DCN 844

INSTALLATION NAME	INSTALLATION TYPE	STA	MAJOR CO	RESOURCES	MAJOR UNITS ASSIGNED	BRAC CATEG	JOINT CROSS-SERVICE GR
ANCHORAGE IAP AGS	Guard Base	AK					
CLEAR AFS	Surveliance Station	AK					
EIELSON AFB	Fighter Base	AK	PAF	18-F16C/D, 12-OA10A,	354th Fighter Wing, Cope Thunder,	Key Excluded	
ELMENDORF AFB	Fighter Base	AK	PAF	54(51?)-F15/F15E, 10-C	3d Wing, Hq 11 Air Force, Hq, Ala	Key Excluded	
GALENA AIRPORT AFS	Air Defense Station	AK					
KING SALMON AIRPORT	Air Defense Station	AK					
EARECKSON AFS	Surveliance Station	AK					
ABSTON AGS	Guard Station	AL					
BIRMINGHAM MAP AGS	Guard Base	AL		18-RF4C >8KC135R (L			
DANNELLY FIELD AGS	Guard Base	AL		15-F16(G), 1-C26(G)	187th Fighter Group (ANG)		
GUNTER AFS	Training Station	AL					
HALL AGS	Guard Station	AL					
MAXWELL AFB	Technical Training Base	AL	AETC	Schools8-C138(R), 4-C2	42d Air Base Wing, Air University,	Key Excluded	
FORT SMITH MAP AGS	Guard Station	AR					
EAKER AFB	Closed 12/92 (91 Round)	AR	AFBCA			N/A	
LITTLE ROCK AFB	Airlift/Training Base	AR	ACC	C130	314th Airlift Wing (c130 Training)	Large AC(A)	
DAVIS MONTHAN AFB	Fighter Base w/"Bone Yard"	AZ	ACC	57-A10, ?-OA10, 16-EC	355th Wing, Hq 12th Air Force, 41s	Small AC *	Depot
GILA BEND AFS		AZ					
LUKE AFB	Fighter/Training Base	AZ	AETC	122-F16, 31-F15E(-33),	56th Fighter Wing, 944th Fighter Wi	Small AC	
PHOENIX SKY HARBOR IAP AGS	Guard Base	AZ		8-KC135(G)	161st Air Refueling Group(ANG)		
TUCSON IAP AGS	Guard Station	AZ	NGB			ANG	
WILLIAMS AFB	Closed 9/93 (91 Round)	AZ	AFBCA			N/A	
BEALE AFB	Reconnaissance Base	CA	ACC	U-2,9-KC135(R),7-T38	9th Reconnaissance Wg,7th Space W	Large AC(T)	
CASTLE AFB	Closed 9/95 est (91 Round)	CA	AFBCA			N/A	
EDWARDS AFB	Aircraft Test Base	CA	AFMC			Joint Only	Test & Evaluation, Laboratories
FRESNO AIR TERMINAL AGS	Guard Base	CA					
GEORGE AFB	Closed 12/92 (88 Round)	CA	AFBCA			N/A	
LOS ANGELES AFB	Space & Missile Systems Center (	CA	AFMC		Hq Air Force Space and Missile Syst	Joint Only	Laboratories
MARCH AFB	Realigned 3/96 est (93 Round)	CA	AFRES			AFRES	
MATHER AFB	Closed 9/93 (88 Round)	CA	AFBCA			N/A	
MCCLELLAN AFB	Air Logistics Center	CA	AFMC	10-KC135(R)Temporary	Sacramento ALC, 77th Air Base Wg	Joint Only	Depot, Test & Evaluation, Labo
NORTH HIGHLANDS AGS	Guard Station	CA					
NORTON AFB	Closed 3/94 (88 Round)	CA	AFBCA			N/A	
ONIZUKA AFB	Space Center	CA	AFSPC				
ONTARIO IAP AGS	Guard Station	CA					
TRAVIS AFB	West Coast Mobility Base	CA	AMC			Mobility	
VAN NUYS AIRPORT AGS	Guard Station	CA					
VANDENBERG AFB	Space Launch Support Center	CA	AFSPC			Key Excluded	
BUCKLEY AGB	Guard Base	CO	NGB			ANG	
CHEYENNE MOUNTAIN AFB	NORAD Command Center	CO					
FALCON AFB	Space Operations Center	CO	AFSPC			Key Excluded	
LOWRY AFB	Closed 9/94 (91 Round)	CO	AETC			N/A	
PETERSON AFB	AF Space Command Hq Base	CO	AFSPC			Major Hq *	Depot, Laboratories
US AIR FORCE ACADEMY	Education Base	CO	USAFA			Key Excluded	
BRADLEY IAP AGS	Guard Station	CT					
ORANGE AGS	Guard Station	CT					
BOLLING AFB	National Capitol Region Support B	DC	AFDW			Key Excluded	

INSTALLATION NAME	INSTALLATION TYPE	STA	MAJOR CO	RESOURCES	MAJOR UNITS ASSIGNED	BRAC CATEG	JOINT CROSS-SERVICE GR
DOVER AFB	Air Lift Base	DE	AMC			Large AC(A)	
NEW CASTLE COUNTY APT AGS	Guard Station	DE					
AVON PARK AFS	Air Training Range	FL					
CAPE CANAVERAL AFS	Space Launch Support Center	FL					
EGLIN AAF 3 (DUKE FIELD)	Reserve Special Operations Statio	FL					
EGLIN AFB	Test/Fighter Base	FL	AFMC			Small AC *	Test & Evaluation, Laboratories
HOMESTEAD AFB	Realigned 3/94 (93 Round) / Rese	FL	AFRES			AFRES	
HURLBURT FIELD	AF Special Operations Command	FL	AFSOC			Key Excluded	
JACKSONVILLE IAP AGS	Guard Station	FL					
MACDILL AFB	Realigned 9.95 est (91/93 Round)	FL	ACC			Major Hq	
PATRICK AFB	Launch Center Support Base	FL	AFSPC			Key Excluded	
TYNDALL AFB	Fighter/Training Base	FL	AETC			Small AC *	Test & Evaluation
DOBBINS ARB	Reserve Base	GA	AFRES			Large AC(T)	
MCCOLLUM AGS	Guard Station	GA					
MOODY AFB	Air/ Land Composite Wing	GA	ACC	40-F16C, 40-A/OA10, 8	347th Wing, 71st Air Control SQ	Composite	
ROBINS AFB	Depot/ Airlift Base	GA	AFMC			Large AC(T) *	Depot, Test & Evaluation, Labo
SAVANNAH IAP AGS	Guard Station	GA					
HICKAM AFB	Pacific AF Hq Base	HI	PAF			Key Excluded	
KOKEE AFS	Guard Station	HI					
WHEELER AFB	Army Air Field	HI				Transferred to A	
DES MOINES IAP AGS	Guard Station	IA					
SIOUX CITY MAP AGS	Guard Station	IA					
BOISE AIR TERMINAL AGS	Guard Station	ID	NGB			ANG	
MOUNTAIN HOME AFB	Air Intervention Composite Wing	ID	ACC			Composite	
CAPITAL MAP AGS	Guard Station	IL					
CHANUTE AFB	Closed 9/93 (88 Round)	IL	AFBCA			N/A	
GREATER PEORIA APT AGS	Guard Station	IL					
O HARE IAP ARS	Reserve Station	IL	AFRES			AFRES	
SCOTT AFB	Air Mobility Command Hq Base	IL	AMC			Major Hq	
FT WAYNE MAP AGS	Guard Station	IN					
GRISSOM AFB	Closed 9/94 (91 Round) / Reserve	IN	AFRES			AFRES	
HULMAN REGIONAL APT AGS	Guard Station	IN					
FORBES FIELD AGS	Guard Station	KS					
MCCONNELL AFB	Core Tanker Base	KS	AMC			Large AC(T)	
STANDIFORD FIELD AGS	Guard Station	KY					
BARKSDALE AFB	Bomber/Training Base	LA	ACC			Large AC(B)	
ENGLAND AFB	Closed 12/92 (91 Round)	LA	AFBCA			N/A	
HAMMOND AGS	Guard Station	LA					
BARNES MAP AGS	Guard Station	MA					
CAPE COD AFS		MA					
HANSCOM AFB	Laboratory and Systems Center	MA	AFMC	No Flying Mission	Hq Electronic Systems Center, Geop	Joint Only	Laboratories
OTIS AGB	Guard Base	MA	NGB			ANG	
WELLESLEY AGS	Guard Station	MA					
WESTOVER ARB	Reserve Base	MA	AFRES			AFRES	
WORCHESTER AGS	Guard Station	MA					
ANDREWS AFB	Presidential/Congressional Airlift	MD	AMC			Key Excluded	
MARTIN STATE AGS	Guard Station	MD	NGB			ANG	

INSTALLATION NAME	INSTALLATION TYPE	STA	MAJOR CO	RESOURCES	MAJOR UNITS ASSIGNED	BRAC CATEG	JOINT CROSS-SERVICE GR
BANGOR AGS	Guard Station	ME					
LORING AFB	Closed 9/94 (91 Round)	ME	AFBCA			N/A	
SOUTH PORTLAND AGS	Guard Station	ME					
K. I. SAWYER AFB	Closed 9/95 est (93 Round)	MI	ACC			N/A	
SELFRIDGE AGB	Guard Base	MI	NGB			ANG	
W K KELLOGG REGIONAL APT AG	Guard Station	MI					
DULUTH IAP AGS	Guard Station	MN					
MINNEAPOLIS/ST PAUL IAP ARS	Reserve Station	MN	AFRES			AFRES	
JEFFERSON BARRACKS AGS	Guard Station	MO					
LAMBERT ST LOUIS IAP AGS	Guard Station	MO	NGB			ANG	
RICHARDS GEBAUR ARS	Closed 9/94 (91 Round) / Reserve	MO					
ROSECRANS MEMORIAL APT AGS	Guard Station	MO					
WHITEMAN AFB	Bomber Base	MO	ACC			Large AC(B)	
ALLEN C THOMPSON FIELD AGS	Guard Station	MS					
COLUMBUS AFB	Flying Training Base	MS	AETC			Joint Only	Undergraduate Pilot Training
GULFPORT/BILOXI MAP AGS	Guard Station	MS					
KEESLER AFB	Technical Training Base	MS	AETC			Tech Trng	
KEY FIELD AGS	Guard Station	MS					
GREAT FALLS IAP AGS	Guard Station	MT					
MALMSTROM AFB	Tanker/Missile Base	MT	AMC			Large AC(T)(M)	
BADIN AGS	Guard Station	NC					
CHARLOTTE/DOUGLAS IAP AGS	Guard Station	NC					
POPE AFB	Air Land Composite Wing	NC	ACC			Composite	
SEYMOUR JOHNSON AFB	Fighter Base	NC	ACC			Small AC	
CAVALIER AFS	ABM Support Station	ND					
GRAND FORKS AFB	Core Tanker/Missile Base	ND	AMC			Large AC(T)(M)	
HECTOR FIELD IAP AGS	Guard Station	ND					
MINOT AFB	Bomner/Missile Base	ND	ACC			Large AC(B)(M)	
LINCOLN MUNICIPAL AIRPORT A	Guard Station	NE					
OFFUTT AFB	Joint Strategic Command Hq Base	NE	ACC			Major Hq	
NEW BOSTON AFS		NH					
PEASE AGS	Guard Station	NH	AFBCA			N/A	
ATLANTIC CITY MAP AGS	Guard Station	NJ					
MCGUIRE AFB	East Coast Mobility Base	NJ	AMC			Mobility	
CANNON AFB	Fighter Base	NM	ACC			Small AC	
HOLLOMAN AFB	Fighter Base	NM	ACC			Small AC *	Test & Evaluation
KIRTLAND AFB	Research/Helocopter Training Bas	NM	AFMC			Joint Only *	Test & Evaluation, Laboratories
INDIAN SPRINGS AFS		NV					
NELLIS AFB	Air Force Weapons Center/Fighte	NV	ACC			Key Excluded *	Test & Evaluation
RENO CANNON IAP AGS	Guard Station	NV					
TONOPAH AFS		NV					
GRIFFISS AFB	Realigned 9/95 est (93 Round) / R	NY	ACC			Joint Only (Rom	Laboratories
HANCOCK FIELD AGS	Guard Station	NY					
NIAGARA FALLS IAP ARS	Reserve Station	NY	AFRES			AFRES	
PLATTSBURGH AFB	Closed 9/95 est (93 Round)	NY	AMC			N/A	
ROSLYN AGS	Guard Station	NY					
SCHENECTADY AIRPORT AGS	Guard Station	NY					

