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SQUARE FOOT REDUCTION SUMMARY

				BANK		CORE	
BLDG	SF	TRC		BLDG	SF		
				5L	22000		
5N/P	13,000	AVIONICS		5A	1515		
5E	5,000	HARNES CABLE		5P	22000		
238	66,000	2LEVEL ENGINES		100F	2500		
238	6,000	SHEET METAL RPR		100K	21000		
257	700	INJECTION MOLDING		100L	3900		
265	5,000	SHEETMETAL MAN		100J	7000		
507	3,000	FOUNDRY		100M	11500		
1915	2,000	HYDRAULICS		214	5096		
100P/N	3,000	SOFTWARE ATE		225	8000		
100/C/214	23,000	INSTRUMENTS		257	15000		
238/257	41,000	COMPOSITES		507	1486		
510/214	63,000	MACHINE MANUFACTURE		510	3342		
VARIOUS	9,000	MACHINE REPAIR		1208	13655		
VARIOUS	9,000	INSPECTION		1216	8000		
VARIOUS	8,000	SOFTWARE OFF		1621	12280		
TOTAL	256,700			1623	2310		
				1816	2247		
				1917	4000		
BANKED			DLA OFFERING	2014	9171		
BLDG	SF		BLDG	SF			
			800	82,000			
245	4000		810	6,000			
252	4620		830	86000			
286	1350		TOTAL	174,000			
849	6159						
1102	7000						
1254	6000		TRC TOTAL	256,700			
1367	2286		BANK TOTAL	44183			
1379	1550		CORE TOTAL	242529			
1600	2827		DLA TOTAL	174000			
1627	2491		DEMO TOTAL	551,807			
2015	657		GRAND TOTALS	1,269,219			
2114	1563						
2214	1200						
1622B	2480						
TOTAL	44183						

Small Missile Impact

PLANNED/FUTURE DEMO'S			
DEMOL ORG	BLDG	VACATED SQ FT	DEMO LIST BY ORG/OTHER
			OTHERS BLDG SQ FT
LA	228	4,148	
LA	272	39,792	16 560
LA	268	61,250	22 96
LA	222	10,249	32 1,457
LF	1147	6,208	179 1,750
LI	2143	152	DLA 273 43,544
LI	2145	152	405 1,566
LI	2147	152	569 3,600
LI	2002	334	785 2,927
LI	745	2,880	786 2,832
LI	747	80	799 407
LI	1532	10,920	DLA 840 217,432
LI	1564	4,549	1132 16,687
LI	1568	4,549	1136 1,340
LI	805	16,862	1140 1,400
LI	806	240	DISP 1312 1,348
LI/LA	267	15,104	1544 6,781
LM	2202	4,329	1554 4,549
LM	2127	127	1558 4,549
LM	2222	127	1560 4,549
LM	2115	2,088	1562 4,235
LM	936	3,024	2001 152
LM	1556	4,628	DISP 2123 127
TI	247	2,146	DISP 2124 264
TI	11	18,896	3303 2,545
TI	276	7,916	
TI	1146	6,208	
TOTAL		227,110	324,697
			227,110
			GRAND TOTAL DEM 551,807

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**“DOWNSIZING” IMPACTS
ON
OGDEN AIR LOGISTICS CENTER
(HILL AFB)**

19 April 1995



OVERVIEW

- Air Force Recommendations
- Trends
- Impacts of Realigning/Downsizing
- Summary

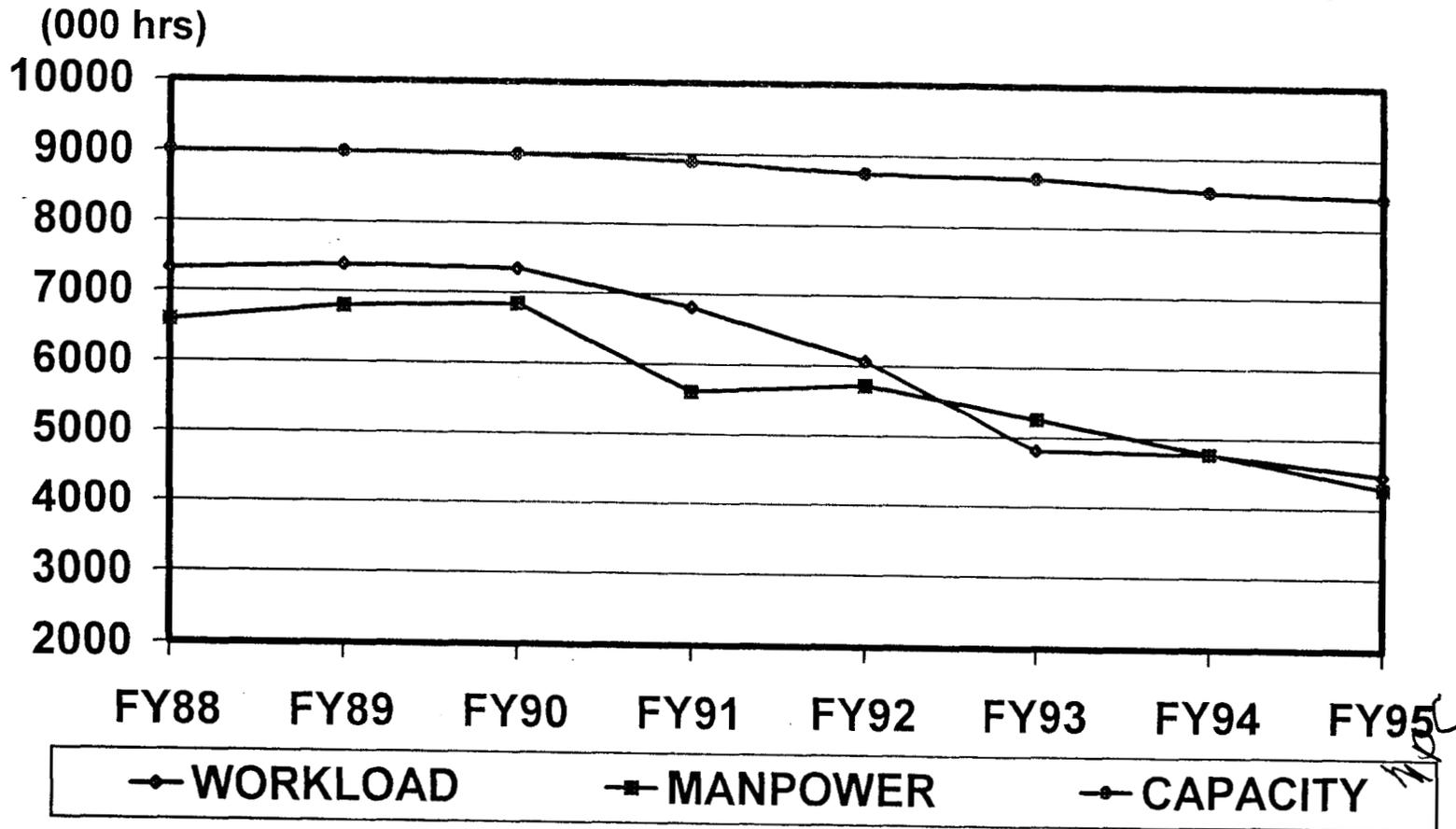


RECOMMENDATIONS TO BRAC '95

- **Realign Workload Among Five Air Logistics Centers (ALCs)**
 - Establish Centers of Excellence
 - Consolidate Technical Repair Centers (TRCs)
- **Consolidate/Downsize Processes Internally**
- **Achieve 15 percent Efficiency Improvement**
 - Reduce Capacity
 - Reduce Manpower



DMIF WORKLOAD, MANPOWER AND CAPACITY TRENDS (DLH)





REALIGNMENT IMPACTS

<u>Workload "Gains"</u>	<u>From</u>	<u>PEs</u>	WKLD HRs <u>(000)</u>
- Manufacture (PWB)	(SM/WR)	+29	+58



REALIGNMENT IMPACTS (Cont)

<u>Workload</u> <u>"Losses"</u>	<u>To</u>	<u>PEs</u>	<u>WKLD</u> <u>HRs (000)</u>
Avionics <i>work in F-16 all next 3 months →</i>	(WR)	-42	-58
Composites*	(SM)	-26	-35
Hydraulics	(SM)	-10	-8
Injection Molding	(SM)	-3	-1
Tubing*	(WR)	-3	-5
Instruments	(OC)	-96	-118
Machine Mfg*	(WR)	-63	-57

* Retain Necessary Residuals for PDM/Line-Routed Support

11 April version



Jan-Feb
15/9/01

REALIGNMENT IMPACTS (DOWNSIZE/SQUEEZE DOWN)

OO-ALC

WKLD

<u>TRC/Process</u>	<u>PES</u>	<u>HRS (000)</u>
Foundry	-2	0
Inspection (NDI)	-10	-9
Elec Mfg (Cables)	-3	-3
Paint/Depaint	-12	0
Machine Repair	-26	-23
Plating	-7	-8
Physical Science Lab	-10	-10
Software OFP	-32	-58
Software ATE	-26	-39
Sheetmetal (Rep/Mfg)	-9	-9



WORKLOAD CHANGES BY COMMODITY (000 HRS)

Commodity	PRE-BRAC	POST BRAC
	Projections	
Aircraft		
Cargo	543	543
Combat	691	691
Components		
Structures	241	206
Hydraulics	13	0
Instruments	124	6
Landing Gear	488	478
Ordnance	104	104
Avionics	430 (loss-gain offset)	430
APUs	29	29
Other	180 (cables/tubing)	158



WORKLOAD CHANGES BY COMMODITY(000 HRS)(Cont)

Commodity	PRE-BRAC	POST BRAC
Projections		

Engines

2LM/PDM	102	102
---------	-----	-----

Missiles

Strategic	674	674
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Tactical	181	181
----------	-----	-----

Other	120	120
-------	-----	-----

Software

Tactical (OFP)	653	653
----------------	-----	-----

SE (ATE)	241	241
----------	-----	-----

Spec Items

Bearings	5	5
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Assoc Fabric/Mfg	<u>76</u>	<u>19</u>
------------------	-----------	-----------

TOTALS	4,895	4,640
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PERSONNEL “CHALLENGES”

- **Further Loss of Highly Skilled Workers**
 - Past Depot Maintenance Personnel RIFs
- **Creates Short-term Skills Imbalances**
 - Example: Composites vs PWB (Technicians)
- **Anticipated Productivity Increase will be Difficult**
- **OMB Policies Severely Limit Flexibility in Reducing the Workforce**
- **Morale Issues are Critical!**

3 formal RIFs



PERFORMANCE “CHALLENGES”

- **Decreased Volume of Work**
 - Smaller Base to Apply Fixed Costs
 - Impacts on Schedule
 - Space Allocation
 - Maintaining Efficient “Process Flows”
 - Equipment Utilization
- **Minimize Impact to Sales Rates**
- **Impact on Customer Support**



HILL AFB SQ FT REDUCTION SUMMARY

	SQ FT (000)	# BLDGS
• TRC Consolidation	257	12*
• Turn Over To DLA	174	3
• Demolition	552	51
• Mothballed	286	40*
• TOTAL	1,269	106

*all mothballed
found acceptable*

* Majority "Partials"/Bays

*will get breakout
of BLDG stuff*



SUMMARY

- **Planning Underway to Implement the Air Force Recommendations**
- **Necessitates we “Re-engineer” our Industrial Complex**

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DISTINGUISHED VISITOR

ITINERARY FOR



DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION (DBCRC) STAFFERS 19-20 April 1995



Escort Officer: Major General Condon/Tom Miner/Gene Hathenbruck
Dress: Uniform of the day

Visitor Roster:

<i>Name</i>	<i>Grade</i>	<i>Organization</i>
Ann Reese	GM-15	DBCRC Senior Staff Analyst
Glenn Knoepfle	GM-14	DBCRC Senior Staff Analyst
David Olsen	Col, USAF Ret	DBCRC Senior Staff Analyst
Mike Pavich	Maj Gen, USAF Ret	President, Hill/DDO '95

Billeting Roster:

<i>Name</i>	<i>Hotel/Bldg</i>	<i>Suite/Room</i>	<i>Phone No.</i>
Ann Reese	Hobson House	Titan Suite	777-6780
Glenn Knoepfle	Hobson House	Invader Suite	777-4923
David Olsen	Hobson House	Phantom Suite	777-5513

Date: Wednesday, 19 April 1995

<i>Time of Day</i>	<i>Trans Mode</i>	<i>Lapse Time</i>	<i>Location/Event</i>	<i>Escort/Briefer</i>
0823	Delta 1504		Arrive Salt Lake City Airport - Met by Gene Hathenbruck	
0930	DV-Van		Arrive Hill AFB, Bldg 891, Defense Mega Center, LSOC Conference Room - Met by Mr Tom Miner	
0945-1020		35 min	Opening Comments / Mission Video	Tom Miner
1020-1040		20 min	OO-ALC Mission Briefing	Gene Hathenbruck
1040-1100		20 min	Break (Setup Working Lunch Catered By Officer's Club)	

As of: 1000 18 Apr 95

Date: Wednesday, 19 April 1995 Cont'

1100-1200		1 hr	TRC Realignment / Downsizing Briefing (During Working Lunch)	Mike Williams
1200-1320		1 hr 20min	Tactical Missile Repair Briefing	Jeannie Hathenbruck
1320-1330		10 min	Break	
1330-1340	Surrey	10 min	Depart LSOC Conf Room, Travel to Bldg 847 - Met by Mike McBride	G. Hathenbruck
1340-1400	Golf Cart	20 min	Tour Bldg 847 / Missile Launchers / Vehicles Machine Shop	J. Hathenbruck M. McBride
1400-1410	Surrey	10 min	Travel to Bldg 100, Bay K (Point out Bldg 849, Automated Warehouses, DLA facilities, etc)	
1410-1430		20 min	Tour Bldg 100, Bay K, AF / Navy / FMS Sidewinder	J. Hathenbruck B. Dandoy
1430-1435	Walk	5 min	Travel to Bldg 5, Bay G	
1435-1455		20 min	Tour Bldg 5, Bay G, Proposed Phoenix Missiles	J. Hathenbruck B. Dandoy
1455-1500		5 min	Walk to Bldg 5, Bay E	
1500-1505		5 min	Tour Bldg 5, Bay E, Cable Shop	B. Dandoy
1505-1510		5 min	Break	
1510-1515		5 min	Walk to Bldg 5, Bays C/D	
1515-1530		15 min	Tour Bldg 5, Bays C/D, Maverick and Launcher Future Hellfire	J. Hathenbruck B. Dandoy
1530-1535		5 min	Walk to Surrey, Bay C/D Drive by Bldg 5, Bay M, Radar & Antenna Range	J. Hathenbruck B. Dandoy
1535-1545	Surrey	10 min	Travel to 388th Flightline, Drive Along Fightline Pointing Out, Hot Pads, etc (Enter MAMS I Through Gate 106)	J. Hathenbruck
1545-1555	Surrey	10 min	Tour MAMS I Area, Pointing Out Munitions Processing, X-Ray, Other LM/LI Facilities - Met by Col Herb Scherbinske at Bldg 984	G. Hathenbruck J. Hathenbruck
1555-1625		30 min	Tour Computed Tomography (Bldg 984)	Col Scherbinske
1625-1630	Surrey	5 min	Travel to Bldg 1424, through MAMS I Area (Past Bldg 1321, Strategic Missile Storage) - Met By Barry Howard	

Date: Wednesday, 19 April 1995 Cont'

1630-1700		30 min	Tour Bldg 1424, ACM / ALCM & All-Up-Rounds Facility	J. Hathenbruck B. Dandoy
1700-1705	Surrey	5 min	Travel to Bldg MAMS II, Bldg 2026 (Exit Gate 103) (Indicate Points of Interest)	J. Hathenbruck
1705-1715		10 min	Tour Bldg 2026, AF / Navy / FMS Maverick All-Up-Round Facility	J. Hathenbruck B. Dandoy
1715-1725	Surrey	10 min	Travel to Strategic Missile Integration Complex (SMIC), Bldg 1538 (Point out Bldg 1515) - Met by Mike McBride	
1725-1800		35 min	Tour SMIC and Peacekeeper Silo	M. McBride
1800-1805	Surrey	5 min	Travel to Hobson House (Billeting)	
1830	Courtesy Staff Car		Social - Officers Club	Senior Staff
1900			Dinner (Mongolian BBQ) - O'Club	Senior Staff

DAY 2

Date: Thursday, 20 April 1995

0705-0710	Surrey	5 min	Depart Bldg 1102 for Hobson House	
0710-0715	Surrey	5 min	Depart Hobson House	G. Hathenbruck
0715-0725	Surrey	10 min	Travel to Bldg 830 (Drive Past Bldg 1208, Cable Shop) <i>will be banked</i>	
0725-0735	Surrey	10 min	Drive-By Tour of Bldg 830 (DLA)	
0735-0740	Surrey	5 min	Travel to Bldg 238 (Sheet Metal/Composites) - Met by Brent Figgins	
0740-0800		20 min	Tour Bldg 238	
0800-0805	Surrey	5 min	Travel to Bldg 510 (Machine Shop) - Met By Lt Col Edward Trust	
0805-0825		20 min	Tour Bldg 510	
0825-0830	Surrey	5 min	Travel to Bldg 214 (Instrument Bldg) - Met By Bill West	
0830-0900		30 min	Tour Bldg 214	B. West
0900-0905	Surrey	5 min	Travel to Bldg 205 (Printed Wiring Boards) - Met By Col Herb Scherbinske	
0905-0950		45 min	Tour Bldg 205	Dr. Myrne Riley
0950-1000	Surrey	10 min	Travel to Bldg 1102, Air Room - Met By Maj Gen Condon	
1000-1035		35 min	Discussion With Senior Staff - Air Room	
1035-1045		10 min	Outbrief / Discussion, CC Office	Maj Gen Pat Condon and Tom Miner
1045-1055		10 min	Break	
1055-1130	DV-Van	35 min	Depart Hill AFB for Salt Lake City Airport	G. Hathenbruck
1130			Arrive Salt Lake City Airport	
1200	Delta 1506		Depart Salt Lake City	

*stripp for all
#-16 new 20-30% capacity
F-15 will try
117*

*people 1:00 -> 66 -> 48
#620
#100
we're doing gear capability
50khr 50% direct support mission
col people*

Ann Reese

Welcome to Ogden Air Logistics Center, Hill Air Force Base, Utah

Leading the Way In America's Defense

Military Value of Ogden ALC

- Strategic Missile Test Analysis and Maintenance Facilities**
- Landing Gear Repair Facility**
- Conventional Munitions Maintenance, Test and Storage**
- Utah Test and Training Range**
- AFMC's Premier Fighter Aircraft Depot**
- Other High Value Capabilities**
- Tenants**

Military Readiness, Mobilization/Deployment

Base/Depot Attributes

- Interservicing, Condition and Capacity**
- Economic Impact/Community Infrastructure**
- Location/Infrastructure**
- Encroachment**
- Customer Interface**
- Environmental Management**

A National Resource

Hill Air Force Base

and

Ogden Air Logistics Center



Reinvestment in our infrastructure, automated systems, robotics, consolidated functions, and our personnel have continually contributed to efficient operations

MILITARY VALUE of OGDEN ALC

INTRODUCTION



Peacekeeper launch. Our ICBM people ensure they are operational.

Hill Air Force Base and Ogden Air Logistics Center (ALC) military and civilian personnel share a sense of pride and ownership that establishes our center as one of the most competitive and efficiently operated installations in the Department of Defense (DoD). Our capabilities and performance in modifying and refurbishing silo-based intercontinental ballistic missiles (SBICBM), conventional munitions, landing gear, aircraft, and commodities have made Ogden ALC a recognized and vital national resource. Our product and service directorates support the Air Force and DoD along with customers from 81 nations around the world.

Other military services have their engineering, logistics, and management personnel located outside of their depots. Our single point of logistics management includes the full scope of acquisition, engineering, item management, technical management, logistics support, and depot maintenance collocated at one installation. We also have a full environmental support staff collocated with our missions. We have continually demonstrated our capability of becoming the single DoD source of repair for aircraft and commodities workloads such as repairing Navy C-130 landing gear and the Navy Maverick Missiles. We successfully completed an interservice workload on the Navy F/A-18 Modification, Corrosion, and Paint Program (MCAPP) awarded through the competitive process. Reinvestment in our infrastructure, automated systems, robotics, consolidated functions, and personnel has continually contributed to efficient operations at Ogden ALC.

Currently, our center is assigned worldwide logistics management, maintenance, and testing support responsibilities for our nation's fleet of silo-based intercontinental ballistic missiles, landing gear, worldwide conventional munitions, and the F-16 Fighting Falcon which comprises the world's largest fleet of fighter aircraft. We have built a reputation as one of the world's leading aircraft, missile, and commodities refurbishment and modification centers. We are ranked in the top three most efficiently managed military depots.

We have built a reputation as one of the world's leading aircraft, missile, and commodities refurbishment and modification centers.

The loss or reduction of these resources, in the event of closure or significant realignment, may jeopardize portions of our national defense posture and endanger the requirements and implications of the Strategic Arms Reduction Treaties (START I and START II). A major DoD concern is the continued ability to support two major regional conflicts. Closing Ogden ALC would jeopardize that scenario. Our equipment and facilities must be duplicated, tested, and activated before dismantling, or divestment of the original complex can take place. The risk of losing environmental permits for testing and disposal of missiles and munitions must also be considered. Obtaining new permits at other locations has met with severe public criticism and resistance.



From fighters to cargo aircraft we can do it all. Our maintenance team performs depot level maintenance on Air Force and Navy C-130 cargo aircraft.

Ogden ALC possesses many discriminators and attributes that demonstrate its military value to the nation. Following are highlights of our capabilities and infrastructure emphasizing the features that make it second to none as a "national treasure."

STRATEGIC MISSILE TEST, ANALYSIS, AND MAINTENANCE FACILITIES

The Ogden ALC Silo-Based Intercontinental Ballistic Missiles (SBICBM) facilities are the only DoD test and maintenance facilities for Minuteman and Peacekeeper Missiles. Our SBICBM Systems Program Office is the “prime contractor” for Minuteman and Peacekeeper weapons systems.

Ground testing, simulation and integration must be performed in specially built engineering test and integration facilities, for strategic missile systems to perform as designed. Our facilities are specifically constructed and equipped with instrumentation to replicate both alert and flight environments. They are vital to the development, prototyping, testing, troubleshooting, technical order validation and verification, nuclear certification, and performance assessment of missile systems.

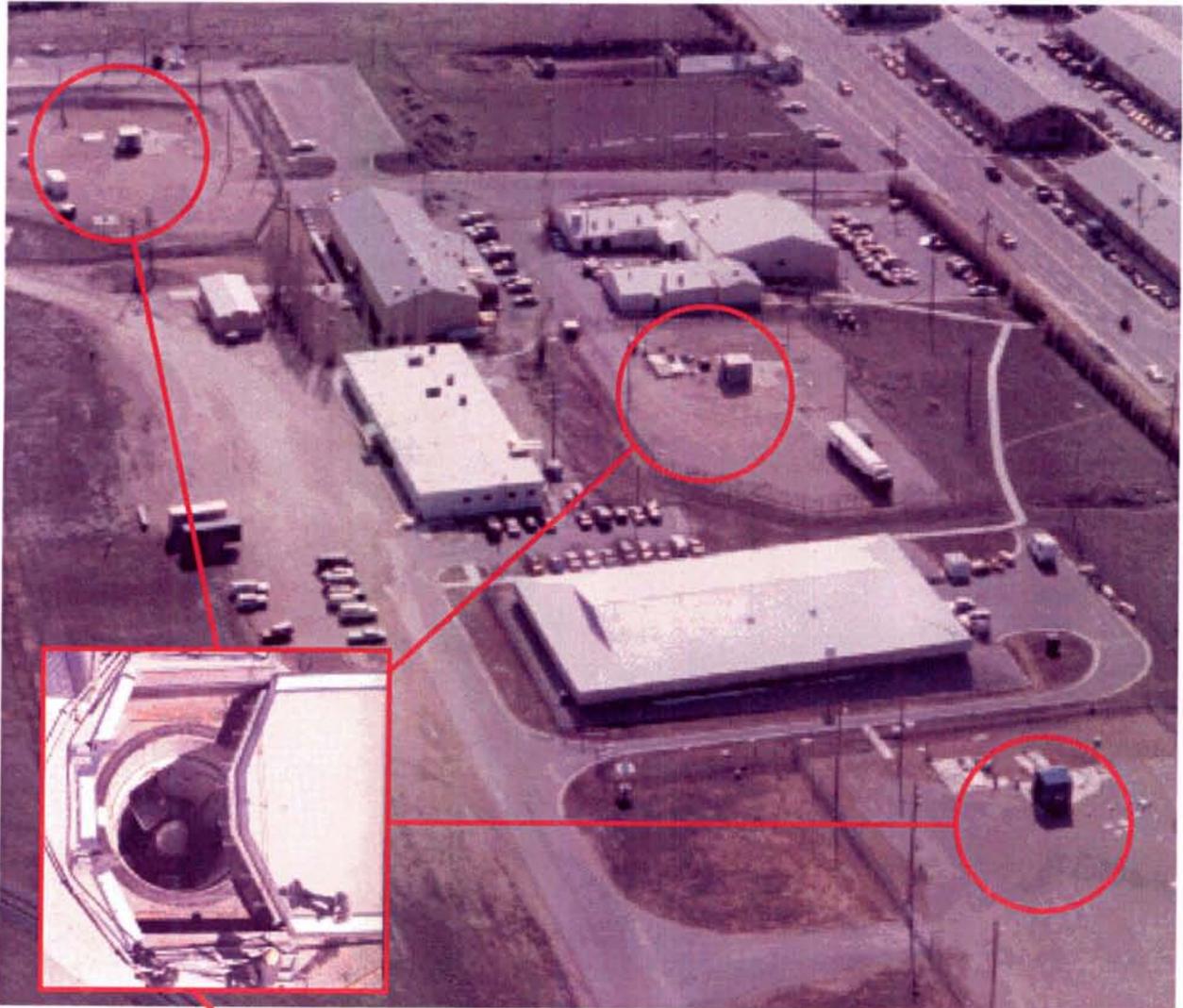
Similarly, the booster and motor maintenance and test infrastructure has been developed to safely and efficiently support the preparation, buildup, tear-down, and test of these assets in one of a kind maintenance and test facilities. Our facilities are in close proximity to storage and shipping facilities minimizing impacts to mission support. These facilities are required for mission support. Our test, industrial operations, and storage facilities have been built and/or modified and equipped to exclusively support SBICBM activities. They are not duplicated anywhere. They are operated and maintained by personnel whose skills and experience are unique.

The infrastructure at Hill AFB is designed specifically to allow the System Program Office (SPO) to act as the prime system manager, and engineering authority. Our SPO manages a physical plant containing 39 industrial operations facilities, 21 test facilities, 146 storage facilities and 20 administrative facilities totaling 1,246,155 square feet on 31,782 acres, and are collocated to optimize processes for both system sustainment and acquisition. The location of the SBICBM infrastructure at Hill AFB is central to both the deployed operational wings and major rocket motor manufacturers. This mitigates the risk of transporting hazardous and toxic elements of the weapons systems and enhances customer support and responsiveness.

No single SBICBM contractor has the capability to perform the engineering, integration, and maintenance functions being performed by our SPO personnel today, nor is the SPO infrastructure duplicated at any contractor’s plant. No single associated contractor has the data or system expertise for more than its portion of the weapon system. All SBICBM contractors and vendors are reliant upon the organic SBICBM infrastructure to perform their sustaining engineering, assessment, and support roles.

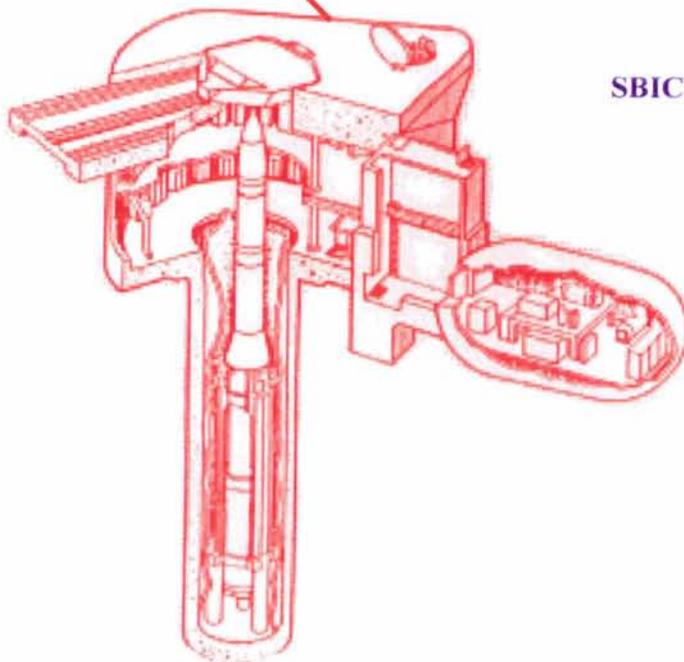


A Peacekeeper ICBM being launched from Vandenberg AFB. We are strategically and centrally located within the western states to ensure our ICBM fleet remains operational and ready.



Prior to installation at the operational wings, we test and evaluate performance, service life, extension of the system hardware, and modifications.

SBICBM TEST AND ANALYSIS FACILITY



The Strategic Missile Integration Center (SMIC) is the only facility of its kind in DoD that provides a platform for system level test, integration, evaluation, and configuration control for the Air Force's Minuteman III and Peacekeeper ICBMs. Without this facility, missile silos at operational wings would have to be taken off alert status and shut down for testing and integration to take place. The center has one Peacekeeper and two Minuteman below ground silos constructed to meet the same nuclear hardness and physical security requirements as Air Force operational SBICBM missile silos.

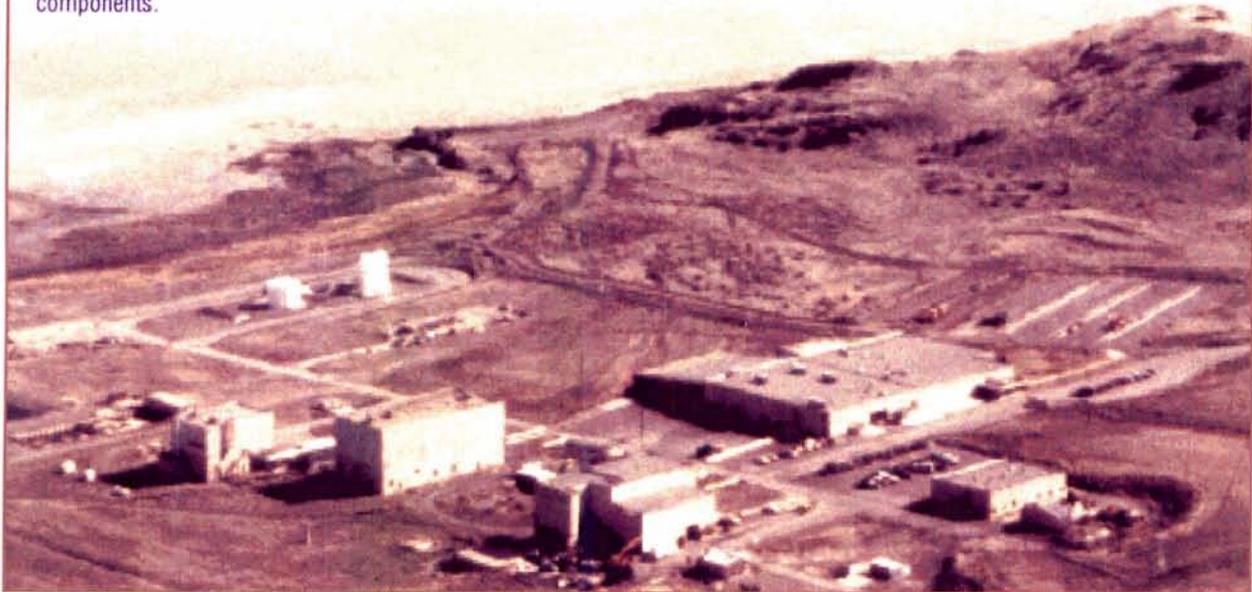
The special features that make the SMIC a valuable military asset are facilities that include exact replicas of operational launch facilities, launch control centers, and operational missiles without warheads. There are sensitive SBICBM guidance system instruments and equipment that are isolated by a large concrete seismic mass. The power and air supply systems, capable of supporting all ICBM equipment are the same as those at operational sites. The surrounding ground is compacted, and access roads are built to meet 32,000 pound axle transportation load requirements. There are also buried antenna systems and literally hundreds of miles of underground communication cables that simulate the large amount of wiring and cable found at operational wings. This ensures all Air Force operational requirements are met.



Inside the launch control center at the Strategic Missile Integration Center.

No single SBICBM contractor has the capability to perform the engineering, integration, and maintenance functions being performed by our SPO personnel today.

Our SVIC complex is in a remote secure location near the Great Salt Lake. It provides safe nuclear weapons effect testing on critical weapon systems components.



Shock testing on one of our eight shock vibration tables.



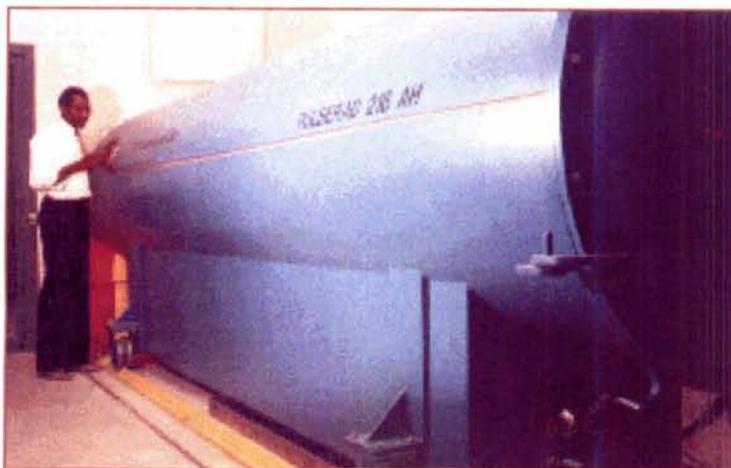
Our Linear Accelerator safely produces gamma rays to simulate nuclear weapons detonation.

The Survivability and Vulnerability Integration Complex (SVIC) is dedicated to the simulation testing of nuclear hardness, survivability, reliability, and electromagnetic compatibility of a variety of defense systems. Located 12 miles west of Ogden, Utah, this complex is the only one of its kind within DoD.

The SVIC simulates basically six environments to accommodate testing for weapon system specifications such as those required for Minuteman and Peacekeeper ICBMs.

These environments are:

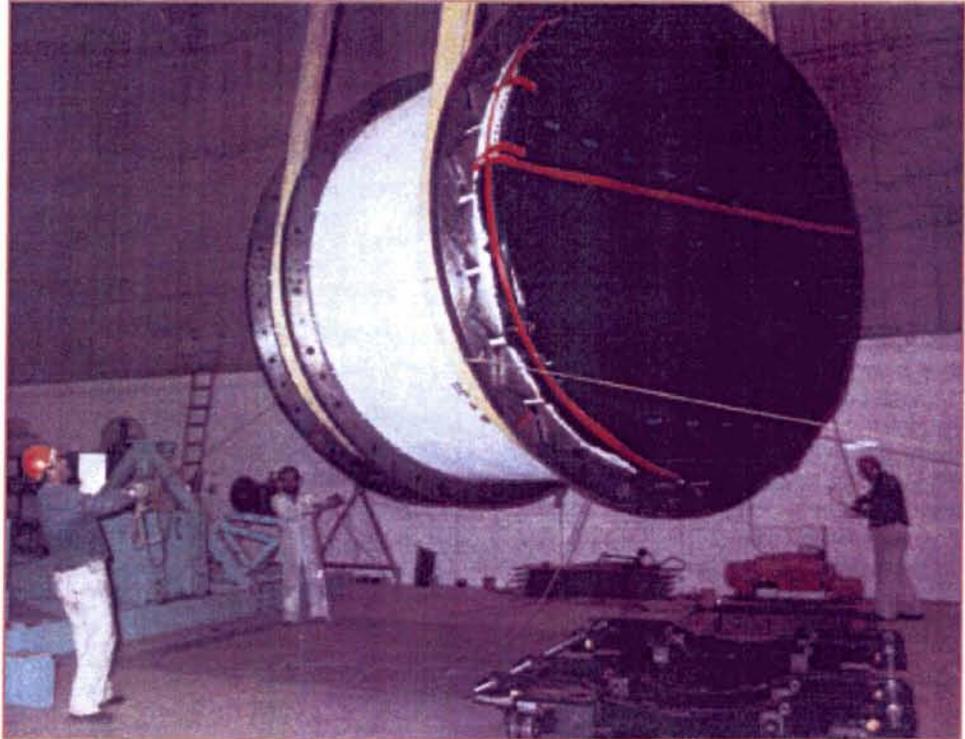
- Nuclear radiation and gamma ray bombardment
- Nuclear airblast overpressure simulation
- Shock and vibration simulation
- Direct drive electromagnetic pulse simulation
- Free field electromagnetic pulse simulation
- Electromagnetic interference (EMI) and compatibility testing



Simulation of nuclear blasts is performed by our two Physics International flash x-ray machines.

