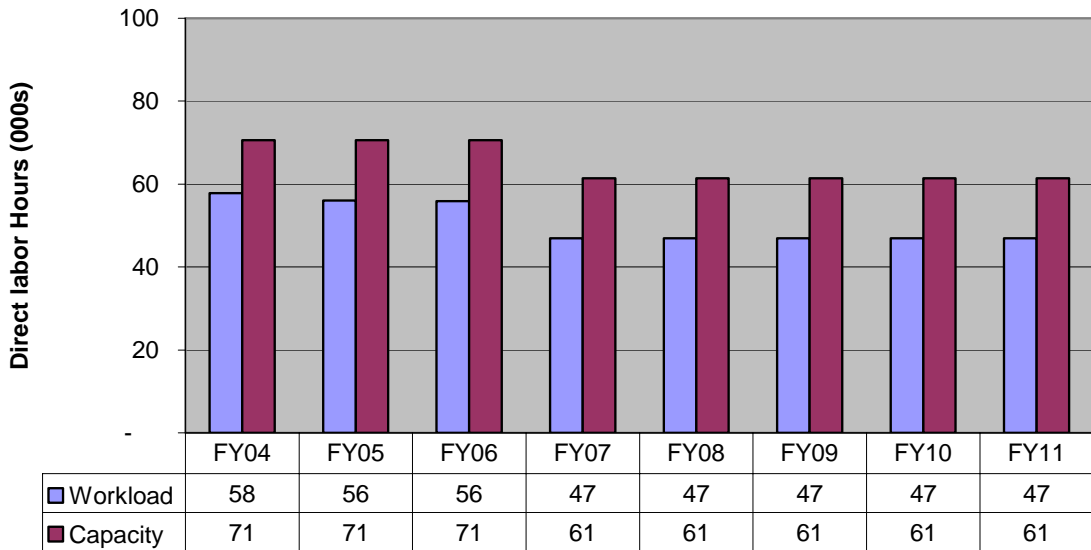
**Naval Undersea Warfare Center - Keyport
Depot Maintenance Workload and Capacity**



**SPAWAR Systems Center - San Diego
Depot Maintenance Workload and Capacity**



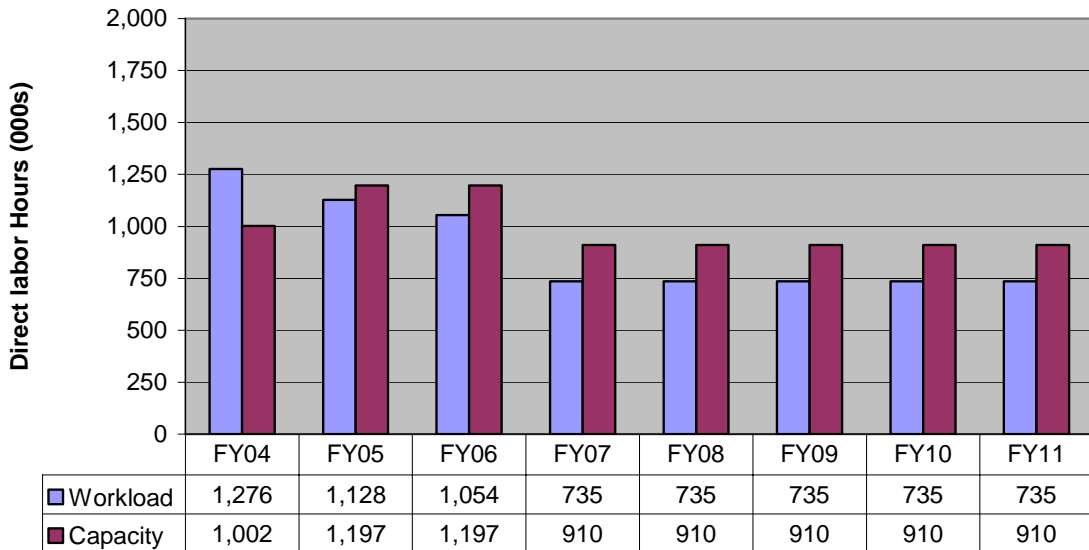
**SPAWAR Systems Center - Charleston
Depot Maintenance Workload and Capacity**