INSTALLATION NAME	INSTALLATION TYPE	STA	MAJOR CO	RESOURCES	MAJOR UNITS ASSIGNED	BRAC CATEG	JOINT CROSS-SERVICE GR
STEWART IAP AGS	Guard Station	NY	NGB			ANG	
SUFFOLK COUNTY AIRPORT AGS	Guard Station	NY					
CAMP PERRY AGS	Guard Station	OH					
GENTILE AFS	Closed 12/96 est (93 Round)	OH					
MANSFIELD LAHM MAP AGS	Guard Station	OH					
NEWARK AFB	Closed 9/96 est (93 Round)	OH	AFMC			N/A	
RICKENBACKER AGB	Closed/"Reopened" (91/93 Round	OH	NGB			ANG	
SPRINGFIELD BECKLEY MAP AGS	Guard Station	OH					
TOLEDO EXPRESS APT AGS	Guard Station	OH					
WRIGHT-PATTERSON AFB	AF Material Command Hq Base	OH	AFMC			Major Hq *	Laboratories
ALTUS AFB	Airlift/Tanker/Training Base	OK	AETC			Large AC(T)(A)	
TINKER AFB	Depot/Reconnaicance Base	OK	AFMC	22-E3, 3-E/C135, #-E6(	72d Air Base Wing, 552d Air Contr	Large AC(T) *	Depot, Test & Evaluation, Labo
TULSA IAP AGS	Guard Station	OK					
VANCE AFB	Flying Training Base	OK	AETC			Joint Only	Undergraduate Pilot Training
WILL ROGERS WORLD APT AGS	Guard Station	OK					
KINGSLEY FIELD AGS	Guard Station	OR					
PORTLAND IAP AGS	Guard Station	OR	NGB			ANG	
GREATER PITTSBURGH IAP AGS	Guard Station	PA	AFRES			AFRES/ANG	
HARRISBURG OLMSTED IAP AGS	Guard Station	PA					
WILLOW GROVE ARS	Reserve Station	PA					
COVENTRY AGS	Guard Station	RI					
NORTH SMITHFIELD AGS	Guard Station	RI					
QUONSET STATE AIRPORT AGS	Guard Station	RI					
CHARLESTON AFB	Airlift Operations	SC	AMC	13-C17, 32-C141	437thAirlift WING, 315TH aw(afres	Large AC(A)	
MCENTIRE AGB	Guard Base	SC	NGB			ANG	
MYRTLE BEACH AFB	Closed 3/93 (91 Round)	SC	AFBCA			N/A	
SHAW AFB	Fighter Base	SC	ACC	54-F16, 21-A10	20th Fighter Wing, 9th Air Force, 7	Small AC	
ELLSWORTH AFB	Bomber Base	SD	ACC	32-B1, 4-HH1	28th Bomb Wing	Large AC(B)	
JOE FOSS FIELD AGS	Guard Station	SD					
ARNOLD AFB	Research/Lab Base	TN	AFMC			Joint Only	Test & Evaluation
MCGHEE TYSON AIRPORT AGS	Guard Station	TN					
MEMPHIS IAP AGS	Guard Station	TN					
NASHVILLE METROPOLITAN APT	Guard Station	TN					
BERGSTROM AFB	Closed 9/93 (91 Round) / Reserve	TX	AFRES			AFRES	
BROOKS AFB	Laboratory Base	TX	AFMC			Joint Only	Laboratories
CARSWELL AFB	Closed 9/93 (91 Round) / Naval R	TX	AFRES			AFRES	
DYESS AFB	Bomber Base	TX	ACC	36-B1, 42-C130	7th Wing, 39th & 40th Airlift Squad	Large AC(B)	
ELDORADO AFS		TX					
ELLINGTON FIELD AGS	Guard Station	TX					
GARLAND AGS	Guard Station	TX					
GOODFELLOW AFB	Technical Training Base	TX	AETC			Tech Trng	
KELLY AFB	Depot/Air lift Base	TX	AFMC	ALC, 15-F16(G), 14-C5(	San Antonio ALC, 76th Air Base W	Large AC(A) *	Depot, Test & Evaluation, Labo
LA PORTE AGS	Guard Station	TX					
LACKLAND AFB	Technical Training Base	TX	AETC			Tech Trng	
LAUGHLIN AFB	Flying Training Base	TX	AETC	46-T37,49-T38, 39-T1A	47th Flying Training Wg	Joint Only	Undergraduate Pilot Training
RANDOLPH AFB	AF Training & Education Comma	TX	AETC			Joint Only	Undergraduate Pilot Training
REESE AFB	Under-graduate Pilot Training	TX	AETC	35-T1, 50-T37, 59-T38	64th Flying Training Wg	Joint Only	Undergraduate Pilot Training

INSTALLATION NAME	INSTALLATION TYPE	STA	MAJOR CO	RESOURCES	MAJOR UNITS ASSIGNED	BRAC CATEG	JOINT CROSS-SERVICE GR
SHEPPARD AFB	Technical Training Base	TX	AETC			Joint Only	
HILL AFB	Air Logistics Center & Fighter Op	UT	AFMC	ALC, 55-F16, 18-F16(R)	Ogden ALC, 545th Test Group(Utah	Small AC *	Depot, Test & Evaluation, Labo
SALT LAKE CITY IAP AGS	Guard Station	UT	NGB			ANG	
LANGLEY AFB	Air Combat Command Hq/Fighter	VA	ACC			Major Hq	
RICHMOND IAP AGS	Guard Station	VA					
BURLINGTON IAP AGS	Guard Station	VT					
FAIRCHILD AFB	Core Tanker Base	WA	ACC	60-KC135, 3-UH1, 7-C1	92d Air Refueling Wing, 336th Cre	Large AC(T)	
FOUR LAKES AGS	Guard Station	WA					
MCCHORD AFB	Air Lift Base	WA	AMC			Large AC(A)	
SPOKANE IAP AGS	Guard Station	WA					
GEN BILLY MITCHELL FIELD	Guard Base	WI					
GEN MITCHELL IAP ARS	Reserve Station	WI	AFRES			AFRES	
TRUAX FIELD AGS	Guard Station	WI					
SHEPHERD FIELD AGS (EWVRA)	Guard Station	WV					
YEAGER AIRPORT AGS	Guard Station	WV					
CHEYENNE MAP AGS	Guard Station	WY					
FRANCIS E. WARREN AFB	Missile Base	WY	AFSPC	MMIII, Pease Keeper M		Key Excuded	
KWAJALEIN MISSILE RANGE	Test Range	TT					
ANDERSEN AFB	Pacific Combat Staging Base	GU	PAF			Key Excluded	
PUERTO RICO IAP AGS	Guard Station	PR					
VAN NUYS AGS	Guard Station	CA					
KULIS AGB	Guard Base	AK					
WURTSMITH AFB	Closed 6/93 (91 Round)	MI	AFBCA			N/A	
YOUNGSTOWN MAP ARS	Reserve Station	OH	AFRES			AFRES	
ARMSTRONG LAB, MESA	Laboratory	AZ	AFMC			Joint Only	Laboratories
BATTLE CREEK FED CNTR	Defense Logistics Agency Support	MI	AFMC			Key Excluded	

Document Separator

by Roger Hoach 5/9

Defense Science Board
Key Findings

EXECUTIVE SUMMARY

-The DSB

-Key issues addressed
- -balance of workload between public and private sectors
- -how that balance is achieved
- -rationale for keeping service maintenance depots
- -appropriateness of competition as management tool to determine workload allocation

-Key finding
- -elimination of infrastructure is key to real depot cost savings for DoD

-All except USAF agreed that competition with private sector/other military depots is not desirable because of two key considerations:
- -DoD accounting systems do not permit identification of real costs
- -efficiencies can be obtained through private-private competitions

-Key recommendations
- -implement new CORE concept
- -improve financial management systems within DoD
- -strengthen DoD Defense Depot Maintenance Council
- -Readiness, sustainability, life-cycle support are reasons for core depots
- -There is/will be excess capacity in system--even after BRAC93 closures
- -Major modifications are more appropriate for the private sector
- -DoD needs common systems for collecting/reviewing/displaying cost data
- -"Empowered Defense Depot Maintenance Council" is key to fixing problem

-"Core" represents **skills, capabilities, competencies**--not specific amounts of workload

-The cost of retaining unnecessary depot capacity is unknown, but probably significant

-Competition not consistent with DoD goals and objectives
- -Congress authorized, but intended it to be fair
- -Government exists to provide services private sector can't or won't
- -Competitions having disruptive/divisive effect--in services and with industry
- -Questionable whether depot capacity should be keptjust to be able to compete
- -Industry questions whether level playing field achievable
- -To control costs, DoD must size its depots consistent with CORE, divesting itself of unneeded capacity and infrastructure

-New core concept

-only 40 to 50 percent of work is actually core
-core consists of organic capabilities--skills, competencies, facilities, amd equipment that exists in government shipyards and depots
-Core consists of skills and capabilities--not work on specific weapons
-Core is capability to support, not the maintenance of specific weapons

SOME OF THE DETAILS

-What is depot maintenance:

"Those material maintenance functions requiring overhaul or a complete rebuilding of parts, assemblies, subassemblies, and end items (e.g., aircraft, engines, vehicles,ships, missiles), including the manufacture of parts, modifications, testing and reclamation, calibration, software maintenance, and all related supporting industrial processes. Depot maintenance process and functions return items to a specified state or condition, as prescribed by engineered standards and specifications, to meet user or customer requirements."

- At beginning of 88 BRAC, 35 DoD depots--a/of end of 93, there will be 24.

-Statistics show differing amounts of workload. Why?

- Different sets of rules or principles used to develop stats.
-Tendency to focus on depot maintenance appropriation amount
    -understates total amt of actual work since other $ also fund depot work.
-Difference between appropriations, obligations, actual execution, and financial completion.
    -amt appropriated may be different than amt obligated due to reprogramming

-Task force selected actual program execution to determine workload.

-It's the one stat that accurately reflects activity conducted in depot.
-TF also used all depot-level work included--regardless of $ or where completed.
    -Consequently, work from facilities other than depots included

-Two important points on workload value:

-Magnitude much greater than assumed--$15billion, not $13
    -Why? Because it includes all depot maintenance--non-DBOF, work done at facilities other than depots, contract depot work administered by PMs.
-Overall trend for split between public and private reflects increasing share of workload being done by public sector--from 67% in '90 to 71% in '93.

-Stability of workload. ('90-'93).

-fixed wing---29-31%
-helos----------6-8%
-ordnance/wpns/munitions-----1-2%
-cbt veh/arty/auto/construction------7%
-C/E-avionics----------13-14%
-sea systems----------37%
-total aviation share (fixed wing and helos)------37%
-sea systems----------38%
-KEY POINT--SEA/AIR ACCOUNT FOR ALMOST 75 % OF TOTAL

-Workload service by share:

-Navy-------59-60%
-USAF------25-27%
-Army------13-15%
-USMC----1%
-DA-------1/10%

-Methodology to calculate workload.