SOLID PROPELLANT DISSECTION AND TESTING

Our propellant dissection and analysis facilities allow us to safely cut large ICBM and small tactical missile motors for both physical and chemical analysis. With this capability we can keep both our ICBM fleet and Tactical Missiles operational and ready.



Propellant blocks being prepared for analysis

The Propellant Analysis Center is the only depot maintenance site within the Air Force for complete motor dissection, propellant machining, and physical and chemical testing. The center supports aging surveillance and failure analysis of both the large Minuteman and Peacekeeper ICBMs and small tactical missile motors and their component parts.

The Motor Dissection Facilities are an integral part of propellant analysis. They are the only solid propellant dissection facilities capable of dissecting large ICBM rocket motors as well as small tactical missile motors. These systems are explosives sited and remotely operated for safety. The large ICBM facility, located at Oasis on the Utah Test and Training Range, can dissect motors up to 120 inches in diameter such as the Titan 34D segment. The Small Tactical Rocket Motor Dissection Facility, located at the Little Mountain Complex, is used mainly for tactical missile motors or small missile items with metal cases and diameters up to 30 inches. Both facilities perform dissection on an array of items and the end result is propellant blocks weighing approximately 50 pounds or less.

After the motors have been dissected, the Propellant Machine Shop uses a variety of computer controlled lathes, milling machines, band saws, guillotines, and robotics to prepare solid rocket test specimens for the physical and chemical property test facilities. In addition to test specimens preparation, the machine shop has the capability to disassemble explosive items and modify explosive components for static testing or disposal.

The Physical Properties Facility performs tests primarily focused on stress, strain, and shear properties of propellant to simulate flight environment as well as transportation and storage scenarios. The Chemical Properties Facility is responsible for the determination of chemical constituents in propellants. Testing capabilities consist of moisture analysis, density, ignitability, burn rate, thermal properties, and quantitative chemical composition.

MISSILE MAINTENANCE AND REPAIR

The Minuteman and Peacekeeper missile assembly and repair facilities are the only facilities of their kind in DoD



Our 100 ton gantry crane is designed to transfer Peacekeeper stages I, II, and III to and from railroad cars and the specially designed Peacekeeper trailers.

Our Missile Maintenance and Repair Facilities are one of a kind, specially constructed, configured, and explosives sited for Minuteman and Peacekeeper ICBMs. They are designed and built to accommodate SBICBMs with a horizontal rail system, explosive safety clear zone (quantity distance) for inhabited buildings and frangible (easily broken) construction for explosive contents. They are collocated with the many functions required to support the repair, modification, and testing of conventional munitions and tactical missiles.

Our Missile Support Equipment Repair Facility is designed for the service and repair of Minuteman and Peacekeeper transportation, handling, ground mechanical, and ground electrical equipment supporting operational sites at four wings and Vandenberg AFB, CA. Our state of the art facility ensures that the operating wings have the most reliable and highly maintained Minuteman and Peacekeeper transportation and handling equipment, launch, and launch control facilities ground support equipment. The facility is fully equipped with the necessary utilities, test equipment, lifting and handling devices and support shops that enable us to provide complete repair and testing capabilities. For example, our transportation and handling hoist proof-load test facility is a mock-up silo equipped with weight slugs to simulate the weight of the Minuteman missile. It is used to inspect and test hoist and wire ropes for Minuteman Transporter Erectors to ensure they operate properly and safely.



Minuteman repair facilities.

A Minuteman transporter erector during functional test





Our 21,000 acres at Oasis enable the disposal of ICBM motors and munitions and static firings far from populated areas.

MISSILE AND MUNITIONS DISPOSAL AND STATIC FIRING FACILITIES

Our Remote Missile and Munitions Disposal and Static Firing Facilities are located at Oasis on Utah Test and Training Range. The Thermal Treatment Unit sits on a 21,000 acre site at the Utah Test and Training Range. It is the only site in the US environmentally permitted to dispose of Minuteman and Peacekeeper solid rocket motor propellant and large quantities of conventional munitions. It is also capable of disposing of obsolete motors from other services. Our Static Firing Facility provides the capability required to determine shelf life and perform depot maintenance according to refurbishment schedules for the Minuteman and Peacekeeper solid rocket motors. The facilities are environmentally permitted and explosives sited Minuteman test pads with 500,000 pound thrust blocks. They include a remotely controlled vertical and horizontal static firing facility, with fully instrumented bays and a test recording capability at approximately 200 channels of information.

MISSILE AND MUNITIONS STORAGE FACILITIES

Our Munitions and Missile Assembly, Maintenance, and Storage (MAMS) areas include 109 specialized and environmentally controlled storage bunkers. They are located within secure areas at Hill AFB, MAMS I and II, and the Utah Test and Training Range.

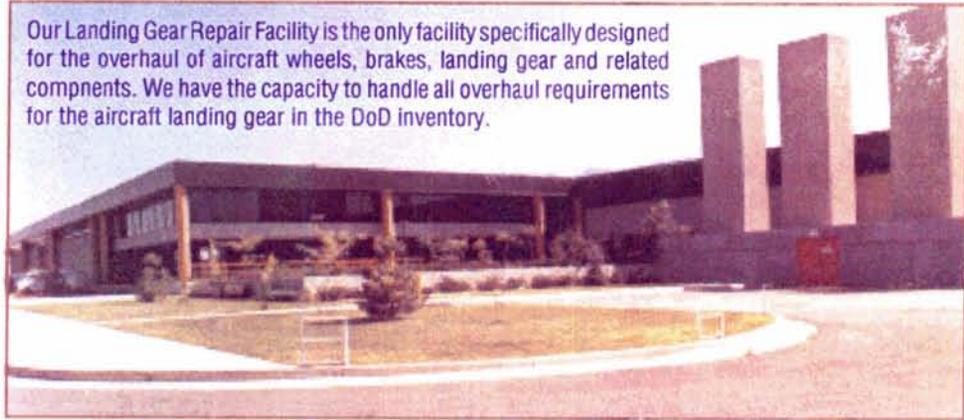


Our MAMS I and II areas provide safe storage for both ICBMs and conventional munitions. They are located close to our runway which enhances our capability to handle contingencies with short notice.

LANDING GEAR REPAIR FACILITY

No facility modifications, expansions, or capital equipment investments would be necessary for the Landing Gear Division to assume all of DoD landing gear workload.

Our Landing Gear Repair Facility is the only facility specifically designed for the overhaul of aircraft wheels, brakes, landing gear and related components. We have the capacity to handle all overhaul requirements for the aircraft landing gear in the DoD inventory.



Our Landing Gear Repair Facility is specifically designed for the overhaul of aircraft wheels, brakes, landing gear, and related components with minimal human intervention. We currently provide overhaul, repair, modification and testing services to 70 percent of DoD aircraft landing gear inventory, and have the capacity to do it all.



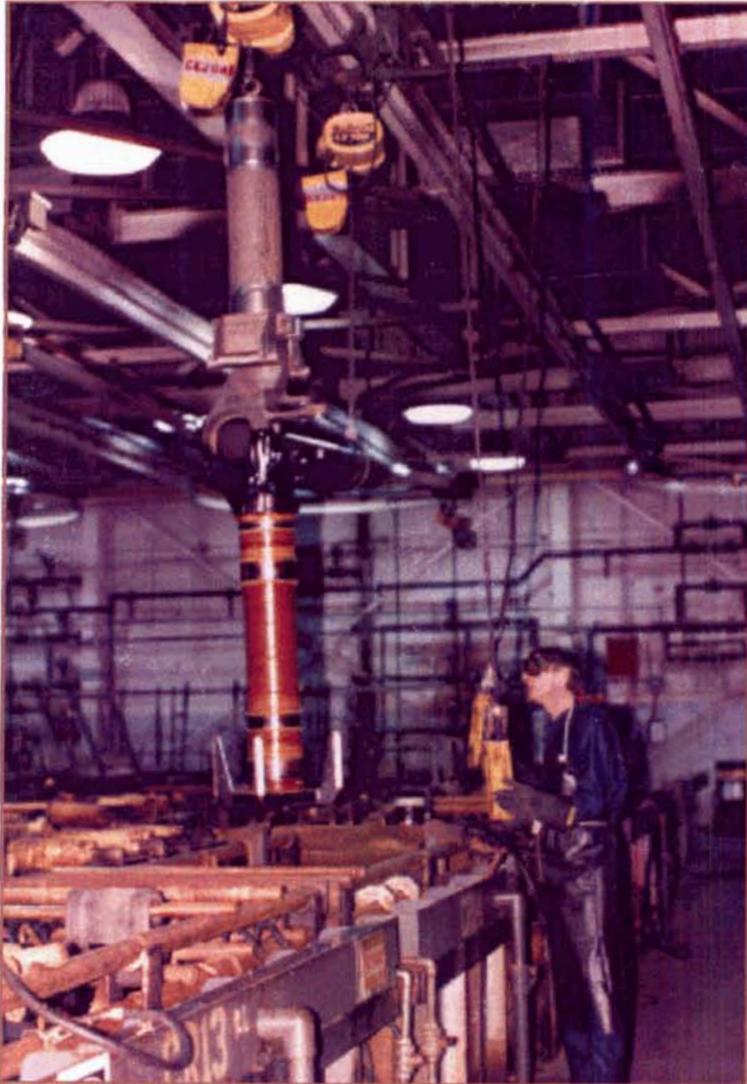
Our paint system is in total compliance with federal, state, and local environmental laws and requirements.

Our Landing Gear facilities have features and capabilities not found at any other location within the United States Military infrastructure. No facility modifications, expansions or capital equipment investments would be necessary for the Landing Gear Division to assume all of DoD landing gear workload. Although other centers claim to have landing gear overhaul capabilities, our facility is the only one designed with an automated material handling system that can safely handle any size of landing gear and components. These distinctive facilities are a vital national resource. They provide the scientific process controlled capability to overhaul all landing gear from the small T-38 Talon nose gear to the largest most complex such as those used on the B-1B, B-2, C-141, C-5A/B, and C-17.



Our computer controlled overhead monorail material handling system has 275 programmable hoists with up to one ton capacity to safely transport and process large components. The hoists, which traverse over 1.5 miles, provide easy movement of the largest aircraft and struts through both our main facility and the plating and grinding shops. Components are efficiently moved from the disassembly area through essential repair processes that include the chemical stripping and cleaning tanks, nondestructive inspection stations, and other required work areas until the landing gear is painted and crated for shipment.

Our computer controlled chemical stripping tanks are sized to handle the largest landing gear components. This reduces employee exposure to the chemical environment of the tank area and eliminates the physical handling of the parts, thus reducing back injuries and parts damage.



The plating shop is coupled to the main landing gear facility by computer controlled overhead conveyor. Our equipment and processes are designed to handle the largest landing gear in the DoD inventory.

Our plating shop houses all the essential processes to perform the plating operations necessary to support any landing gear workload in DoD. Our plating tanks are sized to accommodate the largest landing gear components and can handle a high volume of production requirements.

We have developed a repair process for carbon brake plates which enables us to use two worn-out plates to make one serviceable plate. Our "two for one" repair process involves grinding the worn-out plates to one half of their original thickness and clipping them together to restore the reworked plate to the original thickness. This process provides additional service life to plates normally condemned at a substantial cost savings to our customers.

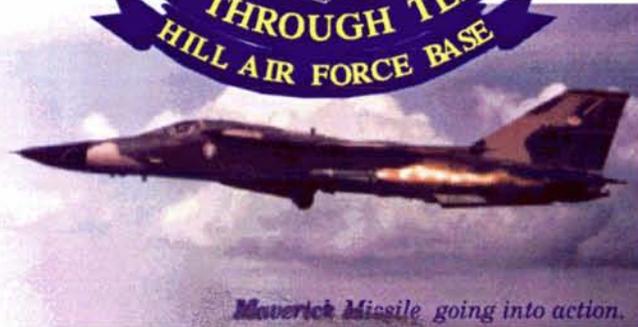
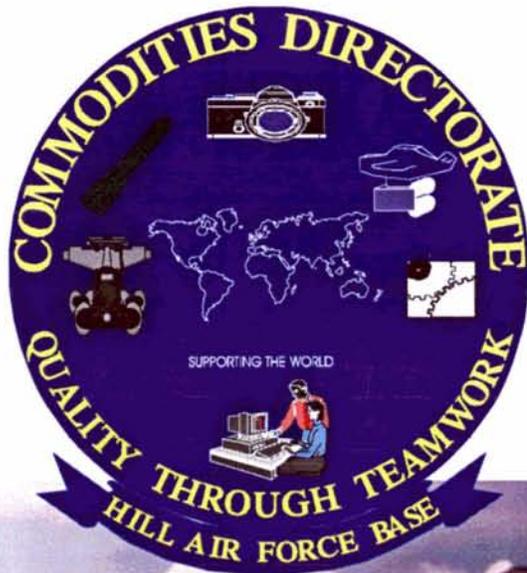


Technician working on C-5 main gear assembly



Our carbon brake two-for-one process is environmentally safe and saves costs.

TACTICAL MISSILE REPAIR BRANCH OGDEN ALC, UTAH



Maverick Missile going into action.

Located at the Ogden Air Logistics Center, Hill AFB Utah, we have the equipment and over 20 years of experience in Repairing Laser, Infrared, Imaging Infrared, TV and Radar guided systems. Our innovative team tests, repairs and modifies all of the AGM 85 Maverick Weapons Systems, and the AIM-9 Weapons Systems for the Department of Defense (DOD) and Foreign Military Sales (FMS). We also, repair and modify their Field Test Sets. Using reverse engineering we are able to modify our test equipment and field test sets to provide broader testing capabilities and quality upgrades.

Our reputation to adapt to customer needs and consistently deliver quality products on schedule in a cost effective manner speaks loudly of our achievements. As we prepare to meet the challenges of the future, we know that expanding into new areas of growth is essential, and we are prepared to meet this challenge. This brochure provides a glimpse into the technical capabilities of the Armament



The AIM 9 is known as the Sidewinder Missile because of its in-flight characteristic which resembles a Sidewinder snake. The Sidewinder is an all weather supersonic short range air to air intercept missile with dog fight capability, which uses a heat seeking infrared homing system.

The AIM9 (Sidewinder) Air to Air Missile is a joint USN/USAF Program. It is utilized by all USAF and USN Fighter Aircraft, Army and USMC helicopters as a defensive weapon. AIM9 infrared homing missile development began in 1949, designated AIM9A. The total number of sidewinders built has exceeded

160,000 with over 20 models.

AIM9 missile guidance and control sections are currently produced by LOREAL (formerly Ford) and RATHEON Rocket Motors, Hercules and Thiokol Corp. The Guidance Control System (GCS) repairs have evolved from the AIM-9B to the AIM9M. We are presently repairing the AIM 9M's and some AIM 9Ls for foreign military. We are also involved in the AIM 9M plus (AIM-9M-8/9) upgrade program. The newly upgraded AIM9 - 8/9 configuration will include the installation of a new imaging infrared guidance system, which enables the missile to distinguish better between actual targets and infrared countermeasures such as flares.

At Ogden ALC we have repaired the AIM 9 IR Guidance Control unit since 1978. We have a highly trained, skilled, and extremely knowledgeable (TSK) work force in place. Many of our personnel have been trained at Ford Aerospace, one of the prime AIM9 contractors. The AIM-9 missile was originally developed by the US Navy/Naval weapons center, China Lake Ca., (NAWC). Ogden ALC, throughout the years has assisted in the the further development of the AIM-9. During the Desert Shield and Desert Storm crisis, our (TSK) work force assisted by (NAWC) engineers, were required to modify the AIM9M, GCS to the -4-7 configuration. This effort was Highly successful. 1000 GCS's were modified in a short period of time.



Ogden ALC has 4 ea. computer controlled automatic rate tables in service. These test sets are modified to the latest test specifications. This gives us the total capability to test any or all AIM9 IR guidance control units. All our lower level test positions have also been upgraded increasing speed and reliability.

Ogden ALC trouble shoots and repairs all sections of the GCS, including the smallest seeker bearing and the tiny resistors and Diodes on the electronic circuit cards. We utilize a class 1000 clean room to repair the Seeker and its tiny mechanical parts. The GCS is repaired and calibrated in a class 300,000, controlled facility.



In the last 10 years the Ogden ALC (TSK) work force has repaired 8250 GCS's with 284,000 hours of production. The work defect rate (QDR/MDR) during this time has been .01%.

We have a diversified infrastructure of support facilities time tested and product proven, including:

- Laboratory Analysis - chemical, metallurgy, and electronic verification labs.
- Circuit card and cable manufacture.
- Non destructive inspection of explosive items using
- High & low x-rays and computed tomography.
- A precision measurement lab for inspection and calibration of various types of test equipment.
- Software development & engineering support.
- Optical Refurbishment
- Precision machined parts, welding and heat treating.

We have an established tactical missile depot with 25 years of experience in smart weapons systems. Repairing Laser, Imaging Infrared, Infrared, Electron optical and radar guided systems. For these workloads we have in place:

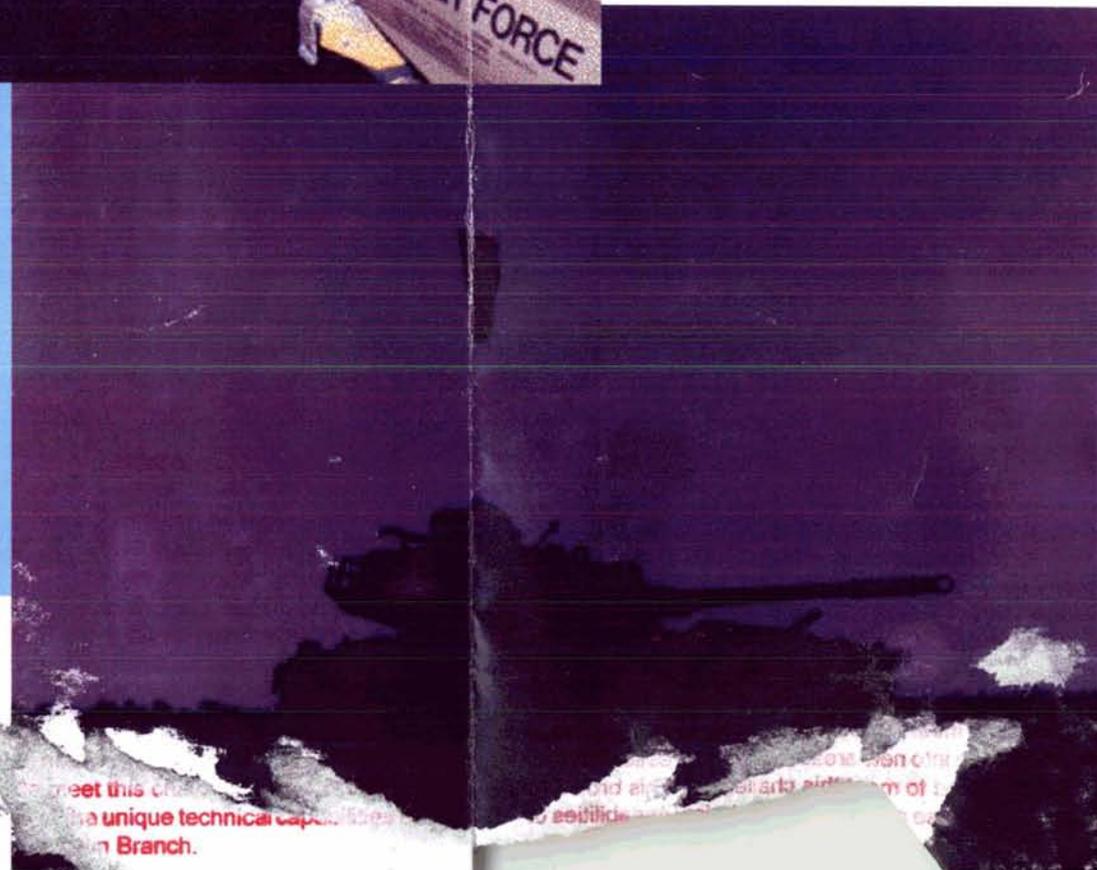
- An experienced core of highly trained technicians able to troubleshoot and repair down to the component level.
- The only factory trained (Hugh's Aircraft) technicians to work the AGM-65 Maverick weapons system family at depot level.
- Existing environmentally controlled work area's, including a 10,000 class clean room.
- In excess of 150,000 sq. ft. of existing work space for expansion.
- System and Item management specialist
- Engineering Support
- Center and AFT sections repair and modification for warhead, hydraulics, and pneumatics.
- Full-up and field test of tactical missiles.
- The only depot working GBU-15 guided bombs, guidance & control section which uses IIR Technology.



Our Tactical Missile All-up Round Maintenance Facility Is the only Air Force facility where fully loaded tactical missiles with warheads can be repaired.



What we've accomplished at Ogden ALC, is the capability to repair an item in the AGM-65 Maverick weapons system family for 1/5 the cost of what private industry charges. By these smart weapons system families remaining in place at Ogden ALC, a broader knowledge has been gained and repair costs continue to go down.



meet this...
a unique technical...
Branch.

Document Separator

Ogden Air Logistics Center

Depot Process

“One Stop Shopping”

Integrating Tomorrow's Technology... **Today**

Ogden Air Logistics Center

Department of Defense

Army

Air Force

Navy

AFSPC

AMC

AFMC

ACC

AETC

Labs &
Test Centers

**Air Logistics
Centers**

Product
Centers

Sacramento

Oklahoma

Ogden

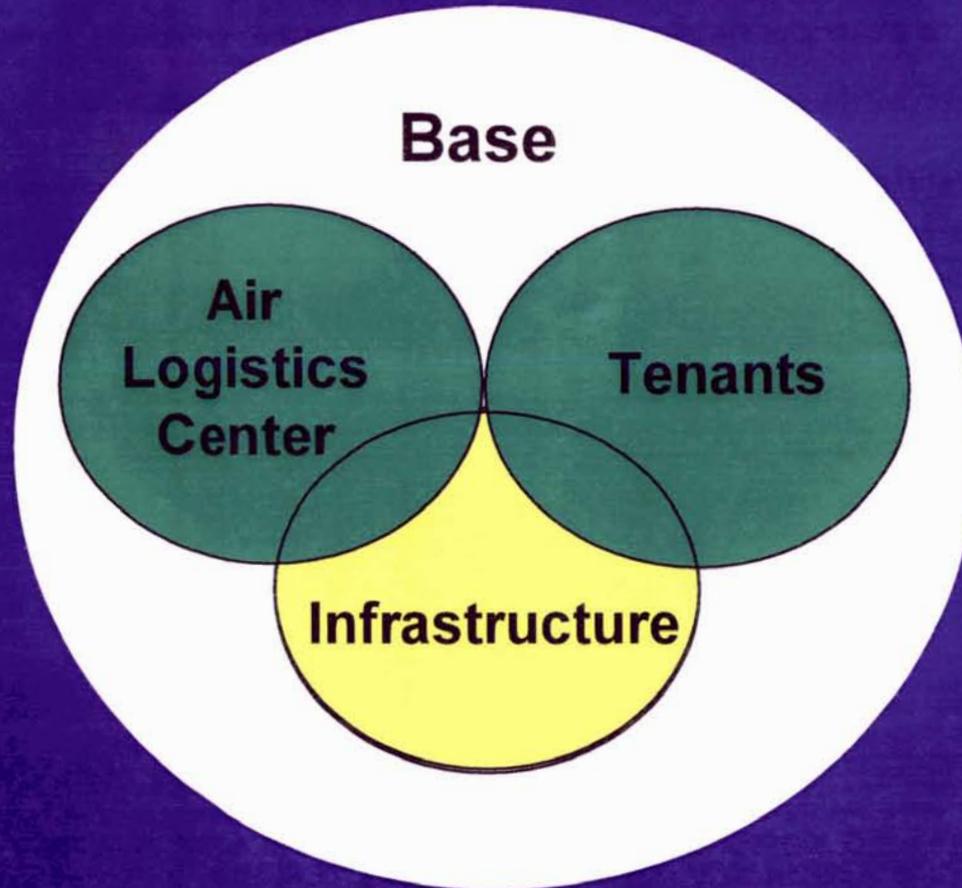
Warner Robins

San Antonio

Integrating Tomorrow's Technology...**Today**

Ogden Air Logistics Center

HILL AIR FORCE BASE



Integrating Tomorrow's Technology...**Today**

Home For 49 Tenants



Integrating Tomorrow's Technology...**Today**

Ogden Air Logistics Center

Hill Air Force Base Home For Tenants

- 388th Fighter Wing
- 419th Fighter Wing
- 84th Radar Evaluation Squadron
- 151st Air Refueling Group
- 533rd Field Training Detachment
- 545th Test Group

Integrating Tomorrow's Technology... **Today**

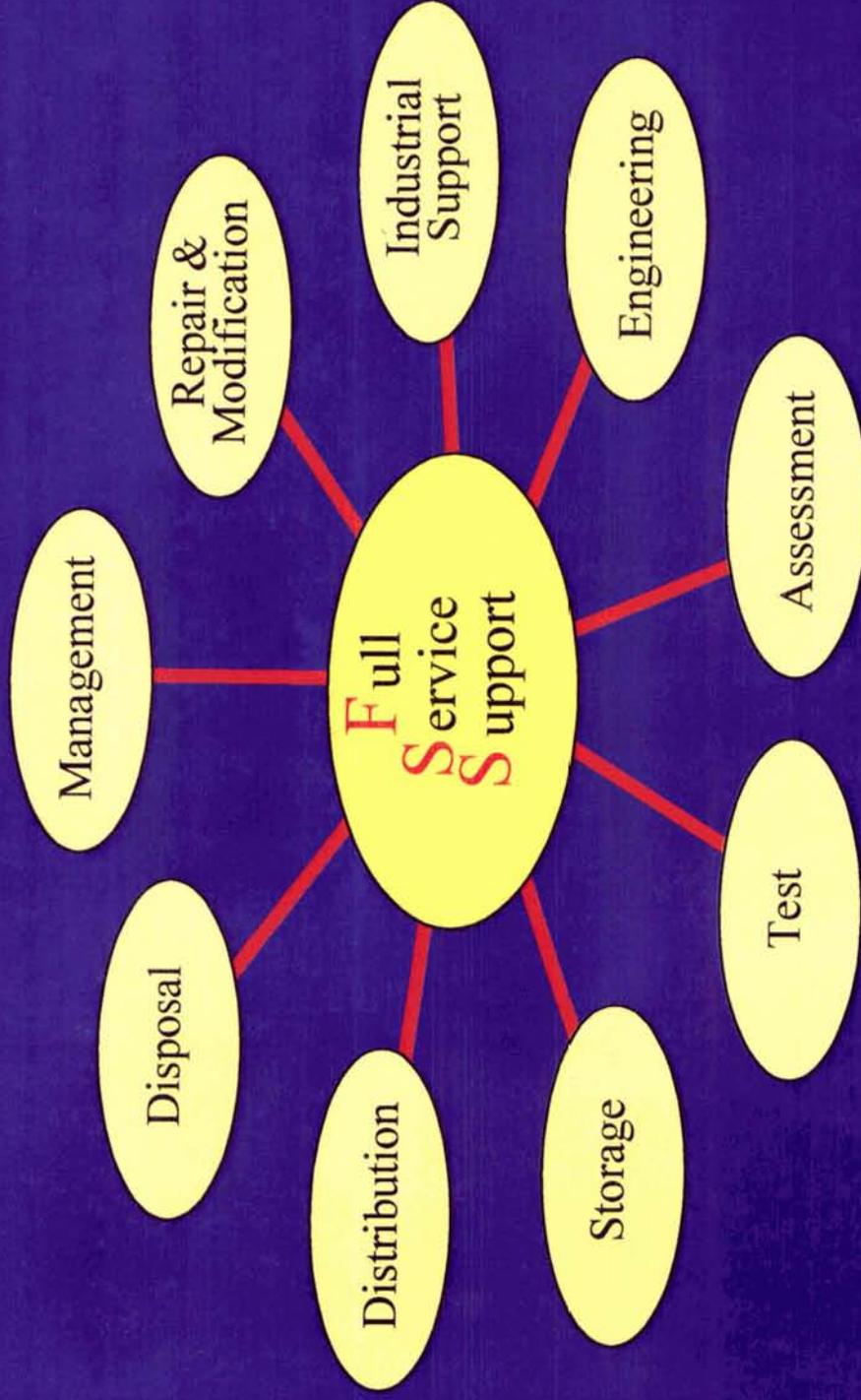
Ogden Air Logistics Center

**Hill Air Force Base
Home of Ogden Air Logistics Center**

- Weapon System Management
- Engineering Support
- Industrial Repair

Integrating Tomorrow's Technology...**Today**

OO-ALC Support Capability



Ogden Air Logistics Center

00-ALC

COMMANDER
CC

CONTRACTING
DIRECTORATE
PK

FINANCIAL
MANAGEMENT
DIRECTORATE
FM

BASE
MANAGEMENT
AND SUPPORT
75th ABW

SUPPLY & TRANS
PERSONNEL

Integrating Tomorrow's Technology... Today

Ogden Air Logistics Center

00-ALC

COMMANDER
CC

AIRCRAFT
DIRECTORATE

LA

F-4
DET 35
F/A-18 REPAIR
C-130 REPAIR
F-16 REPAIR

TECHNOLOGY
& INDUSTRIAL
SUPPORT
DIRECTORATE

TI

SOFTWARE
TECH & ENG
SUPPORT
INDUST PLANT
MGMT
INDUSTRIAL
TRAINING

SILO-BASED
ICBM SYSTEM
PROGRAM
OFFICE

LM

PEACEKEEPER
MINUTEMAN

COMMODITIES
DIRECTORATE

LI

AIRMUNITION
MAVERICK
TRAINERS
PHOTONICS
LANDING GEAR

F-16
MANAGEMENT
DIRECTORATE

LF

F-16
FMS

Integrating Tomorrow's Technology...**Today**

Ogden Air Logistics Center

OO-ALC WORKLOAD

FY 95

DPSH (000)

● Aircraft				1,494,743
F-16	Falcon	174		
F/A-18	Hornet	31		
C-130	Hercules	34		
C-130	Navy	10		
● Missiles				476,547
LGM-30	Minuteman	132		
M-118	Peacekeeper	3		
● Engines				60,004
● Other Major End Items				109,354
● Exchangeables (Component Parts)				1,567,249
● Software				864,849
● Manufacturing				75,805
● Miscellaneous				190,874
			Total Hours	4,839,425

Integrating Tomorrow's Technology...**Today**

Demographics

- **Number of Systems Managed**

Weapon Systems	7
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Commodities	4
-------------	---

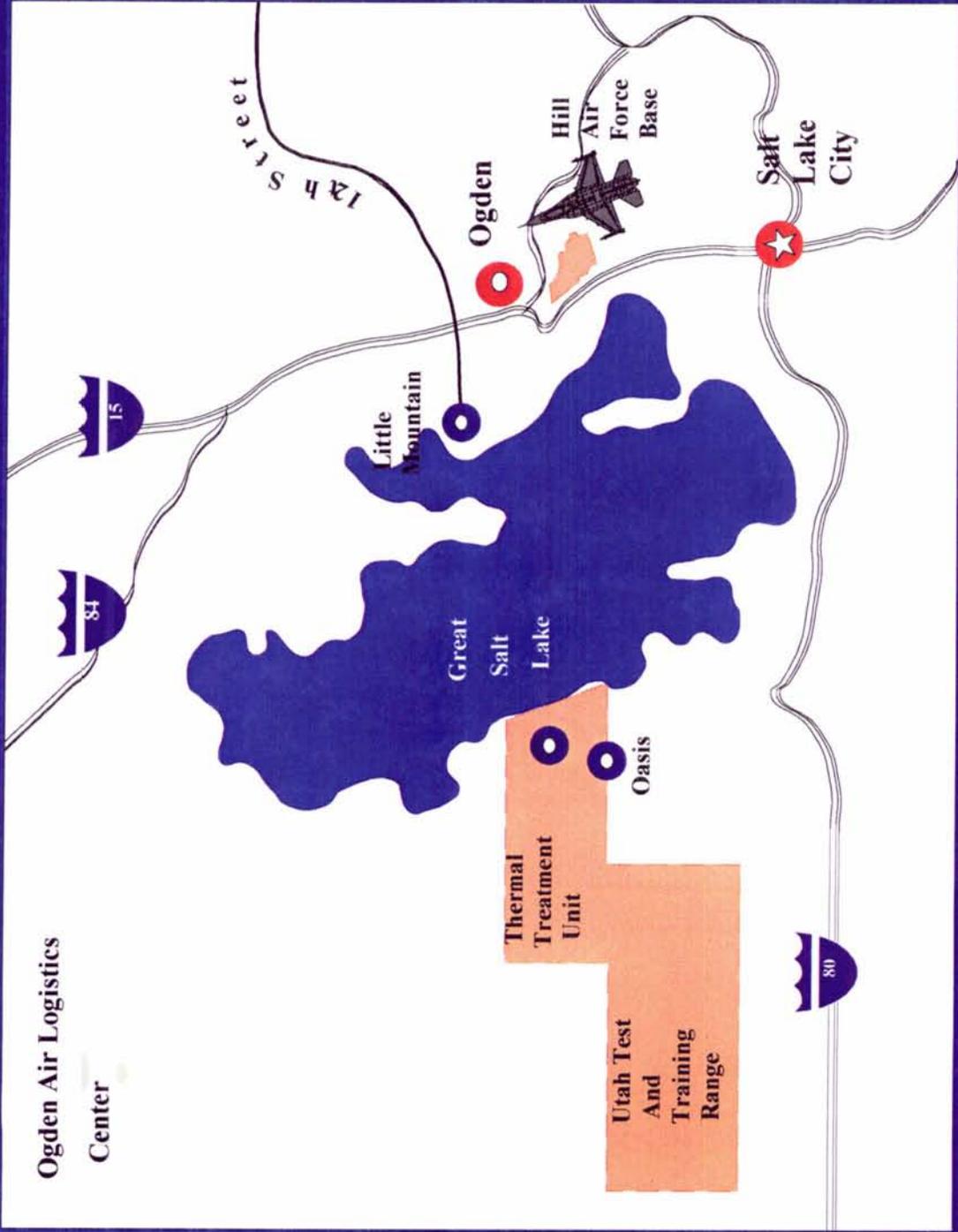
- **Number of Items Managed**

Recoverable	27,802
-------------	--------

Expendables	43,747
-------------	--------

Equipment	7,492
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Ogden Air Logistics Center



Integrating Tomorrow's Technology... Today

OO-ALC Features

- Utah Test Training Range (UTTR)
- Disposal Thermal Treatment Unit (TTU)
- Rocket Motor Storage (Oasis)
- Static Test Firing (Oasis)
- Motor Dissection (Oasis)
- Nuclear Environment Test (Little Mountain)

OO-ALC Features (Continued)

- Missile - Launch Control
- Launch Facilities
- Advanced Cruise Missile (ACM) Repair
- Imaging Radar System Test Facility
- Landing Gear
- Fighter Aircraft

OO-ALC Features (Continued)

- Munition Storage
- Computed Tomography
- Investment Casting
- Regional Data Processing
- Environmental Awards

Ogden Air Logistics Center

Base Environmental Awards

President's Council on Management Improvement "Management Excellence" Award	1992
Gen Thomas D. White Environmental Quality Award for "The Best Environmental Program in the Air Force, of 140 Installations	1993
Gen Thomas D. White Pollution Prevention Award for "The Best Pollution Prevention Program in the Air Force	1993
The Department of Defense Environmental Quality Award for "The Best Environmental Program in the Department of Defense, of 469 Installations	1993
AFMC "Best Environmental and Restoration Program	1994
Tree City USA (US Forest Service)	1994

Integrating Tomorrow's Technology... Today

Ogden Air Logistics Center

Base Awards

- Hammer Award, 29 September 1994, DMBA Corporate Board, LM
- Nominated for Bernard A. Shiver Award, PEO Level Major Program, Best Managed Air Force Program, 16 November 1994, Major James Myers, LM
- Maintenance Effectiveness Award, Best Munitions Squadron in Air Force, March 1994, 649 MMTS
- Air Force Outstanding Unit Award, 3 August 1994, CLSS
- Suggestion Program Manager of the Year, 14 March 1994, Janene Gandee
- Journalist of the Year, 2nd Place, April 1994, Frances Kosakowsky, PA
- Secretary of Defense Pollution Prevention Individual Award, May 1994, Allan Dalpias

Integrating Tomorrow's Technology...**Today**

Ogden Air Logistics Center

Work Force

- 21,732 People Report to Work at Hill AFB
 - Ogden ALC Employs 8,141 Civilians and 1,866 Military Members
 - Other DoD Units Employ an Additional 2,824 Civilians and 2,853 Military
 - 4,550 Employees Work for Contractors doing Business with the Base
 - 1,498 Individuals are Members of the U.S. Air Force Reserve

Integrating Tomorrow's Technology...**Today**

Ogden Air Logistics Center

Demographics

● Base Area	6,698 Acres
Runway	13,500 ft
Building	12,828,643 sq ft
● Take-Offs and Landings	82,656
● Direct Payroll	\$569,382,835
● Annual Payroll Impact on Area	\$1,288,869,644

Integrating Tomorrow's Technology...**Today**



OGDEN AIR LOGISTICS CENTER ICBM COMPUTED TOMOGRAPHY

In January 1995, Ogden Air Logistics Center (OALC) acquired a computed tomography facility to complement a nondestructive inspection capability.