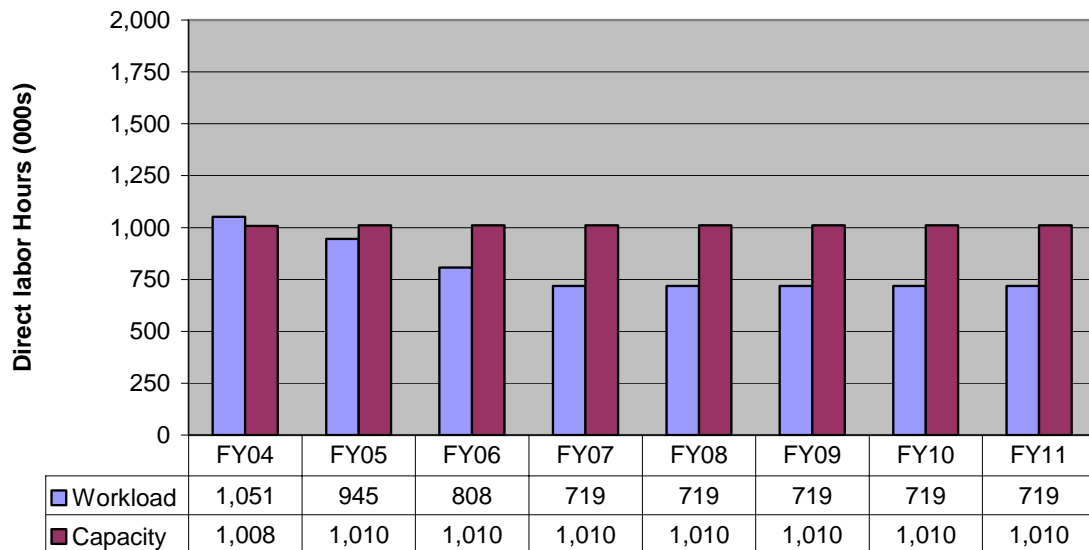
Appendix 3

Marine Corps Depot Maintenance Activities

**Marine Corps Logistics Base - Albany
Depot Maintenance Workload and Capacity**



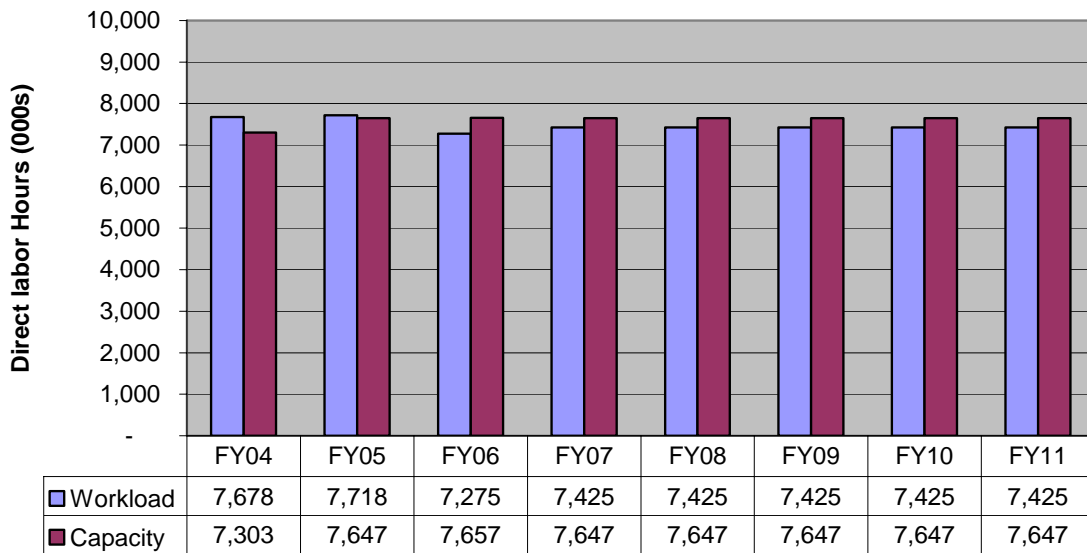
**Marine Corps Logistics Base - Barstow
Depot Maintenance Workload and Capacity**