-Rejected use of DoD 7220.M which uses following reporting format

-job order
-work breakdown structure
-work performance category
-customer
-public sector
-private sector

-Rejected because

-data reported into system known to be inaccurate
-data known to be incomplete--doesn't include all customers/facilities
-data was keyed to financial completions--does not reflect actual work

-Data call used by Task Force. Solicited following data:

-all work completed, regardless of level, and include mods/upgrades
-all costs, include direct, indirect, overhead costs, salaries, material, and parts, utilities, depreciation, capital investment, facility repair, and support services.
-workloads from all funding sources, not just that funded from DBOF
-work completed at facilities primarily devoted to other purposes
-work at non-DBOF depot maintenance facilities

-Total value of workload---$15 billion. Split by percentages by categories

	FY90	FY91	FY92	FY93
Fixed wing	29	29	30	31
Helos	8	7	6	7
Ground (less helos)	8	9	8	8
Missiles	3	4	4	4
CE/Avionics	14	13	13	13
Ships	38	38	39	37

-Public sector share of workload (% that is done in the depots) by commodity

	FY90	FY91	FY92	FY93
Fixed wing	68	66	65	67
Ground	69	66	74	77
Elect/Missiles	62	63	64	67
Ships	68	67	68	72

	FY90	FY91	FY92	FY93
DoD (Billions)	11.1	10.8	11.2	10.6
Industry (Billions)	5.4	5.5	5.4	4.4

KEY POINT-------PUBLIC SECTOR SHARE TREND IS UP FROM 90-93

-Costs

-Materiel-----35%
-Overhead----40%
-Direct labor---25%

-Costs by services($000)

		FY90	FY91	FY92	FY93
Army					
	Organic	1,337.1	1,336.5	1,499.4	1,324.2
	Contract	708,000	932,000	780,000	678,000
	Total	2,045.1	2,297.5	2,259.4	1,902.2
USAF----------DATA NOT AVAILABLE IN COPY I HAVE-------					
DLA					
	Organic	17,396	15,091	16,271	19,300
	Contract	0 0	0 0		
USMC					
	Organic	107,527	124,147	181,169	189,892
	Contract	5,516	3,358	2,695	3,216
USN					
	Organic	6,048.8	6,313.2	6,575.5	6,404.5
	Contract	2,807.2	2,975.1	3,040.5	2,365.0

-Workload value by service (by percentage)

	FY90	FY91	FY92	FY93
Army	14	15	14	13
USAF	25	25	25	27
USMC	1	1	1	1
USN	60	59	60	59
DLA	.1	.1	.1	.1

KEY POINTS

- **NAVY ALONE ACCOUNTS FOR ALMOST 2/3**
  - --1/3 MANAGED BY NAVAIR
  - --2/3 MANAGED BY NAVSEA
- -USMC AND DLA ARE NEGLIGIBLE
- -ARMY ALMOST NEGLIGIBLE

-Costs--Direct Labor Hours and Costs by Fiscal Year (000)

		FY90	FY91	FY92	FY93
DoD					
	DLH	158,7481	148,863	154,120	136,924
	Costs	9,923,479	10,329,559	10,838,764	10,580,975
USAF					
	DLH	41,291	38,367	36,442	33,214
	Costs	2,412,626	2,511,603	2,566,379	2,643,026
Army					
	DLH	20,889	19,377	17,950	15,105
	Costs	1,337,100	1,365,500	1,499,400	1,324,200
DLA					
	DLH	273	242	289	175
	Costs	17,396	15,091	16,271	19,300
USMC					
	DLH	1,955	2,066	2,833	3,119
	Costs	107,527	124,147	181,169	189,892
USN					
	DLH	94,340	88,801	96,606	85,311
	Costs	6,048,830	6,313,218	6,575,525	6,404,565

KEY POINT----LABOR HOURS ARE DECREASING BUT THE COST IS EITHER REMAINING CONSTANT OR INCREASING; WHY, BECAUSE OF THE FIXED OVERHEAD EXPENSES...

-Key problems task force had in collecting data:

-DoD has no common system for collecting and displaying all DoD and industry maintenance costs.
-Each service uses different depot maintenance program execution systems
-The recommended system, according to task force, should include:
-all financially completed work orders for FY to determine unit cost
-actual program execution so that actual workload can be expressed

CAPACITY

-"Excess capacity" is current theme.
-Theme of task force report is that, even with number of depots reduced from 35 to 24 through BRAC 88-93 actions, more depot closures will be required in 1995.
-Task force did not establish any new or comprehensive process to estimate capacity.
-Depot capacity and utilization was based on latest data IAW current capacity measurement policy...
-i.e., number of workstns X # of DLH produced by 1 worker in single shift, 40-hr wk.

-Aggregate statistics:

DoD:				
FY	**Workload (DLH000)**	**Capacity(DLH000)**	**Util**	**Depot Wkld**
1994	122,177	159,914	76	
1997	95,608	118,301	81	
Industry				
Fixed wing	167,181	379,109	44	35,488
Ground Sys	23,434	69,609	34	20,526
C/E/Missiles	104,302	269,157	39	19,587
Sea Systems	134,051	212,687	63	61,323

A KEY POINT----Even if were possible to put every bit of depot workload (far right figure under industry) inside industry plants/facilities, there would still remain a very large amount of excess capacity in the private sector!!!

- See attached pages from task force for specific charts by service on category utilization

~~Table D-1~~

PUBLIC SECTOR CAPACITY UTILIZATION
(DLH's IN THOUSANDS)

ARMY

DEPOT	FY94 WORKLOAD	FY94 CAPACITY	FY94 UTILIZATION	FY97 WORKLOAD	FY97 CAPACITY	FY97 UTILIZATION
Anniston AD	2,054	4,278	48%	1,429	4,278	33%
Corpus Christi AD	3,010	4,394	69%	3,405	4,394	77%
Letterkenny AD	1,378	1,869	74%	2,292	1,869	123%
Red River AD	1,661	3,173	52%	2,695	3,173	85%
Tobyhanna AD	3,318	4,098	81%	3,419	4,742	72%
Tooele AD	290	2,573	11%	0	0	0%
Sacramento AD	0	0	0%	0	0	0%
ARMY TOTAL	11,711	20,385	57%	13,175	18,456	71%

NAVY

DEPOT	FY94 WORKLOAD	FY94 CAPACITY	FY94 UTILIZATION	FY97 WORKLOAD	FY97 CAPACITY	FY97 UTILIZATION
NADEP Alemeda	1,612	3,001	54%	0	0	0%
NADEP Cherry Point	2,620	3,158	83%	2,903	3,158	92%
NADEP Jacksonville	2,497	3,062	82%	3,560	3,062	116%
NADEP Norfolk	2,274	3,404	67%	0	0	0%
NADEP North Island	2,551	3,536	72%	3,612	3,536	102%
NADEP Pensacola	2,063	2,312	89%	0	0	0%
NAVAIR TOTAL	13,617	18,473	74%	10,075	9,756	103%

PUBLIC SECTOR CAPACITY UTILIZATION
(DLH's IN THOUSANDS)

NAVY CONTINUED

DEPOT	FY94 WORKLOAD	FY94 CAPACITY	FY94 UTILIZATION	FY97 WORKLOAD	FY97 CAPACITY	FY97 UTILIZATION
NSY Portsmouth	4,928	6,974	71%	3,183	6,974	46%
NSY Philadelphia	6,056	11,144	54%	0	0	0%
NSY Norfolk	9,757	11,928	82%	9,472	11,928	79%
NSY Charleston	5,693	7,036	81%	0	0	0%
NSY Puget Sound	12,494	14,168	88%	14,092	14,168	99%
NSY Mare Island	5,845	7,518	78%	0	0	0%
NSY Long Beach	3,303	4,626	71%	2,566	4,626	55%
NSY Pearl Harbor	3,194	5,303	60%	3,377	5,303	64%
NAVAL SHIPYARD TOTAL	51,270	68,697	75%	32,690	42,999	76%

DEPOT	FY94 WORKLOAD	FY94 CAPACITY	FY94 UTILIZATION	FY97 WORKLOAD	FY97 CAPACITY	FY97 UTILIZATION
NWS Charleston	17	26	65%	9	26	35%
NWS Concord	53	88	60%	53	88	60%
NWS Earle	32	49	65%	30	49	61%
NWS Seal Beach	280	462	61%	260	462	56%
NWS Yorktown	10	23	43%	10	23	43%
NAVSEA NOC TOTAL	392	648	60%	362	648	56%

DEPOT	FY94 WORKLOAD	FY94 CAPACITY	FY94 UTILIZATION	FY97 WORKLOAD	FY97 CAPACITY	FY97 UTILIZATION
NSWC Crane	612	673	91%	635	724	88%
NSWC Louisville	1940	2333	83%	1963	2353	83%
NAVSEA NSWC TOTAL	2,552	3,006	85%	2,598	3,077	84%

PUBLIC SECTOR CAPACITY UTILIZATION
(DLH's IN THOUSANDS)

NAVY CONTINUED

DEPOT	FY94 WORKLOAD	FY94 CAPACITY	FY94 UTILIZATION	FY97 WORKLOAD	FY97 CAPACITY	FY97 UTILIZATION
NUWC Keyport	1,861	2,339	80%	1,818	1,958	93%
NAVSEA NUWC TOTAL	1,861	2,339	80%	1,818	1,958	93%

DEPOT	FY94 WORKLOAD	FY94 CAPACITY	FY94 UTILIZATION	FY97 WORKLOAD	FY97 CAPACITY	FY97 UTILIZATION
SPAWAR TOTAL	394	486	81%	402	496	81%

MARINE CORPS

DEPOT	FY94 WORKLOAD	FY94 CAPACITY	FY94 UTILIZATION	FY97 WORKLOAD	FY97 CAPACITY	FY97 UTILIZATION
MCLB Albany	1,599	1,211	132%	1,470	1,215	121%
MCLB Barstow	1,397	1,178	119%	1,295	1,178	110%
MARINE CORPS TOTAL	2,996	2,389	125%	2,765	2,393	116%

PUBLIC SECTOR CAPACITY UTILIZATION
(DLH's IN THOUSANDS)

AIR FORCE

DEPOT	FY94 WORKLOAD	FY94 CAPACITY	FY94 UTILIZATION	FY97 WORKLOAD	FY97 CAPACITY	FY97 UTILIZATION
OC-ALC	7,667	9,003	85%	7,442	9,173	81%
OO-ALC	5,779	8,826	65%	4,950	7,567	65%
SA-ALC	7,936	9,057	88%	6,116	7,130	86%
SM-ALC	6,359	7,024	91%	5,247	7,024	75%
WR-ALC	8,564	8,187	105%	7,941	7,464	106%
AGMC	899	1,150	78%	0	0	0%
AMARC	(674)			(549)		
AIR FORCE TOTAL	37,204	43,247	86%	31,096	38,358	93%

Excludes AMARC Workload

DEFENSE LOGISTICS AGENCY (DLA)

DEPOT	FY94 WORKLOAD	FY94 CAPACITY	FY94 UTILIZATION	FY97 WORKLOAD	FY97 CAPACITY	FY97 UTILIZATION
DLA Mechanicsburg	120	160	75%	162	160	101%
DLA Stockton	50	84	60%	0	0	0%
DLA Memphis	10	0	0%	0	0	0%
DLA TOTAL	180	244	74%	162	160	101%

- Key points made by task force on capacity measurement:

-No agreed upon method of collecting capacity data between industry and depots.
-Concern that divestiture of depots may aggravate the amount of private sector capacity available and that closed depots will not enter private sector inventory at full market value

WORKLOAD ALLOCATION (CORE VS CONTRACT)

-Services now reevaluating and reprioritizing essential factors on workload allocation:

-mission essentiality
-cost
-risk
-owning service organic capability to do the work
-other DoD organic capability to perform the work
-private sector capability to do the work

-Other key variables have also been introduced, including..