OALC is the leader in non-destructive inspections for explosives, non-explosives, and hazardous items. Additionally, the 9-MEV and the new 15-MEV computed tomography systems can scan a variety of materials or products to provide information for research and development, process improvement, reverse engineering, and inspections.



SCAN0002 IMB.A
Reconstruction
9-AUG-1994
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Field 1 of 1

Columns:	1024
Rows:	1024
K-Size:	1901.86
T-Size:	1901.86
Z-GANT:	2000
ReAP:	-2.2
THICK:	12.00
SLICE #:	3
PULSES:	28.2
SCAN:	8.8
CTMIN:	-663
CTMAX:	4736



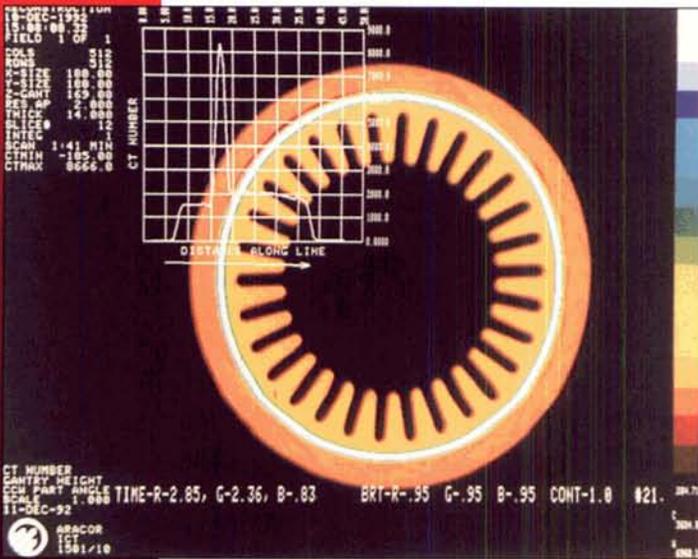
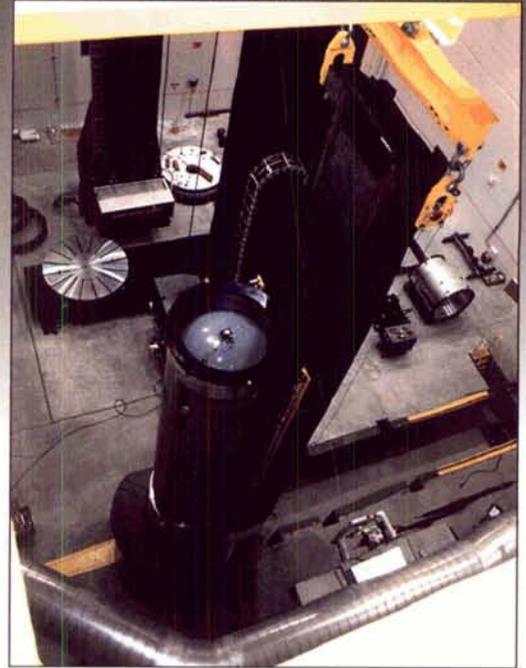
The inspection envelope of the new ICT2500 system is:

96" in Diameter
348" in Height
120,000 lb. Maximum Turntable Load

QUANTITY ANGLE
SCALE INCHES
OO-ALC-HH AFB
16-Aug-94
ARACOR
ICT 2000

Computed Tomography slice of a Minuteman III Stage I Solid Booster. Motor Diameter: 66 Inches. Crack coming out of star valley to end of case.

The primary mission of our systems is to determine aging and provide surveillance of all Minuteman and Peacekeeper solid rocket booster propellants. In addition, Ogden Air Logistics Center welcomes the opportunity to explore other testing and inspection needs. We can do your testing using high and low energy x-ray and computed tomography. Our inspection testing units can ensure that weapon systems and equipment function reliably, which will save you valuable man-hours and capital asset dollars.



The inspection envelope of the ICT1500 system is:

- 57" in Diameter
- 100" in Height
- 10,000 lb. Maximum Turntable Load

The radiation source used is a Varian Linatron 3000, variable 7, 9, 11 MEV (Million Electron Volt). The detector package consists of 130 crystal detectors.

For more information write to:

Missile X-Ray/CT Section
Building 2113
6321 Lemon Lane
Hill AFB, UT 84056

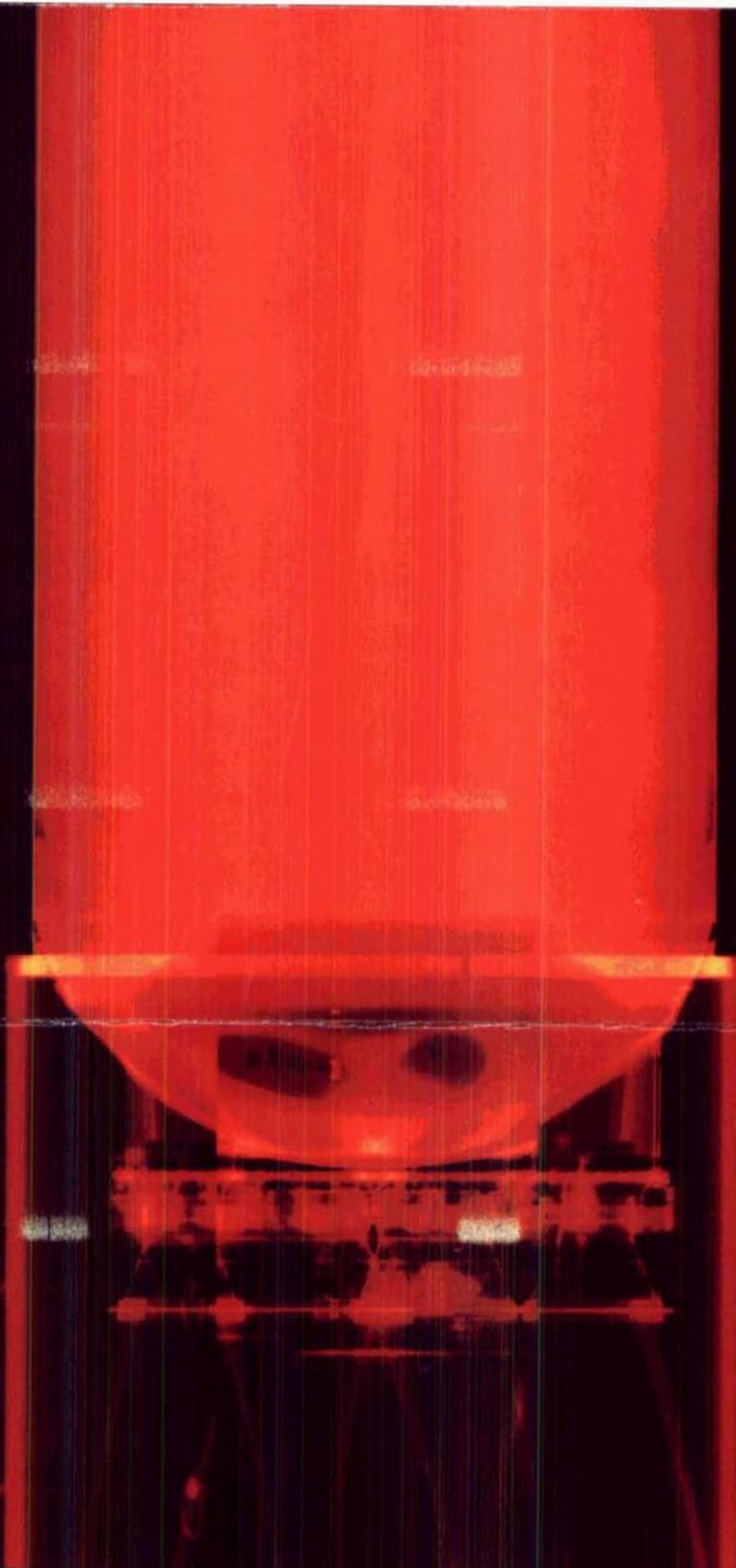
or call us at the numbers listed on the reverse.

CT NUMBER
QUANTITY ANGLE
SCALE INCHES
OO-ALC-HH AFB
16-Aug-94
ARACOR
ICT 2000

ICEBNA COMPUTED



COMPUTED TOMOGRAPHY



for information on Computed Tomography services, please contact:

TI Business Office
(801) 777-2719

Computed Tomography Lab
(801) 777-6080
(801) 777-6082



OGDEN AIR LOGISTICS CENTER



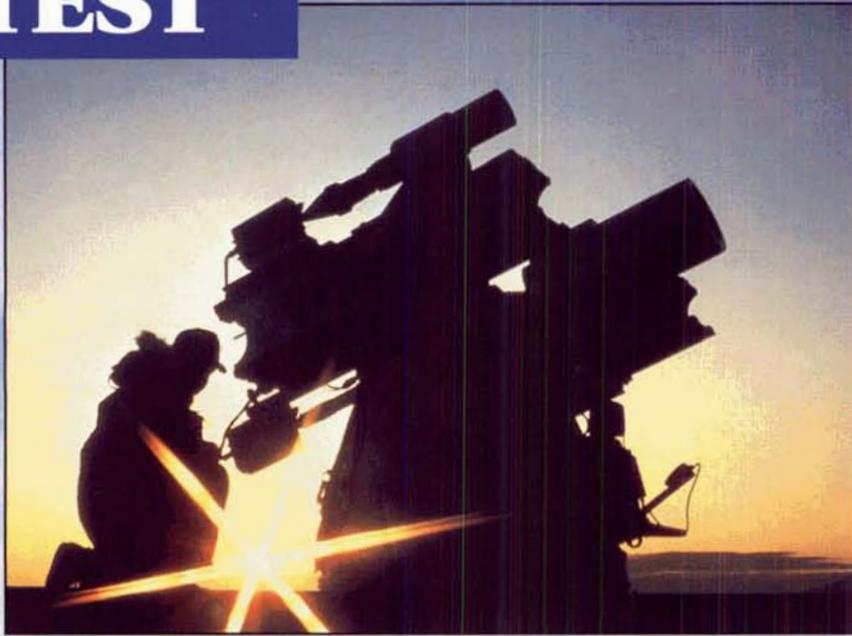
Our Sky
Has NO LIMIT...

UTTTR

Utah Test and Training Range

THE TEST and TRAINING T

TEST



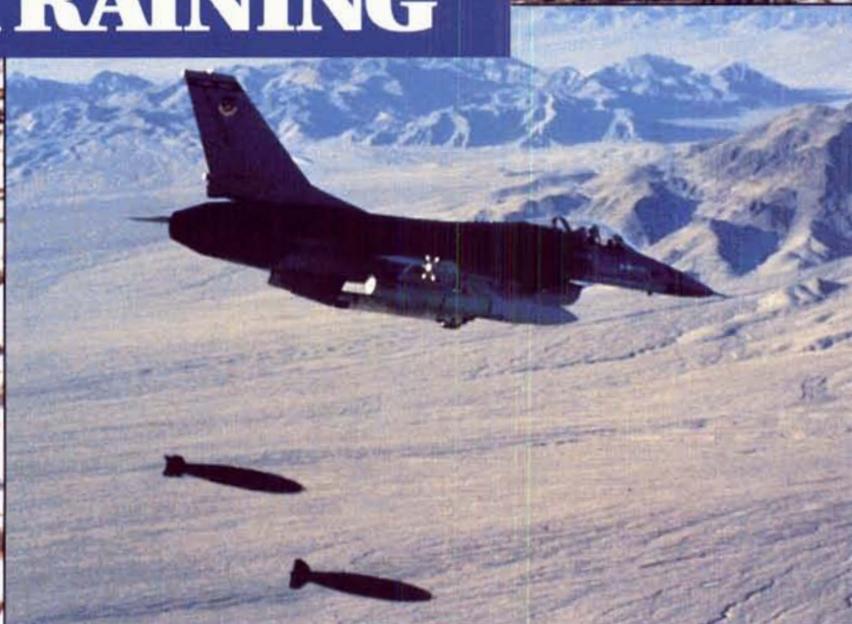
DEVELOPMENTAL TEST

Utah Test and Training Range is the perfect location for developmental test and evaluation support for cruise missiles, unmanned air vehicles, and munitions. The land and airspace, combined with our modern data collection/processing capabilities and test expertise, provide unmatched support for developmental tests of advanced weapons systems.

OPERATIONAL TEST

UTTR blends modern developmental test capabilities with a realistic environment for training to produce the finest operational test range in the United States. Our vast range contains the largest overland safety footprint available in the Department of Defense.

TRAINING



TRAINING

UTTR can support over 30,000 training sorties annually with capabilities for air-to-ground, air-to-air, ground-to-air, and ground exercises - in any combination. An extensive variety of realistic targets within the 6 complexes are available to meet any training need - from scorable target pads to remotely controlled realistic threats.

EAM for the 21st CENTURY



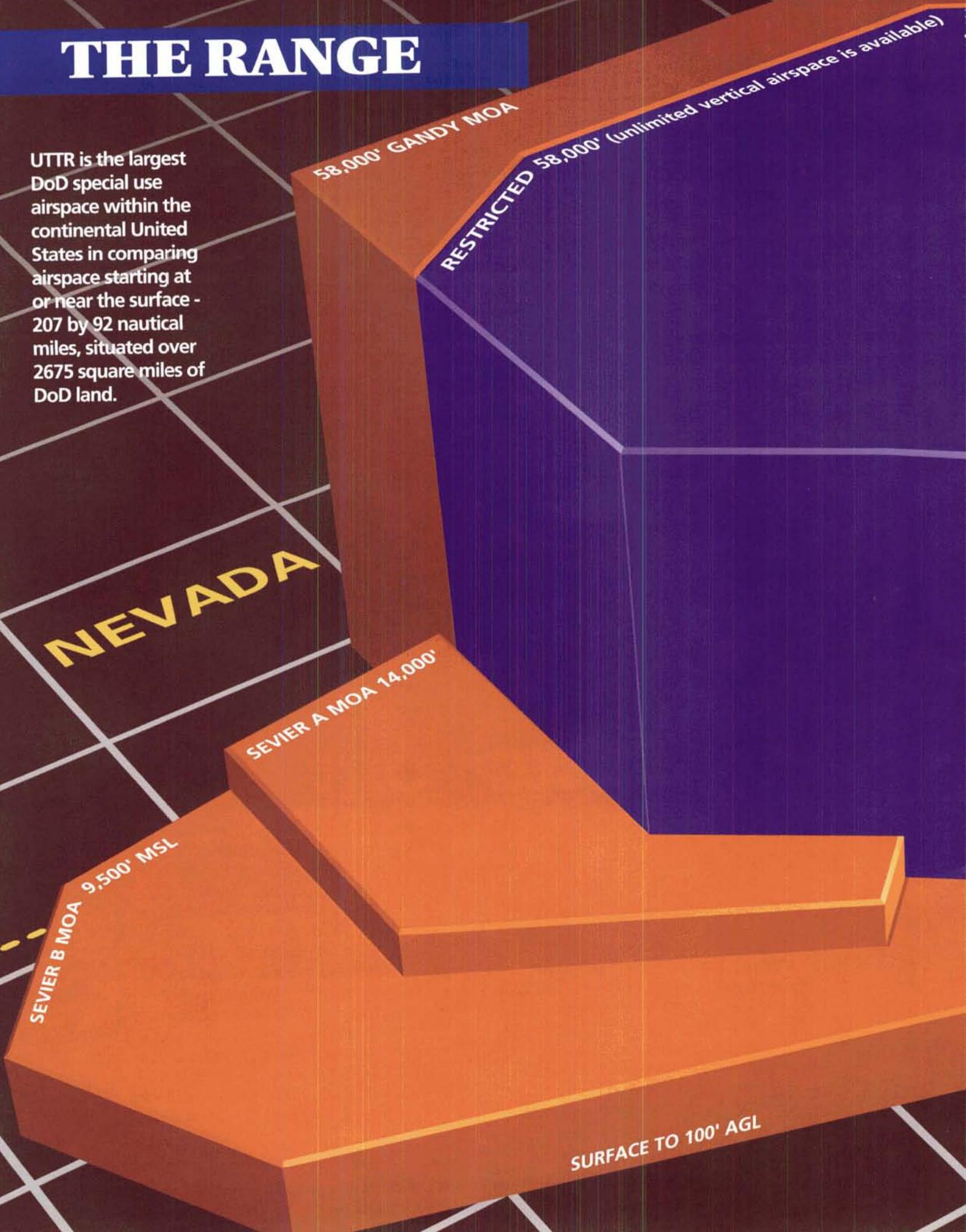
MISSION SUPPORT SERVICES

UTTR is an essential developmental test support capability of the Air Force Flight Test Center. The unique mixture of unmatched physical characteristics and modern equipment makes it ideal for a wide variety of operational test and training activities. Combined with sustainment test support for the nearby AF Logistics Center at Hill AFB, UTTR provides a cradle-to-grave capability. Tracking and documentation equipment include an extensive high accuracy, multiple-object tracking system in addition to radars, cinetheodolites,

video-metric systems, and high speed cameras. State-of-the-art systems are used to collect, process, display, and analyze data. Both ground and airborne telemetry acquisition systems are available. Training operations use near-real-time air-to-ground target scoring and a large air combat maneuvering instrumentation arena. Simultaneous test and training activities are routinely conducted using modern communications, airspace control, and mission control facilities. UTTR is an outstanding capability of the Department of Defense.

THE RANGE

UTTR is the largest DoD special use airspace within the continental United States in comparing airspace starting at or near the surface - 207 by 92 nautical miles, situated over 2675 square miles of DoD land.



UTAH

IDAHO



30 NM

30 NM

30 NM

SOUTH RANGE

NORTH RANGE

SALT LAKE INTERNATIONAL AIRPORT

HILL AFB

GREAT SALT LAKE

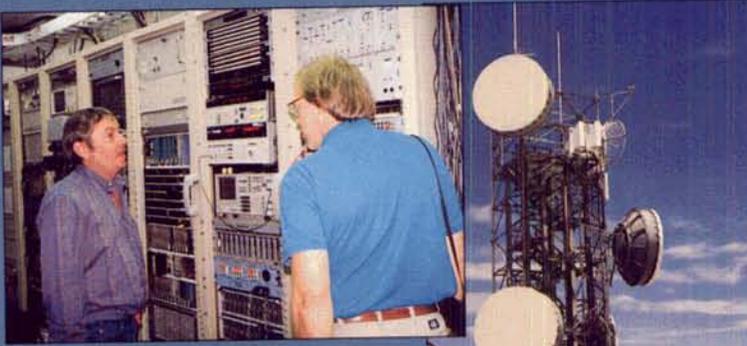
RESTRICTED 25,000'

RESTRICTED 58,000'

7,500'
9,000'

UT

DIVERSE • FLEXIBLE



Wendover Peak Instrumentation



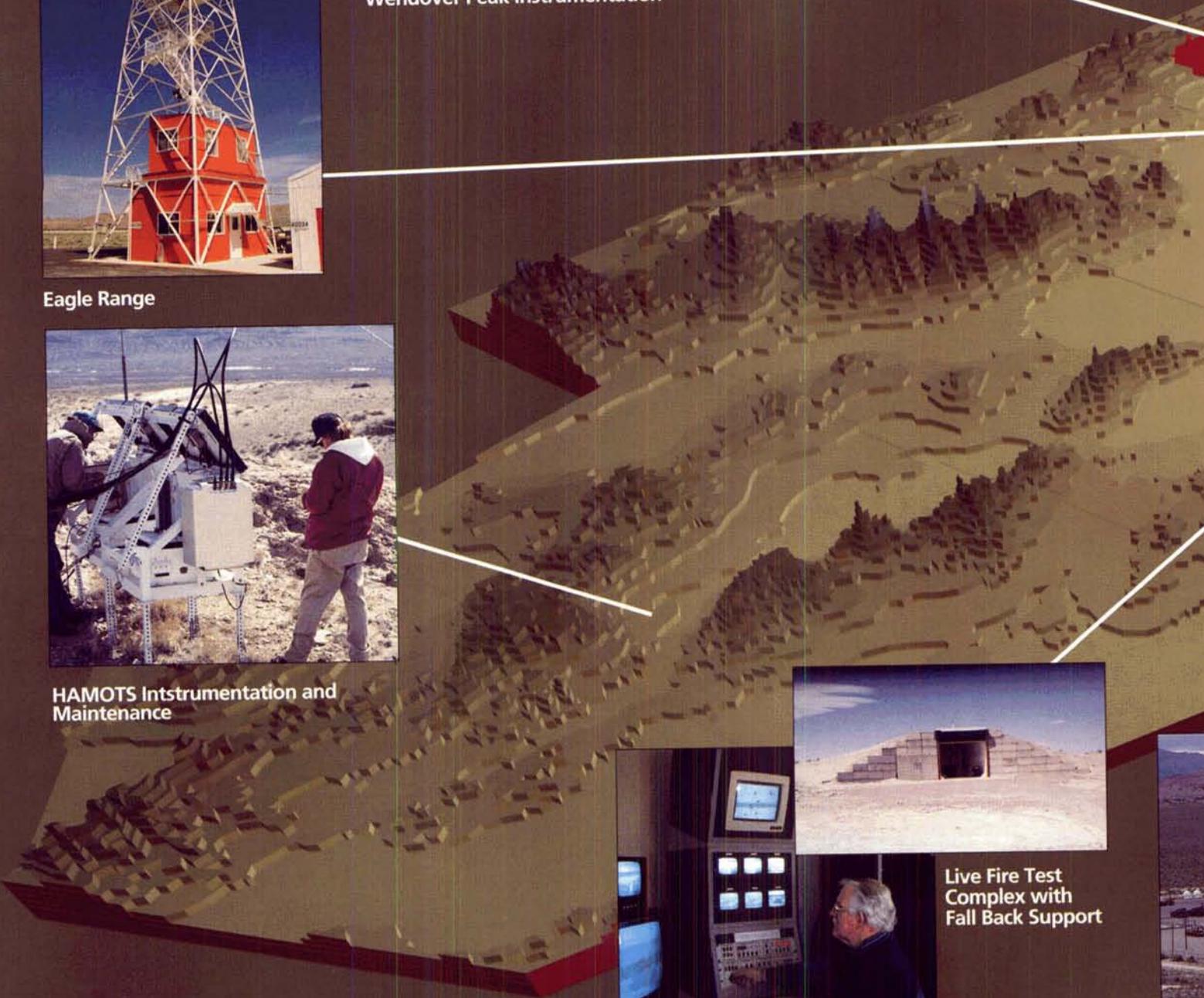
Eagle Range



HAMOTS Intstrumentation and Maintenance



Live Fire Test Complex with Fall Back Support



TR

LE • SAFE • SECURE



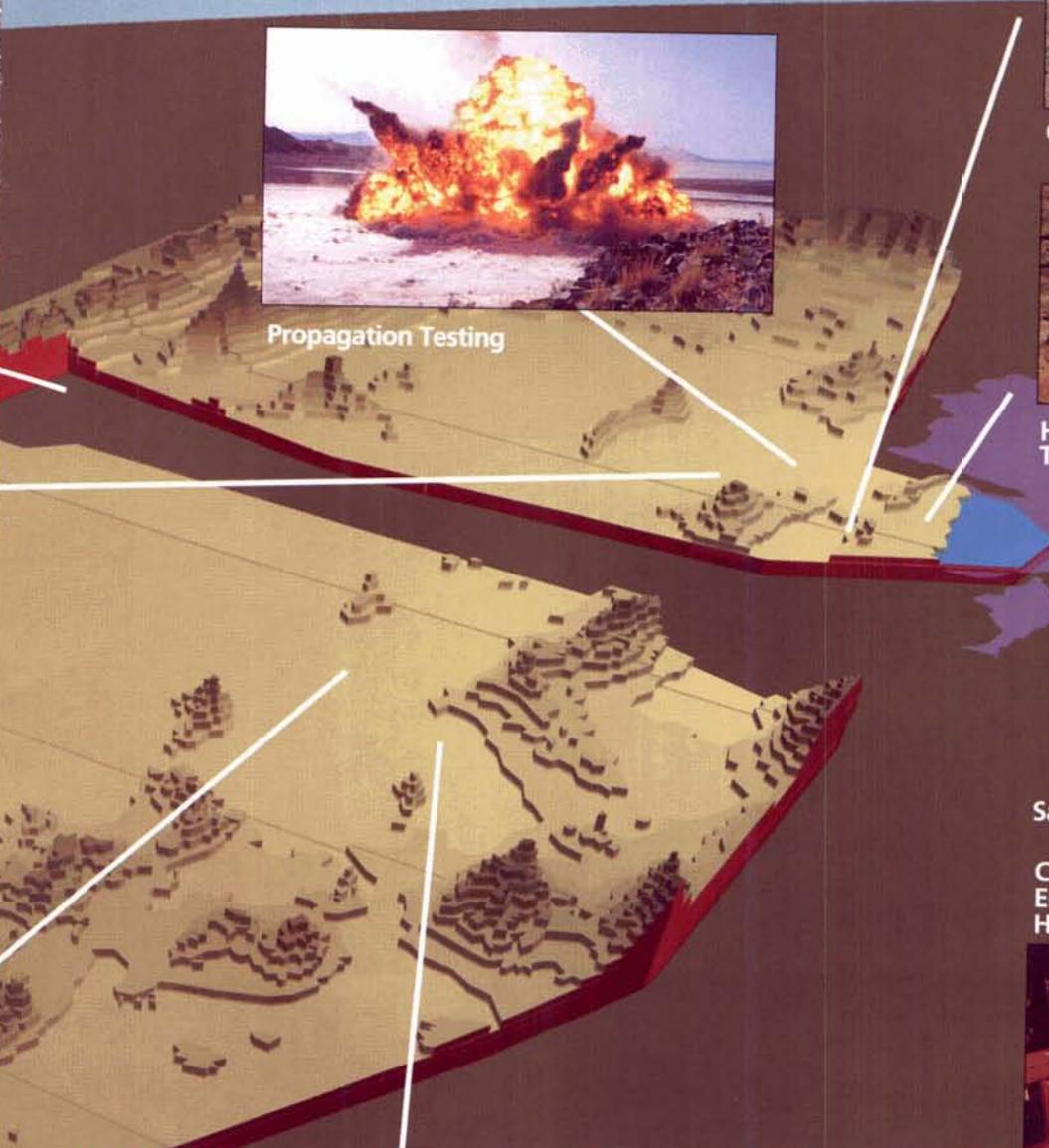
Propagation Testing



OASIS



Helicopter/Air to Ground Target Area

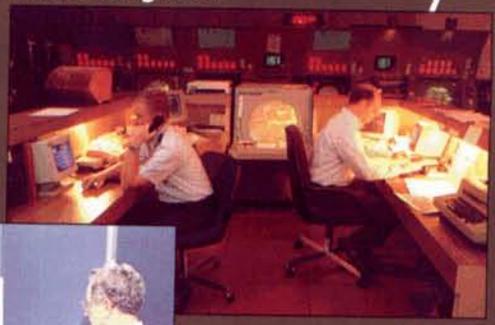
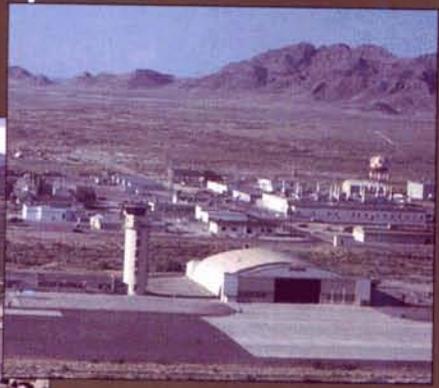


Hill AFB

Salt Lake International Airport

Clover Air and Weapons Control, Engineering Support, Hill AFB Flightline

Michael AAF at Dugway Proving Ground Avery Technical Area (USAF)



TEST

The UTTR test history is exceptional, from testing buzz bombs (V-1) used after WWII to being the primary test site for medium long range, terrain following cruise missiles in the 1980s and 1990s. Medium and long range unmanned air vehicles and a variety of armaments and munitions, including smart bombs, have been tested and evaluated here.

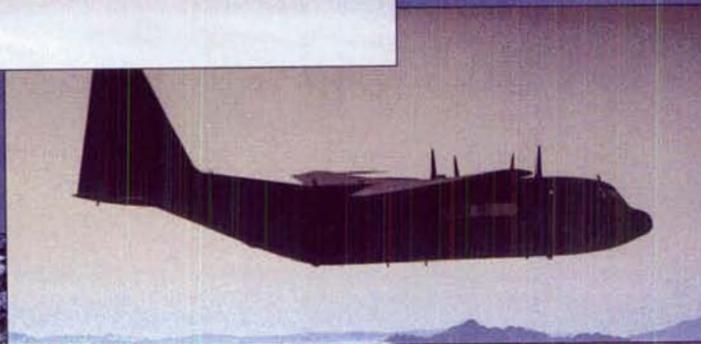
Static motor firing tests for ICBMs and tactical weapons are also conducted here. The extensive aircraft test work includes hardware and software upgrades for the F-16. US Army test areas include ground grids to support artillery, obscurant, and chemical/biological research. Numerous areas are used for precision monitored explosive propagation tests and munitions "shelf-life" tests. Tests up to 500,000 pounds of conventional explosive have been conducted here.



Atmospheric and Sensor Sampling Platform



F-16 Test Platform



C-130 Test Platform



MR UAV Ground Launch



Cinetheodolite Filming Ground Launch

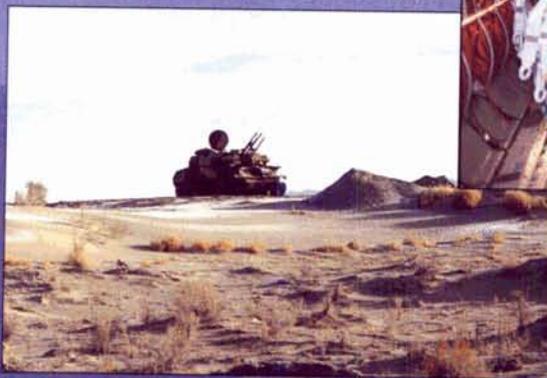


Helicopter airlifting UAV to Recovery Area

SUPPORT



C-130 Airborne Instrumentation



Tank Target on Live Fire Range



Mission Control Center

Conventional 500,000 lb Propagation test.

TRAINING



F-16 Proficiency Training Flight



B-1 on Low-Level Bomb Run



Calibrating Television Ordnance Scoring Systems



Infrared Maverick Missile Destroying Tank





Range Support Personnel Providing
Air Traffic Control and Air
Weapons Control Services

Training is serious business at UTTR. The Air Combat Maneuvering Instrumentation arena provides a realistic, real-time environment for developing air-to-air combat skills. B-52 and B-1 aircraft routinely launch cruise missiles or drop munitions on UTTR targets. The 16 target areas on UTTR are designed to provide realistic training using virtually any combination of inert or live munitions in the Air Force inventory. The target areas contain over 300 targets. The varied terrain, from the 4,300 foot desert floor to 12,000 foot mountains, and four season climate, supplies conditions necessary for full training. Multiple threat emitter systems provide a realistic electronic combat environment, while several target complexes provide near-real-time scoring information to bomber and fighter aircraft crews. The combination of UTTR capabilities provide an extraordinarily effective environment for Air Force, multi-service, and multi-national combat training exercises.

SUPPORT



Air Combat Maneuvering
Instrumentation Debrief

Francis Peak Radar Site



WORKING PA

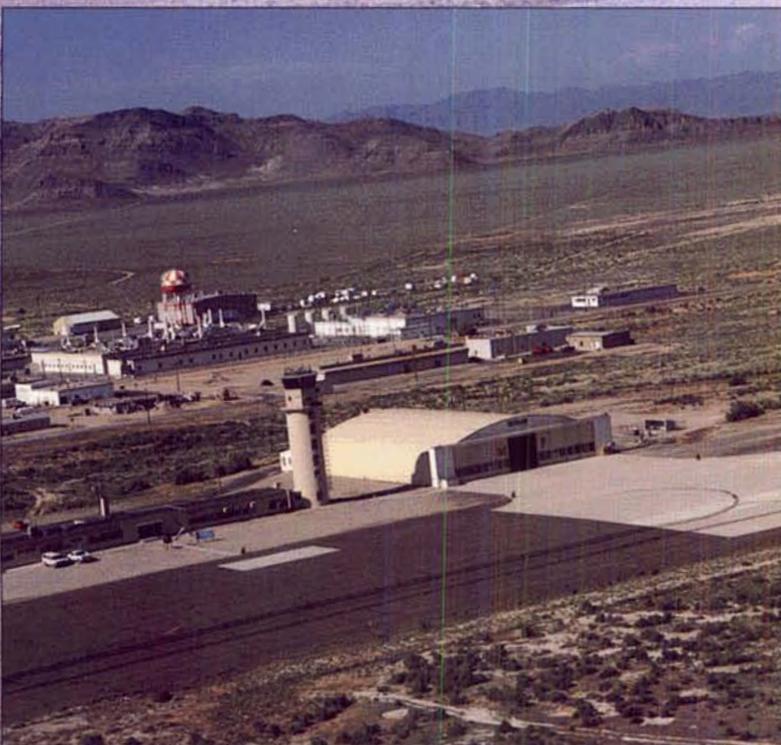
Hill AFB, Dugway Proving Ground and UTTR

Hill AFB is a natural partner for the Utah Test and Training Range. Hill's 13,200 foot runway and more than half century history as a major Air Force materiel base and depot are unmatched resources. Hill AFB is the central manager for the Air Force munitions and small missiles inventory. Its major role as logistics manager for the F-16 and Minuteman ICBMs provides unmatched synergism for using the UTTR capabilities to offer the most comprehensive services at the lowest cost.



Hill AFB Flightline

Michael AAF at Dugway Proving Ground



The strong partnership with Dugway Proving Ground marks UTTR as a unique DoD resource. Dugway is the Army's center of expertise for chemical and biological testing. Michael Army Airfield, with its 13,100 foot runway, is a major support asset for multi-service developmental and operational tests. Shared Army and Air Force land is home to realistic joint training exercises. Dugway's complementary capabilities ensure that UTTR can offer exceptional advantages to any test or training customer.

PARTNERSHIPS

The Natural Environment and UTTR



Another natural is this land which is home to UTTR. The mountains and desert valleys of northwestern Utah are the perfect location for a major DoD test and training range. And, while we fully appreciate the potentialities of the UTTR land and airspace - we are extremely sensitive to the stewardship we have. We value this trust and work hard to protect the natural resources within and surrounding the test range. Current projects include supplemental watering for arid area grazing animals, such as our herds of antelope and wild horses, and a successful cooperative effort to stop electrocution of birds of prey by modifying power line cross trees to provide safe perches far away from dangerous wires. Our Team is committed to ensuring that our natural environment is protected and enhanced.