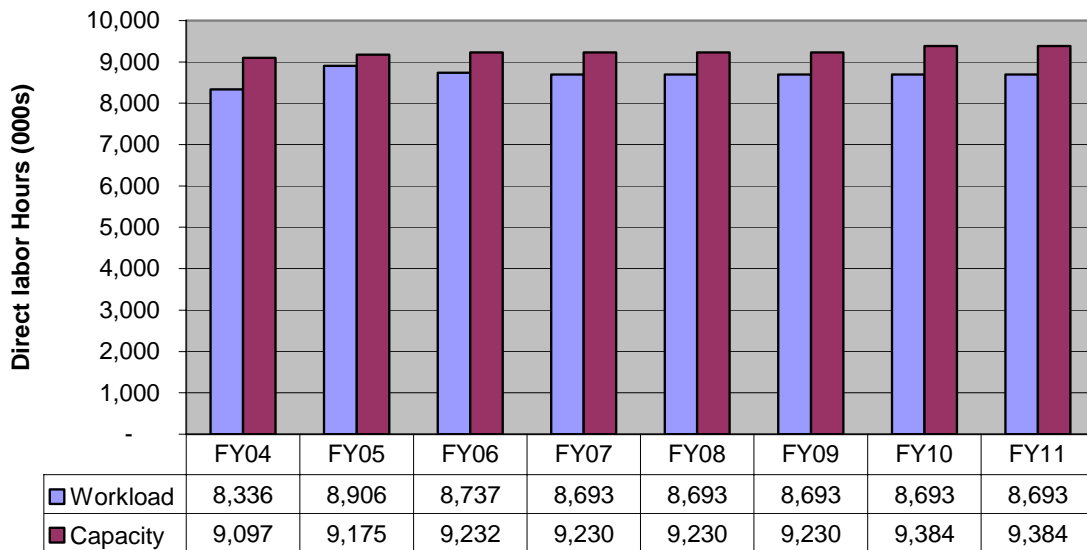
Appendix 4

Air Force Depot Maintenance Activities

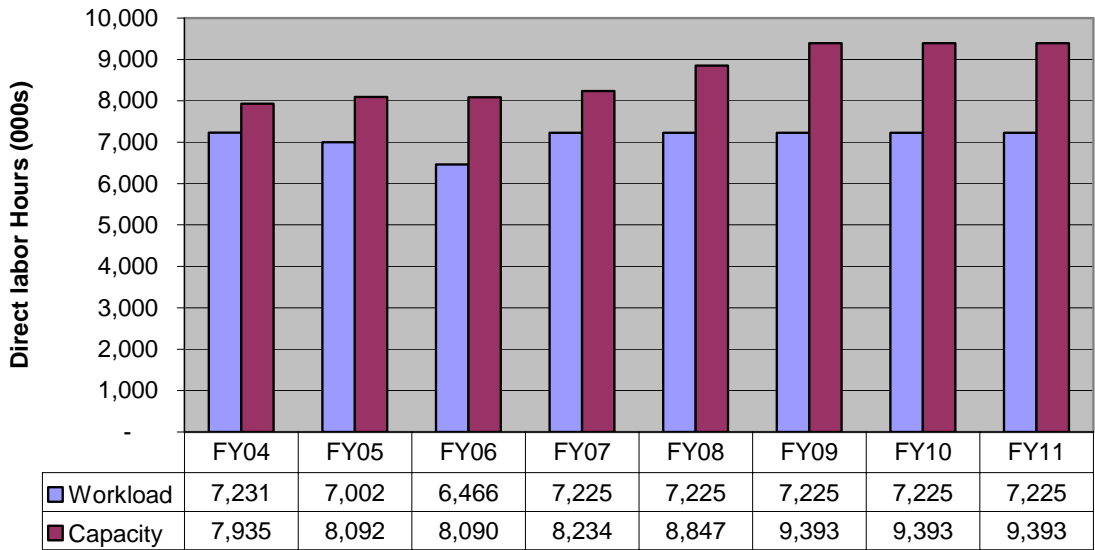
**Ogden Air Logistics Center
Depot Maintenance Workload and Capacity**