-identification of dept maintenance workload requirements for essential systems supporting JCS scenarios
-development of core capabilities req'd in depots to respond to surge requirements
-after ID of core capability rqmnts, what work required to maintain capabilities
-where will work not req'd to maintain capabilities be performed (organic or industry?)
-Legislation that directs 60/40 split

-Historical background

-Services' fundamental process:
-maintain capability for ready, organic surge capacity to meet immediate needs of operational forces while buying time for private industry to gear up to wartime needs.
-Large-scale, full-mobilization scenario drove the logic of the process.
-This process was based on number of factors including:
-existing organic capability
-desirability of increasing organic tech to support critical systems and workloads
-cost of setting up maintenance capability
-system density, location, and planned use
-design stability
-costs
-workload balancing
THERE WAS NO LINKAGE TO JCS SCENARIOS

-Workload Allocation---the Air Force approach

-Three major phases

-identification
-evaluation
-approval

-Candidate workloads include

-new starts
-modification programs which will generate new repair requirements
-workload shifts
    -organic to contract
    -organic to organic
    -contract to organic (considered a new start rather than a shift)

-Evaluation phase

-Present source of repair (where its being done now, or NA if new start)
-Description of system or program--purpose, function, unique tech challenges
-description of workload--type of work to be performed and tech requirements
-projected surge rate
-logistics support priority
-recommended SOR with justification--posturing goals, surge costs, technology
-estimated costs--facilities, support equipment, training, tech data, software
-workload--5-year projected workload, including initial and peak years.

-Approval process

-detailed review by board of key business managers from product/spt centers
- support and industrial operations board--general officers/senior civilians
-final approval required by AFMC Commander depending on workload size

-The "New" Core Approach

-Centers on surge and combat support-based decision methodology applied and used by DoD components as basis for determining minimum resources (people, equipment, facilities) required in support of the mobilization (JCS scenario) scenario, and the organic capabilities and physical capacities to be established and retained as a core organic peacetime basis for the services/DoD agencies.

-"Core" is capabilities, not actual workload.

COST, MANNER, AND QUALITY

-Task Force unanimous in belief that some depots must close to free up funds for readiness

-Average savings from NADEPs programmed for closure is over $70M annually--for larger depots, such as shipyards, savings could be as much as $100M annually.

-Recent studies show excess capacity ranging from 25-50 percent, and after closure or realignment of 93 selections, there will still be excess capacity.

-Current Defense guidance requires that DoD divest itself of unneeded facilities.

-The greater the amount of overhead expenses depot carries, primarily from large facilities and engineering support staffs, the less competitive that depot is.

-Private industry in recent years has learned the hard way that to remain competitive and to control costs, they had to "rightsize" their facilities and workforces. DoD must also rightsize the organic depot system to achieve goal of providing cost effective depot maintenance.

-Primary consideration on public/private workload issues must be impact on readiness.

-Importance of obtaining depot maintenance at "best value" is second only to readiness.

-Majority of R&D and new production work is already the domain of private industry

-New manufacture and repair/overhaul are fundamentally different and dollars available for repair will actually not be a major factor in preserving private sector design/engineering capabilities.

-However, providing modification and upgrade work, and non-CORE maintenance work to the private sector, can be an effective element in broader defense industrial base policy--this is especially true in shipyard work.

-Task Force believes reducing infrastructure (closing depots) to support the CORE requirements (40-50% of total depot maintenance activity) and putting rest of work out for industry competition is, in near- and long-term, bet approach.

-Direct Labor Hour Rate:

"The fully burdened cost per direct labor hour used as the basis for establishing stabilized rates for customers of depot maintenance. The direct labor hour rate is computed by dividing the sum of all labor, non-labor, and non material, direct, indirect, general, and administrative expenses, by the total number of DLH to be accomplished.

-DoD organic depots incorporated into DBOF in FY 1991.

-DBOF funding is derived from orders placed by customers (wings, divisions, etc.)

-DoD establishes stabilized rates and locks in cost of organic depot maintenance by establishing composite rates per DLH during budget formulation process.

-Use of stabilized rates protects against cost swings and insures customers pay.

-Cost patterns can vary by commodity groups because of following:

-nature of work itself--how labor intensive; is work done in large projects or small batches; does work require high levels of supplies, parts, and replacement components.

-geographic considerations (basing and deployment schedules)

-existing structure of overall U.S. industrial base

-level of capital investment required to do the work
-changing technology could cut requirements because of increased reliability

-Within organic depots, customer orders or direct reimbursable accounts finance all business expenses and industrial operations, including:

-wages and salaries
-benefits to employees
-disability compensation
-severance pay
-travel and per diem
-material and supplies
-parts and components
-fire/police/security
-accounting, personnel
-training and tuition
-trash and snow removal
-minor construction
-capital investments
-utilities
-subcontracting costs
-rent and leases
-depreciation charges
-transportation costs
-fuel expenses
-parts and equipment
-ADP and telecommunications
-facility and equipment repair
-facility maintenance
-consultant services
-headquarters costs
-other engineering support
-mobilization costs
-military labor costs
-other military related costs
-non-business costs
-host expenses (running the base)

-What is funded through capital investment budgets?

-new and replacement industrial plant equipment
-tooling requirements
-purchases of software and hardware for ADP/telecommunications rqmnts
-minor construction
-pollution prevention and remediation equipment and related minor construction required to meet OSHA and EPA requirements

-ENVIRONMENTAL RESTORATION IS NOT FUNDED THROUGH DBOF.

-The primary things DBOF did:

-cash management has been consolidated (collections and disbursements)
-capital investment budgets added
-accelerated full depreciation charges (straightline basis including MILCON)
-inclusion of headquarters overhead costs
THESE MOVED DEPOTS CLOSER TO PRIVATE SECTOR-TYPE STRUCTURE

-Costs that exist in private sector that have no equivalency in military depots include:

-profits
-cost of money
-state income taxes
-federal income taxes
-property taxes
-casualty insurance

-Factors that influence costs:

-profits and taxes: private industry must make profit, and margins vary year to year. Average FY1992 aerospace industry profit (for 23 companies) was 7.8%. Corporate income tax (34%) also impact cost.

-subcontracting. private firms often subcontract and just pass on profit margins of subcontrators. Depots, on other hand, are multi-commodity, integrated facilities that have no need to subcontract.

-Restrictions on RIFs. Congressional notification required if involves more than 50. Depots must retain people for which there is no available workload.
Excess people are charged to overhead accounts until removed from payroll.

-Non-maintenance missions: For depots, includes engineering design support, supply functions performed for other activities, military salaries for people not doing depot work (physical fitness, retirement ceremonies, parades); special studies

-Government surveillance. MILSPEC 9858A quality assurance costs and cost of Defense Contract Management Command inspectors approving over and above work that exceeds original statement of work; inspection and approval process tends to shut down the job or production line, thereby increasing costs associated with down time.

-Purchasing flexibility. Private sector procurement streamlined and uses just-in-time inventory deliveries--lower costs for materials and supplies. Depots must use the DoD supply system which is sometimes slow and includes surcharges to pay overhead costs of supply system.

-Excessive infrastructure. Significant overcapacity in both sectors. Represent a drain on resources. Private sector can readily shed, through sale or other disposal, excess facilities and equipment no longer economical to retain. **FOR DEPOTS, BRAC IS THE ONLY RECOURSE TO SHED UNNEEDED FACILITIES.**

-Organizational structure. Significant differences in how depots and private facilities organized. Original Equipment Manufacturers (OEMs) have large overhead staffs for engineering, R&ED, marketing, and other functions--they usually have highest overhead costs and are heavily facilitized. Military depots are also heavily facilitized and are large-scale, integrated facilities with capability and capacity for multiple commodities. At other end of spectrum, are private service companies that are specifically organized to have minimum overhead.--they do not retain large indirect staffs, have no large sunk costs in facilities and equipment that must be depreciated or amortized.

-What goes into a depot's developing a bid--what are the bid preparation costs?

-bid and proposal office staff, supplies
-TDY costs
-proposal team selection and kick-off meetings
-receiving and reviewing the RFP
-RFP questions
-Bid conference

-Bid decision process
-Cost data gathering and analysis
-Technical and cost document development
-Make or buy decision process
-Various team reviews
-Finalization of proposal
-Price review
-Corporate board review
-Document reproduction
-Bid submission documentation
-Responses to the seller support team review

-Comparison of accounting systems--depots and private sector:

	Depots	**Private**
Job order systems	-No unique differences	No unique differences
Depreciation	-Depreciate cost of plant facilities twice as fast as private -greater capitalization criteria	
Retirement Costs	-Does not fully account for unfunded retirement costs	-Does not fully account for unfunded retirement $
Bid Preparation Costs	-No big differences	-No big differences
Cost Realism Checks	Yes	Yes
Property Taxes	No, but does have BOS (roads, police, fire, etc.)	Yes, but gets breaks
Cost of Money	-No long-term financing	-Yes

-Cost Comparability

-Three levels in terms of overall cost competitiveness

-Level 1

-non-prime service contractors. Reduced overhead, minimal staffs, local tax incentives. Pursue contracts where substantial assets provided to winning bidder such as GFE or GOCO. Very cost competitive and beat out organic depots.

-Level 2

-Most depots. Inherent competitive advantage of not having to make a profit, pay taxes, or maintain large engineering and design staffs, make organic depots with moderate to relatively high capacity utilization rates very competitive.

-**Level 3:** OEMs. They retain large engineering staffs, have R&D capabilities, and overhead structures. Need to make profit on sales. Least competitive when cost is primary basis for selection for maintenance and repair contracts.

-Results of Contracts Analysis (28 contracts and over 105 bids reviewed to ID trends)

-Total cost per DLH (Total contract cost divided by total # of DLH): Significant differences by commodity group. Variances between commodities greater than variance between public and private bidders.

-DLH Estimates: Private bids differed from pubic bids from low of 3% to high of 300%. Average private bidder exceeded public bidder by 103%. Wide range in private bids depending on commodity group. No such wide range in public bids.

-Labor Rates (cost per hour for direct labor): Data indicates no particular pattern favoring public or private sector. Rates in local job market is driving factor.

-Direct and Indirect Costs: Range was not large. Material costs not a significant factor in competitions. Public (44% direct/56% indirect); private (42% direct/58% indirect)

-Profits: Large aircraft contracts (5-16%, averaging 12%); ground support equipment and small aircraft (4-10%, average of 7%); shipyard (average 11%).

-Total Price: For contracts won by public, private bidder prices exceeded winning public bid by range of 12-334%, with average of 94%. **KEY FACTOR IS NUMBER OF DIRECT LABOR HOURS BID.**

-Competition

-Current issue of Cost Comparability Handbook provides for 10 major cost adjustments which DoD believes helps level the playing field. These are:

-Additions to public bids
  - -state unemployment payments
  - -unfunded civilian retirement
  - -facility depreciation costs
  - -casualty insurance
  - -impact aid

-Reductions to public bids
  - -non industrial fund recurring costs (services provided as "host" at base)
  - -military non-depot related costs

-Knowledge of Market Opportunities

-Industry says military decides what workload will be competed, providing an inherent advantage in planning and investment strategies. Services do not compete items widely seen on commercial market, but chooses military unique items, in smaller uneconomical units. Services explain this away by saying they have to be a smart buyer in the marketplace.

-Qualification of Repair sources and specifications: Not really a factor. Industry says depots are source of expertise for development of source selection criteria, identification of statement of work packages, giving them unfair advantage. However, actual work specifications are not developed by depots, but by inventory control points or project offices. OEMs designed the weapon system, prepared the tech manuals, usually maintained the equipment in initial deployment, and developed the frequency of repair tables.