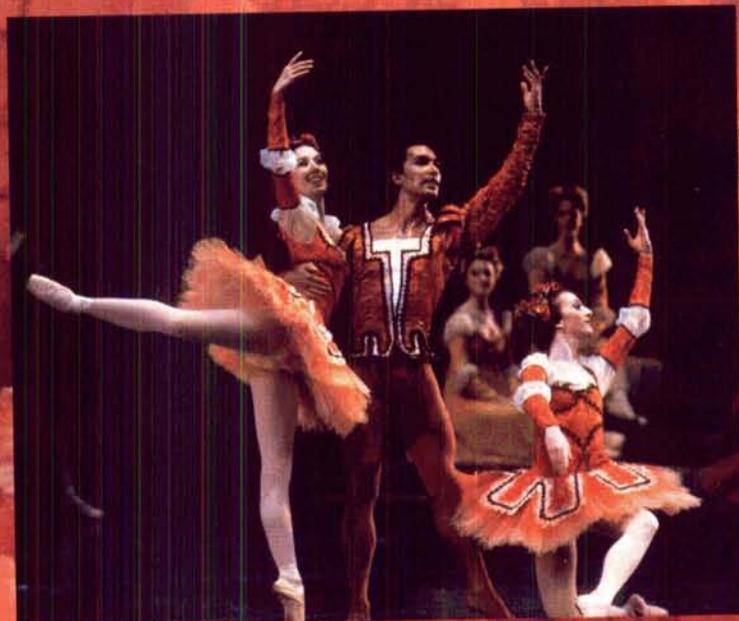


...Before



...After

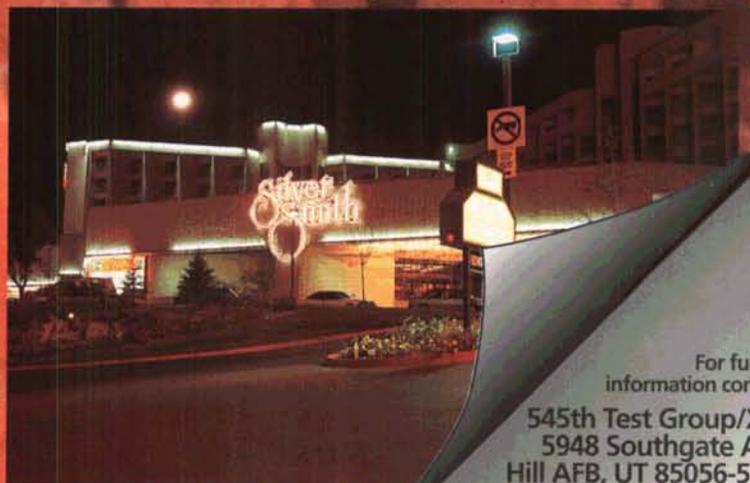
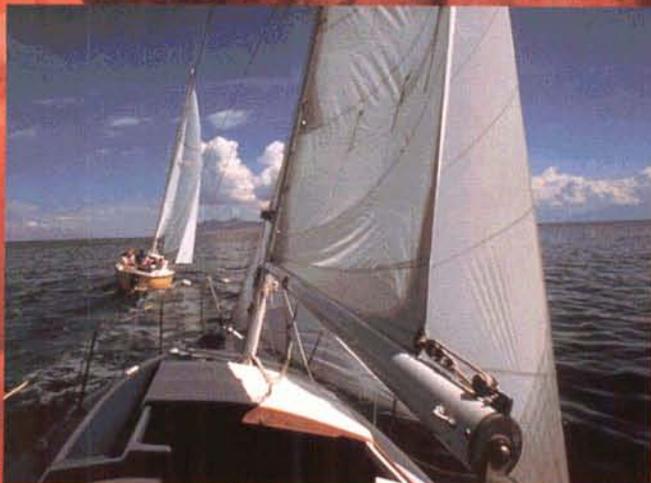
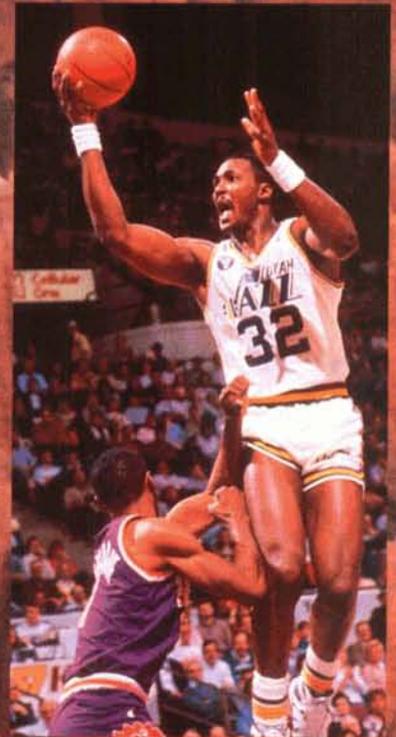
UTAH



LIFESTYLE

Utah's many national parks and historic monuments are tributes to the magnificent scenery and fascinating history found here. Utah is an outdoor paradise. There is skiing at world famous resorts, fishing in the clear water lakes and streams, climbing majestic mountains, and just enjoying spectacular vistas. And, while Utah abounds with natural wonders, our cities afford the sophisticated pleasures of excellent dining, up-scale shopping, professional sports, symphonies, ballet, even a world renowned Shakespearean festival.

Utah - always a very special "welcome."

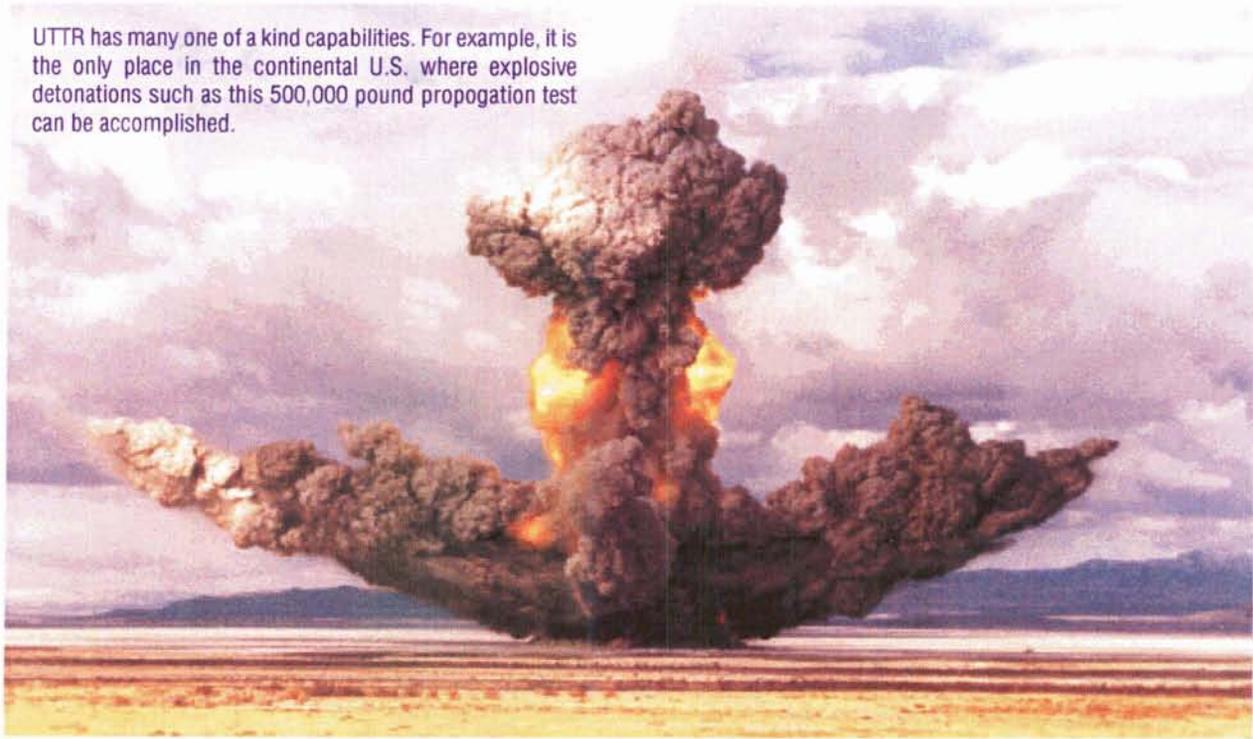


For further information contact:
545th Test Group/XRP
5948 Southgate Ave.
Hill AFB, UT 85056-5232
Phone: (801) 777-7852
DSN 458-7852



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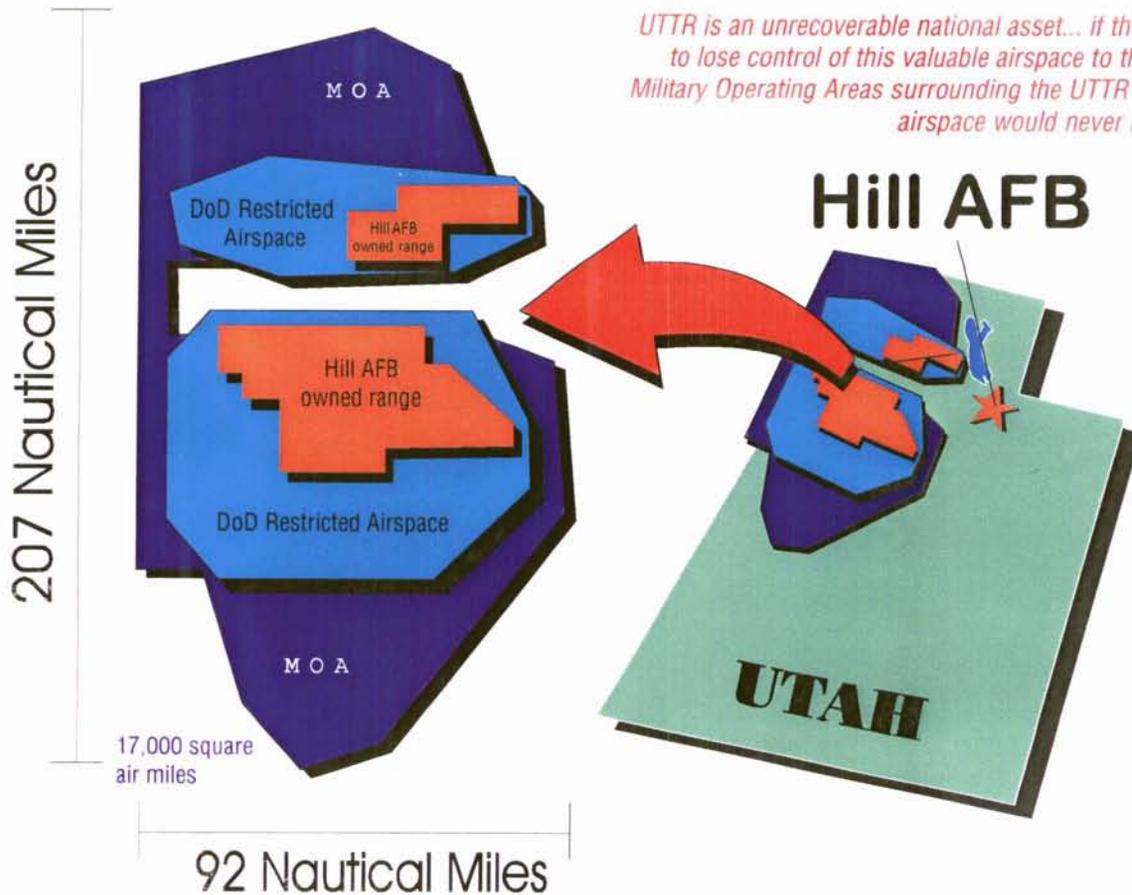
UTTR has many one of a kind capabilities. For example, it is the only place in the continental U.S. where explosive detonations such as this 500,000 pound propogation test can be accomplished.



UTAH TEST AND TRAINING RANGE

The Utah Test and Training Range (UTTR) is the largest DOD overland controlled airspace (17,000 square air miles). The large land and airspace, combined with modern data collection/processing capabilities and test expertise, provide unmatched support for developmental tests of advanced weapons systems.

UTTR is an unrecoverable national asset... if the DoD were to lose control of this valuable airspace to the FAA, the Military Operating Areas surrounding the UTTR's restricted airspace would never be regained





Oasis, located on UTTR, is the only site in the US environmentally permitted to dispose of Minuteman and Peacekeeper solid rocket motor propellant and large quantities of conventional munitions. It is also capable of disposing of obsolete motors from other services

The UTTR supports over 30,000 training sorties annually and has the capacity to increase to over 90,000 annually. UTTR is an essential developmental test capability for the Air Force and Department of Defense. Training at UTTR blends modern developmental and operational test capabilities with a realistic environment for training to produce the finest operational test range in the U.S. We have capabilities for air-to-ground, air-to-air, ground-to-air, and ground exercises in any combination. Of all the western desert training ranges, UTTR has the lowest surrounding population. UTTR's proximity to Hill AFB increases the time on target and test time because of minimal fuel burn to arrive at the range. Varied terrain from the 4,300 foot desert floor to 12,000 foot mountains, and four season climate,

provides conditions required for a full scope of training scenarios. This mixture of unmatched physical characteristics and modern equipment makes it ideal for a wide variety of operational test and training activities. Tracking and documentation equipment includes an extensive high accuracy, multiple-object tracking system in addition to radars, cinetheodolites, video-metric systems, and high speed cameras. It is the only range in the US. where all test objectives for the Air Launched Cruise Missile (ALCM) can be conducted.

Helicopter pick up of Unmanned Air Vehicle (UAV) after completion of test.



Ground launch of Unmanned Air Vehicle (UAV) at UTTR.



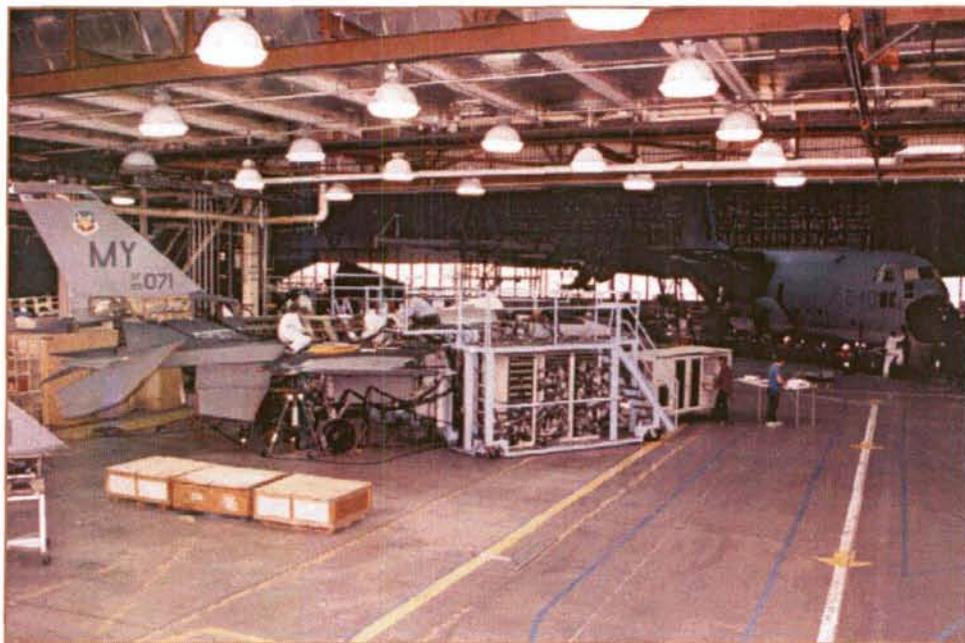
F-16 Fighting Falcons in action over UTTR. Three of the four 1994 Gunsmoke top scorers trained at UTTR.



The UTTR is an unrecoverable national asset. It is the only range in the U.S. where such operations as overland high altitude strategic bombing can take place using live ordinance. Our Thermal Treatment Unit is the only environmentally permitted propellant disposal site in the United States. It is capable of disposing of Minuteman and Peacekeeper solid rocket motor propellant as well as obsolete motors from other services. We have an outstanding working relationship with the Federal Aviation Administration (FAA). The Utah Air National Guard's 299th Range Control Squadron or "Clover Control" is responsible for all air traffic and weapons control for the UTTR. The 299th is certified as an Air Traffic Control (ATC) facility by both the Air Force and Federal Aviation Administration (FAA). Clover Control ensures a smooth flow of military, commercial, and private aircraft into, around and through the UTTR simultaneously providing efficient use of this valuable airspace. If the DoD were to lose control of this valuable airspace to the FAA, the Military Operating Areas surrounding the UTTR's restricted airspace would never be regained.

**AFMC's
PREMIER
FIGHTER
AIRCRAFT
DEPOT**

The on-site presence of engineers greatly reduces the time required for engineering solutions to reach depot maintenance when compared to a non-collocated engineering activity.



We have one of the largest fighter repair facilities in the world with 18 buildings and over one million square feet of repair and overhaul space. The specially designed industrial buildings are collocated to enhance integrated avionics workloads, and the facilities are specifically identified and designed to handle the repair of virtually any fighter aircraft or component.



Ogden ALC provides worldwide logistics management and depot maintenance for the F-16 Fighting Falcons, the world's largest fleet of fighter aircraft. More than 21 countries employ over 3,000 F-16s. They enjoy an outstanding relationship with Ogden ALC.

Our depot maintenance facilities enable us to be self supporting, with the ability to repair or manufacture virtually any fighter aircraft component. The facilities are equipped to overhaul/repair an average of 300 fighter aircraft per year and have the capability and capacity to increase the workload to over 400 per year. In our main repair hangars, we have both fighter and cargo aircraft maintenance docks which are fully equipped for aircraft utilities. If the facility were to be reconfigured to accept only fighter aircraft the total dock capacity would increase to 133. Additionally each dock has central avionics air cooling hook-ups, allowing for final functional test to be run on all systems.

Our aircraft repair facility and experienced staff ensure rapid implementation of programs and changes. Our workforce demonstrated their flexibility in successfully transitioning from the maintenance of fighter aircraft to cargo aircraft. Currently there are 11 C-130 docks with an expansion capacity to 17. This transition has entailed significant depot reconfiguration and substantial retraining and certification for our mechanics, electricians and other artisans. Our people have the proven ability and can-do attitude necessary to tackle any new workload.



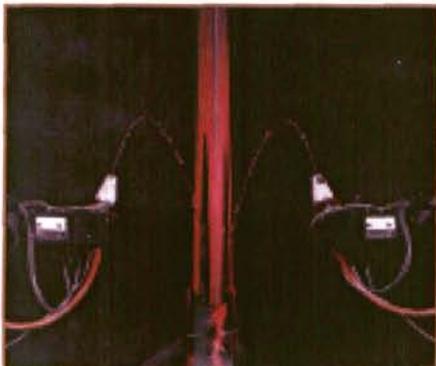
The F/RF-4 System Program Director (SPD) provides worldwide logistical support and technical management of the F/RF-4 weapon system. Our support currently includes Air Force and Air National Guard activities and eight foreign countries. This organization is also the System Support Manager for the QF-4 Drone Program. The SPD has engineering and configuration management authority for the weapon system and is responsible for ensuring safety and logistics supportability throughout sustainment and final disposition of all F/RF-4 aircraft, components, and equipment.

Our depot maintenance facilities are collocated with two premier operational fighter wings, the 388th Fighter Wing and the 419th FW (Reserve), which allows a high degree of integration between the F-16 program management activity and supporting depot repair functions. The F-16 System Support Manager (SSM) has both engineering and configuration management authority for the F-16 weapon system. As such, any weapon system engineering and configuration questions that arise during the course of maintenance can be resolved on site by resident structural, mechanical, and electronic engineers assigned to the SSM. This is an immense advantage to the worldwide support of the largest fighter fleet in the Air Force. Feedback between depot maintenance, product engineering, and the operational units brings aircraft problems to the prompt attention of responsible engineers for resolution. Conversely, the on-site presence of engineers greatly reduces the time required for engineering solutions to reach depot maintenance when compared to a non-collocated engineering activity. This translates directly to greatly reduced aircraft downtime, and improved cost and schedule effectiveness for depot support of the F-16 fleet.

The ISROMS Facility is specifically designed for the manufacture and repair of structural sheet metal, composite aircraft components, and engines. The structure contains the latest technology and equipment and is one of the most modern facilities in the world.

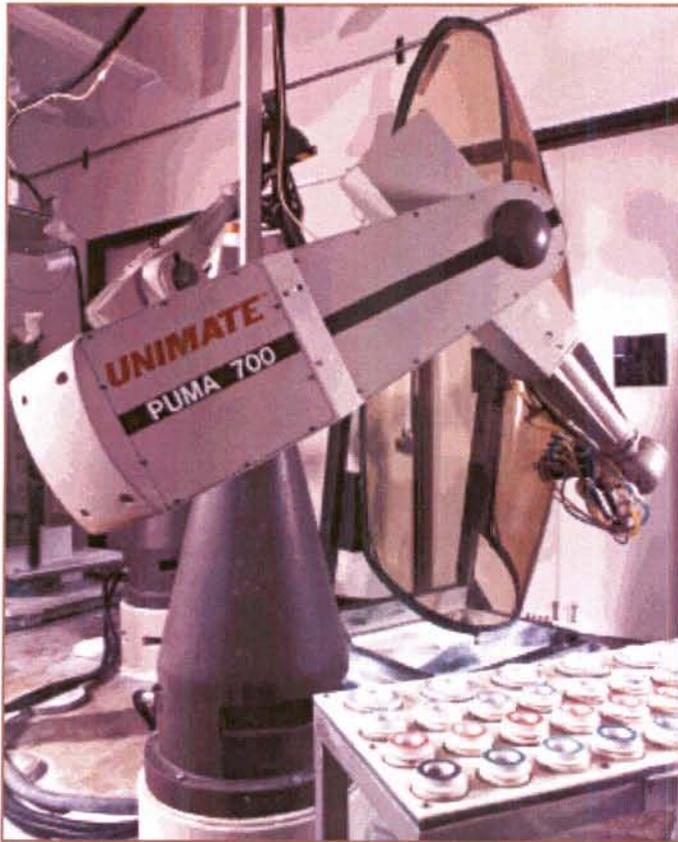


Autoclave for manufacturing composites in ISROMS Facility.



Our diversified capabilities are demonstrated in the Integrated Structural Repair, Overhaul, and Maintenance Systems (ISROMS) facility. It is a 289,000 square foot building dedicated to manufacture and repair of structural sheet metal, composite aircraft components, and engines. All processes required for these functions are in-house and under the same roof. This eliminates the need for routing work to other areas, which saves money and greatly reduces flow days. We have three autoclaves which can produce temperatures of up to 650 degrees F at 350 psi. Our Automated Ultrascanning System (AUSS) is used to test composite and metal bonded parts. The Laser Automated Decoating System (LADS) is the only device of its kind, deployed or under development, that strips or removes paint and other coatings from aircraft components. It allows us to efficiently and effectively remove coating from aircraft composite surfaces with no damage to underlying materials. Our process can be successfully applied to all composites such as thermoplastic, and metallic substrates, etc.

Ultrasonic Scanner.

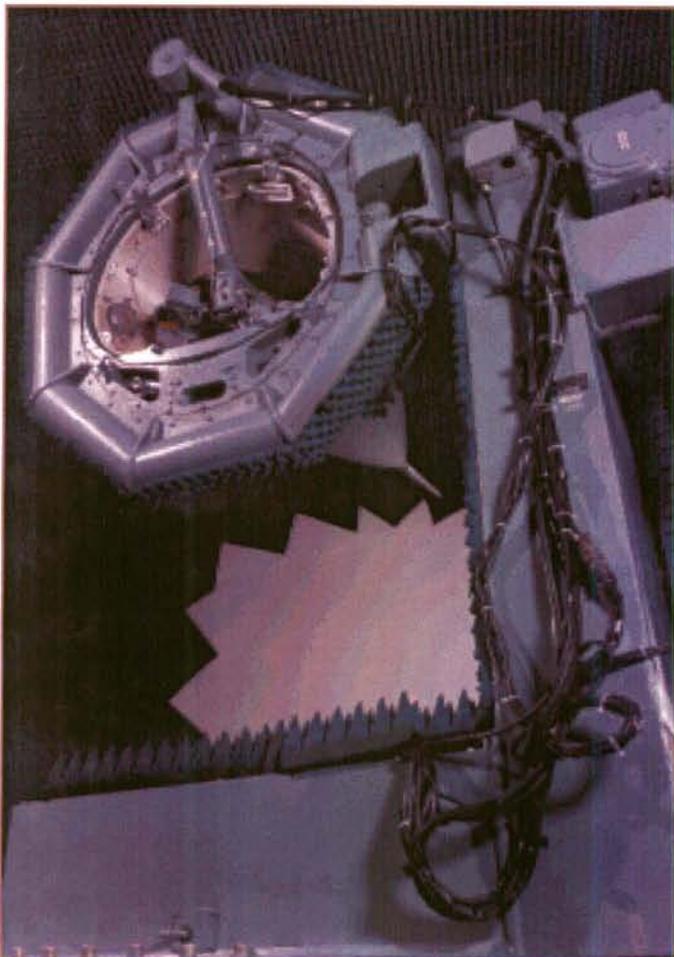


Robotic Canopy Polisher.

The Robotic Canopy Polisher is the only one of its kind in the world. Its precision contour work is highly efficient and much more consistent when compared to traditional hand polishing methods. The system detects flaws using vision inspection and performs the repair procedure.

The F-16 Hydrazine Emergency Power Unit Test Facility is the DoD's only source of repair, overhaul, and test capability for the F-16 Hydrazine Emergency Power Unit (EPU). This facility is designed to duplicate aircraft in-flight emergencies for major systems failures of the EPU. The EPU test firing was built specifically for the Air Force. It requires strict handling procedures to comply with EPA, Occupational Safety and Health Administration (OSHA), and Air Force Occupational Safety and Health standards (AFOSH). Hydrazine handling and disposal require chemical laboratory support and unique equipment of which the Air Force is the sole owner.

The Compact Range Facility (CRF) is one of a kind in DoD and is the only CRF available for testing the F-16 AN/APG-66 and AN/APG-68 Fire Control Radar Antennas and the F-16 Nose Radome. Used for F-16 models A, B, C, and D and two Nose Radome Electrical Test systems, it tests electrical mapping (including image sidelobe levels), power transmission deficiencies, and beam deflections. The facility is designed and constructed to create an electromagnetic environment to allow pattern testing gain documentation and boresighting. Its design provides significant cost and time savings, improved security, and eliminates surveillance requirements and adverse environmental factors. The facility is environmentally controlled and mounted on a spring supported concrete floating foundation to preclude movement.



Compact F-16 radome test range



The Robotic Bead Blast, which was developed at Ogden ALC, Improves the environment and improves flow time.

Our Aircraft Robotics Bead Blast is the DoD's only robotics bead blast aircraft paint stripping cell in operation. The cell consists of two custom designed nine axis robots that strip fighter aircraft using a plastic media blast (PMB) process for paint removal. This improves worker environment, and reduces man-hours and flow time for stripping fighter aircraft. Our facilities are located in close proximity to the runway minimizing towing distances, and has an aircraft engine runup area.

The Compass Transmitter and Magnetic Azimuth Detector Test Facility is one of a kind in the DoD. The building, tools, end items, and component parts are non-magnetic/non-ferrous and the facility is aligned directly along the earth's true magnetic north-south meridian. Before construction of this facility, an in-depth geographic study was accomplished to determine the most suitable and magnetically stable location at Ogden ALC. The repair and testing of the Compass Transmitter and Magnetic Azimuth Detector (MAD) requires a facility with state-of-the-art technology to ensure the highest reliability and maintainability are achieved in providing DoD support. These extremely sensitive items require an environment as free from magnetic interference as possible to achieve the level of accuracy needed to obtain calibration requirements.



Our Compass Transmitter and Magnetic Azimuth Detector Test Facility is one of a kind in DoD.

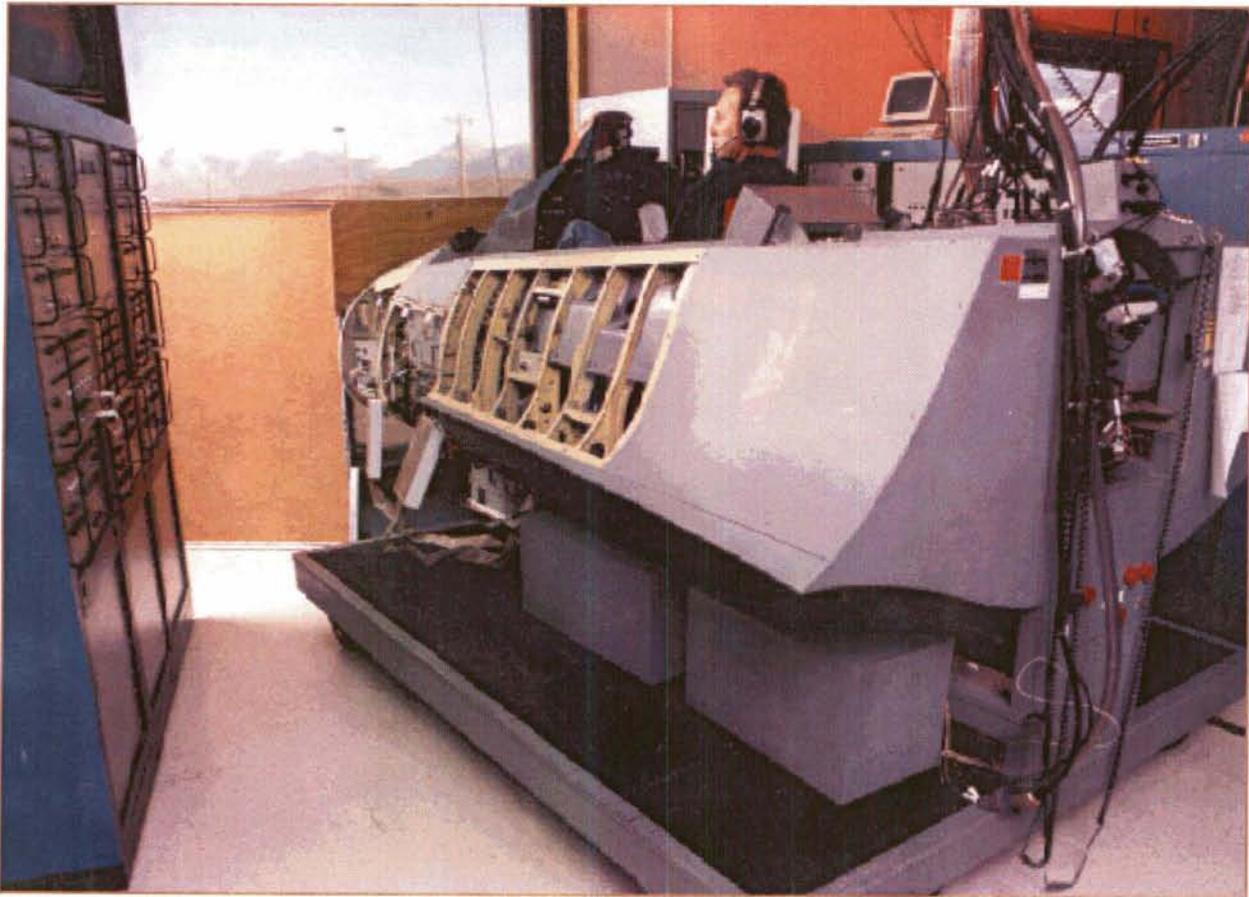
**OTHER HIGH
VALUE
CAPABILITIES**

Our Computed Tomography facilities provide the only explosives sited nondestructive inspection of large Peacekeeper rocket motors.



Our Computed Tomography (CT) Facilities have the only DoD explosives sited production capability to provide nondestructive inspection of large and small items, varying from small tactical missile components to Peacekeeper ICBM motors. In addition to the assigned mission, our CT facilities are capable of performing computed tomography testing for any size components. Our two CT inspection facilities provide the largest CT capability in existence.

The high energy radiographic facility was specifically designed large enough and with high enough energy levels to provide nondestructive surveillance inspection for very large as well as small components. Specifically designed to accommodate the Minuteman and Peacekeeper solid rocket motor requirements, the facility has been sited for 1,000,000 pounds of 1.3 class explosives and 100,000 pounds of 1.1 class explosives.



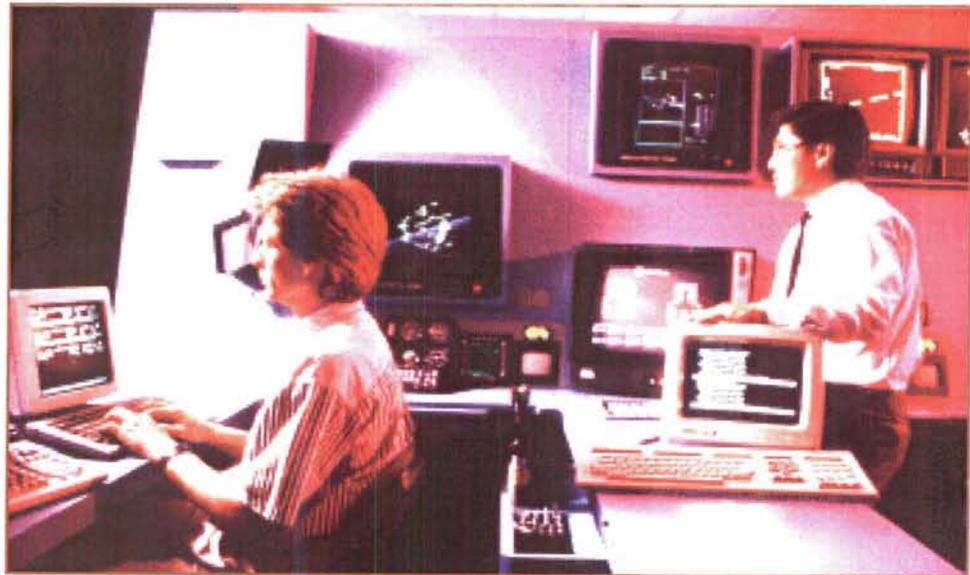
Our AISF facility is the only one that allows unobstructed radar view of incoming and outgoing aircraft to test OFP development in the radar environment.

The Avionics Integration Support Facility (AISF) is a unique/ peculiar testing facility both in design and location. It comprises 144,000 square feet and is essentially a secure vault, radio frequency bonded and totally fenced, requiring security code access. This facility was specifically designed to provide large scale classified testing, from confidential to top secret, and operational flight program (OFP) support; including computer, simulator, and test fixture support. Located within the facility are engineering laboratories and office space for the development, test, and integration of software and hardware for the F-4, F-16 and Air Force Mission Support Systems.

The facility is positioned to allow unobstructed radar view of all incoming and outgoing aircraft from Ogden ALC. It houses the seven-window integrated test stand lab which was built to allow active radar use and acquiring live targets (illuminating aircraft). This capability of tracking actual airborne targets provides a myriad of opportunities to test the development efforts in the OFP radar environment. Latest OFP innovations in the radar software can simply be loaded on existing hot mock-ups and tested within the confines of the ASIF. Advantages to this approach include decreased actual weapon system downtime, economical testing and rapid turnaround time for test results. Ogden ALC's depot maintenance software charter simply could not be performed without a facility like the ASIF.

SOFTWARE

Our software engineers provide ICBM simulation to integrate new operational software and hardware into the ICBM weapon systems.



Engineers developing Operational Flight Program software for the F-16 Weapon System

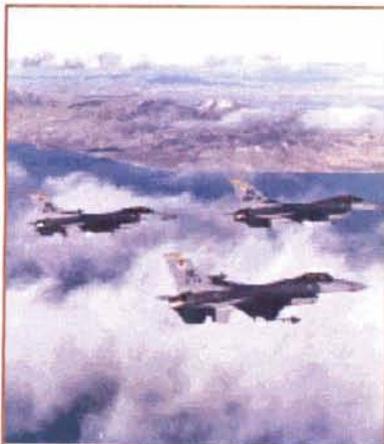


Peacekeeper Automated Test Equipment is driven by software.