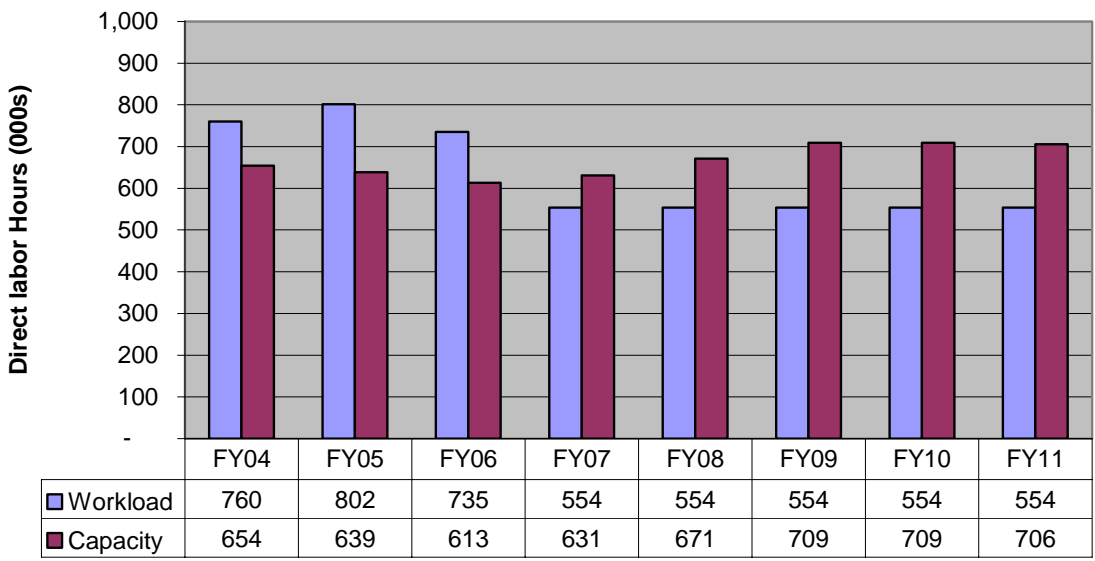
**Oklahoma City Air Logistics Center
Depot Maintenance Workload and Capacity**



**Warner-Robins Air Logistics Center
Depot Maintenance Workload and Capacity**



**Aerospace Maintenance and Regeneration Center
Depot Maintenance Workload and Capacity**



Appendix 5

Acronyms

ACAT	Acquisition Category
AD	Army Depot
ADUSD	Assistant Deputy Under Secretary of Defense
ALC	Air Logistics Center
AMARC	Aerospace Maintenance and Regeneration Center
CBM+	Condition-Based Maintenance Plus
CHCO	Chief Human Capital Officer
CITE	Center of Industrial and Technical Excellence
CPI	Continuous Process Improvement
CPI SSC	Continuous Process Improvement Senior Steering Committee
CTMA	Commercial Technologies for Maintenance Activities
DAMIR	Defense Acquisition Management Information Retrieval
DLH	Direct Labor Hour
DM WIPT	Depot Maintenance Working Integrated Process Team
DoD	Department of Defense
DoDI	Department of Defense Instruction
DSOR	Depot Source of Repair
DUSD	Deputy Under Secretary of Defense
FRC	Fleet Readiness Center
FY	Fiscal Year
FYDP	Future Years Defense Program
IMF	Intermediate Maintenance Facility

IOC	Initial Operating Capability
IPT	Integrated Process Team
JCS	Joint Chief of Staff
JROC	Joint Requirements Oversight Council
KPP	Key Performance Parameter
KSA	Key System Attribute
L&MR	Logistics and Materiel Readiness
MCLB	Marine Corps Logistics Base
MDAP	Major Defense Acquisition Program
MR&MP	Materiel Readiness and Maintenance Policy
MRSSG	Materiel Readiness Senior Steering Group
NAVAIR	Naval Air Systems Command
NAVSEA	Naval Sea Systems Command
NSWC	Naval Surface Warfare Center
NSY	Naval Shipyard
NUWC	Naval Undersea Warfare Center
ODUSD	Office of the Deputy Under Secretary of Defense
OJT	On-the-job Training
OSD	Office of the Secretary of Defense
PA&E	Program Analysis and Evaluation
PBL	Performance-Based Logistics
PDO	Performance-Driven Outcome
PM	Program Manager
POM	Program Objectives Memorandum
PPBES	Planning, Programming, Budgeting and Execution System

PPP	Public-Private Partnership
PSI	Product Support Integrator
QDR	Quadrennial Defense Review
RCM	Reliability-Centered Maintenance
SPAWAR	Space and Naval Warfare Systems Command
TOC	Theory of Constraints
USC	United States Code
WIPT	Working Integrated Process Team