-Consequences of non-compliance: Industry suffers severe consequences if it fails to comply--debarment, severe financial losses, maybe even going out of business. Organic depots not subject to the same penalties. Organic depots who suffer losses do, however, become a drain on vital resources for parent service. Depot that continues to experience net operating losses will encounter pressure from customers and superiors to cut costs.

-Summary of industry concerns on cost comparability:

-government has inherent advantages--not possible to have a level playing field
-uncomfortable competing against primary client and customer--reluctant to complain because of damaging the fundamental customer-provider relationship
-private sector says depots do not include all true costs
-burdens imposed by government contract oversight places them at disadvantage
-No adverse consequences when depots fail--private sector faces severe consequences
-limitations and failings of DoD accounting system make accurate comparisons tough

-Summary of Task Force position on competitions:

-public-private should be eliminated or minimized.
-may not be possible to achieve a level playing field
-Task Force believes paramount challenge is to downsize to only CORE required capacity, so that organic depots are not burdened with high cost of maintaining excess capacity.
-AF position is that competitive advantage (ability to offer product at lower cost or provide better quality) and "best value" to DoD should determine disposition of workload. USAF argues that CORE should be DoD-specific and not service-specific, and that downsizing should be accomplished while minimizing cost by interservicing workloads to the most cost efficient depot regardless of owners service.

-Work specifications and requirements: Following is typical pattern in military depot:
-at time of acquisition, services also buy tech data package (drawings, parts list, etc) developed by OEM.
--includes description of maintenance tasks to be performed, when, etc.
-OEM typically maintains system for several years before transfer to military depot
-During transition period, historic data base is generated
-Historic data base, original maintenance standards are update.
-Work specs and requirements and related processes are developed based on the engineering recommendations from OEM, and evolve from a combination of historical

data records and formal improvement efforts--results become the standard method used in depot

-Production Processes
-Processes essentially same for military depot and private sector
-initial inspection
-disassembly and nondestructive tests
-component or parts repair or replacement
-frame or basic structural repair or buildup
-reassembly and installation
-test and evaluation
-painting, or other final preparation
-final test, inspection, and acceptance
-packaging, shipping

-Services maintenance depots expenses (FY93) (Percentages)

	USAF	**USA**	**USN**		**USMC**
			NADEP	**SHIP**	
Salaries	41	45	46	64	52
Facility Repair	1	3	4	3	1
Depreciation	2	6	5	3	2
Utilities	2	NA	NA	NA	2
Equipment Maintenance	2	NA	NA	NA	1
Other Expenses	12	7	7	10	1
Materials and Parts	34	28	30	11	30
Contracts/Profess Services	4	5	5	7	9
Capital Investments	2	5	3	2	2
Transportation	NA	1	NA	NA	NA

-Foreign Military Sales by DoD DBOF Depot (FY 93) (in millions)

Army Maintenance Depots	46.9
Army Ordnance Depots	107.6
Naval Aviation Depots	49.9
Naval Shipyards	2.9
USMC Depots	8.0
Naval Ordnance Stations	10.5
Air Force Depots	57.7
Total FY93	283.5

-FY95 Budget Request DBOF Costs (in millions)

	FY 94	FY 95
Army Depot Maintenance Other	1,721.8	1,605.5
Army Ordnance	574.0	582.9
Naval Shipyards	3,855.8	3,430.8
Naval Aviation Depots	1,953.0	1,851.9
Naval Weapons Stations	576.0	470.3
USMC Depots	179.7	164.5
USAF Depot Maintenance	4,684.0	4,327.2
Total	13,544.3	12,433.1

-FY 95 Budget Request DBOF Capital Investments

	FY94	FY95
Army Depot Maintenance Other	106.2	50.2
Naval Shipyards	89.7	52.0
Naval Aviation Depots	19.6	8.0
USMC Depots	5.6	3.6
USAF Depot Maintenance	143.7	53.4

-Total Capital Investments at Depots (in millions)

	FY 90	FY91	FY92	FY93	FY94	FY95
Major Construction						
USAF	55	37	17	32	43	8
Army	9	17	16	26	1	2
USMC	0	4	2	4	0	0
NAVAIR	0	15	11	0	0	0
NAVSEA	51	87	40	28	32	11

CORE WORKLOAD

-Core is organic depot maintenance capabilities that exist in government depots and shipyards
-Core is needed to assure readiness and sustainment related to JCS scenarios are met
-Services will preserve CORE capabilities with minimum infrastructure
    -capacity beyond that needed for CORE used only for last source of repair and cost control workload
-Primary workloads assigned to depots in support of core capabilities should be maintenance of weapon systems included in JCS scenarios.
-Core is skills and competencies, not work on specific weapons systems
    -not necessary that specific contingency weapon system workload be retained, but rather that a capability relevant to that weapon system be preserved.
    -Core is capability to support, not the maintenance of the specific weapon
    -Clear implication is that mission-essential equipment can be maintained by private sector contractors without violating the assumptions underpinning core.
-Requirement for core tied directly to threats in contingency scenarios approved by JCS
    -maintenance capabilities not tied to scenarios are not core
    -Reduction in range/intensity of scenarios should result in drop in core
    -Depot capacity maintained to support core should consist of no more than minimum assets needed to preserve those capabilities
    -depots and shipyards exist to maintain weapons, not upgrade them
        -major alterations belong in the private sector and are not core

Document Separator

THE DEPUTY SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

4 May 1994

MEMORANDUM FOR THE SECRETARY OF THE NAVY
SECRETARY OF THE AIR FORCE

SUBJECT: Depot Maintenance

The attached policy on Depot Maintenance operations requires extraordinary efforts for full implementation. The fixed wing aviation commodity area provides the greatest opportunity for consolidating workloads across the Services. Currently, there are redundant sources of repair for several aviation components e.g. engines. Therefore, I am asking you to jointly develop a coordinated plan to improve aviation depot maintenance operations taking into consideration my memoranda on Depot Maintenance Operation Policy.

You must strive for a lean structure. In implementing the DoD Core Concept, you should use the most proficient DoD depot to perform depot maintenance. Retain in only one Service militarily unique capabilities for use by two or more Services. Consolidate workloads across the Services to reduce excess capacity. Finally, I suggest you strongly consider joint depot management and joint operations alternatives to include joint operation of a single base by both services. When approved by me, the approach you develop will be used as guidance for the BRAC 95 process.

I look forward to receiving your joint plan.

Attachment

940388

THE DEPUTY SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

4 May 1994

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
COMPTROLLER
GENERAL COUNSEL
DIRECTOR, OPERATIONAL TEST AND EVALUATION
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTORS OF THE DEFENSE AGENCIES

SUBJECT: Depot Maintenance Operations Policy

I have completed my review of the Defense Science Board Depot Maintenance Task Force report. As noted in my forwarding letter to the Congress, the report is a constructive contribution to the challenge of rightsizing the depot infrastructure of the DoD for present and future national defense needs.

The weapon systems and equipment readiness, sustainability and life-cycle support requirements of the Department demand a base of organic depots. To control risk, the Department's CORE depot maintenance concept provides for identification and quantification of specific capabilities that need to be resident in organic depots. The ability to guarantee delivery of flexible and responsive industrial support represents the essence of DoD's depot maintenance mission.

> *CORE is the capability maintained within organic Defense depots to meet readiness and sustainability requirements of the weapon systems that support the JCS contingency scenario(s). Core depot maintenance capabilities will comprise only the minimum facilities, equipment and skilled personnel necessary to ensure a ready and controlled source of required technical competence. (DoD Memorandum, Subject: Depot Maintenance Capability, dated November 15, 1993).*

The DoD CORE concept means determining Department wide the CORE capability requirements and identifying requisite workload to maintain these capabilities, based on military service inputs. This determination considers the level of risk and the capabilities of all DoD depots. The Task Force validated the DoD CORE concept but recommended adoption of Service CORE. Our review determined that greater flexibility is achievable by maintaining the current DoD CORE.

With regard to competition between the public depots and the private sector, the Task Force and other related studies and audits have concluded that: Databases and financial management systems in the Department and the Military Services are not capable of supporting the determination of actual cost of specific workloads. Although vigorous attempts have been made to execute fair public/private cost competitions through the medium of the Cost Comparability Handbook, a level playing field is not achievable in the near term. Based on these findings public/private cost competition will be discontinued at present.

The Task Force concluded that the above findings pertaining to public/private cost competitions also apply to public/public competitions. Additionally, the Task Force observed that there is considerable expense in conducting public/public cost competitions, and that the same efficiencies can be gained by interservicing workloads to Centers of Excellence. I agree with the Task Force conclusion that interservicing of Depot Maintenance work is preferable to direct public/public cost competition. Therefore, public vs. public cost competition will also be discontinued, and interservicing decisions taken on the basis of efficiencies that can be gained. In the future, if accurate and comparable cost data is available, the issue of cost competition should be reopened.

Major modifications and upgrades to increase the performance envelope of systems are not by definition part of depot maintenance CORE. The Government has traditionally obtained development and manufacture of kits for modifications and upgrades from the private sector. The Task Force concluded that major modifications and upgrades should be primarily accomplished in the private sector. This conclusion is sound and will be implemented.

Efficient depot maintenance support of new weapon systems is of utmost importance. However, the paradigm must change; we should no longer assume new weapon systems and equipment will transition to organic depot support. In many cases, there is neither a strong economic case nor risk control requirement for establishing organic depot maintenance support. The depot maintenance strategy is an important element of the acquisition process for new systems. It is clear that in this era of declining force structure, the strategy must be refined periodically throughout the entire acquisition cycle. The Defense Science Board Depot Maintenance Task Force has been given an additional task of determining the process and procedures the Department should use in procuring the depot maintenance support for new weapons systems. Their report will be completed in 30 days.

The Military Services and Defense Agencies will take the actions necessary to implement the above guidance. These policy changes are effective immediately and will be incorporated into DoD Directives.

JOHN DEUTCH
DEPUTY SEC OF DEFENSE

Document Separator

AUSA BACKGROUND BRIEF

No. 61 January 1994

DEPOT MAINTENANCE

EXECUTIVE SUMMARY

Continuing defense budget cuts and the resulting decrease in acquisition funds have led to an increased pressure to reduce the number of service-operated depots and plants and to limit the maintenance workload at Army facilities. A 1993 Joint Chiefs of Staff (JCS) study on depot maintenance concluded that the existing Department of Defense (DoD) depot capacity exceeds future requirements and that there is a need to streamline and consolidate the existing depot base.

Many private companies view depot maintenance activities as an alternative opportunity to sustain their own production and research capabilities at a time when military procurement is severely limited. In their view, shifting most of the depot maintenance workload to private industry is the best way to preserve a viable sector of the industrial base.

The services believe that it is important to retain a core depot-level maintenance support capability to reduce operational risks by providing ready and controlled resources to respond to contingency requirements and provide a basis for surge mobilization.

The congressional "Depot Caucus" has consistently supported the military depot maintenance system and has opposed attempts by DoD to divert more maintenance and repair work to the private sector.

The 1995 Defense Base Closure and Realignment Commission is sure to play a major role in determining the future of many Army depot facilities.

ISSUE

How much and what types of core capabilities should be maintained in Army arsenals, depots and plants to meet peacetime and emergency needs, and at the same time provide a mobilization base?

BACKGROUND

The Army's arsenals, depots and plants have always played important roles in developing and maintaining weapons and other equipment, as well as supplying many of the basic weapons needed by the Army. The first of these, Springfield Armory in Massachusetts, was established in 1777 to support the Continental Army.

that all depot-level maintenance activities be consolidated under a single authority. The study contained a particularly significant and controversial observation pertaining to the future of government depots: "We recognize that full contracting out of depot maintenance functions to commercial industry is also a long term possibility." However, this comment was tempered by the acknowledgement that "with the elimination of organic depot capability, there is a distinct probability that the commercialization process would become a sole source environment with potentially higher costs."