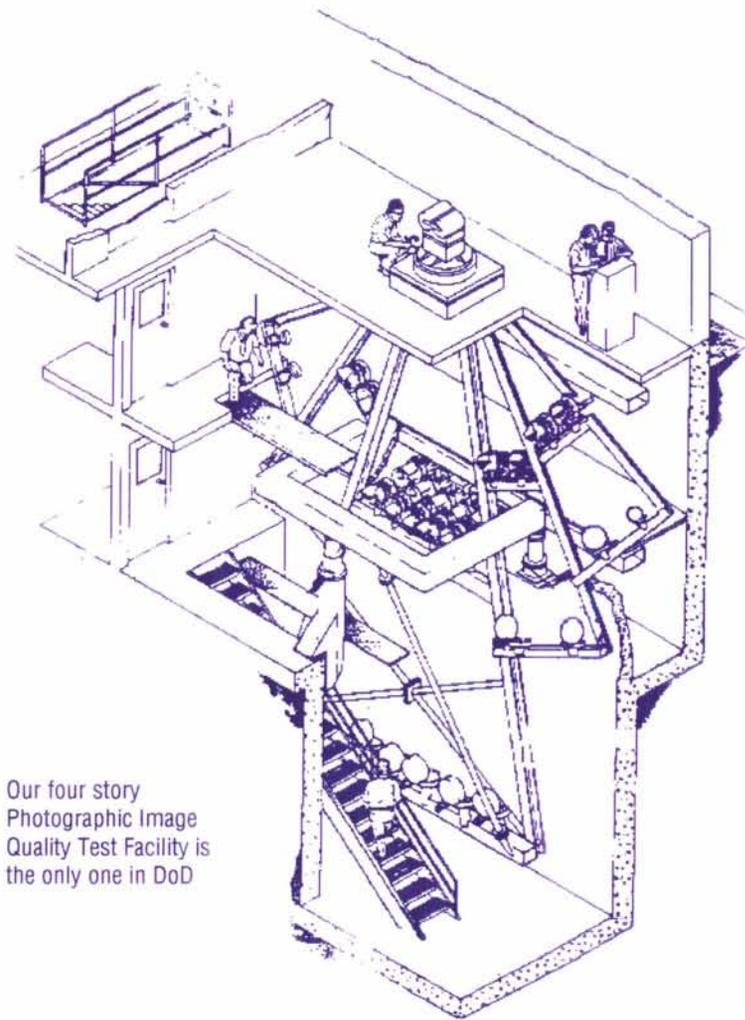
Ogden ALC's software development maintenance function provides engineering design and development of Operational Flight Programs (OFPs) for F-4 Wild Weasel, RF-4s, F-16 production blocks 10 through 40, and the Mission Planning systems software for the F-4 and F-16 weapon systems. All our software programs are designed or maintained under strict process control using Software Engineering Institute (SEI) Capability Maturity Model level 3 criteria. Our software engineers and technicians provide software engineering and maintenance of key ICBM test and simulation systems and are core members of the ICBM Strategic Missile Integration Complex team. The team provides ICBM simulation to integrate new operational software and hardware into the ICBM weapon systems as well as trouble shooting ICBM assets which cannot be repaired outside of an integrated simulation environment.

Our electronic engineers and technicians provide a complete range of services covering both control and support software for automatic test systems for testing line replaceable units and shop replaceable units from aircraft, small missiles, and photographic/reconnaissance systems. We provide technical data packages including test program sets, technical orders, drawings and maintenance manuals. We rehost test programs to new test systems when the original becomes obsolete. We support the F-16, F-4, B-1, and C-141 as well as munitions systems such as the Maverick Missile, the Advanced Cruise Missile, and the GBU-15 Guided Bomb Unit.

Software Technology Support Center (STSC) has been designated as the focal point for Air Force and Department of Defense for software technology. The mission of the STSC is to enable software organizations to identify, evaluate, and adopt technologies that improve the quality of their software products, their efficiency in producing software, and their ability to accurately predict the cost and schedule of software delivery. The prime benefits received include increased awareness and understanding of proven software technologies, intelligent evaluation, selection, and use of software technologies, and increased quality and efficiency in developing and supporting software intensive systems.



Ogden develops and maintains software for the F-16 "Electric Jet"



Our four story
Photographic Image
Quality Test Facility is
the only one in DoD

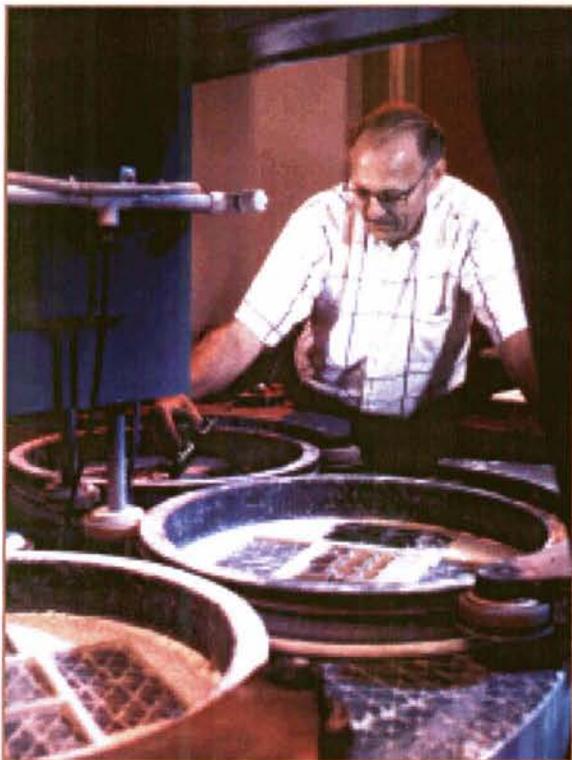
The Photographic Image Quality Test Facility (PIQTF) and the Cartographic Camera Calibration Facility (CCCF) are the only ones in DoD. The Photographic Image Quality Test Facility is a four-story facility specifically designed for critical testing of aerial/space sensors, and determining the operational imagery quality to DoD standards. There is only one other cartographic camera calibration facility in government control in the United States. It is in Reston, Virginia, at the U.S. Geological Service. They only test and perform limited repair of mapping cameras. The customer has to perform their own repairs then send the camera to the U.S. Geological Service for testing. They do not offer the full range of depot overhaul and testing provided by Ogden ALC.

The Airborne Reconnaissance Overhaul capability at Hill Air Force Base is the only one of its kind in the Department of Defense providing the full range of maintenance capabilities. As the Air Force Technical Repair Center for depot repair of airborne reconnaissance equipment, both photographic and electro-optical sensors, our maintenance and engineering personnel are uniquely qualified.

The Imaging System Overhaul capability at Hill Air Force Base is the only one of its kind in the Department of Defense providing the full range of maintenance

capabilities. As the Air Force Technical Repair Center for depot repair of imaging systems, we support a variety of film-based cameras, printers, processors, light tables, stereoscopes, electro-optic sensors, infrared sensors, mapping and hand-held cameras, optical lenses and elements.

The Optical Refurbishment Overhaul capability at Hill Air Force Base is the only one of its kind in the Department of Defense having the ability to work lenses up to 30 inches and providing a full range of maintenance capabilities, and single source of repair. We provide complete overhaul and test operations including the physical, photonics, electronics, circuit boards, wiring harnesses, and testing operations not found at any other facility. Ogden Air Logistics Center photonics opticians and technicians skillfully refurbish concave, convex, and flat optical elements consisting of metal, glass and plastic materials.





Tenants

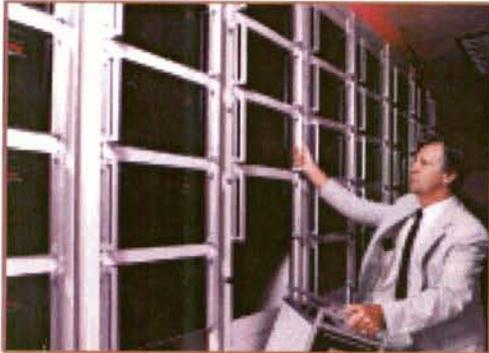
The 388th and 419th placed 1st and 3rd respectively in the 1994 Gunsmoke competition.



Hill AFB hosts the premier 388th Fighter Wing and the 419th Fighter Wing (Reserve) under the direction of the Air Combat Command and the Air Force Reserve. These major tenant organizations benefit from the geographical location, close proximity to a major commercial airport, the support infrastructure at Hill AFB, adjacent training facilities, and open airspace. The UTTR, and surrounding open airspace provides the full spectrum of possible training scenarios that may be incurred throughout the world from remote desert to rugged mountains and expansive lakes. The high degree of integration between these two fighter wings, the F-16 program management activity, and supporting depot repair functions is an immense advantage to the worldwide support of the Air Force F-16 fleet. Feedback between the maintenance wings' personnel, F-16 depot maintenance, and F-16 product engineering brings aircraft problems to the prompt attention of responsible engineers for resolution.



Defense Information Services Agency, Defense Megacenters Ogden (DMC Ogden) - Hill AFB has one of the largest and most extensive computer infrastructures available in DoD. Recently rated as **Number Two** out of the sixteen megacenters in the United States, and has the capability to rapidly expand the services and technology of our information systems to meet any organizational requirement.



The Hill AFB infrastructure supporting the megacenters is state of the art with a new facility containing 143,000 square feet of floor space. Attributes include:

- Secure Compartmentalized Information Facility for processing classified information
- Redundant fibre optic communications network
- Multimedia communications
- Data and voice imaging
- Fully reliable electrical backup Processing Center serving 26 Air Force bases/units in eight western states

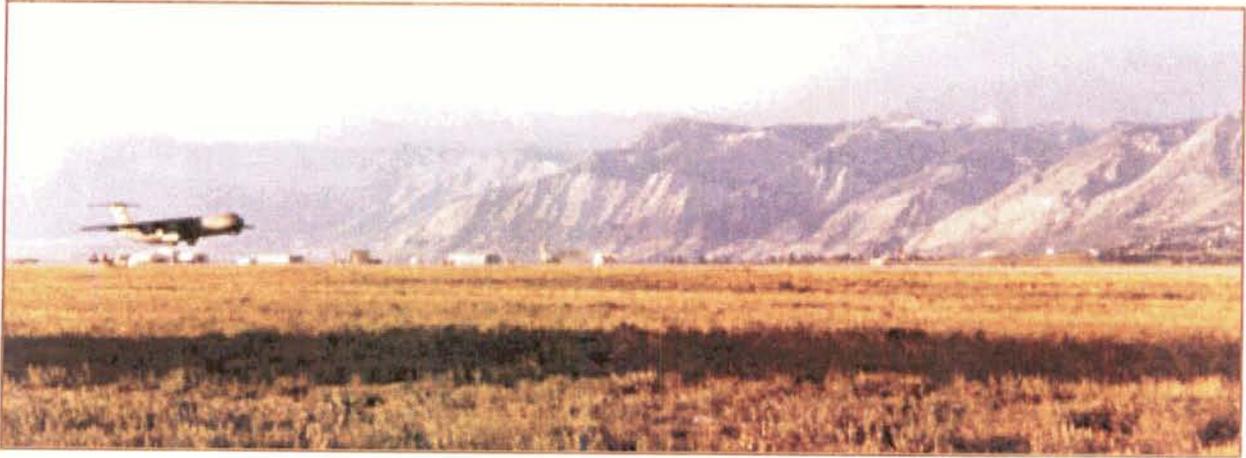


DMC Ogden is a leader in Electronic Communications/Electronic Data Interchange and High Speed Asynchronous Transmission Mode technology. Our facility is capable of processing over 835 Million instructions Per Second (MIPS), 1555 gigabytes of memory, over 13 terabytes of storage space, and most importantly, has a highly trained work force performing as a full service megacenters.



Our Regional Processing Center was recently rated as number two out of the sixteen Megacenters in the United States.

Military Readiness, Mobilization/Deployment



*Worldwide deployment:
Active duty and Reserve
training prepare us to
mobilize and deploy
personnel and
equipment to any
location in the world.*



Our readiness staging area
can handle large or small
equipment and keep it ready
for worldwide deployment.

Hill AFB's capacity to project, generate, and sustain support for contingencies and mobilization for Reserve, as well as active duty units, meets or exceeds military organizational requirements. The Installation Mobility Office presently supports 4,800 military personnel in our active duty organizations and tenant units, as well as over 1,800 Reserve and National Guard personnel. Our Mobility Processing Unit (MPU) has demonstrated the capacity to process one person per minute, 24 hours per day. For example, during the Desert Shield buildup our MPU processed an unprecedented 1,568 active duty, Reserve, and other Defense Department personnel in one day.

BASE/DEPOT ATTRIBUTES



Navy F/A-18 Hornet readies for departure after extensive depot maintenance.

INTERSERVICING CONDITION AND CAPACITY

Ogden ALC has the capacity and capability of becoming the single DoD source of repair for all Air Force and other services fighter aircraft and related commodities workloads. We have been very successful with our aircraft interservice efforts and are prepared to accept new workloads from all services. Historically, we have been a premier fighter depot. Since June of 1993, our depot maintenance team has been performing Standard Depot Level Maintenance (SDLM) on Navy C-130 cargo aircraft, demonstrating our flexibility in depot level maintenance. Currently we have 11 C-130 docks with an expansion capacity to 17. If our facility were to be reconfigured to accept only fighter aircraft, our total dock capacity would increase to 133. Our landing gear team is repairing Navy C-130 landing gear. We contracted for, and successfully performed work on 36 Navy F/A-18 in the Modification, Corrosion, and Paint Program (MCAPP). This was the only major contract ever awarded through public/private competition to a public activity.

Other interservice efforts at Ogden ALC are as follows:

The SBICBM Directorate has the overall refurbishment and logistic support responsibility for booster motors, support equipment, and aging surveillance testing for the Reentry Systems Launch Program (RSLP). This is an Army program which serves all DoD agencies, using excess DoD assets.

Currently, our Rapid Execution and Combat Targeting (REACT) test program is underway using the SMIC facilities. Our close proximity to the Thiokol Solid Propellant Motor Production facility reduces transportation costs and our interservice workloads include some Navy rocket motor activities.



C-5 galaxy being loaded near runway at Dugway.



UTTR hosts many joint service exercises and blends modern developmental test capabilities with a realistic environment. Much of the training for the Desert Shield/Desert Storm operations was performed at UTTR. Our strong partnership with the Army's Dugway Proving Grounds marks UTTR as a valuable DoD resource. Dugway's Michael Army Airfield, with its 13,100 foot runway, is a major support asset for multi-service developmental and operational tests.

The Thermal Treatment Unit at Oasis is the only environmentally permitted large ICBM motors and propellant disposal site in the United States. We have the capacity to dispose of Minuteman and

Peacekeeper solid rocket motor propellant and to increase activity to handle obsolete motors from other services. Environmental approval is pending for the destruction of the Navy Poseidon C-3 rocket motors.

Our tactical missile all-up-round maintenance facility repairs and overhauls Air Force and Navy Maverick Missiles, electro optic, laser, and infrared guidance control sections. They also repair and overhaul Field Level Analog/Digital Missile Test Sets.

Our Technology and Industrial Support Directorate regularly provides support to the Army and Navy with our computed tomography and high energy X-ray facilities, Science and Engineering Laboratory, battery shop, and Precision Measurement Equipment Laboratory. With many of these workloads we are the only source of test and repair in the DoD.

Facilities at Hill AFB are in excellent condition. A large number of our buildings, such as overhaul and testing facilities, and military dormitories, have been constructed within the last five years. Many other structures such as the base hospital were built within the past 20 years. Nearly all other buildings have been remodeled to one extent or another within the past five years and present a modern quality atmosphere for our personnel. An additional 2 million square feet of space can be made available to the depot maintenance to accommodate any new workloads.

Our capacity to provide water, sewage treatment, electrical distribution, and landfill facilities was satisfactory when the base population was 22,000 in the 1980's. Our current population is approximately 16,000 and these systems are functioning with excess capacity available to support any new workloads. Our water storage tank has a two million gallon capacity which is far from being fully utilized. Our sanitary sewer system from the base goes into the North Davis Sewer System. Existing electrical distribution substations on base were originally oversized, and thus still provide adequate capacity to take on any proposed load. Solid waste service for the base is provided at the Davis County Burn Plant located just outside of the base.

An additional 2 million square feet of space can be made available to depot maintenance to accommodate any new workloads.

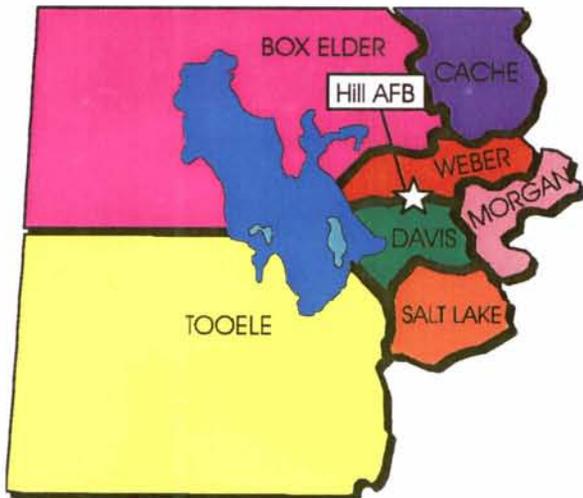




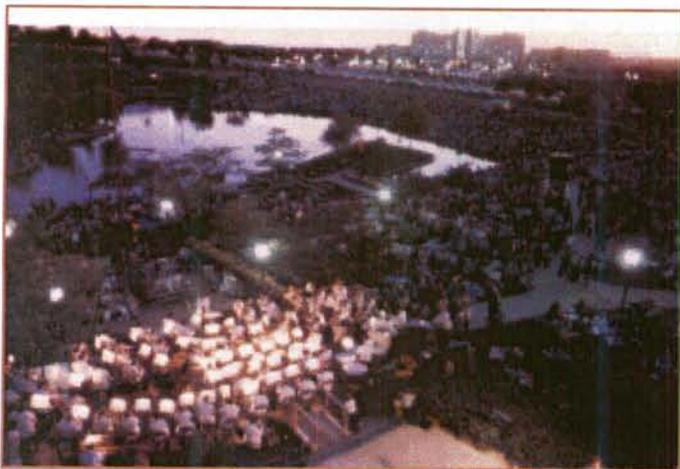
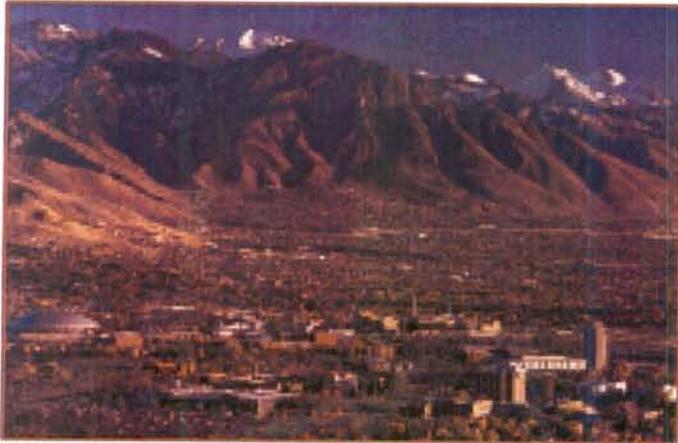
Salt Lake City, Utah

**ECONOMIC
IMPACT/
COMMUNITY
INFRASTRUCTURE**

Defense spending in Utah has been falling more rapidly than elsewhere in the nation. Utah's share of national defense spending has fallen from \$9,282 per million dollars of national expenditures in 1986 to \$5,138 in 1993. Nationally, defense spending has declined in absolute terms in two of the last eight years. In contrast, defense spending in Utah has declined in six of the last eight years. This disproportionate share of defense spending would prolong an economic recovery in the event of closure or significant realignment of workloads from Hill AFB or Ogden ALC.



Economic impact models estimate that Hill supports more than 12,800 secondary jobs in the surrounding communities. Over 15,000 military and civilian personnel earn an annual payroll of approximately \$510 million. Total new procurement each year amounts to over \$1 billion, with nearly \$155 million contracted to Utah companies, many of them small or disadvantaged firms. Annual state and federal taxes and deductions paid by Hill AFB's workforce total some \$100 million. Annual charitable contributions by base employees have consistently exceeded \$500 thousand dollars. Approximately \$300 thousand of this money stays in Utah each year. Added to the economic impact of the current workforce are the many military and civilian retirees living nearby. There are approximately 24,000 civilians; 10,000 military retirees; and 6,700 survivors, totaling more than 41,000 in the Hill area. Their annual retirement payments total more than \$500 million.



Utah offers a well educated and dedicated workforce. Communities surrounding Hill AFB are extremely supportive of forces, mission, and personnel. This stems from the fact that so many local residents are either employed by Hill AFB, dependent on supplying Hill AFB and Hill AFB employees, or are active duty or retired military personnel. Facilities, such as hospitals, utilities, etc., are modern and in plentiful supply with excess capacities. Further logistical support comes from Hill AFB being located at a transportation hub for rail, air, and highway transportation.

The 1993 edition of "Places Rated Almanac, a guide to finding the best places to live in North America", ranks the Salt Lake City-Ogden area eighth best out of 343 areas in the United States and Canada. Our close proximity to universities and schools of higher education along the Wasatch Mountain Range and in the Salt Lake Valley is advantageous to personnel desiring to complete or upgrade their education. Universities include the University of Utah, Weber State University, Utah State University, and Brigham Young University. Other schools in the area include Salt Lake Community College, Westminster College of Salt Lake City, Columbia College, University of Phoenix, Embry-Riddle Aeronautical University (located at Hill AFB), and Park College from Parkville, Missouri (located at Hill AFB). There are also two vocational schools within 10 to 30 minutes driving distance from Hill AFB, the Applied Technology Center in Ogden and the Davis Applied Technology Center located in Kaysville. There has also been tentative approval to build a junior college in Davis County within easy commuting distance from Hill AFB.

There are several excellent school districts in Davis, Weber, and Morgan Counties that are only a 10 to 30 minute drive from the base. The school districts serve elementary, junior high, and high school students. Some of the highlights of Utah Public Schools, as stated by the Utah State Board of Education, include ranking second nationally for high school completion, SAT scores that are considerably above the national average, and ranking first in the nation for advanced placement testing.

First : Nestled between the Great Salt lake and the beautiful Wasatch Mountains is the city of Ogden.
Second :The University of Utah campus is situated on the foothills of the Wasatch Mountains in Salt lake City.
Third: Cougar stadium on the campus of Brigham Young University; Home of football power BYU Cougars.
Bottom: Utah Symphony summer concert on the campus at Weber State University, Ogden.

LOCATION/ INFRASTRUCTURE



Hill AFB Flightline.

Because of our location, we have the ability to accommodate contingency, mobility, and future force operations at virtually any time during the year.

the runway at Hill is one of the busiest in the Air Force for a single runway. We have a total of 4,710 developed acres and real estate resources which have the potential to facilitate future development totaling approximately 10,000 unrestricted acres.

We have a large military and civilian personnel population and offer a strong military training environment for both active duty and Reserve personnel. Because of our location, we possess the ability to accommodate contingency, mobility, and future force operations at virtually any time during the year. Our ability to accommodate contingency and mobility situations was dramatically demonstrated during Desert Storm. Much of the training for this highly successful military operation was conducted at the UTTR, and the logistical and overhaul/repair support provided by Hill AFB was outstanding, often providing needed material and repairs in less than half the time requested.



During Desert Storm, our ability to accommodate contingency and mobility situations was dramatically demonstrated.

A multitude of recreation services cater to our military and civilian personnel. Some of our services include, golfing, hunting, tennis, fishing, horseback riding and much more.

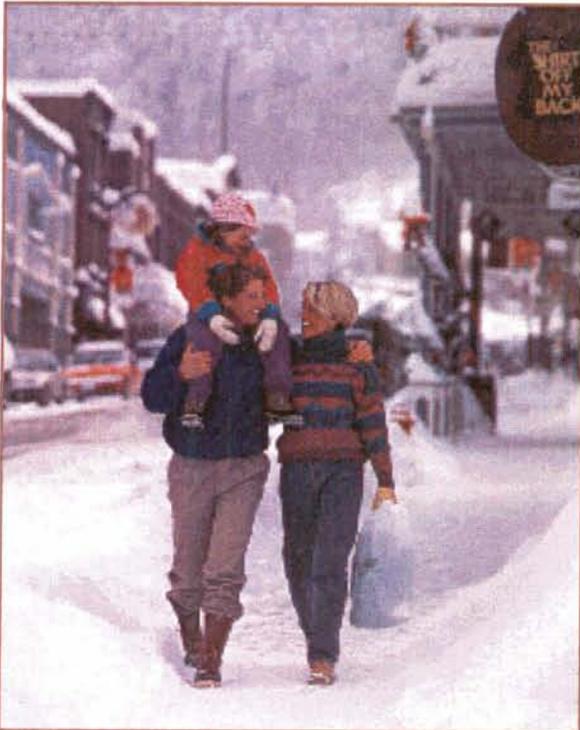


Tenant units located on Hill AFB benefit by our geographical location, support infrastructure, and adjacent training facilities. **We host more than 50 tenant organizations, directed by commands other than the Air Force Materiel Command (AFMC).** A few of the largest tenants are the 388th Fighter Wing, 419th Fighter Wing (Reserve), the Defense Information Systems Agency (Regional Processing Center), the 84th Radar Evaluation Squadron, the 545th Test Group, and the 729th Air Control Squadron.

Meeting the numerous needs of Hill AFB organizations and people is the mission of the 75th Air Base Wing. The 75th ABW provides the equivalent of municipal services and is responsible for hiring, pay, security, fire protection, and transportation; as well as morale, welfare, and recreation activities. Our base services division contributes to our military readiness and improved productivity through programs supporting fitness, esprit de corps, and quality of life for both our military and civilian people.

ENCROACHMENT

Hill AFB was rated as the best of the five bases hosting air logistics centers in 1993. It was the only base that was rated "green" indicating "off-base development generally compatible with accident potential zones". **Since 1993 the State of Utah has invested \$10 million to protect our airspace around the base.** This ensures protected, unencroached corridors to the Great Salt Lake and the ranges in the western desert which are virtually uninhabited and controlled by DoD. Local communities have done everything in their power to make development compatible with the activities at the base. The population density in the critical areas surrounding the base has been carefully watched and limited to minimize encroachment.



Park City: Skiing the heart of the Rockies. Eight major ski resorts are within a one hour drive from Hill AFB, which gives the opportunity to ski "the best snow on earth".

Enlisted personnel dormitories are modern facilities with all the latest conveniences and comforts.



CUSTOMER INTERFACE

Our infrastructure is well organized, our facilities are very functional and contribute to the effectiveness and efficiency of the mission of all organizations we support. **We are flexible and highly capable of relocating activities and organizations, and of readjusting workloads as required in the interest of accommodating new missions and increasing organization performance.** Our support organizations provide the equipment and expertise needed. We work in a secure and wholesome environment conducive to satisfying the mission of the DoD while at the same time providing world-class service to our customers.

A WORD FROM OUR CUSTOMERS...

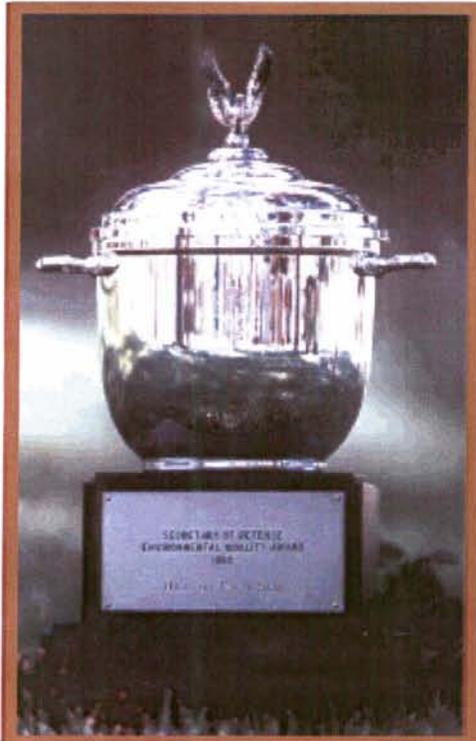
..."Fully expecting an interruption of my communications service due to recent move to our new facility, I was surprised to find out the move had already taken place..."

..."We appreciate your efforts in beta testing our new network security software which should enhance security procedures throughout the Air Force"...

Air Force Cryptological Center

..."From the onset of the acceptance inspection, it was apparent that... the overall product was vastly superior to that we have received in recent years from other USAF and contractor operations. Every area we checked showed a degree of expertise, pride and almost artistic craftsmanship plainly missing from the efforts and results of other depots"...

Commander, 913 CAMS, USAFR



Selected as "Best Environmental Managers" in DoD (1992)

ENVIRONMENTAL MANAGEMENT

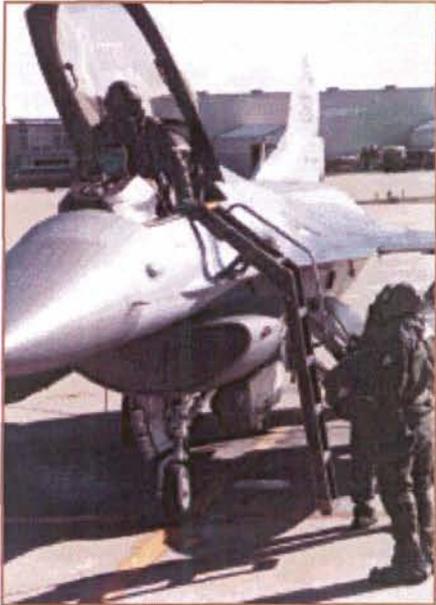
Hill's environmental management efforts serve as a model for the Air Force and other federal installations. Our environmental programs are diverse, unique, and aggressive. Our environmental capacity and potential for expansion are superb. Our outstanding environmental record and the healthy clean environment in which we live and work enables us to conduct our mission while providing adequate room for additional units which will not exceed our environmental limits. There are no threatened or endangered species located on the 6,698 acres that comprise Hill AFB.

Hill AFB embodies all the ingredients needed to enhance and protect the environment. We enjoy high levels of command support, environmental awareness at all working levels, and rapport with the local communities and regulatory agencies. Hill AFB practices solid, consistent application of Total Quality Management to meet the objectives and intent of environmental protection laws and regulations.

We are proud of our environmental programs which are recognized at the highest levels. We have received national recognition, which is demonstrated by five significant awards presented to Hill AFB in 1992 and 1993.

- Secretary of Defense Environmental Quality Award (Best in Defense Department) 1992
- Gen. Thomas D. White Environmental Quality Award (Best in Air Force) 1991-1992
- Gen. Thomas D. White Pollution Prevention and Recycling Award (Best in Air Force)
- President's Council on Management Improvement Award
- EPA Stratospheric Ozone Protection Award

A National Resource



More than just another military installation, Hill AFB and Ogden ALC is a national resource that supports the operational needs of over 50 tenant organizations. We host two of the Air Forces's premier fighter wings, one of the DoD's computer megacenters, and control the nation's largest overland test and training ranges. Closing Ogden ALC discards the efficiencies, recognized quality, internationally competitive costs, and overall best value processes achieved through years of continuous process improvements and wise decision making.

Ogden ALC possesses many features and facilities of high military value that are truly unique to the United States Air Force and the DoD. Our SBICBM test, maintenance, disposal, and storage facilities are not duplicated anywhere and are operated and maintained by personnel whose skills and experience are unique. The facilities must be duplicated, tested, and made operational prior to relocating them. The cost to relocate them approaches \$1 billion. The SBICBM system program office has improved operations so efficiently over the past few years that millions of dollars have been returned as cost savings to its customers. This is a direct savings to the taxpayers.

Ogden ALC provides worldwide logistics management and depot maintenance for the F-16 Fighting Falcon, the world's largest fleet of fighter aircraft. More than 21 countries employ over 3,000 F-16s. They enjoy an outstanding relationship with Ogden ALC.

We are the leading depot maintenance activity for conventional munitions, and small missiles. The Air Force has designated Ogden ALC as the ammunition Control Point for the Air Force. Our maintenance, testing, and storage capabilities can handle 20,000 munitions shipments annually and we control an \$11 billion inventory of munitions for over 400 bases.

The landing gear facility is the world's largest overhaul and repair center for aircraft landing gear, brakes, struts, and wheels. It is modern, automated, and processes are optimized for efficient production. We handle 70 percent of the landing gear in the DoD and can handle all of the DoD's repair needs.

Our capacity to project, generate, and sustain support for contingencies and mobilization for Reserve, as well as active duty units, meets or exceeds military organizational requirements. Our performance during the Desert Shield build-up speaks for itself. The Mobility Processing Unit processed an unprecedented 1568 Active Duty, Reserve, and other DoD personnel during a one day period.

While we understand the need to downsize and close installations, we believe closing Ogden ALC will be costly to the life cycle of weapon systems we support, and directly impact our armed force's ability to meet mission requirements. All estimates indicate that the cost to close Hill AFB and Ogden ALC will approach \$2 billion. This is an expense that will not be recouped in our lifetime.

Top: First stage Minuteman rocket motor being disassembled by ordnance equipment mechanic.

Second: Flight crew helps F-16 pilot get ready for flight.

Third: Final preparation for propagation test at the Utah Test and Training Range (UTTR).

Fourth: Repairing a C-5 main gear

Bottom: C-130 in repair hangar.

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**BASE CLOSURE
AND
REALIGNMENT COMMISSION
4-5 JUNE 1995**

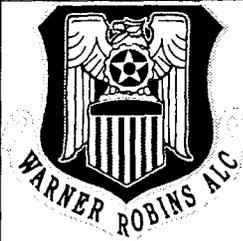
MS REESE

Map of Running Trail

Robins AFB



Entire Course
is 5K or
3 miles.