In 1993, DoD announced that it intended to establish several "pilot" acquisition programs that would include the responsibility for depot-level maintenance support as part of the procurement package. However, attempts by DoD to move in this direction have been resisted, at least for the time being, by the congressional "Depot Caucus." The House version of the FY 1994 Defense Authorization Bill (H.R. 2401) contained a provision prohibiting the Secretary of Defense from authorizing long-term depot-level maintenance by nongovernment personnel. This provision was modified during the House/Senate conference to a "Sense of Congress" (Section 345, Conference Report on H.R. 2401) that an appropriate amount of depot maintenance and repair on new weapons systems be assigned to government facilities in order to maintain the critical depot-level capabilities of DoD.

Depot Maintenance Controversy

Depot-level maintenance accounts for approximately $13 billion of the defense budget for Fiscal Year 1994. Most of this $13 billion goes to government depots. The Army's share of this is approximately $1.3 billion.

Depot maintenance includes overhaul and rebuild, modifications, conversions and upgrades to extend service life of systems. Under the current provisions of law (10 U.S.C. 2466), DoD is prohibited from contracting out more than 40 percent of depot workloads to the private sector.

Although some depot work may be too specialized, or too low in volume to be performed economically in the private sector, the prevailing industry view is that government facilities and work forces are being protected in a time of general defense downsizing at the expense of the private sector. Industry advocates contend that it would be more beneficial to the industrial base to shift a greater share of the work to the private sector in order to sustain the research, development and production capabilities that are not usually available in depot facilities.

Industry representatives are strongly opposed to a statutory limitation on the amount of repair and maintenance work that can be performed by private industry. They also believe that military facilities are taking work away from the private sector by competing with private industry for maintenance work from the other services. It is their contention that making them compete with depots for the limited workload available to private industry is unfair because of the differences in private sector and government cost factors that are considered in the competitions.

The services all believe that there is a need to retain some core depot maintenance capabilities in government facilities in order to provide the rapid response needed to meet requirements in emergency situations and contingency deployments and that elimination of all organic depot capability

Defense Base Closure and Realignment Commission

There has been a significant reduction in the DoD depot structure as a result of the last three rounds of the Base Closure and Realignment Commission. So far, DoD has reduced its maintenance depots by almost 30 percent.

During the 1993 round of base closing hearings, some private companies campaigned before the commission to add some depot maintenance facilities to the base closure list because the repair workload could be transferred to private plants. There were indications that members of the commission were receptive to the argument that diverting work to private industry by closing government facilities would be a viable approach to maintaining the private sector industrial base.

At one of the final base closure hearings, the commission chairman stated that it was his opinion that Air Force maintenance facilities were clearly superior to Army and Navy facilities. This statement, coupled with ever-increasing pressure from private industry, could well mean that during the 1995 round of base closures/realignments, more Army depots will be vulnerable to closure or realignment action.

CONCLUSIONS

The Army and the other services need to retain an organic depot-level maintenance and repair capability in order to provide essential, responsive support for military operational requirements during contingency and emergency operations. However, the services must realistically establish the required minimum core capabilities and workload levels they need to meet military requirements during peacetime and emergency situations.

Determining the required core capabilities and the proper allocation of capabilities and the distribution of workloads between government depots and private industry will certainly be the most challenging issue facing the Defense Depot Task Force. While overall cost-effectiveness considerations must be a major factor in its determinations, the need to support and preserve critical research, development and production capabilities in the civilian industrial base and, at the same time, retain a core depot capability cannot be ignored.

The congressional Depot Caucus will continue to be a major player in any actions to consolidate and close government depots or to divert a larger share of depot-level maintenance to the private sector. Clearly, unless the members of the Depot Caucus are satisfied that the defined core capabilities are reasonable and sufficient, there is little chance that the present allocation of workload between the government and private sectors will be changed.

The 1995 Defense Base Closure and Realignment Commission is almost certain to consider Army arsenals and depots as candidates for closure, even if they are not included in the Secretary of Defense's list of bases recommended for closure.

(This *Background Brief* was prepared by Lieutenant Colonel Austin E. Miller, AUS Ret., an Institute of Land Warfare Research Fellow, and the ILW Staff.)

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United States General Accounting Office

GAO

Testimony

Before the Readiness Subcommittee, Committee on Armed Services, House of Representatives

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DEPOT MAINTENANCE

Issues in Allocating Workload Between the Public and Private Sectors

Statement of Donna M. Heivilin, Director, Defense Management and NASA Issues, National Security and International Affairs Division

GAO/T-NSIAD-94-161

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to discuss several defense depot maintenance issues. DOD annually spends about $15 billion for depot maintenance, modifications and upgrades to support aircraft, combat vehicles, wheeled vehicles, ships, and other equipment. For a variety of reasons, DOD is downsizing and must consider how to cost effectively acquire needed depot maintenance activities while supporting industrial base needs in both the public and private sectors. Recognizing that excesses exist, there are differing views on how the workload should be allocated. At the heart of the current debate are questions regarding how much workload should be retained in the public depots as "core" capability, whether a service should be allowed to have its own core capability, and how the remaining non-core workload should be allocated among the public and private sectors.

As you requested, my testimony today will address the following issues:

-- the share of DOD's depot maintenance program spent in the public and private sectors;

-- the use of public-private competition as a tool for allocating depot maintenance workload;

-- observations on the Defense Science Board Depot Maintenance Task Force findings and recommendations; and

-- DOD's transfer of employees, workload, equipment, and facilities at closing maintenance depots.

Before I discuss specifics, let me provide a summary of our views on these issues.

First, the amount of funding going to the private sector is much higher than reported. In recent years, statistics reported by DOD indicate that the mix of funding between the public and private sectors was 65 percent and 35 percent, respectively. However, all data has not been collected and reported uniformly by the services. While a precise estimate is not possible, it appears at least half of the depot maintenance funding currently goes to the private sector.

Second, while we have concerns about implementation of public-private competition, and while the amount of savings are difficult to quantify, we believe the program can reduce depot maintenance costs. Similarly, while industry representatives believe the program is inherently unfair and want it to be terminated, DOD has made progress in making the competitions fair. We do not at this time see sufficient evidence for terminating the public-private

competition program. We believe it should continue to be an option for allocating work when it is likely to result in reduced costs.

Third, while we support many of the task force findings and recommendations, there are areas where we differ. In particular, we agree there is a need to identify a rational maintenance core policy, but we believe, as DOD does, that this should be done on a DOD-wide basis rather than a service-specific basis. Additionally, we believe the allocation of non-core workload should be based on cost effectiveness--unless there are overriding circumstances, such as industrial base considerations.

Lastly, at this time none of the maintenance depots identified for closure have closed. DOD appears to have an effective program in place to assist employees in finding alternative employment, although some workers may not be able to get a job with comparable pay. There are some concerns about other aspects of closing the depots.

BACKGROUND

Depot maintenance activities require extensive shop facilities, specialized equipment, and highly skilled technical and engineering personnel to perform major overhaul of parts, completely rebuild parts and end items, modify systems and equipment by applying new or improved components, manufacture parts unavailable from the

private sector that are needed for performing depot maintenance activities, and provide technical assistance by field teams at operational units. At the beginning of the Base Closure and Realignment (BRAC) process, DOD was performing depot maintenance operations at 35 of its own major depots[1] and thousands of contractor facilities. With full implementation of currently approved BRAC decisions, the number of DOD depots will be reduced to 24. Reductions are also taking place in the private sector. However, even after planned closures, there will still be excess capacity in both sectors that must be addressed.

Due to threat changes, new war-fighting plans, budget reductions, and decisions to close excess facilities, DOD has been faced with the critical issue of how to determine the appropriate size of its industrial base in the post cold war era. At the heart of this issue is the controversy over what is the proper workload mix between public depots and private contractors. Attempts to "rightsize" the industrial base have been made through legislation that established percentage workload goals and through programs for competing maintenance workloads between the public and private sectors. Because of the interest and, at times, opposing views on how DOD should handle the industrial base issue, Congress directed DOD to establish a defense and industry task force to "assess the overall performance and management of depot-level activities of the

[1]A major DOD maintenance depot is defined as a facility employing more than 400 personnel in depot maintenance.

Department of Defense." Section 341 of the National Defense Authorization Act for Fiscal Year 1994[2] required a report by April 1, 1994. The ensuing Defense Science Board Task Force on Depot Maintenance Management included a large group of senior representatives from both industry and government. The Deputy Secretary of Defense submitted the task force report to Congress on April 7, 1994.

REPORTED PRIVATE SECTOR SHARE OF DEPOT MAINTENANCE FUNDS IS UNDERSTATED

Statutory and regulatory provisions have been used to address the mix of maintenance workload between the public and private sectors. For example, 1974 legislation established a specific dollar value mix for the alteration, overhaul, and repair of naval vessels. Since then, workload allocation decisions have been influenced by percentage goals found in DOD guidance and legislative mandates. DOD Directive 4151.1, "Use of Contractor and DOD Resources for Maintenance of Materiel," directed the services to plan for not more than 70 percent of their depot maintenance to be conducted in service depots in order to maintain a private sector industrial base. A 1992 amendment to 10 U.S.C. 2466 prohibited the military departments and defense agencies from contracting out more than 40 percent of their depot maintenance work to the private sector.

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[2]P.L. 103-160, Sec. 341, 107 Stat. 1547, 1622 (1993).

For fiscal years 1985 through 1992, DOD reported that depot maintenance expenditures were split between the public and private sectors about 65 percent and 35 percent, respectively. However, our work shows that the private sector more likely receives over 50 percent of the DOD depot maintenance budget. We found that a portion of the monies expended on the maintenance workload assigned to the public sector ultimately is contracted out to the private sector for parts and material, maintenance and engineering services, and other goods and services. However, as currently reported, these monies are included in calculating the public sector's share of depot maintenance expenditures. Additionally, some types of depot maintenance activities, such as interim contractor support, are not included in previously reported statistics. We also noted inconsistencies in how the services collect and aggregate data to develop DOD's report to Congress on the public and private mix for depot-level maintenance.

While a lack of uniform and complete data prevented us from precisely quantifying the public-private sector mix, we found several indications that at least 50 percent of the funds ultimately go to the private sector. For example, Army Materiel Command data indicates that about $437 million of the $1.2 billion expended by Army depots in fiscal year 1993--about 31 percent--went to the private sector. About 21 percent of the dollars expended by the Army depots went to buy parts and material and about 10 percent for other goods and services. If these expenditures are added to

the amount of depot maintenance funds spent directly in the private sector, we estimate that about 58 percent of the Army's depot maintenance budget is spent in the private sector.

We also found that about 43 percent of the Air Force Materiel Command's $4.3 billion depot maintenance dollars in fiscal year 1993 went to public depots (excluding parts and other goods and services acquired from the private sector), while about 57 percent went to the private sector. Although we tried to obtain data from all Navy shipyards on fiscal year 1993 expenditures in the private sector, we received data from only one shipyard. Portsmouth Naval Shipyard reported that $81 million of its $399 million expenses for that year went for material and various other goods and services contracted with the private sector. Thus, the private sector received about 20 percent of that shipyard's operating expenses for fiscal year 1993.

The task force report found that the public-private ratio becomes nearly 50-50 when dollars spent at public depots for parts and components--but purchased from the private sector--are included as part of the private sector's share. If included, other goods and services procured from the private sector would increase the private sector's share above 50 percent.

If Congress continues to be interested in quantifying the expenditure of depot maintenance funding in the public and private

sectors, it may wish to consider requiring DOD to revise the manner in which it collects, aggregates, and reports the data.