PROGRAM OF EVENTS
FOR THE VISIT
BY
BASE CLOSURE AND REALIGNMENT COMMITTEE

04-05 JUNE 1995

TIME	DURATION	ACTIVITY
04 June 1995		
1500	0010	Ms Ann Reese and Ms Marilyn Wasleski arrive Robins Billeting via rental car Greeted by: Major Jose Aragon, Chief, Commander's Action Group
1510	0010	Ms Reese is transported via GOV to WR-ALC Headquarters, Bldg 215 Greeted by: Mr George Falldine, Deputy Director, Comptroller Directorate
1520		Meet with George Falldine, Jim Potter and other selected personnel
1600	0010	Ms Wasleski is transported via GOV to DLA Headquarters Escort: Mr Pete McKinney, Deputy Director, Defense Logistics Agency
1610	0200	Ms Wasleski tours DLA Facilities
1720	0010	Ms Reese is transported via GOV to Billeting
1730		Free time in quarters
1800	0010	Ms Wasleski is transported via GOV to Billeting
1810		Free time in quarters
2100	0020	White surrey arrives Billeting, Bldg 557 to transport Ms Reese and Ms Wasleski to Macon Airport Escorted by: Captain Al Garner, Commander's Action Group
2147		Commissioners Cornella & Kling arrive Macon Airport
2200	0020	Transportation via white surrey to Robins Billeting
2220		Free time in quarters
05 June 1995		
Please place your luggage in the living room area of your suite and the rental car keys on the desk. Your car will be moved to the Museum prior to your departure		

UNIFORM: Short Sleeve Shirt/Open Collar

TIME	DURATION	ACTIVITY
0640	0005	White surrey proceeds to Bldg 552 to pickup visitors White surrey proceeds to Bldg 557 to pickup visitors
0645	0015	Continental Breakfast at Conference Center
0700	0030	BRAC Briefing Briefer: Mr George Falldine, Deputy Director, Comptroller Directorate
0730	0010	Break
0740	0005	Transportation via white surrey to F-15 PDM Area, Bldg 125, Dock 2, west end Colonel Rutley briefs enroute (6-2901)
0745	0020	Tour F-15 PDM Area to include Crash Damage Host: Mr Don Jarzynka, Director, F-15 Production (6-3651/952-1537) - F-15 Story Boards - F-15 Goals - Acft Completions - PDM Trend - PDM Bar Charts - Quality Chart - MSIP Trend - MSIP Bar Chart - Wiring Analyzer - PDMSS - Crash Damage Acft Reposition white surrey to east side, Bldg 125, Dock 4
0805	0015	Driveby tour via white surrey of JSTARS & B-1 Beddown enroute to Combat Talon Hangar, Bldg 91, west side General Hallin, Colonel Duntz & Mr Martin brief enroute - Mobility Processing Center - JSTARS Trainer - Acft on Ramp - Point out new hangars - Point out plan to park B-1 (Christmas Tree) - Tour JSTARS Construction - Finish with B-1 on way back - SOF Mission
0820	0015	Tour Combat Talon Hangar Host: Colonel Ben McCarter, Director, C-130 System Program Office (6-2322/952-5464)

UNIFORM: Short Sleeve Shirt/Open Collar

TIME	DURATION	ACTIVITY
		<ul style="list-style-type: none"> - C130 Missions/Goals - Customers/Commands - SPM Office Functions/Production Facilities - Current Major Workloads being Performed <ul style="list-style-type: none"> - PDM - UDLM - Combat Shadow - Center Wing - SOF Center Wing - AC-130 Secondary Liquid Oxygen Install - MC-130H Stand Alone GPS Install - Community Partnership (fuel baffle assy) - BOSS (paint stripping)
0835	0005	Transportation via white surrey to C-141 Center Wing Box, Bldg 83, east side; view Bluesuiter Maintenance enroute Mr Cronan briefs enroute <ul style="list-style-type: none"> - Bluesuiter Maintenance - C-141 Mission enroute
0840	0020	Tour C-141 Center Wing Box Host: Mr Mike Cronan, Deputy Director, C-141 Management Directorate (6-6491/952-4467) <ul style="list-style-type: none"> -CSAF Award - Permanent CWB Display - Story Board - Climb up stand to view acft - Aircraft Capacity Chart (CC briefs)
0900	0005	Transportation via white surrey to DV Lounge, Bldg 110, north side
0905	0015	Break in DV Lounge
0920	0005	Transportation via white surrey to Technology & Industrial Support, Bldg 140, south side Mr Lewis briefs enroute <ul style="list-style-type: none"> - TI Mission enroute
0925	0030	Tour Shops in Bldg 140 Host: Mr Clint Lewis, Director, Technology & Industrial Support (6-3703/951-2044) <ul style="list-style-type: none"> - Map of TI facilities - Plating Story Board - Machining/JSTARS Trainer Support - Sheet Metal Repair/F-15 Wing - Fasteners - C-130 Props - Sheet Metal Manufacturing - Composites - Capacity Charts

UNIFORM: Short Sleeve Shirt/Open Collar

TIME	DURATION	ACTIVITY
0955	0005	Transportation via white surrey to Electronic Warfare, Bldg 226, south end
1000	0015	Tour Electronic Warfare Host: Colonel Harry Calcutt, Director, Electronic Warfare (6-3371) - EW PGM & EWAISF Overview Brief - Tour ALQ-172 -- B-52 & C-130 High Band Jammer - Anechoic Chamber, Hot Mockup - Emergency Reprogramming - Tour ALQ-161 Integrated Support Station - B-1B Defensive Avionics System - Hot Mockup, Threat Simulator -- Cockpit Displays
1015	0005	Transportation via white surrey to Avionics Directorate, Bldg 640/645 Colonel Easterly briefs enroute - Point out facility downsizing & construction/modernization enroute - LY mission enroute
1020	0035	Tour Avionics Host: Colonel Glenn Easterly, Director, Avionics Directorate (6-3363/952-9688) - Graphic of Airborne Electronics Complex - Engineering Support Facillites chart/Graphic - Facility orientation Graphic in east annex - F-15 avionics -- Improved roll torquer amplifier hybrid (synergy with hybrid lab) - Avionics Supply Support (DLA connection) - Organic fabrication (hi-bay area) -- Cable fabrication example - Facility orientation graphic by LANTIRN - Process initiatives (2LM, LL) - PLAD (in LANTIRN) - JSTARS area and charts - PWB fabrication -- CARA flight line test sets examply - Hazardous material storage & handling with HAZMAT Team - Enter Bldg 645 - Facility orientation graphic - TEWS & PAVE MINT - Traveling wave tube tester w/pod exhibit - Pod exhibit & chart on pod repair ctr - Technology sustainment

UNIFORM: Short Sleeve Shirt/Open Collar

TIME	DURATION	ACTIVITY
		<ul style="list-style-type: none"> - ARN-6 to ARC-190 example - B-1 facility - Avionics summary -- Facility graphic -- Capacity graphic <p>Reposition survey to the east side of Bldg 645</p>
1055	0005	Transportation via white survey to Museum of Aviation, Phase II Peggy Young briefs enroute
1100		Arrive Museum to include a brief tour
1100	0002	Address Rally (Outside)
1102	0010	Tour Museum Host: Mrs Peggy Young, Director (6-4242)
1112	0010	Press Conference
1122	0003	Proceed to Art Gallery
1125	0050	Lunch in Art Gallery Menu/Attendees: TBD
1215	0010	Commissioners Cornella and Kling depart via white survey to flightline for departure
1230		Commissioners Cornella and Kling depart Robins via mil air
TBD		Ms Reese and Ms Wasleski depart Robins via rental car for Atlanta Airport

UNIFORM: Short Sleeve Shirt/Open Collar

ROOM ASSIGNMENTS

Commissioner Kling	Georgia Ste/Rm 114/Bldg 557	468-9011 468-2100 912/926-9011 912/926-2100
Commissioner Cornella	Carl Vinson Ste/Rm 115/Bldg 557	468-7561 468-2100 912/926-7561 912/926-2100
Ann Reese	McConnell Ste/Rm 111/Bldg 557	468-1724 468-2100 912/926-1724 912/926-2100
Marilyn Wasleski	Lemay Ste/Rm 109/Bldg 557	468-9013 468-2100 912/926-9013 912/926-2100
Cong Sanford Bishop	Twining Ste/Rm 149/Bldg 552	912/926-6723 912/926-2100
Cong Saxby Chambliss	White Ste/Rm 145/Bldg 552	912/926-3802 912/926-2100
Frank Norton	Suite 6205/6/Bldg 557	912/926-2100
Gail Boyce	Suite 6101/2/Bldg 557	912/926-2100

**MUSEUM OF AVIATION
BRAC LUNCHEON
5 June 1995**

**1125: Opening remarks
-- Introductions**

Mr G. Israel

1130: Invocation

Mr L. Pugh

1135: Lunch

1210: Closing remarks

Mr G. Israel

1215: Depart for Base Ops

**SURREY PASSENGERS
TO BASE OPS
(Escorted by Maj Gen Hallin)**

**Sen Nunn
Sen Coverdell
Rep Chambliss
Rep Collins
Mr Cornella
Mr Kling
Mr Norton**

**Lt Gen Farrell
Lt Col Tate**

Rep Bishop (TBD)

**- Commissioners and delegation depart Robins AFB approximately 1230
enroute to Dobbins ARB, Atlanta via C-26**

**- Lt Gen Farrell and Lt Col Tate depart Robins AFB approximately 1300
enroute to Wright-Patterson AFB via C-21**

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RATE AND DATA OVERVIEW

PRESENTED TO

MS. ANN REESE

CROSS SERVICE DOD ANALYST

JUNE 1995



CURRENT MAINTENANCE MISSION WORKLOAD

TOTAL PROGRAM	4.358	MILLION MHRS
NEW ORDER BASE	3.333	MILLION MHRS

SOURCE: DESCOM MFM, OPS-29 AND HISTORICAL FILES

PROJECTED MAINTENANCE MISSION WORKLOAD

PROJECTED WORKLOAD (MILLION MHRS)	FY95	FY96	FY97	FY98	FY99	FY00	FY01
	3.333	3.597	3.766	3.722	3.732	3.732	3.732

SOURCE: DESCOM MFM, OPS-29 AND JCSG-DM DATA CALL



CORE STATISTICS

CORE WORKLOAD (MILLION MHRS)	FY95	FY96	FY97	FY98	FY99	FY00	FY01
	2.794	2.794	2.794	2.794	2.794	2.794	2.794

ADJUSTMENTS MADE

CORE / TOTAL WORKLOAD STATISTICS FY99

$$\frac{\text{CORE WORKLOAD}}{\text{TOTAL WORKLOAD}} = \frac{2.794 \text{ M MHRS}}{3.732 \text{ M MHRS}} = 75\%$$

MAINTENANCE CAPACITY STATISTICS (MILLION MANHOURS)

DOD STANDARD MAINTENANCE CAPACITY	4.633	MAXIMUM POTENTIAL CAPACITY	7.606
1 SHIFT CAPACITY (BASED ON DOD STANDARD)	8.571	2 SHIFT CAPACITY (BASED ON MAXIMUM POTENTIAL CAPACITY)	TBD

LOST TIME INCIDENTS PER 200K HOURS

TOBYHANNA ARMY DEPOT	FY92	FY93	FY94
	1.96	2.44	2.78

AVERAGE LABOR HOUR COST 1 OCTOBER 94

**WG-11
STEP 3**

\$ 13.10

AVERAGE DEPOT SALARY 1 OCTOBER 94

**AVERAGE
SALARY**

\$ 30,045

ACTUAL DEPOT HOUR COST FY-94

**ACTUAL
EXPENSING
RATE
FY94**

\$ 63.36

RATE INCLUDES: SALARIES / WAGES, MISSION OVERHEAD BASE OPERATIONS, ET



INDIRECT COST COMPARISONS

**INDIRECT
TOTAL**

FY94

FY95

FY96

**TOAD
ACTUAL**

$$\frac{\$ 28.99}{\$ 63.36} = 46\%$$

—

—

**TOAD
BID**

$$\frac{\$ 28.57}{\$ 63.89} = 45\%$$

$$\frac{\$ 27.01}{\$ 80.71} = 33\%$$

$$\frac{\$ 31.29}{\$ 59.95} = 52\%$$

**LEAD
BID**

$$\frac{\$ 44.90}{\$ 86.36} = 52\%$$

$$\frac{\$ 43.28}{\$ 98.32} = 44\%$$

$$\frac{\$ 36.95}{\$ 88.62} = 42\%$$

**POSITIVE BUSINESS PERFORMANCE LOWERS TOTAL COST
BUT INCREASES PERCENTAGE!**



ARMY DEPOT

EXCELLENCE
IN ELECTRONICS

MAINTENANCE MISSION BID RATES

DEPOT	FY91	FY92	FY93	FY94	FY95	FY96
ANAD	73.04	93.68	83.02	90.47	108.47	83.90
CCAD	88.25	120.49	115.48	122.75	143.82	102.37
LEAD	67.58	81.43	83.07	86.36	98.32	88.62
RRAD	63.05	85.92	81.74	99.91	124.50	93.66
TOAD	42.06	55.04	51.25	63.89	80.71	59.95



ARMY DEPOT

EXCELLENCE
IN ELECTRONICS

MAINTENANCE MISSION BID RATES W / O MATERIAL

DEPOT	FY91	FY92	FY93	FY94	FY95	FY96
ANAD	44.79	52.01	42.17	54.36	73.77	48.16
CCAD	46.70	66.49	99.81	72.97	91.99	59.35
LEAD	52.63	63.82	63.02	65.84	82.08	70.79
RRAD	45.97	60.97	34.70	63.61	92.84	70.83
TOAD	35.48	46.51	42.39	52.46	72.44	49.83



THE REVENUE (BID) RATE

LABOR

- INCLUDES BASE LABOR, FRINGE BENEFITS AND LEAVE COSTS

MATERIAL

- MATERIAL COST OF CUSTOMER WORK

MISSION OVERHEAD

- OVERHEAD COST IN SUPPORT OF THE MISSION

GENERAL OVERHEAD

- OVERHEAD COST IN SUPPORT OF THE INSTALLATION

SURCHARGE

- ADJUSTMENTS (PLUS OR MINUS) TO THE RATE FOR VARIOUS REASONS



ARMY DEPOT

EXCELLENCE
IN ELECTRONICS

FROM A FINANCIAL MANAGEMENT POINT OF VIEW

LABOR

- OPM SETS "WHITE COLLAR" RATES
- AREA SURVEYS SET "BLUE COLLAR" RATES
- INFLUENCED BY ORGANIZATION, STRUCTURE AND AVERAGE GRA

MATERIAL

- VARIES WIDELY BY COMMODITY
- INEFFECTIVE COMPARISON

MISSION OVERHEAD

- VARIES BY INSTALLATION
- FLEXIBILITY TO MANAGE
- GOOD INDICATOR FOR COMPARISON



FROM A FINANCIAL MANAGEMENT POINT OF VIEW

GENERAL OVERHEAD

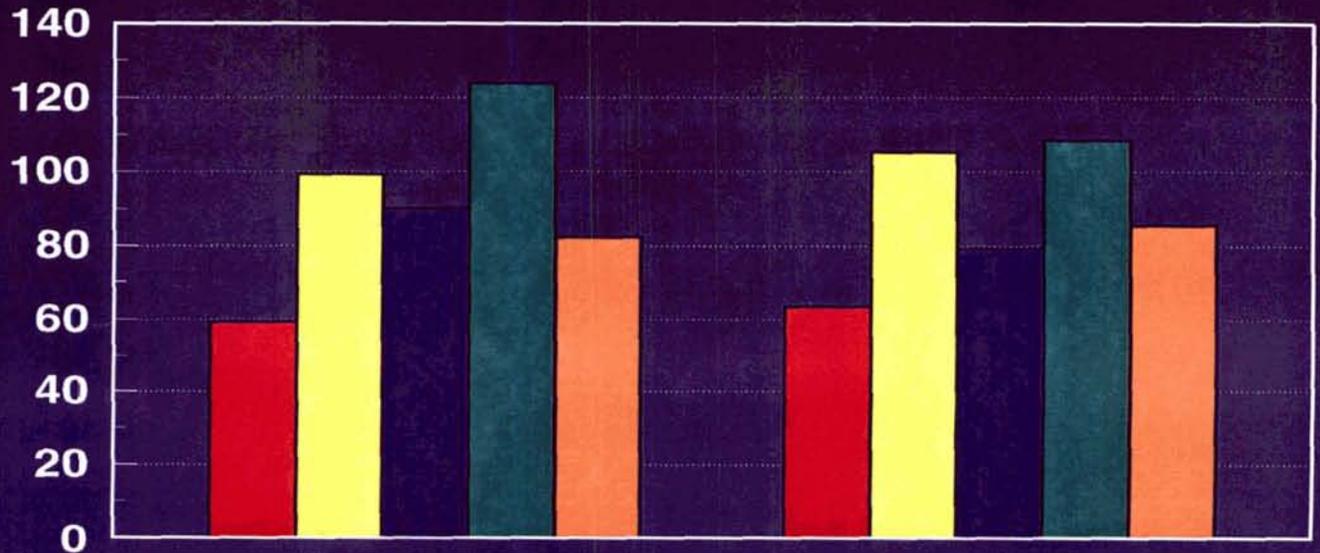
- VARIES BY INSTALLATION
- INFLUENCED BY SIZE AND LAYOUT OF INSTALLATION
- FLEXIBILITY TO MANAGE
- GOOD INDICATOR FOR COMPARISON

SURCHARGE

- SYSTEM-WIDE TO RECOUP OVERALL ISSUES OR BUILD RESERVE
(INEFFECTIVE COMPARISON)
- DEPOT UNIQUE TO ABSORB LOCAL GAINS / LOSSES
- DEPOT UNIQUE MINUS (-) INDICATES EFFICIENT PAST MANAGEMENT
OF THE FUND

COST PER DIRECT LABOR HOUR

Depot Maintenance Operations Indicators



		FY93	FY94
Tobyhanna		59.33	63.37
Letterkenny		99.34	105.53
Red River		90.14	79.32
Corpus Christi		123.89	108.57
Anniston		82.33	85.63

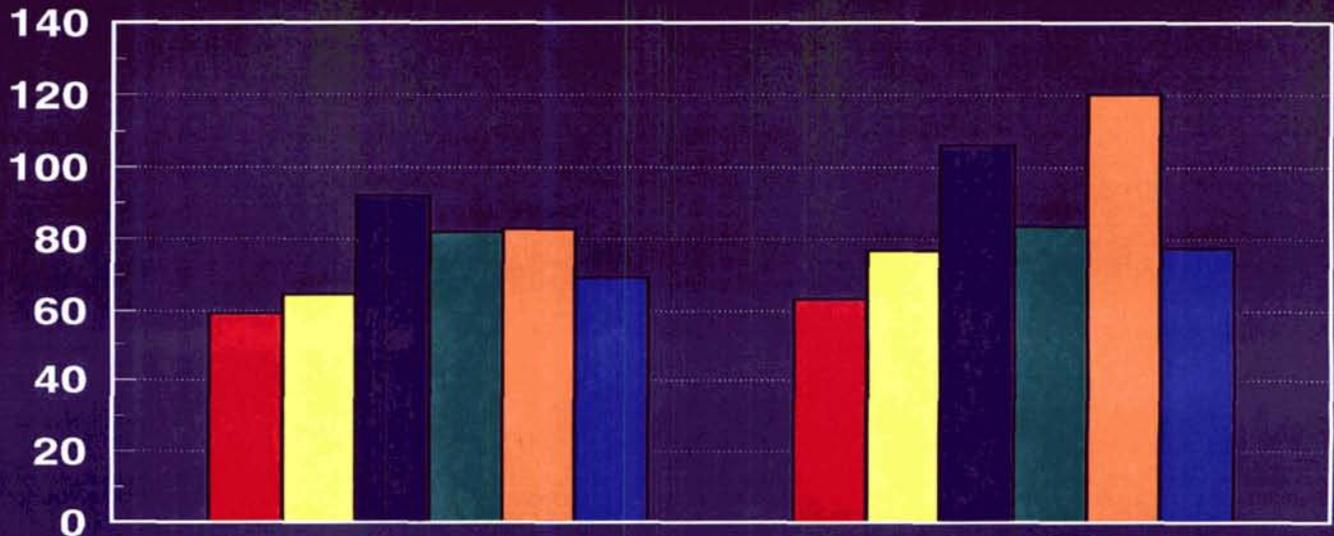


ARMY DEPOT

EXCELLENCE
IN ELECTRONICS

COST PER DIRECT LABOR HOUR

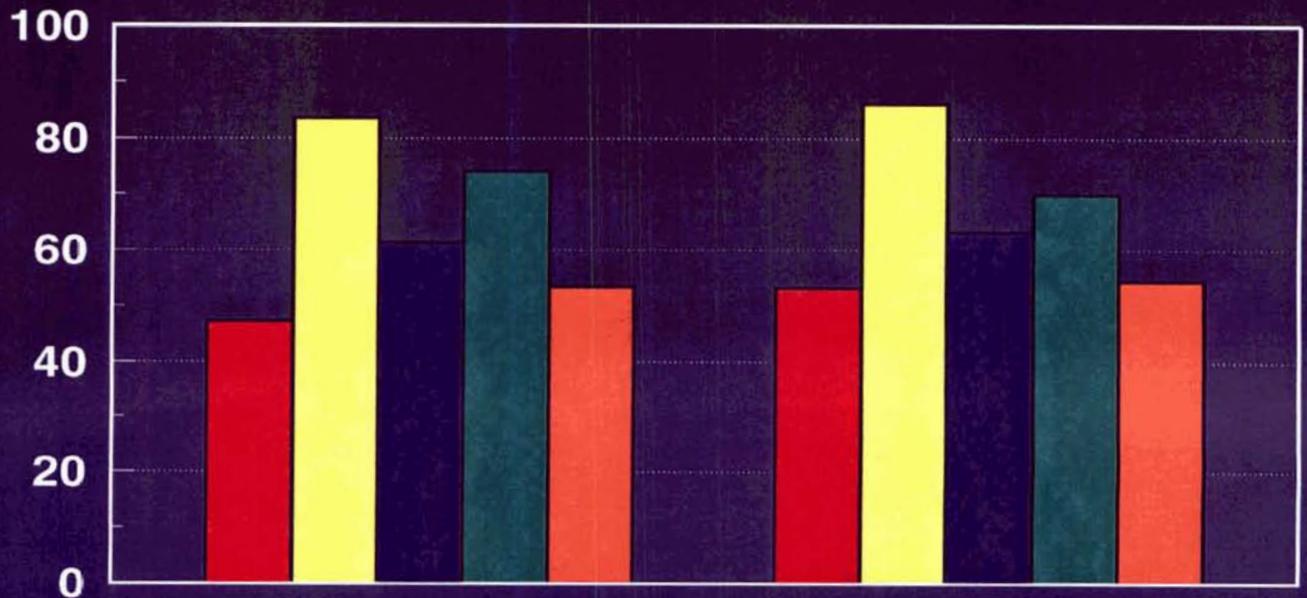
Depot Maintenance Operations Indicators



		FY93	FY94
Tobyhanna		59.33	63.37
Ogden		64.71	76.88
Oklahoma		91.99	106.20
SM ALC		82.03	83.60
San Antonio		82.90	120.24
Warner Robins		69.33	77.49

COST PER DIRECT LABOR HOUR LESS MATERIALS

Depot Maintenance Operations Indicators

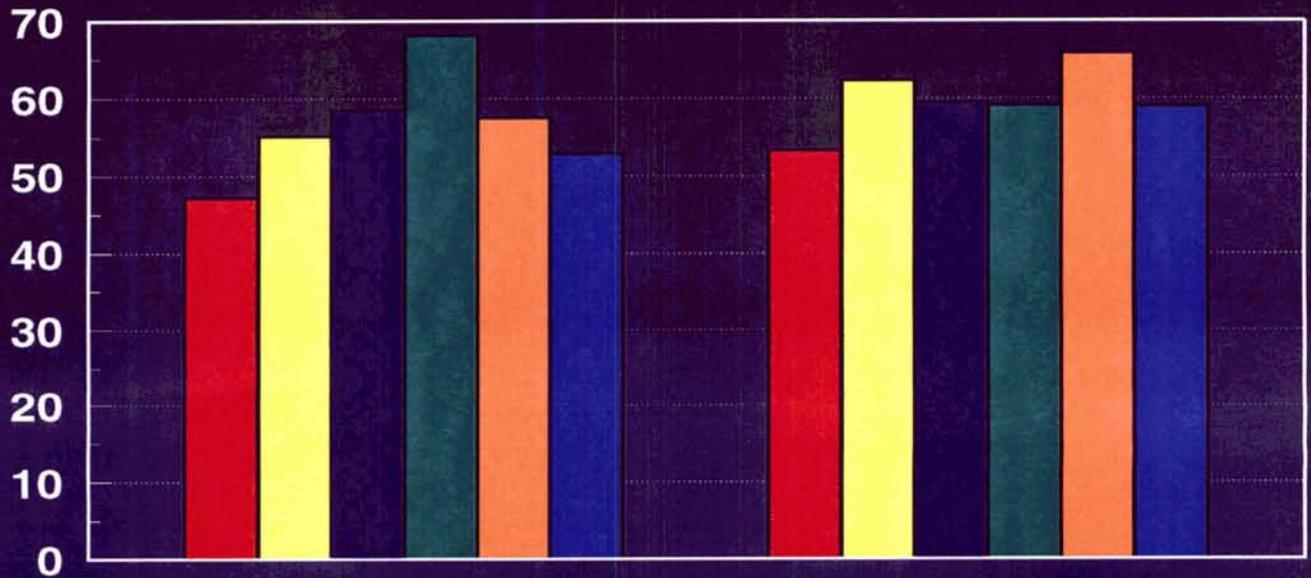


		FY93	FY94
Tobyhanna		47.22	53.26
Letterkenny		83.54	86.16
Red River		61.32	63.25
Corpus Christi		73.91	70.00
Anniston		53.49	54.56



ST PER DIRECT LABOR HOUR LESS MATERIAL

Depot Maintenance Operations Indicators



		FY93	FY94
Tobyhanna		47.22	53.26
Ogden		55.20	62.32
Oklahoma		58.48	59.42
SM ALC		68.25	59.14
San Antonio		57.53	65.37
Warner Robins		52.93	59.03

5/3

RATE COMPARISON WITHOUT MATERIAL

	TOAD	LEAD	DELTA
FY96 BID	\$49.83	\$70.79	\$20.96
FY95 BID	\$72.44	\$82.08	\$ 9.64
FY94 BID	\$52.46	\$70.97	\$18.51
FY93 BID	\$42.40	\$63.02	\$20.62

3.732M MHrs X \$20.96 = \$78M Cost Increase Annually

COST COMPARISON

	<u>TOBYHANNA BID RATE</u>	<u>SACRAMENTO ALC SALES RATE</u>
FY92	55.04	64.53
FY93	51.24	73.83
FY94	63.89	73.13
FY95	80.71	93.22
FY96	59.95	88.11 93.22 (EST)

COMPARISON

	<u>TOBYHANNA ARMY DEPOT</u>	<u>SACRAMENTO ALC</u>
FY94 ACTUAL HOURLY COST	\$63.37	\$83.60
WAGE GRADE 11-3	\$13.10	\$17.34
AVERAGE SALARY	\$30,045	\$37,000
DIRECT LABOR YIELD (MHRS)	1,632	1,500
BID RATE FY95	\$80.71	\$93.22
BID RATE FY96	\$59.95	\$93.22 (EST)

**BRAC 91
PUBLIC TO PUBLIC COMPETITION WORKLOAD
SACRAMENTO ARMY DEPOT**

COMPETITION GROUP	COMPETITORS	WINNER/\$M
AIRBORNE ELECTRONICS	TOAD vs SM-ALC	TOAD/\$4.6
RADIO	TOAD vs SM-ALC	TOAD/\$5.0
INTELLIGENCE & ELNC WARFARE	TOAD vs SM-ALC	TOAD/\$7.4
WIRE/DATA COM	TOAD vs SM-ALC	TOAD/\$1.4
TMDE/RADIAC	TOAD vs SM-ALC	SM-ALC/\$1.2



COSTING INFORMATION

- LOWEST HOURLY COST OF MAINTENANCE DEPOTS
- HIGH MANAGEMENT PRIORITY TO KEEP COST DOWN
- VALIDATED BY GAO AND AAA

BEST VALUE
FOR THE
TAXPAYER



WORKLOAD TRANSITIONS

- **SEAMLESS**
 - HI-TECH CAPABILITY
 - SKILLS IN PLACE
- **LOW COST**
 - MINIMAL INVESTMENT
 - FACILITIES AND TEST EQUIPMENT IN PLACE
- **TRANSPARENT TO THE CUSTOMER**
 - COMSEC
 - SAAD AVIONICS - INDICATORS
 - SAAD IEW - TRAILBLAZER



Document Separator



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE

20 APR 1995



MEMORANDUM FOR DEFENSE BASE REALIGNMENT AND
CLOSURE COMMISSION (Mr. Francis A. Cirillo, Jr.)

FROM: HQ USAF/RT

SUBJECT: Request for Information (Verbal Request)

This letter responds to the verbal request of Ann Reese of April 11, 1995, requesting manpower figures related to depot installations. Attached please find a binder with four tabs for each depot. The first tab is the manpower authorization by unit for all Air Force units located at the installation. This information was certified input to COBRA. The second tab is a list of non-Air Force tenants. This was also certified and used in COBRA. The third tab is a subset of the second tab information, but is limited to those tenants with 100 or more authorizations. The fourth tab is air logisticis center manpower history. This information was not used in the Air Force analysis, and does not readily correspond to the other manpower information.

In addition, you asked for DMBA information for each of the ALCs. This listing by FY 96/4 authorizations is provided below:

	Fill	Kelly	McClellan	Robins	Tinker
Officer	20	28	27	35	41
Enlisted	115	42	24	41	40
Civilian	4184	5501	4661	5695	6003
Total	4319	5571	4712	5771	6084

I trust this information will be helpful. Please address any questions to my point of contact, Lt Col Louise Eckhart, 695-4578.

Jay D. Blume, Jr.

JAY D. BLUME, Jr.
Major General, USAF
Special Assistant to the Chief of Staff
for Realignment and Transition

Data Requested at 11 Apr 95 meeting with BRAC Staff

1. Break out the non-BRAC portion of the 183M COBRA
2. HQ AFMC/CE
 - a. Demo and Mothball Building List FY95 to FY 01 by ALC
 - b. Resource Management Plan which addresses Demo and Mothball Building list by ALC
 - c. Demo and Mothball Building List - based lined to DOD BRAC 1 Mar 95 submission (1706PE reduction)
 - d. Demo and Mothball Building List - based lined to implementation (based on site survey data - 1713 PE reduction) DOD BRAC 1 Mar 95 submission
 - e. Demo and Mothball Building List - based line to proposed change to DoD BRAC recommendation (based on site survey data - 1832 PE reduction)
 - f. Military Construction Program FY 96 to FY 01 by ALC in the following format:

YR	Title	Cost	SQFT
----	-------	------	------

- g. Installation square foot breakout for each ALC, based on FY 97 4th quarter, by the following groups:

Group	SQFT
Tenants	
DBMA	
Other	

The totals should add up to all the square ft shown on the real property records

3. Air Staff *Provided on 20 April*

Manpower break out for each ALC, based on FY 97 4th quarter, by the following groups

Group	Military	Civilian
Tenants		
DBMA		
Other		

Provide manpower breakout for each ALC installation based on FY 97/4 authorization data. Include DMBA, Non AF Tenants, AF Tenants. Provide military and civilian numbers.

Table of Contents

Tab	Description
A	Hill AFB Manpower Data
A1	Manpower Authorizations by Unit, FY 97/4
A2	Non AF Tenants Without Regard to Population, FY 93/4
A3	Non AF Tenants with Populations Over 100, FY 93/4
A4	Air Logistics Center Manpower History FY 88-01
B	Kelly AFB Manpower Data
B1	Manpower Authorizations by Unit, FY 97/4
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C	McClellan AFB Manpower Data
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E4	Air Logistics Center Manpower History FY 88-01

MANPOWER AUTHORIZATIONS BY UNIT
FY97/4
as of Aug 94 manpower file

CMD	ORGANIZATION	OFF	AMN	FY 97		TOTAL
				CIV	DRILL	
**	BASE: hill					
u aag	Det 405 af audit agency fo	0	0	29	0	29
u acc	34 fighter sq	31	265	1	0	297
u acc	388 fighter wg	12	40	6	0	58
u acc	388 logistics gp	5	21	1	0	27
u acc	388 logistics support sq	8	83	4	0	95
u acc	388 maintenance sq	8	544	1	0	553
u acc	388 maintenance tng ft	1	88	2	0	91
u acc	388 operations gp	5	15	2	0	22
u acc	388 operations spt sq	17	72	5	0	94
u acc	4 fighter sq	31	262	1	0	294
u acc	421 fighter sq	31	265	1	0	297
u acc	729 air control sq	16	225	1	0	242
u acc	84 radar evaluation sq	29	98	40	0	167
u acc	01 ac 612 air operations gp	1	0	0	0	1
u acc	01 ah 29 training systems sq	0	0	10	0	10
acc	01 aq 4525 combat appl sq	0	0	0	0	0
acc	01 k ACC Log Support gp	0	0	13	0	13
u aet	368 Recruiting sq	4	17	1	0	22
u aet	368 Recruiting sq	1	1	1	0	3
u aet	372 Recruiting gp	3	16	1	0	20
u aet	Det 533 371 training sq	0	20	0	0	20
u afr	2400 res readiness mob sq	2	5	1	0	8
u afr	405 combat log support sq	0	0	4	0	4
u afr	419 Civil Engineer sq	0	0	3	0	3
u afr	419 communications ft	0	0	1	0	1
u afr	419 fighter wg	0	0	17	0	17
u afr	419 logistics gp	0	0	7	0	7
u afr	419 logistics support sq	0	0	10	0	10
u afr	419 maintenance sq	0	0	87	0	87
u afr	419 medical sq	0	0	3	0	3
u afr	419 mission support sq	0	0	23	0	23
u afr	419 operations gp	0	0	5	0	5
u afr	419 operations spt ft	0	0	2	0	2
u afr	419 security police sq	0	0	1	0	1
u afr	419 support gp	0	0	1	0	1
u afr	466 fighter sq	0	0	90	0	90
u afr	67 aerial port sq	0	0	2	0	2
u amc	Det 8 air combat camera sr	0	0	0	0	0
u elm	01 alc afelm disa jc	0	0	0	0	0
u elm	01 hl afelm def fin acct ce	1	8	0	0	9
u elm	afelm deca ag	0	10	0	0	10
u lct	af legal ser ag fo	1	1	0	0	2
mtc	15 test sq	0	0	0	0	0
mtc	501 range sq	6	1	31	0	38
u mtc	514 Flight Test sq	24	98	9	0	131
u mtc	545 test gp	14	8	39	0	61
u mtc	649 Civil Engineer sq	12	323	299	0	634

MANPOWER AUTHORIZATIONS BY UNIT
FY97/4
as of Aug 94 manpower file

CMD	ORGANIZATION	OFF	AMN	FY 97		TOTAL
				CIV	DRILL	
u mtc 649	air base gp	17	131	557	0	705
u mtc 649	combat log support sq	3	225	1	0	229
u mtc 649	comm comp sys gp	2	103	90	0	195
u mtc 649	medical gp	105	208	113	0	426
u mtc 649	medical gp	0	1	0	0	1
u mtc 649	munitions sq	8	160	7	0	175
u mtc 649	operations spt sq	6	55	14	0	75
u mtc 649	security police sq	2	170	18	0	190
u mtc Det 1	651 munitions sq	1	28	0	0	29
u mtc Ol ad	hq materiel system ce	2	0	30	0	32
u mtc Ol aj	485 engineering instl gp	26	225	326	0	577
u mtc Ol ea	warner robins alc ce	0	0	1	0	1
u mtc Ol ya	615 specialized Msn sq	0	0	28	0	28
u mtc ogden	alc ce	34	50	466	0	550
u mtc ogden	alc ce	4	0	34	0	38
u mtc ogden	alc ce	18	1	1215	0	1234
mtc ogden	alc ce	32	10	1138	0	1180
mtc ogden	alc ce	14	0	247	0	261
mtc ogden	alc ce	36	91	455	0	582
u mtc ogden	alc ce	33	33	1887	0	1953
u ang Ol t5	299 range control sq	0	0	36	0	36
u osi Det 113	1 field investigatns dt	2	10	2	0	14
u paf Ol aa	8 supply sq	0	1	0	0	1
u tec Ol jj	af op tst&eval ctr du	1	0	0	0	1
** Subtotal **		609	3988	7420	0	12017

Non Air Force Tenant Units

BASE NUMBER	STATUS	UNIT NAME	OFFICERS	ENLISTED	AFSCN	TOTAL
Hill AFB	Non AF Tenant	American Federation of Gov Employees	0	0	2	2
Hill AFB	Non AF Tenant	American Red Cross	0	0	1	1
Hill AFB	Non AF Tenant	Army-US Corps of Engineers	1	0	24	25
Hill AFB	Non AF Tenant	Arts and Crafts	0	0	8	8
Hill AFB	Non AF Tenant	Bowling Center	0	0	17	17
Hill AFB	Non AF Tenant	Civilian Recreation	0	0	7	7
Hill AFB	Non AF Tenant	DLA Liaison	0	1	1	2
Hill AFB	Non AF Tenant	DLA-Hill Site Distribution	0	0	539	539
Hill AFB	Non AF Tenant	Defense Contract Audit Agency	0	0	1	1
Hill AFB	Non AF Tenant	Defense Fuel Region West	0	0	1	1
Hill AFB	Non AF Tenant	Defense Printing Service	0	0	31	31
Hill AFB	Non AF Tenant	First Security Bank	0	0	13	13
Hill AFB	Non AF Tenant	Human Resources	0	0	4	4
Hill AFB	Non AF Tenant	Market Publicity Office	0	0	3	3
Hill AFB	Non AF Tenant	Naval Ordnance Station Liaison	0	0	1	1
Hill AFB	Non AF Tenant	Outdoor Recreation	0	0	4	4
Hill AFB	Non AF Tenant	Rod and Gun Club	0	0	1	1
Hill AFB	Non AF Tenant	US Postal Service	0	0	2	2
All Non Air Force Tenant Organizations Regardless of Size			7	67	1748	1822

Numbers are authorized personnel for FY 93/4. Consistent with BRAC Questionnaire data

Base Name	Category	DLA Hill AFB	DLA Hill AFB	DLA Hill AFB	TOTAL
Unit	Non AF Tenant				
Hill AFB	Non AF Tenant	0	0	0	100
Hill AFB	Non AF Tenant	0	0	0	539
Hill AFB	Non AF Tenant	0	0	0	165
All Non Air Force Tenant Organizations With Population Over 100		5	56	1144	1205