PUBLIC-PRIVATE COMPETITION AS A TOOL FOR ALLOCATING DEPOT MAINTENANCE WORKLOAD

There is disagreement about using public-private competition as a tool for allocating depot maintenance workload. This program is quite new, except for its use in competing ship repair.

DOD's public-private competition program, which began in 1985 when Congress authorized the Navy to compete shipyard workloads between the public and private sectors, is carried out under various legislative authorities. The 1985 DOD Appropriations Act[3] directed the Navy to test the feasibility of using competition between public and private shipyards as the basis for awarding a portion of the ship overhaul and repair workload. Although the House and Senate Committees on Armed Services initially opposed expanding the competition program to the other services and Navy aviation activities, the National Defense Authorization Act for Fiscal Year 1991 provided for a pilot competition program. Section 314 (b) of the National Defense Authorization Act for Fiscal Years 1992 and 1993[4] authorized a new pilot program through fiscal year 1993. The pilot program limited the amount that could be competed to four percent of the total depot maintenance program. Arguing that DOD

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[3]P.L. 98-473, 98 Stat. 1904, 1907 (1984).

[4]P.L. 102-190, Sec. 314, 105 Stat. 1290, 1336 (1991).

could achieve significant savings by expanding the public-private competition program, DOD officials requested that limitations on the pilot program be removed. Section 354 of the National Defense Authorization Act for Fiscal Year 1993[5] repealed the requirement for the pilot program--clearing the way for DOD to expand its competition program.[6]

Table 1 provides summary information on workloads awarded to the private and public sectors for the 302 competitions that were awarded as of December 31, 1993.[7] Of these, 202 competitions were for the repair of Navy surface ships and submarines. Of the remaining 100 competitions, the Air Force conducted 34; the Army 35; the Navy 24; and the Marine Corps 7.

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[5]P.L. 102-484, Sec. 354, 106 Stat. 2315, 2379 (1992).

[6]A more detailed history of the public-private competition program was provided in correspondence to the Chairman, Subcommittee on Defense, Senate Committee on Appropriations (GAO/NSIAD-93-292R, Sept. 30, 1993).

[7]Navy ship awards are included through March 31, 1994.

Table 1: Summary Information on Workloads Awarded to the Private and Public Sectors in the Public-Private Competition Program

Dollars in millions

Service	Number of Workloads Awarded				Value of Workload			
	Private Sector		Public Sector		Private Sector		Public Sector	
	Number	Percent of Total	Number	Percent of Total	Value	Percent of Total	Value	Percent of Total
Air Force	13	38	21	62	$ 64.3	22	$ 232.0	78
Army	15	43	20	57	54.0	54	55.3	56
Navy Aircraft/ Components	10	42	14	58	88.5	23	288.6	77
Marine Corps	1	14	6	86	.4	3	13.9	97
Non-Ship Total	39	39	61	61	207.2	26	589.8	74
Navy Ships	133	66	69	34	1,174.4	50	1,171.6	50
Total	172	57	130	43	$1,381.6	44	$1,761.4	56

While private companies believe the program is inherently unfair and want it terminated, DOD has made progress in making the competitions fair. Our analysis showed that overall, the private sector won 57 percent of the competitions, which represent about 44 percent of the dollar value. Private shipyards won 91 percent of the 117 surface ship competitions and 32 percent of the 85 submarine competitions. Moreover, private shipyards won all of the more recent competitions. Public shipyards complain that their ability to reduce their overhead is inhibited by the requirement that they maintain industrial base capability to repair items that are being phased out of the inventory or are unusual and not common on most ships.

Public shipyards also contend that they are no longer competitive because they are now required to bid full costs, whereas private shipyards are not so restricted. During the first few years of the competition program (fiscal years 1985 to 1987), public shipyards were not required to bid full costs. That is, if overhead costs were covered by noncompeted work, public shipyards could bid the variable costs of the proposed additional work. The National Defense Authorization Act for Fiscal Year 1989[8] required that public shipyard proposals in public-private competitions include full costs to the government.

We have been asked to look in more detail at the ship and submarine competitions. As a part of our ongoing work, we compared the historical costs of competed submarine repairs in both the public and private sectors. We found that the average cost of performing a competed submarine workload in public shipyards during fiscal years 1988 through 1993 was less than the average cost for competed workloads over the same period, even though private yards had bid lower.

The private sector won only one of the seven Marine Corps competitions. Forty-three percent of the 35 Army competitions went to the private sector--but the dollar value was split about in half. The private sector won 42 percent of the Naval aircraft and

[8]P.L. 100-456, 102 Stat. 2054 (1988).

component repair competitions--representing 23 percent of the dollar value of naval aviation competitions.

The Air Force is a strong advocate of public-private competition and its depots have been very successful in winning competitive awards. Air Force depots have won 21 of the 34 Air Force competitions--representing workload valued at $232 million, or 78 percent of the total value of Air Force competition programs awarded as of December 31, 1993. The Air Force reported that awarding these workloads to the next lowest bidder would have increased costs by $108 million. An Air Force depot also won a $61 million Navy depot maintenance competition for the F/A-18 aircraft. The Air Force wants to expand its public-private competition program. Because of questions over whether the Air Force competitions are fair, I am focusing many of my comments today on our analysis of this program.

To gain further insights into the Air Force's competition program, we examined the 28 competitions in which the Air Force bid on a workload. We analyzed 134 bid proposals submitted for these competitions. The difference between the winning bid and the highest losing bid exceeded 300 percent in several competitions. Losing bids ranged from 9 percent less to 496 percent more than the winning bid. In competitions won by the public sector, private offerors' final bids averaged 150 percent greater than the winning depots' bids.

Noting the large percentages by which Air Force depots were winning many of their competitions, private sector companies--particularly original equipment manufacturers that have higher overhead costs and are more heavily facilitized than service-oriented companies--believe this is because the Air Force depots are not including all their costs. When we questioned Air Force officials about the reasons for these variances, they noted that industrial improvements to Air Force depots during recent years have contributed significantly to efficiency and productivity. For example, one Air Force depot we visited had reduced the number of hours required to accomplish programmed depot maintenance tasks by applying state-of-the-art equipment, tooling, and processes. These included robotic media blast technology to remove paint from aircraft surfaces and a more efficient industrial production line.

We noted in comparing proposals for several competitions that bidders appeared to interpret differently the tasks required to accomplish the work. Air Force officials acknowledged the difficulty in writing a precise statement of work for maintenance competitions and conceded that, as a result, bidders often had widely varying interpretations as to the tasks required and the time needed to perform them. Air Force depots that have maintained the equipment previously may better understand what is actually required. Contracting officers said that the difficulty in writing a precise statement of work also adversely affects repair

competitions restricted to the private sector--frequently leading to contract revisions and cost overruns.

In two competitions, the Air Force bid the lowest cost, but cost comparability adjustments[9] to its bids increased the evaluated prices, resulting in the awards going to private sector bidders. We observed that, over time, the relative significance of cost comparability adjustments has increased. For the first half of the competitions, Air Force depots' bids were adjusted upwards for comparability an average of 3.5 percent of the amount bid. In contrast, adjustments for the second half averaged 7.6 percent. As additional comparability factors were added, their share of the bid prices increased.

In the 60 proposals we reviewed where data on labor hours were provided, the most significant cause for the difference between the winning and losing bids was the number of direct labor hours proposed. Winning offerors bid an average 77 percent fewer labor hours than the losing offerors. On average, the closest competitor bid 32 percent more hours than did the winner. We reviewed Defense Contracting Audit Agency reports on some of these competitions as

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[9]To level the playing field between public and private sector bidders, DOD uses comparability factors to reflect cost elements not included or fully included in the proposed bid prices. For public sector bids, comparability factors are used to account for elements not included in the end-item cost that is charged the customer but are paid for by other appropriation accounts. These factors include such items as unfunded civilian retirement liability, unemployment compensation, and military support costs.

well as the cost-realism analyses performed by the procuring activities. The Air Force depots' estimates for labor hours were reviewed and the final estimates accepted as reasonable. Nonetheless, it is not possible to determine if the performing depots will accomplish the work for the labor hours bid until actual performance data is available and evaluated. This analysis should be facilitated by the Air Force's implementation of a Depot Maintenance Performance Tracking System. However, post award contract administration performed by the Defense Contract Management Command and independent post award audits would also be helpful in evaluating the results of these competitions.

OBSERVATIONS ON DEPOT MAINTENANCE TASK FORCE REPORT

You asked that we comment on the findings and recommendations of the task force report provided to Congress on April 7, 1994. We have not reviewed the report in depth, and are focusing our comments on the task force recommendations that (1) core be implemented as service-specific; (2) selected non-core workload be allocated to certain capabilities in the private sector, and the remaining non-core workload competed in the private sector; and (3) public-private competition be eliminated.

In transmitting the report to Congress, the Deputy Secretary of Defense generally agreed with the task force recommendations, except for the recommendation that core should be service specific.

The Deputy Secretary noted that core will be DOD-wide, thus providing greater flexibility in eliminating duplicate resources, increasing interservicing, and implementing efficiency measures.

Service versus DOD Core

DOD established a methodology for determining the capabilities needed to maintain mission essential weapon systems--referred to as core workload--to be used in the Joint Chiefs of Staff contingency scenarios.[10] Core capabilities and requisite workloads, by definition, are generally to be maintained in DOD depots, although some core capability could logically exist outside of DOD depots--in the private sector.

The task force found that readiness responsibilities contained in law require service depots to provide service core responsibilities--rather than relying on another service's depot for this support. Task force members found that current DOD policy was not definitive on the issue of whether core requirements should be service specific or consolidated as DOD core. The majority of the task force held the position that core should be service specific, and commented in the report that "such an approach is essential to support military service title 10 readiness

[10]At the direction of Office of the Secretary of Defense (OSD), each service used the approved methodology to compute its core depot maintenance requirements. OSD is now reviewing the results, but has not yet approved the core workloads.

responsibilities."[11] Conceptually, under a service core concept, each service would be allowed to retain its own core workload. Non-core workload would then be transferred to the private sector, either allocated or competed. The Air Force did not agree with the majority opinion. Air Force officials noted that core should be established and maintained in the most cost-effective and efficient public depots; thus, it should be based on a DOD-wide rather than a service-specific basis.

The task force concluded that, in implementing the core policy, excess capacity in the depot system should be eliminated. However, the task force indicated that substantive challenges existed in transitioning the current DOD depot infrastructure to one based on the core concept and that conflicts with the current direction will arise. For instance, the task force suggested that ongoing efforts to consolidate the depot maintenance of tactical missiles at one depot may be inconsistent with industrial base issues-- including the core concept.

We support the task force's findings and recommendations for implementation of a rational core policy, but disagree that the core must be service specific. Assessing and maintaining the

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[11]DOD activities are required under title 10 to "maintain a logistics capability...to ensure a ready and controlled source of technical competence and resources necessary to ensure effective and timely response to a mobilization, national defense contingency situations, and other emergency requirements". 10 U.S.C. 2464(a).

health of the total DOD industrial base is a key issue facing the country as funds are decreasing for both weapons production and maintenance. Implementing a rational DOD policy on core is an essential step for developing an effective strategy for allocating depot maintenance workload between the public and private sectors.

We believe core requirements should be defined by each service. However, we find no persuasive argument that the performance of the core workload should be performed in a service-specific depot. Prior DOD directives defining core requirements have clearly noted that core workload could be assigned to any DOD component.