AIR LOGISTICS CENTER MANPOWER HISTORY

	<u>FY 88</u>	<u>FY 89</u>	<u>FY 90</u>	<u>FY 91</u>	<u>FY 92</u>	<u>FY 93</u>	<u>FY 94</u>	<u>FY 95</u>	<u>FY 96</u>	<u>FY 97</u>	<u>FY 98</u>	<u>FY 99</u>	<u>FY 00</u>	<u>FY 01</u>
HILL AFB (Ogden ALC)														
Foreign Military Sales (FMS)														
OFF	9	10	8	8	3	6	6	6	6	6	6	6	6	6
ENL	3	3	1	1	4	4	4	4	4	4	4	4	4	4
CIV	<u>713</u>	<u>770</u>	<u>671</u>	<u>592</u>	<u>487</u>	<u>577</u>	<u>761</u>	<u>754</u>	<u>753</u>	<u>753</u>	<u>753</u>	<u>753</u>	<u>753</u>	<u>753</u>
TOT	725	783	680	608	494	587	771	764	763	763	763	763	763	763
Depot Maintenance (Maint)														
OFF	45	47	46	45	45	27	27	26	26	26	26	26	26	26
ENL	356	358	357	355	355	352	353	326	326	326	326	326	326	326
CIV	<u>6,634</u>	<u>6,553</u>	<u>6,696</u>	<u>5,611</u>	<u>5,567</u>	<u>5,427</u>	<u>4,571</u>	<u>4,269</u>	<u>4,205</u>	<u>4,205</u>	<u>4,205</u>	<u>4,205</u>	<u>4,205</u>	<u>4,205</u>
TOT	7,035	6,958	7,099	6,011	5,967	5,806	4,951	4,621	4,557	4,557	4,557	4,557	4,557	4,557
Material Management (MM)														
OFF	126	119	107	108	112	105	109	111	111	111	111	111	111	111
ENL	106	102	102	102	112	94	65	98	98	98	98	98	98	98
CIV	<u>2,392</u>	<u>2,150</u>	<u>1,854</u>	<u>1,631</u>	<u>1,383</u>	<u>1,082</u>	<u>930</u>	<u>856</u>	<u>782</u>	<u>782</u>	<u>782</u>	<u>782</u>	<u>782</u>	<u>782</u>
TOT	2,624	2,371	2,063	1,841	1,807	1,281	1,104	1,065	998	998	998	998	998	998
Central Contracting (PK)														
OFF	16	16	16	15	11	12	12	11	11	11	11	11	11	11
ENL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CIV	<u>437</u>	<u>410</u>	<u>410</u>	<u>380</u>	<u>324</u>	<u>233</u>	<u>162</u>	<u>168</u>	<u>150</u>	<u>150</u>	<u>150</u>	<u>150</u>	<u>150</u>	<u>150</u>
TOT	453	426	426	395	335	245	174	179	161	161	161	161	161	161
Management Overhead (MGMT)														
OFF	9	10	10	10	9	8	7	7	7	7	7	7	7	7
ENL	11	13	13	12	12	12	12	12	12	12	12	12	12	12
CIV	<u>67</u>	<u>71</u>	<u>77</u>	<u>74</u>	<u>67</u>	<u>58</u>	<u>55</u>	<u>44</u>						
TOT	87	94	100	96	88	78	74	63	63	63	63	63	63	63
Communications & Computers (COMM/COMP)														
OFF	5	5	5	8	11	12	8	8	8	8	8	8	8	8
ENL	-	-	-	93	99	134	101	100	95	95	95	95	95	95
CIV	<u>523</u>	<u>497</u>	<u>472</u>	<u>451</u>	<u>397</u>	<u>358</u>	<u>82</u>	<u>75</u>	<u>79</u>	<u>79</u>	<u>79</u>	<u>79</u>	<u>79</u>	<u>79</u>
TOT	528	502	477	552	507	504	191	183	182	182	182	182	182	182
Medical (MED)														
OFF	72	81	89	90	101	98	104	105	105	105	105	105	105	105
ENL	179	180	190	196	202	194	197	208	205	205	205	205	205	205
CIV	<u>87</u>	<u>85</u>	<u>97</u>	<u>118</u>	<u>136</u>	<u>129</u>	<u>128</u>	<u>107</u>	<u>103</u>	<u>103</u>	<u>103</u>	<u>103</u>	<u>103</u>	<u>103</u>
TOT	338	346	376	404	439	421	429	420	413	413	413	413	413	413
Base Operating Support (BOS)														
OFF	73	73	71	79	81	76	74	71	71	71	71	71	71	71
ENL	1,066	1,067	1,062	1,093	1,053	993	948	900	888	888	888	888	888	888
CIV	<u>3,504</u>	<u>3,378</u>	<u>3,238</u>	<u>3,186</u>	<u>2,228</u>	<u>1,623</u>	<u>1,576</u>	<u>1,385</u>	<u>1,149</u>	<u>1,149</u>	<u>1,149</u>	<u>1,149</u>	<u>1,149</u>	<u>1,149</u>
TOT	4,643	4,518	4,371	4,358	3,362	2,692	2,598	2,356	2,108	2,108	2,108	2,108	2,108	2,108
TOTAL ALC MANPOWER														
OFF	355	361	352	363	373	344	347	345	345	345	345	345	345	345
ENL	1,721	1,723	1,725	1,852	1,837	1,783	1,680	1,648	1,628	1,628	1,628	1,628	1,628	1,628
CIV	<u>14,357</u>	<u>13,914</u>	<u>13,515</u>	<u>12,050</u>	<u>10,789</u>	<u>9,487</u>	<u>8,265</u>	<u>7,658</u>	<u>7,272</u>	<u>7,272</u>	<u>7,272</u>	<u>7,272</u>	<u>7,272</u>	<u>7,272</u>
TOT	16,433	15,998	15,592	14,265	12,999	11,614	10,292	9,651	9,245	9,245	9,245	9,245	9,245	9,245

AUTHORIZED MANPOWER AS OF AUG 94 MANPOWER FILE

UNIT	FY 94				FY 95				FY 96				FY 97				FY 98			
	OFF	AMN	CIV	TOT																
BASE POPULATION	790	3,373	12,461	16,624	762	3,176	11,454	15,392	748	3,164	11,358	15,270	738	3,148	11,855	14,941	738	3,148	11,000	14,886
AIR FORCE MATERIAL COMMAND UNITS																				
SAN ANTONIO AIR LOGISTICS CENTER UNITS																				
AFMC san antonio alc	185	133	8812	9130	184	132	8248	8564	182	132	8185	8499	182	131	7929	8242	182	131	7880	8193
AFMC O1 cm oklahoma city alc ce	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
	185	133	8813	9131	184	132	8249	8565	182	132	8186	8500	182	131	7930	8243	182	131	7881	8194
AFMC SUPPORT UNITS																				
AFMC 651 air base gp	10	48	762	820	10	48	745	803	10	48	743	801	10	48	729	787	10	48	729	787
AFMC 651 Civil Engineer sq	6	88	531	625	6	86	502	594	6	81	493	580	6	75	476	557	6	75	476	557
AFMC 651 combat log support sq	4	167	0	171	3	131	0	134	3	131	0	134	3	131	0	134	3	131	0	134
AFMC 651 communications gp	5	122	101	228	5	128	105	238	5	120	105	230	5	120	105	230	5	120	105	230
AFMC 651 medical service sq	43	110	75	228	49	119	71	239	49	119	71	239	49	119	71	239	49	119	71	239
AFMC 651 operations spt sq	2	48	19	69	2	48	18	68	2	48	17	67	2	48	17	67	2	48	17	67
AFMC 651 security police sq	3	172	13	188	3	172	12	187	3	172	10	185	3	172	9	184	3	172	9	184
AFMC 651 services sq	2	4	43	49	2	4	44	50	2	4	44	50	2	4	43	49	2	4	43	49
	75	759	1546	2380	80	736	1497	2313	80	723	1483	2286	80	717	1450	2247	80	717	1450	2247
OTHER AFMC UNITS																				
AFMC O1 ad 412 logistics support sq	1	3	2	6	1	3	2	6	1	3	1	5	1	3	1	5	1	3	1	5
AFMC 1827 electronics instl sq	4	388	28	420	4	388	28	420	4	388	28	420	4	388	28	420	4	388	28	420
AFMC 313 Flight Test sq	10	7	4	21	10	7	4	21	10	7	4	21	10	7	4	21	10	7	4	21
AFMC bq materiel system ce	1	1	33	35	1	1	29	31	1	0	24	25	1	0	24	25	1	0	24	25
	16	399	67	482	16	399	63	478	16	398	57	471	16	398	57	471	16	398	57	471
OTHER COMMAND UNITS																				
AIR INTELLIGENCE AGENCY UNITS																				
ALA bq aia	185	257	318	760	184	257	318	759	184	257	318	759	181	255	315	751	181	255	315	751
ALA 48 intelligence sq	1	2	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ALA 67 intelligence gp	2	2	1	5	2	2	1	5	2	2	1	5	2	2	1	5	2	2	1	5
ALA 67 intelligence wg	7	38	12	57	7	38	12	57	7	37	12	56	7	37	12	56	7	37	12	56
ALA 67 operations spt sq	14	61	3	78	14	61	3	78	14	61	3	78	14	61	3	78	14	61	3	78
ALA 6960 electronic securit gp	10	69	73	152	10	67	73	150	10	67	73	150	9	68	71	148	9	68	71	148
ALA 6960 security police sq	2	124	4	130	2	124	4	130	2	124	4	130	2	124	4	130	2	124	4	130
ALA 6967 contracting ft	0	0	26	26	0	0	24	24	0	0	24	24	0	0	24	24	0	0	24	24
ALA 6968 alteration & instl sq	3	57	21	81	3	57	21	81	3	57	21	81	3	57	18	78	3	57	18	78
ALA 93 intelligence sq	8	368	32	408	9	414	33	456	8	429	33	470	8	429	31	468	8	429	31	468
ALA Det 1 67 intelligence wg	2	0	1	3	2	0	1	3	2	0	1	3	2	0	1	3	2	0	1	3
ALA O1 xo Det 1 Air Intel Agency fo	5	14	3	22	3	5	3	11	3	5	3	11	3	5	3	11	3	5	3	11
ALA af crypto spt cen ce	22	178	379	579	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ALA af info warfare ce	188	358	251	797	189	371	251	811	186	371	251	808	184	373	251	808	184	373	251	808
ALA aia info service ft	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
ALA aia intel sys man sq	5	157	21	183	5	135	20	160	5	135	19	159	5	135	19	159	5	135	19	159
ALA aia intel sys tech sq	7	98	33	138	8	91	33	132	8	91	33	132	8	91	33	132	8	91	33	132
ALA aia intel systems gp	21	55	48	124	21	55	48	124	19	52	47	123	16	60	47	123	16	60	47	123
	484	1838	1227	3549	459	1678	845	2982	453	1694	843	2990	444	1698	833	2975	444	1698	833	2975
AIR FORCE INFORMATION SERVICE																				
AFNEWS O1 mis af news ag fo	5	42	50	97	5	42	46	93	5	41	46	92	5	38	45	88	5	38	43	86
AFNEWS af broadcasting sr	1	20	19	40	1	20	22	43	0	18	23	41	0	18	20	38	0	18	20	38
AFNEWS af news ag fo	3	21	14	38	3	21	10	34	3	21	10	34	3	20	10	33	3	20	8	31
	9	83	83	175	9	83	78	170	8	80	79	167	8	76	75	159	8	76	71	155
AIR FORCE RESERVE UNITS																				
AFRES 2400 res readiness mob sq	0	5	1	6	0	5	1	6	0	5	1	6	0	5	1	6	0	5	1	6

AUTHORIZED MANPOWER AS OF AUG 94 MANPOWER FILE

UNIT	FY 94				FY 95				FY 96				FY 97				FY 98			
	OFF	AMN	CIV	TOT	OFF	AMN	CIV	TOT	OFF	AMN	CIV	TOT	OFF	AMN	CIV	TOT	OFF	AMN	CIV	TOT
AFRES	26	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2
AFRES	307	0	0	15	0	0	0	15	0	0	0	15	0	0	0	15	0	0	0	15
AFRES	32	0	0	15	0	0	0	15	0	0	0	15	0	0	0	15	0	0	0	15
AFRES	34	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2
AFRES	404	0	0	4	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	4
AFRES	433	0	0	3	0	0	0	3	0	0	0	3	0	0	0	3	0	0	0	3
AFRES	433	0	0	171	0	0	0	171	0	0	0	171	0	0	0	171	0	0	0	171
AFRES	433	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2
AFRES	433	0	0	36	0	0	0	36	0	0	0	36	0	0	0	36	0	0	0	36
AFRES	433	0	0	121	0	0	0	118	0	0	0	106	0	0	0	106	0	0	0	104
AFRES	433	0	0	150	0	0	0	150	0	0	0	150	0	0	0	150	0	0	0	150
AFRES	433	0	0	12	0	0	0	12	0	0	0	12	0	0	0	12	0	0	0	12
AFRES	433	0	0	45	0	0	0	45	0	0	0	45	0	0	0	45	0	0	0	45
AFRES	433	0	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0	0	0	5
AFRES	433	0	0	38	0	0	0	38	0	0	0	38	0	0	0	38	0	0	0	38
AFRES	433	0	0	7	0	0	0	7	0	0	0	7	0	0	0	7	0	0	0	7
AFRES	433	0	0	12	0	0	0	12	0	0	0	12	0	0	0	12	0	0	0	12
AFRES	433	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1
AFRES	433	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2
AFRES	68	0	0	28	0	0	0	28	0	0	0	28	0	0	0	28	0	0	0	28
AFRES	74	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2
AFRES	8085	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1
		0	5	673	0	5	0	672	0	5	0	660	0	5	0	665	0	5	0	663
AMC	Det 1 615	1	76	1	1	76	1	78	1	76	1	78	1	76	1	78	1	76	1	78
AMC	Det 5 375	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMC	O1 1 615	2	0	0	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1
AFAA	Det 410	0	0	30	0	0	30	30	0	0	30	30	0	0	30	30	0	0	30	30
AFAA	O1 h	0	0	2	0	0	2	2	0	0	2	2	0	0	2	2	0	0	2	2
ACC	O1 ax	0	4	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0
ACC	O1 x	3	0	0	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1
AETC	O1 a	0	3	0	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0	3
AFELM	Det 12	0	12	0	0	12	0	12	0	12	0	12	0	12	0	12	0	12	0	12
AFELM	O1 ale	2	25	0	2	17	0	19	1	8	0	9	0	0	0	0	0	0	0	0
AFELM	O1 csc	6	2	0	3	1	0	4	0	1	0	1	0	0	0	0	0	0	0	0
AFELM	O1 kd	3	7	0	3	7	0	10	2	7	0	9	2	7	0	9	2	7	0	9
AFELM	afelm	2	8	0	2	8	0	10	2	8	0	10	2	8	0	10	2	8	0	10
AFELM	afelm	0	1	0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
AFELM	afelm	1	4	0	1	4	0	5	1	4	0	5	1	4	0	5	1	4	0	5
AFCESA	O1 b	0	9	16	0	10	16	26	0	12	16	28	0	12	16	28	0	12	16	28
HAF	u s	0	0	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1

Non Air Force Tenant Units

Base Name	Category	Unit Name	FY 93/4	FY 93/4	FY 93/4	FY 93/4
Kelly AFB	Non AF Tenant	93 IS	8	327	32	367
Kelly AFB	Non AF Tenant	DECA Midwest Region	3	11	94	108
Kelly AFB	Non AF Tenant	Defense Accounting Office	13	0	166	179
Kelly AFB	Non AF Tenant	Defense Commissary Agency West Svc Ctr	1	0	302	303
Kelly AFB	Non AF Tenant	Defense Criminal Investigative Svc	0	0	6	6
Kelly AFB	Non AF Tenant	Defense Reutilization and Marketing Ofc	0	0	85	85
Kelly AFB	Non AF Tenant	GSA Utilization Ofc	0	0	2	2
Kelly AFB	Non AF Tenant	San Antonio Credit Union	0	0	11	11
Kelly AFB	Non AF Tenant	Services (NAF)	0	0	400	400
Kelly AFB	Non AF Tenant	US Government Printing Office	0	0	36	36
All Non Air Force Tenant Organizations Regardless of Size			47	768	2153	2968

Non Air Force: Tenant Units

Base Name	Category	Organization	Officer	Enlisted	Civilian	Total
Kelly AFB	Non AF Tenant	93 IS	8	327	32	367
Kelly AFB	Non AF Tenant	DECA Midwest Region	3	11	94	108
Kelly AFB	Non AF Tenant	Defense Accounting Office	13	0	166	179
Kelly AFB	Non AF Tenant	Defense Commissary Agency West Svc Ctr	1	0	302	303
Kelly AFB	Non AF Tenant	Services (NAF)	0	0	400	400
All Non Air Force Tenant Organizations With Population Over 100			40	687	1936	2663

AIR LOGISTICS CENTER MANPOWER HISTORY

	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
KELLY AFB (San Antonio ALC)														
Foreign Military Sales (FMS)														
OFF	17	18	19	17	17	16	15	15	15	15	15	15	15	15
ENL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CIV	262	705	616	573	684	578	681	722	708	708	708	708	708	708
TOT	779	723	635	590	701	594	696	737	723	723	723	723	723	723
Depot Maintenance (Maint)														
OFF	43	39	38	38	37	35	35	34	34	34	34	34	34	34
ENL	146	143	143	143	143	159	159	128	128	128	128	128	128	128
CIV	2,600	7,584	7,448	6,660	6,817	7,048	5,661	5,835	5,358	5,358	5,358	5,358	5,358	5,358
TOT	7,789	7,766	7,629	6,841	6,997	7,242	5,855	5,997	5,520	5,520	5,520	5,520	5,520	5,520
Material Management (MM)														
OFF	150	149	131	127	127	117	107	101	97	97	97	97	97	97
ENL	352	352	347	320	331	347	135	130	130	130	130	130	130	130
CIV	2,940	2,797	2,519	2,357	2,803	2,639	2,174	2,000	2,080	2,080	2,080	2,080	2,080	2,080
TOT	3,442	3,298	2,997	2,804	3,261	3,103	2,416	2,231	2,307	2,307	2,307	2,307	2,307	2,307
Central Contracting (PK)														
OFF	17	17	17	16	13	13	13	13	13	13	13	13	13	13
ENL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CIV	646	598	586	538	492	431	373	328	357	357	357	357	357	357
TOT	663	615	603	554	505	444	386	341	370	370	370	370	370	370
Management Overhead (MGMT)														
OFF	7	6	7	7	8	9	9	8	8	8	8	8	8	8
ENL	12	12	12	11	11	11	11	11	11	11	11	11	11	11
CIV	73	79	85	87	70	56	48	45	45	45	45	45	45	45
TOT	92	97	104	105	89	76	68	64	64	64	64	64	64	64
Communications & Computers (COMM/COMP)														
OFF	4	4	4	7	8	7	5	14	14	14	14	14	14	14
ENL	-	-	-	152	166	171	150	226	218	218	218	218	218	218
CIV	408	392	374	431	358	278	96	266	266	266	266	266	266	266
TOT	412	396	378	590	532	456	251	506	498	498	498	498	498	498
Medical (MED)														
OFF	8	9	11	12	46	42	43	49	49	49	49	49	49	49
ENL	20	20	19	20	104	105	110	119	119	119	119	119	119	119
CIV	31	31	30	33	74	73	75	67	64	64	64	64	64	64
TOT	59	60	60	65	224	220	228	235	232	232	232	232	232	232
Base Operating Support (BOS)														
OFF	65	67	69	66	64	54	63	80	83	83	83	83	83	83
ENL	559	568	556	527	474	466	455	652	651	651	651	651	651	651
CIV	4,235	4,071	3,976	3,666	2,889	1,447	1,400	1,601	1,578	1,578	1,578	1,578	1,578	1,578
TOT	4,859	4,706	4,601	4,259	3,427	1,967	1,918	2,333	2,312	2,312	2,312	2,312	2,312	2,312
TOTAL ALC MANPOWER														
OFF	311	309	296	290	320	293	290	314	313	313	313	313	313	313
ENL	1,089	1,095	1,077	1,173	1,229	1,259	1,020	1,266	1,257	1,257	1,257	1,257	1,257	1,257
CIV	16,695	16,257	15,634	14,345	14,187	12,550	10,508	10,864	10,456	10,456	10,456	10,456	10,456	10,456
TOT	18,095	17,661	17,007	15,808	15,736	14,102	11,818	12,444	12,026	12,026	12,026	12,026	12,026	12,026

[REDACTED]

MANPOWER AUTHORIZATIONS BY UNIT
FY97/4
as of Aug 94 manpower file

CMD	ORGANIZATION	OFF	AMN	FY 97		TOTAL
				CIV	DRILL	
**	BASE: mcclellan					
u aag	Det 415 af audit agency fo	0	0	23	0	23
u acc	01 aw 4525 combat appl sq	0	0	0	0	0
u aet	364 Recruiting sq	1	2	1	0	4
u aet	364 Recruiting sq	4	16	2	0	22
u aet	Det 510 373 training sq	0	7	1	0	8
u aet	01 ac Det 8 cap usaf ap	4	3	2	0	9
u afr	2400 res readiness mob sq	0	2	1	0	3
u afr	314 air refueling sq	0	0	60	0	60
u afr	4 air force af	0	0	49	0	49
u afr	406 combat log support sq	0	0	4	0	4
u afr	940 Civil Engineer sq	0	0	4	0	4
u afr	940 air refueling gp	0	0	26	0	26
u afr	940 logistics gp	0	0	7	0	7
u afr	940 logistics support sq	0	0	13	0	13
u afr	940 maintenance sq	0	0	53	0	53
u afr	940 medical sq	0	0	3	0	3
u afr	940 mission support sq	0	0	21	0	21
u afr	940 operations gp	0	0	6	0	6
u afr	940 operations spt ft	0	0	16	0	16
u afr	940 security police sq	0	0	1	0	1
u afr	01 wm 2400 res readiness mob sq	1	1	2	0	4
u amc	01 d 615 air mobility ops gp	2	0	0	0	2
u amc	01 w air mobility cos st	0	2	0	0	2
u elm	01 alc afelm disa jc	0	0	0	0	0
u elm	01 m Det 7 AFELM Comm Tech el	0	3	0	0	3
u elm	01 mc afelm def fin acct ce	0	8	0	0	8
u elm	afelm deca ag	0	9	0	0	9
u elm	afelm dla-d depot dl	1	0	0	0	1
u fsa	01 b hq af flt std ag fo	1	0	0	0	1
u lct	af legal ser ag fo	1	1	0	0	2
u mtc	1849 electronics instl sq	6	282	28	0	316
u mtc	337 Flight Test sq	11	5	0	0	16
u mtc	652 Civil Engineer sq	11	200	318	0	529
u mtc	652 air base gp	8	87	366	0	461
u mtc	652 combat log support sq	3	201	1	0	205
u mtc	652 comm comp sys gp	7	283	159	0	449
u mtc	652 medical gp	162	389	159	0	710
u mtc	652 operations spt sq	3	47	13	0	63
u mtc	652 security police sq	2	156	6	0	164
u mtc	01 ad Det 42 sacramento alc ce	5	38	89	0	132
u mtc	01 ag hq materiel system ce	0	0	34	0	34
u mtc	01 bb 46 test wg	0	0	1	0	1
u mtc	01 ey oklahoma city alc ce	0	0	2	0	2
		9	5	10	0	24
u mtc	sacramento alc ce	43	16	2039	0	2098
u mtc	sacramento alc ce	10	20	1003	0	1033
u mtc	sacramento alc ce	15	3	190	0	208

MANPOWER AUTHORIZATIONS BY UNIT
FY97/4
as of Aug 94 manpower file

CMD	ORGANIZATION	OFF	AMN	FY 97		DRILL	TOTAL
				CIV			
u mtc sacramento alc ce		38	81	547		0	666
u mtc sacramento alc ce		33	8	1876		0	1917
u mtc sacramento alc ce		9	13	156		0	178
u mtc sacramento alc ce		11	2	1212		0	1225
u osi Det 112 1 field investigatns dt		3	8	5		0	16
u tap tech operations fo		33	241	37		0	311
** Subtotal **		437	2139	8546		0	11122

Organization	Non AF Tenant				
McClellan AFB Non AF Tenant	0	0	0	257	257
AAFES (part-time)	0	0	0	257	257
McClellan AFB Non AF Tenant	0	11	90	101	101
DECA	0	11	90	101	101
McClellan AFB Non AF Tenant	1	8	130	139	139
DFAS	1	8	130	139	139
McClellan AFB Non AF Tenant	1	0	602	603	603
Defense Logistics Agency	1	0	602	603	603
McClellan AFB Non AF Tenant	0	0	51	51	51
Fefense Printing Service	0	0	51	51	51
McClellan AFB Non AF Tenant	0	0	218	218	218
NAF (full-time)	0	0	218	218	218
McClellan AFB Non AF Tenant	0	0	1	1	1
Red Cross	0	0	1	1	1
McClellan AFB Non AF Tenant	0	0	6	6	6
Safe Credit Union	0	0	6	6	6
McClellan AFB Non AF Tenant	26	164	190	190	190
US Coast Guard	26	164	190	190	190
McClellan AFB Non AF Tenant	0	0	2	2	2
US Post Office	0	0	2	2	2
All Non Air Force Tenant Organizations Regardless of Size	36	195	1879	2110	2110

Non Air Force Tenant Units

Base Name	Category	Organization	OFF AUTH	ENL AUTH	CIV AUTH	TOTAL
McClellan AFB	Non AF Tenant	AAFES (part-time)	0	0	257	257
McClellan AFB	Non AF Tenant	DECA	0	11	90	101
McClellan AFB	Non AF Tenant	DFAS	1	8	130	139
McClellan AFB	Non AF Tenant	Defense Logistics Agency	1	0	602	603
McClellan AFB	Non AF Tenant	NAF (full-time)	0	0	218	218
McClellan AFB	Non AF Tenant	NAF (part-time)	0	0	202	202
McClellan AFB	Non AF Tenant	US Coast Guard	26	164	0	190
All Non Air Force Tenant Organizations With Population Over 100			28	192	1499	1719

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AIR LOGISTICS CENTER MANPOWER HISTORY

	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
MCCLELLAN AFB (Sacramento ALC)														
Foreign Military Sales (FMS)														
OFF	13	10	8	8	4	4	4	4	4	4	4	4	4	4
ENL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CIV	527	401	279	212	203	187	367	378	374	374	374	374	374	374
TOT	540	411	287	220	207	191	371	382	378	378	378	378	378	378
Depot Maintenance (Maint)														
OFF	40	40	40	40	40	40	33	32	32	32	32	32	32	32
ENL	263	263	262	260	259	252	248	183	183	183	183	183	183	183
CIV	6,026	6,035	6,045	5,415	5,322	5,354	5,104	4,890	4,480	4,480	4,480	4,480	4,480	4,480
TOT	6,329	6,338	6,347	5,715	5,621	5,646	5,385	5,105	4,695	4,695	4,695	4,695	4,695	4,695
Material Management (MM)														
OFF	104	105	100	100	112	97	96	81	80	80	80	80	80	80
ENL	90	91	93	91	153	30	29	23	23	23	23	23	23	23
CIV	2,283	2,301	2,297	2,093	2,421	1,884	1,634	1,284	1,440	1,440	1,440	1,440	1,440	1,440
TOT	2,477	2,497	2,490	2,284	2,686	2,011	1,759	1,388	1,543	1,543	1,543	1,543	1,543	1,543
Central Contracting (PK)														
OFF	16	16	16	14	11	11	11	10	10	10	10	10	10	10
ENL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CIV	326	333	304	280	251	174	121	108	112	112	112	112	112	112
TOT	342	349	320	294	262	185	132	118	122	122	122	122	122	122
Management Overhead (MGMT)														
OFF	13	13	13	14	13	10	7	6	6	6	6	6	6	6
ENL	22	22	22	22	22	12	14	13	13	13	13	13	13	13
CIV	61	64	72	71	64	58	38	29	30	30	30	30	30	30
TOT	96	99	107	107	99	80	59	48	49	49	49	49	49	49
Communications & Computers (COMM/COMP)														
OFF	3	3	3	11	11	26	35	18	17	17	17	17	17	17
ENL	-	-	22	269	293	292	299	269	255	255	255	255	255	255
CIV	477	458	443	457	356	346	157	117	127	127	127	127	127	127
TOT	480	461	468	737	660	664	491	404	399	399	399	399	399	399
Medical (MED)														
OFF	38	40	46	54	57	146	157	157	157	157	157	157	157	157
ENL	110	109	121	127	346	365	320	396	393	393	393	393	393	393
CIV	84	83	91	92	94	161	167	147	141	141	141	141	141	141
TOT	232	232	258	273	497	672	644	700	691	691	691	691	691	691
Base Operating Support (BOS)														
OFF	62	64	64	61	52	56	54	68	68	68	68	68	68	68
ENL	973	1,015	1,039	1,133	1,097	885	836	698	689	689	689	689	689	689
CIV	3,964	3,825	3,554	3,301	1,730	1,517	1,382	1,113	1,090	1,090	1,090	1,090	1,090	1,090
TOT	4,999	4,904	4,657	4,495	2,879	2,458	2,272	1,879	1,847	1,847	1,847	1,847	1,847	1,847
TOTAL ALC MANPOWER														
OFF	289	291	290	302	300	390	397	376	374	374	374	374	374	374
ENL	1,458	1,500	1,559	1,902	2,170	1,836	1,746	1,582	1,556	1,556	1,556	1,556	1,556	1,556
CIV	13,748	13,500	13,085	11,921	10,441	9,681	8,970	8,066	7,794	7,794	7,794	7,794	7,794	7,794
TOT	15,495	15,291	14,934	14,125	12,911	11,907	11,113	10,024	9,724	9,724	9,724	9,724	9,724	9,724

MANPOWER AUTHORIZATIONS BY UNIT
FY97/4
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CMD	ORGANIZATION	OFF	AMN	FY 97 CIV	DRILL	TOTAL
**	BASE: robins					
u	aag Det 425 af audit agency fo	0	0	29	0	29
u	acc 5 combat comm gp	3	11	1	0	15
u	acc 5 combat comm spt sq	9	66	9	0	84
u	acc 51 combat comm sq	5	209	0	0	214
u	acc 52 combat comm sq	5	139	0	0	144
u	acc 53 combat comm sq	5	139	0	0	144
u	acc 54 combat comm sq	4	136	0	0	140
u	acc 01 av 4525 combat appl sq	0	0	0	0	0
u	acc 01 z ACC Log Support gp	0	0	8	0	8
u	aet 367 Recruiting gp	2	16	1	0	19
u	aet 01 a Det 317 373 training sq	0	15	0	0	15
u	aet 01 f air force rotc cr	1	0	0	0	1
u	aet 01 h college for en pme cl	0	9	1	0	10
u	afr 2400 res readiness mob sq	32	102	271	0	405
u	afr 402 Civil Engineer sq	0	0	1	0	1
	afr 402 combat log support sq	0	0	4	0	4
	afr 8600 support gp	0	0	66	0	66
u	afr 94 aerial port sq	0	0	2	0	2
u	afr 01 a 94 aerosp pat stag sq	0	0	1	0	1
u	afr 01 ew 94 mission support sq	0	0	14	0	14
u	afr af reserve sa	114	136	177	0	427
u	afr cmd band af res bd	2	58	0	0	60
u	amc 19 air refueling wg	21	50	2	0	73
u	amc 19 logistics gp	3	6	1	0	10
u	amc 19 logistics support sq	2	133	4	0	139
u	amc 19 maintenance sq	2	154	3	0	159
u	amc 19 operations gp	7	7	1	0	15
u	amc 19 operations spt sq	14	23	1	0	38
u	amc 712 air refueling sq	47	149	0	0	196
u	amc 99 air refueling sq	62	190	0	0	252
u	amc 01 a air mobility cos st	0	2	0	0	2
u	elm 01 alc afelm disa jc	0	0	0	0	0
u	elm 01 fa afelm def fin acct ce	1	16	0	0	17
u	elm afelm deca ag	0	11	0	0	11
u	elm afelm def fin acct ce	0	0	0	0	0
u	elm afelm dla-d depot dl	4	2	0	0	6
u	lct af legal ser ag fo	1	1	0	0	2
u	mtc 339 Flight Test sq	12	13	1	0	26
u	mtc 653 Civil Engineer sq	13	257	262	0	532
u	mtc 653 air base gp	9	58	729	0	796
u	mtc 653 combat log support sq	3	156	1	0	160
u	mtc 653 comm comp sys gp	5	83	80	0	168
	mtc 653 medical gp	108	236	121	0	465
	mtc 653 operations spt sq	5	40	10	0	55
u	mtc 653 security police sq	4	211	11	0	226
u	mtc Det 1 Elec Sys ce	9	12	1	0	22
u	mtc Det 8 645 materiel sq	20	16	188	0	224

MANPOWER AUTHORIZATIONS BY UNIT
 FY97/4
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CMD	ORGANIZATION	OFF	AMN	FY 97		DRILL	TOTAL
				CIV			
u mtc 01 aa 46 test wg		1	0	0		0	1
u mtc 01 lr Aero Sys ce		0	0	0		0	0
u mtc warner robins alc ce		13	20	1113		0	1146
u mtc warner robins alc ce		12	1	320		0	333
u mtc warner robins alc ce		25	4	794		0	823
u mtc warner robins alc ce		13	9	1862		0	1884
u mtc warner robins alc ce		14	1	465		0	480
u mtc warner robins alc ce		11	2	83		0	96
u mtc warner robins alc ce		16	7	651		0	674
u mtc warner robins alc ce		7	0	227		0	234
u mtc warner robins alc ce		17	0	366		0	383
u mtc warner robins alc ce		1	2	132		0	135
u mtc warner robins alc ce		35	71	550		0	656
u mtc warner robins alc ce		12	1	973		0	986
u osi Det 105 1 field investigatns dt		2	7	5		0	14
u paf 01 aa 18 supply sq		0	0	0		0	0
soc electronic combat ft		7	3	3		0	13
spc 9 space warning sq		13	67	4		0	84
Subtotal **		733	3057	9549		0	13339

Non Air Force Tenant Units

Base Name	Category	Unit Name	Personnel	Space	Value	Total
Robins AFB	Non AF Tenant	Barber/Beauty Shop	0	0	9	9
Robins AFB	Non AF Tenant	Base Exchange - Admin	0	0	8	8
Robins AFB	Non AF Tenant	Baskin Robins	0	0	2	2
Robins AFB	Non AF Tenant	Canadian Forces Liaison Office	1	0	0	1
Robins AFB	Non AF Tenant	Civilian Welfare Fund	0	0	4	4
Robins AFB	Non AF Tenant	Customer Support Assistance Office	0	0	1	1
Robins AFB	Non AF Tenant	Defense Contract Audit Agency	0	0	1	1
Robins AFB	Non AF Tenant	Defense Finance & Account Svc, DAO-DE	1	3	6	10
Robins AFB	Non AF Tenant	Defense Information Systems Agency (A)	2	4	174	180
Robins AFB	Non AF Tenant	Defense Investigative Service	0	0	4	4
Robins AFB	Non AF Tenant	Defense Reutilization & Marketing Office	0	0	82	82
Robins AFB	Non AF Tenant	Federal Aviation Administration	0	0	38	38
Robins AFB	Non AF Tenant	Gift Shop	0	0	2	2
Robins AFB	Non AF Tenant	Global Positioning System Manager (USA)	0	0	5	5
Robins AFB	Non AF Tenant	Hot Dog Stand	0	0	4	4
Robins AFB	Non AF Tenant	Japanese Liaison Office	1	0	0	1
Robins AFB	Non AF Tenant	Military Clothing Sales	0	0	8	8
Robins AFB	Non AF Tenant	Optical Shop	0	0	2	2
Robins AFB	Non AF Tenant	Robins Federal Credit Union	0	0	236	236
Robins AFB	Non AF Tenant	Royal Australian Air Force Liaison Office	1	0	0	1

Numbers are authorized personnel for FY 93/4. Consistent with BRAC Questionnaire data

Non Air Force Tenant Units

Robins AFB	Non AF Tenant	Saudi Arabian Liaison Office	1	0	0	1
Robins AFB	Non AF Tenant	Section 6, Base Schools	0	0	144	144
Robins AFB	Non AF Tenant	Service Station	0	1	15	16
Robins AFB	Non AF Tenant	Small & Disadvantaged Business Office	0	0	5	5
Robins AFB	Non AF Tenant	Systems Automation Center	0	0	9	9
Robins AFB	Non AF Tenant	Trust Company Bank	0	0	6	6
Robins AFB	Non AF Tenant	US Coast Guard Liaison Office	1	0	0	1
Robins AFB	Non AF Tenant	Vendors (Contract)	0	0	7	7
Robins AFB	Non AF Tenant	Weapons System Support (DLA Liaison)	0	0	1	1
All Non Air Force Tenant Organizations Regardless of Size			16	45	2717	2778