Defining core on a DOD basis encourages the potential benefits of increased consolidations and interservicing within the DOD depot maintenance system. Interservicing involves transferring work on comparable systems to the depot of another service to take advantage of economies of scale and to avoid the cost of maintaining unnecessary duplicative capabilities. Since as far back as 1958, the Congress, GAO, and internal DOD studies have repeatedly pointed out that (1) the military services accomplish much less interservicing than they can and should and (2) this condition exists primarily because of service parochialism.[12] In June 1990, the Deputy Secretary of Defense called for increasing

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[12]This point was well chronicled in our testimony, "Depot Maintenance: Issues in Management and Restructuring to Support a Downsized Military", (GAO/T-NSIAD-93-13, May 6, 1993). House Committee on Armed Services, Subcommittee on Readiness.

the amount of interservicing to at least 10 percent by 1995. Between fiscal years 1990 and 1992, DOD increased the amount of interservicing from about $300 to about $460 million, despite significant reductions in the services' depot maintenance programs. This represents 3.5 percent of the depot maintenance work in fiscal year 1990 and over 6 percent in fiscal year 1992.

As indicated by the following examples, current workload planning suggests that the amount of depot maintenance work interserviced will continue to rise over the next few years. The Army estimates that it will interservice about $25 million annually with the Air Force as a result of public-to-public competitions. Likewise, the Navy plans to interservice about $61 million with the Air Force for repairs of some of its F/A-18 aircraft. In addition, DOD plans to consolidate tactical missile maintenance at the Letterkenny Army Depot. In 1993, the Joint Chiefs of Staff Depot Consolidation Study noted that there are many more opportunities to reduce DOD maintenance costs through increased interservicing. That same year, the House and Senate Committees on Appropriations encouraged additional interservicing, noting that interservicing should be taken into consideration during the 1995 BRAC process.[13]

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[13] H. Rept. 254, 103d Cong., 1st Sess. 61-62 (1993) S. Rept. 153, 103d Cong., 1st Sess. 35 (1993) (Reports accompanying H.R. 3116, Dept. of Defense Appropriations Bill, 1994).

Allocating Non-Core Workload to the Private Sector

The task force also recommended that DOD allocate selected non-core workload to private sector companies to help preserve needed private sector industrial base capabilities. The intent of this recommendation appears to be to target workload (most likely for applying modifications and upgrades) to manufacturing companies that, because of their overhead and production-oriented facilities, are not likely to be competitive with public depots or with other private sector companies that concentrated on repair and overhaul. Once direct allocations are made, the remaining non-core workload would be competed within the private sector. The task force did recognize that by exception, some non-core workload will invariably fall to the public depots because the private sector will not or cannot compete. The task force may have been overly optimistic in its views that most of the remaining non-core workload can be competed in the private sector. In view of the amount of sole-source contracting used by the services in acquiring depot maintenance services and the difficulties likely to be faced in contracting for workload that includes many individual items in few quantities, with infrequent and uncertain repair requirements, we believe that the amount of workload that can be successfully competed may be far more limited.

We generally agree with the task force's position that, as an industrial base issue, DOD may want to help preserve critical

capabilities in the private sector with direct allocations of maintenance workload. In those situations where a policy decision is made that research and development and procurement dollars are insufficient to maintain a defense contractor that is essential to the industrial base, other sources of funding must be made available for that purpose. However, like public-private competition, increased use of the private sector for maintenance support is a controversial issue because, as the DOD industrial base is downsizing, both sectors are seeking work traditionally done by the other, and as operations and maintenance dollars are shrinking, operational commanders are looking for the least costly source of obtaining required maintenance services.

Advocates for increased private sector involvement argue that "critical" production skills must be maintained and that a shift toward the private sector would help sustain the production base during a period of much reduced weapons procurement. They also argue that the private sector can provide depot maintenance at lower costs than the public sector. In contrast, opponents to increased private sector involvement contend that the private sector already designs and manufactures the kits used in system modifications and upgrades. They note that contracting with the private sector for the application of modifications is not likely to add significantly to maintaining design and production capability in the private sector. They also believe that applying modifications and upgrades in public depots at the same time other

depot maintenance work is being performed reduces the amount of time weapon systems are out of service, eliminates duplicative tasks, and decreases overall costs.

We believe the marginal amount of funding that would be available to the private sector is likely to have little impact given the overall industry size. Consequently, increasing the amount of maintenance work available to the private sector is likely to have little significant impact on maintaining research and development and production capability in the private sector unless the funding is targeted. For fiscal year 1993, DOD spent about $15 billion for depot maintenance operations, including modifications and upgrades. Based on our projections, 50 percent of these dollars may already go to the private sector. In reality, in an industry where prime defense contractor awards in 1993 were $131 billion dollars,[14] it is not likely that contracting some portion of the remaining $15 billion would make a significant impact unless targeted via direct allocation rather than being competed.

The task force did not address the determination of how selected non-core work should be directed to the private sector and in what amounts. These could be very volatile issues and, given the limited amount of funding that is likely to be available for this purpose, it will be essential to specifically identify those

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[14]Department of Defense Prime Contract Awards By State, Fiscal Year 1993. DOD, DIOR/PO9-93/02(Washington, D.C.: GPO, 1993), p.2.

industrial capabilities in the private sector where depot maintenance workloads should be directed to support overall industrial base needs. Like the public sector, further reductions in excess capacity for production in the private sector will be necessary. Therefore, if certain capabilities need to be preserved in the private sector, rational policies and procedures are needed that will identify what maintenance workload allocations should be directed to specific companies for industrial base considerations, without regard to whether or not the work could be done more cheaply by a public depot or another commercial company.

Additionally, we are concerned that a policy of turning over the remaining non-core work to the private sector could conflict with the long-standing policy of awarding work to the most cost-effective provider. The latter policy is endorsed in 10 U.S.C., section 2462, and by Office of Management and Budget (OMB) Circular A-76 which, in principle, provide that DOD should rely upon the private sector for supplies and services whenever the private sector is less costly than the public sector. A recommendation to offer all non-core workload to the private sector without a determination that the work can be done more cheaply in the private sector appears to conflict with this approach. In our opinion, DOD should generally analyze the non-core workload to determine cost-effective buys. Public-private competition is not the only vehicle for this analysis. Other mechanisms are available such as OMB Circular A-76 cost comparisons and the decision-tree logic found in

DOD Directive 4151.1, "Use of Contractor and DOD Resources For Maintenance of Materiel".

ELIMINATION OF DEPOT MAINTENANCE COMPETITION BETWEEN SECTORS

The task force envisioned that, with sizing to core requirements, the need for public depots to compete for maintenance work would be eliminated. The task force recognized that certain situations could occur where public-private competition would be necessary. The task force report provided little insight regarding how much of DOD's non-core workload can realistically be contracted out more cheaply than it can be done in-house given considerations such as the extensive amount of excess capacity currently available in the public sector, the large amounts of workload whose requirements are sporadic and in very limited quantities, and the inability to compete much of the workload because of considerations such as proprietary data and older technologies.

The task force identified several concerns with continuing the competition program. For example, efficiencies achieved would not be as likely in the future because the costs of conducting competitions were high and the payoffs would be progressively smaller as workloads were recompeted. Furthermore, DOD has other mechanisms for controlling costs and improving productivity. The task force also questioned whether results of prior competitions were meaningful, DOD's ability to create a level playing field, and

the divisive nature of pitting the services against commercial sources or each other. The Air Force dissented with the majority position. It believes if the source of repair is determined by competition, depot maintenance costs will be lower.

We agree with some of the task force's concerns about DOD continuing its public-private and public-public competition programs. A competition program alone should not be used to eliminate inefficiencies in the depot maintenance infrastructure. A "winner-take-all" program may not promote a healthy industrial base, particularly where DOD has created a unique business environment with the influences of government procurement regulations and a single buyer market structure.

On the other hand, while we recognize that improvements are needed in the implementation of the public-private competition program, we do not believe there is sufficient evidence to support eliminating the program. Although competition for depot workload often has been controversial, it has contributed to controlling depot costs. A public-private competition program should not be burdened with artificial goals. We believe that public-private competition should remain as an option for DOD activities to use when selecting source of repairs.

OBSERVATIONS ON DOD'S DEPOT MAINTENANCE CLOSURES

Since 1988, three BRAC Commissions have recommended realignments and closures of DOD's public depots. Table 2 shows the depots recommended for closure and the dates established for closing.

Table 2: Maintenance Depots Recommended For Closure

BRAC Year	Service	Depot Maintenance Activity	Planned date of closure
88	Army	Lexington-Bluegrass Army Depot	09/94
91	Army	Sacramento Army Depot	10/95
	Navy	Philadelphia Naval Shipyard	09/96
93	Navy	Charleston Naval Shipyard	04/96
	Navy	Mare Island Naval Shipyard	04/96
	Navy	Alameda Naval Aviation Depot	09/96
	Navy	Norfolk Naval Aviation Depot	09/96
	Navy	Pensacola Naval Aviation Depot	09/95
	Army	Tooele Army Depot	09/96
	Air Force	Aerospace Guidance and Metrology Center, Newark Air Force Base	09/96

The first depot scheduled to close is the Lexington-Bluegrass Army Depot, in September 1994. The remaining nine depots are scheduled to close over the next 2-1/2 years. Although seven of these depots were identified by the most recent BRAC and are less than a year into the implementation process, our work indicates several emerging issues.

First, DOD has programs to assist employees affected by depot closures to obtain other employment. For instance, under DOD's priority placement program, employees at closing depots can register for positions within DOD and receive priority in filling certain vacant DOD jobs. DOD officials are optimistic that most employees will find jobs, but many may have to move if selected for vacant DOD positions. Employees choosing to remain in their local community may have difficulty obtaining employment with pay comparable to that in the depot.

Second, the National Defense Authorization Act for Fiscal Year 1994,[15] subtitle A of title XXIX of 107 Stat. 1909, "Base Closure Community Assistance"--referred to as the Pryor Amendment, authorized conveyance of real and personal property at closing depots to local redevelopment authorities. Shipyard officials believe that conveying real and personal property to local redevelopment authorities may not be completed by planned depot closure dates. Also, they anticipate that the costs of preserving and maintaining equipment and facilities until turned over to the local community may be high. Some depot officials also are confused as to the definition of what constitutes personal property under the Pryor Amendment. DOD implementing guidance, published on April 6, 1994, may help resolve some of these concerns.

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[15]P.L. 103-160, 107 Stat. 1547 (1993).

Third, DOD may incur unnecessary costs by moving maintenance support capability associated with the repair and maintenance of obsolete items from closing depots to other sources of repair. This possibility highlights the need for DOD's inventory managers to evaluate and update inventory records to identify items that are obsolete and no longer require maintenance support. Maintenance support for these obsolete items should be eliminated and not transferred.

Fourth, some depots may not be receiving sufficient funding to accomplish the closures as scheduled. Depot officials said they received less funding in fiscal year 1994 than they required to develop and implement closure plans. They also expressed concern that funds for related closure actions would not be available as needed.

Fifth, the Air Force plans to convert its Aerospace Guidance and Metrology Center from government to private ownership through privatizing the workload in place. Emerging problems include whether (1) the Air Force can compete workload when manufacturer proprietary rights are involved, (2) contractors will be interested in performing the work at the Center, and (3) adequate funds will be available to transfer the activity to private ownership. Also, industry representatives have pointed out that retaining the workload at the same facility will not reduce excess depot capacity.

In conclusion, Mr. Chairman, DOD faces many challenges in effectively managing its depot maintenance program. These involve a complex set of interactive issues that include both cost and industrial base considerations. Critical decisions must yet be made regarding the appropriate size of the DOD industrial base including how workload will be allocated between the public and private sectors, how to eliminate excess depot capacity, whether to have a DOD or service core, whether to retain public-private competition, and how to most effectively use interservicing to consolidate similar workloads and reduce redundancy in maintenance capability. There may be certain cases where, because of industrial base or readiness considerations, DOD may choose a particular maintenance workload allocation that results in certain cost inefficiencies. We believe this may be appropriate, but the cost of these policies should be known. We look forward to continuing to support your committee as it deliberates these critical issues. I am prepared to respond to your questions at this time.

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