Non Air Force Tenant Units

Base Name	Category	Organization	Off. Staff	Enl. Staff	Other Staff	Total
Robins AFB	Non AF Tenant	Base Personnel	0	0	120	120
Robins AFB	Non AF Tenant	Base Personnel	0	0	120	120
Robins AFB	Non AF Tenant	Defense Information Systems Agency (A)	2	4	174	180
Robins AFB	Non AF Tenant	Robins Federal Credit Union	0	0	236	236
Robins AFB	Non AF Tenant	Section 6, Base Schools	0	0	144	144
All Non Air Force Tenant Organizations With Population Over 100			4	26	2189	2219

AIR LOGISTICS CENTER MANPOWER HISTORY

	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
ROBINS AFB (Warner Robins ALC)														
Foreign Military Sales (FMS)														
OFF	7	7	7	7	6	4	8	8	8	8	8	8	8	8
ENL								1	1	1	1	1	1	1
CIV	582	490	482	482	471	448	471	520	514	514	514	514	514	514
TOT	596	497	496	496	583	452	479	529	523	523	523	523	523	523
Depot Maintenance (Main)														
OFF	39	39	39	40	37	37	37	37	37	37	37	37	37	37
ENL	136	135	135	135	135	138	138	158	158	158	158	158	158	158
CIV	6,132	6,392	6,392	5,913	6,147	6,308	6,342	6,101	5,632	5,632	5,632	5,632	5,632	5,632
TOT	6,307	6,573	6,573	6,088	6,319	6,483	6,524	6,296	5,827	5,827	5,827	5,827	5,827	5,827
Material Management (MM)														
OFF	108	87	87	88	96	95	97	101	101	101	101	101	101	101
ENL	18	19	19	20	83	38	28	26	26	26	26	26	26	26
CIV	2,887	2,634	2,286	2,122	2,817	2,205	1,730	1,560	1,553	1,553	1,553	1,553	1,553	1,553
TOT	3,013	2,755	2,392	2,230	2,996	2,338	1,855	1,687	1,680	1,680	1,680	1,680	1,680	1,680
Central Contracting (PK)														
OFF	18	17	17	17	15	15	14	11	11	11	11	11	11	11
ENL	1	1	1	1										
CIV	575	540	515	425	386	314	234	213	208	208	208	208	208	208
TOT	594	559	533	443	401	329	248	224	219	219	219	219	219	219
Management Overhead (MGMT)														
OFF	7	7	7	6	6	6	6	5	5	5	5	5	5	5
ENL	4	4	3	4	4	5	5	5	5	5	5	5	5	5
CIV	72	76	80	77	78	58	51	50	49	49	49	49	49	49
TOT	83	87	90	87	88	69	62	60	59	59	59	59	59	59
Communications & Computers (COMM/COMP)														
OFF	6	6	6	9	9	10	8	8	8	8	8	8	8	8
ENL	1	1	1	71	85	120	108	107	99	99	99	99	99	99
CIV	405	382	368	351	292	240	58	48	45	45	45	45	45	45
TOT	412	396	375	431	386	370	174	163	152	152	152	152	152	152
Medical (MED)														
OFF	82	86	89	91	100	102	104	108	108	108	108	108	108	108
ENL	181	183	189	185	194	198	207	236	233	233	233	233	233	233
CIV	86	95	107	115	102	126	127	114	102	102	102	102	102	102
TOT	349	364	385	391	403	426	438	458	450	450	450	450	450	450
Base Operating Support (BOS)														
OFF	74	75	76	80	69	63	59	79	79	79	79	79	79	79
ENL	894	895	852	880	793	726	708	685	728	728	728	728	728	728
CIV	3,749	3,507	3,159	3,418	2,492	1,401	1,367	1,434	1,473	1,473	1,473	1,473	1,473	1,473
TOT	4,717	4,477	4,087	4,378	3,361	2,190	2,134	2,198	2,280	2,280	2,280	2,280	2,280	2,280
TOTAL ALC MANPOWER														
OFF	341	328	328	338	338	332	333	357	357	357	357	357	357	357
ENL	1,235	1,238	1,200	1,296	1,294	1,225	1,194	1,218	1,250	1,250	1,250	1,250	1,250	1,250
CIV	14,495	14,052	13,404	12,910	12,905	11,100	10,387	10,040	9,583	9,583	9,583	9,583	9,583	9,583
TOT	16,071	15,631	14,932	14,544	14,537	12,657	11,914	11,615	11,190	11,190	11,190	11,190	11,190	11,190

MANPOWER AUTHORIZATIONS BY UNIT
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CMD	ORGANIZATION	OFF	AMN	FY 97		DRILL	TOTAL
				CIV			
**	BASE: tinker						
u	aag Det 440 af audit agency fo	0	0	29		0	29
u	acc 3 combat comm gp	2	19	1		0	22
u	acc 3 combat comm spt sq	11	71	10		0	92
u	acc 31 combat comm sq	5	220	0		0	225
u	acc 32 combat comm sq	5	139	0		0	144
u	acc 33 combat comm sq	5	146	0		0	151
u	acc 34 combat comm sq	3	141	0		0	144
u	acc 552 air control wg	26	66	9		0	101
u	acc 552 computer systems gp	3	1	2		0	6
u	acc 552 computer systems sq	21	100	38		0	159
u	acc 552 logistics gp	6	34	2		0	42
u	acc 552 logistics support sq	13	138	12		0	163
u	acc 552 maintenance sq	6	544	2		0	552
u	acc 552 operations gp	9	20	2		0	31
u	acc 552 operations spt sq	68	120	16		0	204
	acc 552 training sq	41	122	1		0	164
	acc 552 training sq	18	12	0		0	30
u	acc 752 computer systems sq	12	121	13		0	146
u	acc 8 abn cmd control sq	16	69	1		0	86
u	acc 963 air warn ctrl sq	134	504	2		0	640
u	acc 964 air warn ctrl sq	127	495	3		0	625
u	acc 965 air warn ctrl sq	129	493	3		0	625
u	acc 966 air warn ctrl tr sq	56	229	3		0	288
u	acc Det 6 ACC Training Spt sq	7	9	0		0	16
u	acc 01 ad ACC Log Support gp	0	0	23		0	23
u	acc 01 af 29 training systems sq	0	1	0		0	1
u	acc 01 bc 4525 combat appl sq	0	0	0		0	0
u	aet 349 Recruiting sq	4	15	2		0	21
u	aet 349 Recruiting sq	2	1	1		0	4
u	aet Det 413 373 training sq	1	43	1		0	45
u	aet 01 ac Det 6 cap usaf ap	1	1	0		0	2
u	afr 2400 res readiness mob sq	0	2	1		0	3
u	afr 403 combat log support sq	0	0	4		0	4
u	afr 465 air refueling sq	0	0	67		0	67
u	afr 507 Civil Engineer sq	0	0	2		0	2
u	afr 507 air refueling gp	0	0	26		0	26
u	afr 507 communications ft	0	0	1		0	1
u	afr 507 logistics gp	0	0	6		0	6
u	afr 507 logistics support sq	0	0	16		0	16
u	afr 507 maintenance sq	0	0	68		0	68
u	afr 507 medical sq	0	0	3		0	3
u	afr 507 mission support sq	0	0	20		0	20
	afr 507 operations gp	0	0	5		0	5
	afr 507 operations spt ft	0	0	8		0	8
u	afr 507 security police sq	0	0	1		0	1
u	afr 507 support gp	0	0	2		0	2
u	afr 72 aerial port sq	0	0	2		0	2

MANPOWER AUTHORIZATIONS BY UNIT
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CMD	ORGANIZATION	OFF	AMN	FY 97		DRILL	TOTAL
				CIV			
u aia	01 tt 67 operations spt sq	1	4	0		0	5
u amc	01 a 22 logistics gp	0	0	0		0	0
u amc	01 k 615 air mobility ops gp	0	0	0		0	0
u aws	Det 7 af global wea ce	2	33	3		0	38
u elm	01 alc afelm disa jc	0	0	0		0	0
u elm	01 tk afelm def fin acct ce	1	11	0		0	12
u elm	afelm deca ag	0	6	0		0	6
u elm	afelm dla-d depot dl	1	0	0		0	1
u lct	af legal ser ag fo	1	1	0		0	2
u mtc	10 test sq	14	3	1		0	18
u mtc	1818 reserve advisor sq	1	2	1		0	4
u mtc	1845 engineering instl gp	26	92	234		0	352
u mtc	654 Civil Engineer sq	10	259	430		0	699
u mtc	654 air base gp	8	67	628		0	703
u mtc	654 combat log support sq	3	124	1		0	128
u mtc	654 comm comp sys gp	5	179	92		0	276
mtc	654 medical gp	145	352	147		0	644
mtc	654 operations spt sq	6	41	20		0	67
u mtc	654 security police sq	4	306	16		0	326
u mtc	01 ac hq materiel system ce	0	0	78		0	78
u mtc	01 ad Det 2 645 materiel sq	0	0	1		0	1
u mtc	01 af 412 logistics support sq	1	8	3		0	12
u mtc	01 de 615 specialized Msn sq	0	0	1		0	1
u mtc	comm sys ce	78	194	344		0	616
u mtc	comm sys ce	76	206	103		0	385
u mtc	oklahoma city alc ce	18	32	1842		0	1892
u mtc	oklahoma city alc ce	0	0	38		0	38
u mtc	oklahoma city alc ce	12	0	359		0	371
u mtc	oklahoma city alc ce	15	5	793		0	813
u mtc	oklahoma city alc ce	72	8	3145		0	3225
u mtc	oklahoma city alc ce	8	11	1490		0	1509
u mtc	oklahoma city alc ce	37	98	707		0	842
u osi	Det 114 1 field investigatns dt	3	9	3		0	15
u paf	01 a 3 wing wg	0	0	0		0	0
**	Subtotal **						
		1279	5927	10888		0	18094

Non Air Force Tenant Units

Base Name	Category	Organization	AF Personnel	Non AF Personnel	Total Personnel	Total
Tinker AFB	Non AF Tenant	Army Corps of Engineers	1	0	32	33
Tinker AFB	Non AF Tenant	Defense Finance & Accounting Service	1	13	144	158
Tinker AFB	Non AF Tenant	Defense Logistics Agency	1	0	1050	1051
Tinker AFB	Non AF Tenant	Defense Reutilization & Marketing Office	0	0	56	56
Tinker AFB	Non AF Tenant	NAF	0	0	520	520
Tinker AFB	Non AF Tenant	Post Office	0	0	4	4
Tinker AFB	Non AF Tenant	SATO	0	0	11	11
Tinker AFB	Non AF Tenant	Tinker Credit Union	0	0	61	61
All Non Air Force Tenant Organizations Regardless of Size			232	961	2606	3799

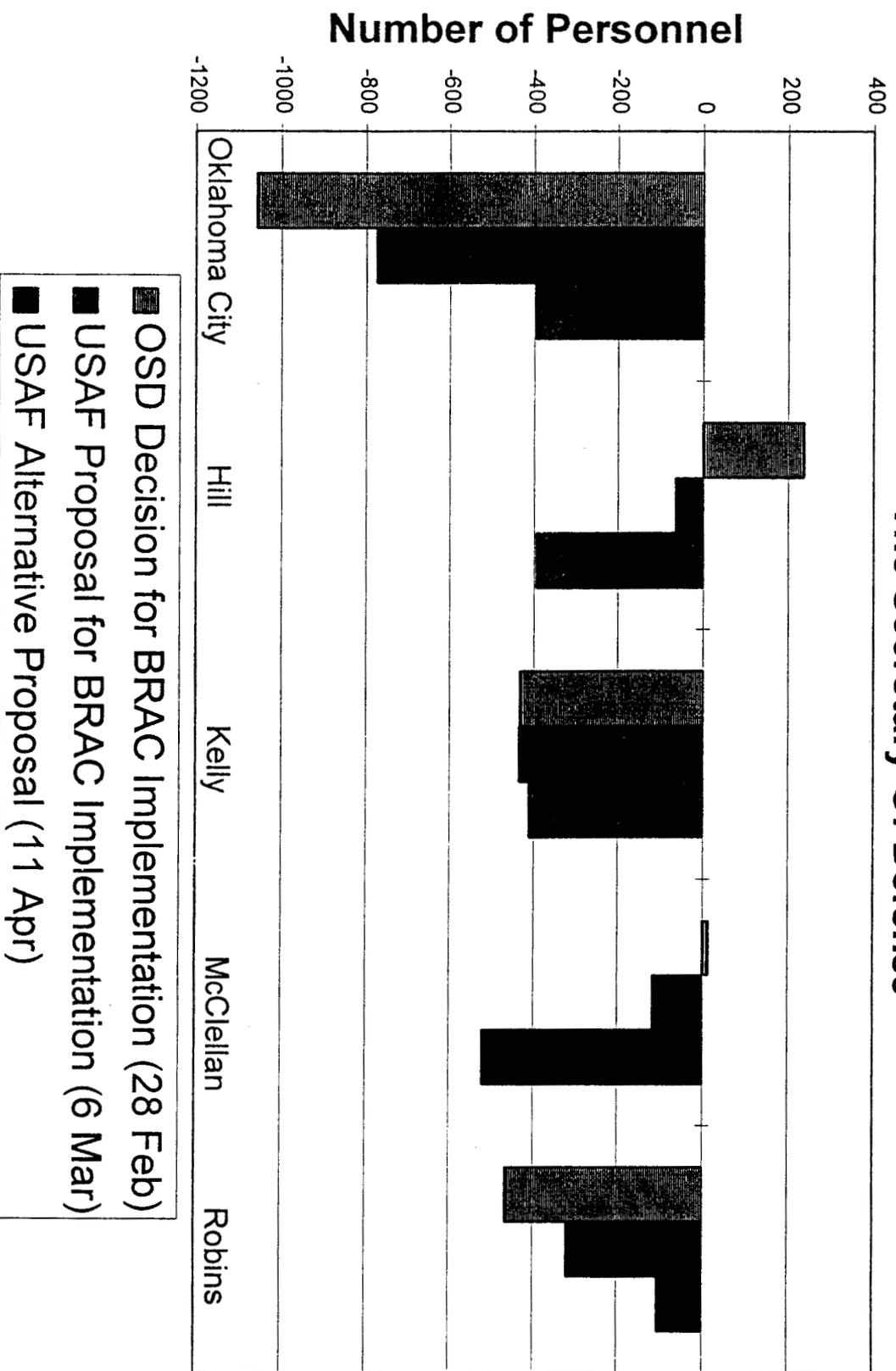
Non Air Force Tenant Units

Base Name	Category	Organization	TPF	BJ	Other	TOTAL
Tinker AFB	Non AF Tenant	Defense Finance & Accounting Service	1	13	144	158
Tinker AFB	Non AF Tenant	Defense Logistics Agency	1	0	1050	1051
Tinker AFB	Non AF Tenant	NAF	0	0	520	520
Tinker AFB	Non AF Tenant	NAF	229	98	21	348
All Non Air Force Tenant Organizations With Population Over 100			231	961	2393	3585

AIR LOGISTICS CENTER MANPOWER HISTORY

	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
TINKER AFB (Oklahoma City ALC)														
Foreign Military Sales (FMS)														
OFF	8	4	4	4	4	4	3	2	2	2	2	2	2	2
ENL	-	-	-	1	1	1	-	-	-	-	-	-	-	-
CIV	493	502	437	423	388	366	421	417	412	412	412	412	412	412
TOT	501	506	441	428	393	371	424	419	414	414	414	414	414	414
Depot Maintenance (Maint)														
OFF	45	45	45	46	46	46	45	45	45	45	45	45	45	45
ENL	109	108	109	109	109	128	128	117	117	117	117	117	117	117
CIV	7,844	7,851	7,800	6,070	5,991	6,389	6,140	6,047	5,957	5,957	5,957	5,957	5,957	5,957
TOT	7,998	8,004	7,954	6,225	6,146	6,563	6,313	6,209	6,119	6,119	6,119	6,119	6,119	6,119
Material Management (MM)														
OFF	91	91	82	82	80	71	76	79	79	79	79	79	79	79
ENL	18	18	18	57	17	17	17	17	16	16	16	16	16	16
CIV	3,321	3,077	2,922	2,766	3,072	2,446	1,954	1,704	1,685	1,685	1,685	1,685	1,685	1,685
TOT	3,430	3,186	3,022	2,905	3,169	2,534	2,047	1,800	1,780	1,780	1,780	1,780	1,780	1,780
Central Contracting (PK)														
OFF	17	17	17	15	15	13	12	12	12	12	12	12	12	12
ENL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CIV	561	538	473	420	409	334	268	219	223	223	223	223	223	223
TOT	578	555	490	435	424	347	280	231	235	235	235	235	235	235
Management Overhead (MGMT)														
OFF	7	7	8	8	8	8	7	6	6	6	6	6	6	6
ENL	11	11	11	12	12	3	3	3	3	3	3	3	3	3
CIV	83	86	91	83	79	81	76	65	66	66	66	66	66	66
TOT	101	104	110	103	99	92	86	74	75	75	75	75	75	75
Communications & Computers (COMM/COMP)														
OFF	2	2	2	6	9	9	8	8	8	8	8	8	8	8
ENL	-	-	-	150	162	226	193	192	184	184	184	184	184	184
CIV	538	517	487	507	455	424	92	90	90	90	90	90	90	90
TOT	540	519	489	663	626	659	293	290	282	282	282	282	282	282
Medical (MED)														
OFF	106	111	118	123	133	142	147	144	143	143	143	143	143	143
ENL	253	258	277	272	271	291	320	352	348	348	348	348	348	348
CIV	117	123	139	152	154	143	144	139	133	133	133	133	133	133
TOT	476	492	534	547	558	576	611	635	624	624	624	624	624	624
Base Operating Support (BOS)														
OFF	69	70	71	76	75	70	64	61	61	61	61	61	61	61
ENL	973	1,015	1,039	1,133	1,097	885	836	809	798	798	798	798	798	798
CIV	3,964	3,825	3,554	3,301	3,730	3,517	3,382	3,348	3,344	3,344	3,344	3,344	3,344	3,344
TOT	5,006	4,910	4,664	4,510	2,902	2,472	2,282	2,218	2,203	2,203	2,203	2,203	2,203	2,203
TOTAL ALC MANPOWER														
OFF	345	347	347	360	370	363	362	357	356	356	356	356	356	356
ENL	1,364	1,410	1,454	1,734	1,669	1,551	1,497	1,490	1,466	1,466	1,466	1,466	1,466	1,466
CIV	16,921	16,519	15,903	13,722	12,278	11,700	10,477	10,029	9,910	9,910	9,910	9,910	9,910	9,910
TOT	18,630	18,276	17,704	15,816	14,317	13,614	12,336	11,876	11,732	11,732	11,732	11,732	11,732	11,732

Changes To The Depot Realignments as Recommended By The Secretary Of Defense



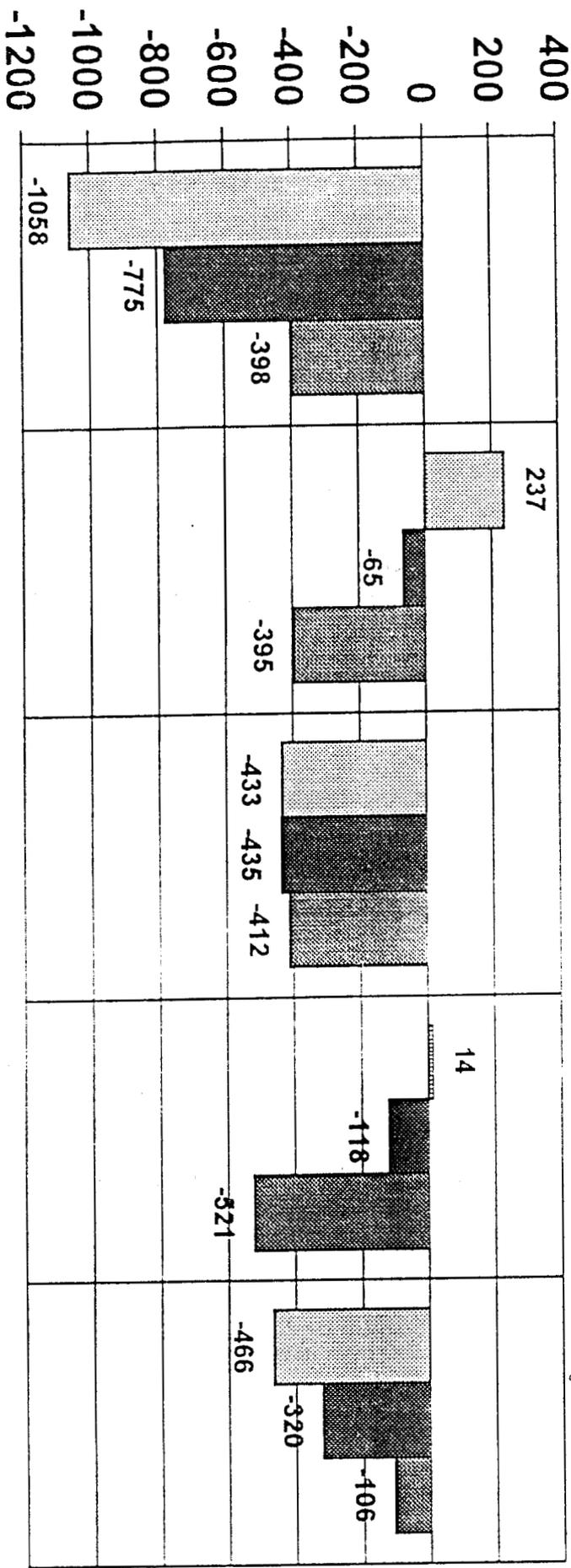
~~507 to SM for 134th~~

+ 240 to SM
SA

RC band and other services
possible other services

Personnel Changes

~~6.7%~~ ~~8.9%~~ ~~7.5%~~ ~~11.2%~~ ~~19%~~



OSD Decision for BRAC Implementation (28 Feb)
 USAF Proposal for BRAC Implementation (6 Mar)
 USAF Alternative Proposal (11 Apr)

Document Separator



DEPOT

MAINTENANCE

OPERATIONS

INDICATORS

REPORT

1st Quarter FY93 Through 4th Quarter FY94

FOREWORD

This report presents joint Service and DLA organic maintenance depot performance data reflected in the Depot Maintenance Operational Indicators System (DMOIS). It is the result of an evolutionary process of developing and enhancing depot performance indicator data.

The latest stage in this process began in early 1992, when the Joint Policy Coordinating Group on Depot Maintenance (JPCG-DM) directed the Joint Performance Measurement Group (JPMG) to develop indicators relating to the Theory of Constraints. At that time, there was a view among the Services that the existing Performance Measurement System Report had achieved commonality, but lacked comparability. As a result, the JPCG-DM directed the JPMG to look at other measures. The JPMG reviewed several sources for measurements including Competitive Edges, the Theory of Constraints, and the measures required by the Chief Financial Officers Act. The DMOIS Report is the result of the effort to revise the DMPMS. The JPMG is also developing additional indicators for quality and inventory.

The joint effort to identify and report depot performance data was first begun in response to a 1990 tasking by the Defense Depot Maintenance Council (DDMC). The DDMC commissioned a Performance Measurement Task Force whose report of 26 November 1990 recommended establishment of a Depot Maintenance Performance Measurement System (DMPMS). Subsequently, the JPCG-DM established the Joint Performance Measurement Group (JPMG) to implement and maintain the DMPMS.

The DMOIS reports are published semi-annually. The data presented covers two fiscal years by quarter, current fiscal year and past fiscal year. Since the first submission of the fiscal year is a mid-year submission (1st and 2nd quarters), there are six quarters of data displayed. The last submission for the fiscal year (3rd and 4th quarters) will display eight quarters of data.

The JPMG will continue to review and enhance the DMOIS to ensure that its indicators provide significant management information.

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INTRODUCTION

1.1 Description of the Key Areas and Their Indicators

The Depot Maintenance Operations Indicators System (DMOIS) Report is comprised of three key areas: Theory of Constraints, Timeliness, and Financial. Each key area has one or more indicators that are described below. The formulas employed by each Service and DLA in computing the indicators are documented in the DMOIS Handbook.

1.1.1 Theory of Constraints Indicators

The Theory of Constraints (TOC) represents a philosophy of global system improvement designed to assist organizations in achieving their goals. The TOC indicators are:

a. Throughput. Throughput is defined as the rate at which the system generates money through sales. The formula used to determine Throughput is revenue minus direct material. Revenue is defined as the realized result from the sale of a product or service. Direct material is defined as the material specifically required for the performance of depot maintenance as specified by a work authorization document. Throughput and Operating Expense are displayed on the same chart.

b. Operating Expense. Operating Expense is defined as all the money the system spends in turning inventory into Throughput. The formula used to determine Operating Expense is total actual cost minus direct material. Total actual cost is defined as amounts determined on the basis of costs incurred as distinguished from forecasted costs. Operating Expense and Throughput are displayed on the same chart.

c. Capital Investment Effectiveness. Capital Investment Effectiveness is the ratio of throughput to long term inventory. Long term inventory is defined as the total depreciated value of all capital assets (equipment, buildings, software), excluding land and fixed assets not in use, owned by the depot maintenance activity.

1.1.2 Timeliness

Timeliness Indicators provide information regarding a depot's ability to complete the workload in the agreed upon time. The timeliness indicators are:

a. Schedule Indicator. The Schedule Indicator is a ratio of the units completed on time to the units scheduled. Schedule is defined as the most current schedule for completion of planned or programmed work. Completion is defined as the date when a product is physically completed. On time is defined as completing the workload at the time promised. The Schedule Indicator is reported only by NAVAIR, Air Force and DLA.

b. Process Days. Process Days is calculated as an average for varying commodities. The formula used to calculate Process Days (except by NAVSEA) is the number of days (date completed minus date inducted) divided by the number of items. The formula used by NAVSEA to compute Process Days is scheduled flow days divided by actual flow days.

1.1.3 Financial Indicators

Financial indicators provide information about a depot's ability to manage to its budget. The financial indicators are:

a. Net Operating Results. Net Operating Results are calculated and displayed as two separate indexes, cumulative budgeted and cumulative actual. The cumulative budgeted is a ratio of the cumulative budgeted revenue to the cumulative budgeted cost. The cumulative actual is a ratio of the cumulative actual revenue to the cumulative actual cost.

b. Labor Hour Cost. Labor Hour Cost is a ratio of budgeted labor hour cost to actual labor hour cost. Budgeted labor hour cost is calculated as the total budgeted cost divided by the budgeted total direct labor hours. Actual labor hour cost is calculated as the total actual cost divided by the actual total direct labor hours.

2.1 Structure of the Report

This report portrays data for each Service, or Service Activity Group, and DLA. The depots are presented alphabetically within each Service and DLA grouping. The report presents the Service and DLA data in the following order:

Army
Naval Air Systems Command (NAVAIR)
Naval Sea Systems Command (NAVSEA) Shipyards
Air Force
Marine Corps
Defense Logistics Agency.

The operations indicators for each depot are in the following order for each reporting depot:

Throughput & Operating Expense
Capital Investment Effectiveness
Schedule Indicator
Process Days
Net Operating Results
Labor Hour Cost

2.2 Data Portrayal

For each depot, an introductory page provides supplementary data and an executive summary. The supplementary data includes: depot name, depot location, major workload, personnel levels, and current year budget. The following two pages for each depot reflect a graphic portrayal of all the indicators for that depot with analyses, when appropriate. The fourth page shows the data, the formula for each indicator, and the goal for that indicator.

The data presented covers two fiscal years by quarter, current fiscal year and past fiscal year. Since the first submission of the fiscal year is a mid year submission (1st and 2nd quarters), there are six quarters of data displayed. The last submission for the fiscal year (3rd and 4th quarters) will display eight quarters of data.

3.1 Reporting Activities

The depot maintenance activities that will report to the DMOIS are noted in Appendix A of this report. Depots that the Defense Base Closure and Realignment Commission have voted to close are not required to report.

4.1 Points of Contact

Any inquiries regarding data presented in this report should be referred to the respective Service or DLA representative to the JPMG. These individuals are identified in Appendix B.

5.1 Glossary

A glossary of acronyms used in this report is provided in Appendix C.



ARMY DEPOTS

ANNISTON ARMY DEPOT
ANNISTON, AL

MAJOR WORKLOAD ACCOMPLISHED:

During FY94, Anniston Army Depot repaired 476 M1 RCIRON vehicles, 22 M60/M48 AVLB RCIRON vehicles, 33 M728 RCIRON vehicles, 66 M88A1 RCIRON vehicles, 35 M551/NTC OPFOR vehicles, 15 M551A1 vehicles, 5 M60A1 AVLB overhaul vehicles, 6 M728 overhaul vehicles, and 42 M88A1 overhaul vehicles. ANAD repaired 33 M1 engines, 157 M1 forward modules, 343 M1 rear modules, 169 engines, 233 6V3T engines, and 15 1410 transmissions.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	2506
Military:	3

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

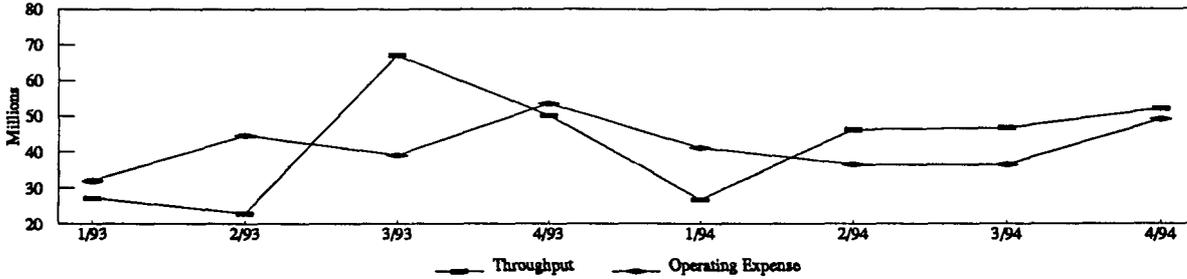
\$271,564,000

M1A2 Upgrade Teaming with General Dynamics - A pilot program at ANAD was completed 30 Sept 94. ANAD has completed 49 vehicles on FY94 program and expects to complete the remainder by the end of December for a total of 86 vehicles. An FY95 program for a quantity of 120 is scheduled for induction at the end of October 1994 with production beginning in December 1994 and continuing through December 1995. Mining Equipment Manufacturing Team Effort with United Defense (BMY)- On 18 April, 1994, ANAD and Steel Products Division of United Defense signed a memorandum of agreement to develop specialized mining equipment in the U.S. ANAD is currently in the process of completing cost estimates for the effort to be performed at the depot. Preliminary estimates should be completed in the mid-November timeframe. M1A1 AIM Teaming with General Dynamics - AIM XXI is a public/private venture between ANAD and General Dynamics Land Systems to provide an integrated program for restoration, enhanced maintenance and information management support for the M1A1 Main Battle Tank (MBT). A \$35M FY95 pilot program at the Army's National Training Center will restore 58-60 M1A1 tanks to a standard configuration incorporating performance, safety, and reliability improvements and fielding a "zero time," better than new MBT. The pilot program will also demonstrate the added value of enhanced intermediate level maintenance provided by joint OEM/civilian field maintenance support teams. Coupling restored M1A1s with aggressive field support will reduce life cycle maintenance cost and improve readiness.

ANNISTON ARMY DEPOT

THROUGHPUT & OPERATING EXPENSE

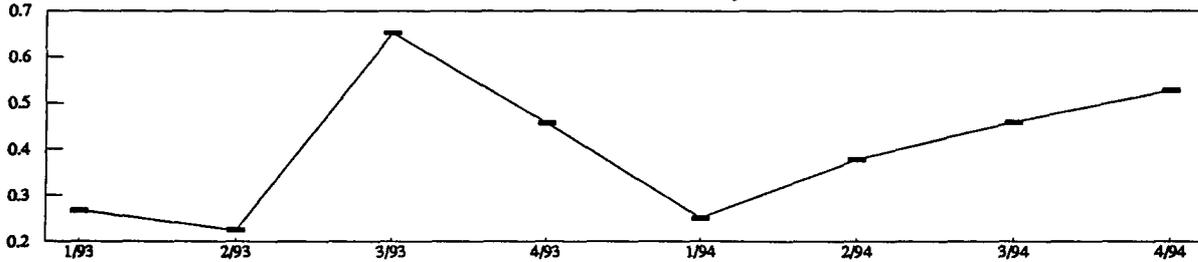
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



Throughput has continued to show a positive trend in FY94. Revenue exceeded the plan per direct labor hour due to completion of prior year unliquidated obligations. Operating expenses exceeded the plan due to reimbursements from the Defense Finance and Accounting Service and Defense Logistics Agency which were not in the plan or fixed prices.

CAPITAL INVESTMENT EFFECTIVENESS

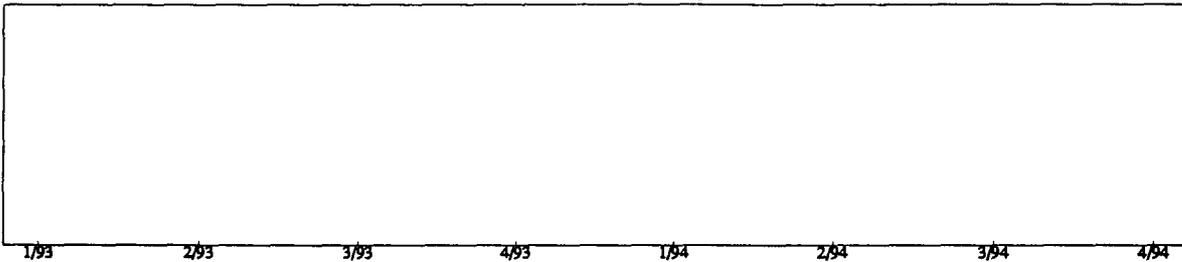
GOAL: Index Should Continually Increase



The positive trend in FY94 was mainly due to an increase in Throughput.

SCHEDULE INDICATOR

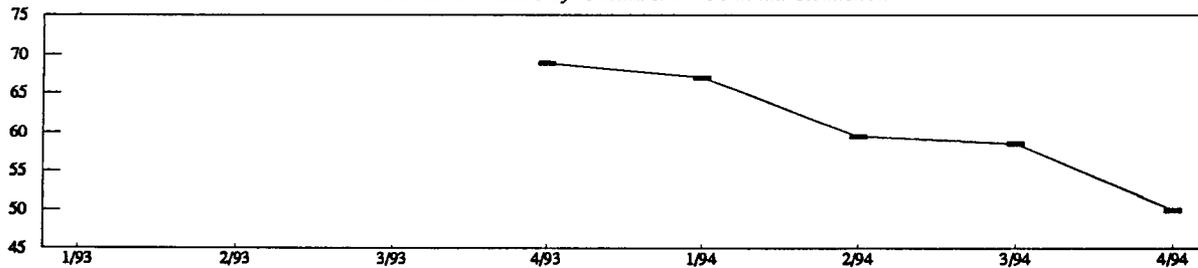
GOAL: Index Should Equal 1



ANNISTON ARMY DEPOT

PROCESS DAYS

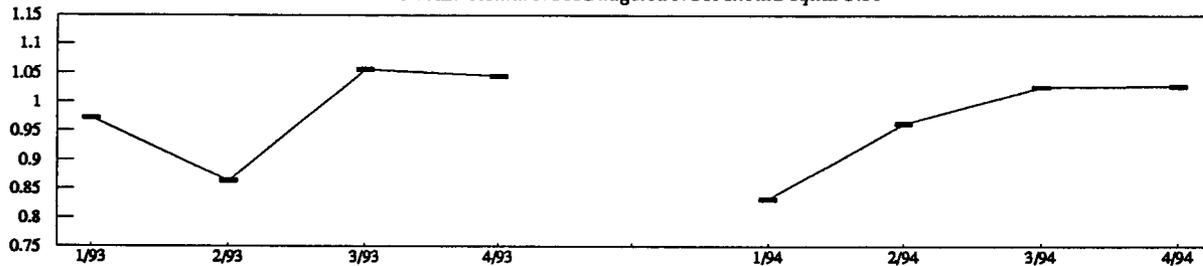
GOAL: Process Days Should show Continual Reduction



In FY94 ANAD reduced actual repair cycle time for M1 RCIRON vehicles from 67 days to 50 days. This was the result of production process improvements via TQM efforts throughout the Maintenance Directorate. Intensive management coupled with employee contributions through statistical process control and process assessment teams resulted in increased Throughput along the critical path of the vehicle production process.

NET OPERATING RESULTS

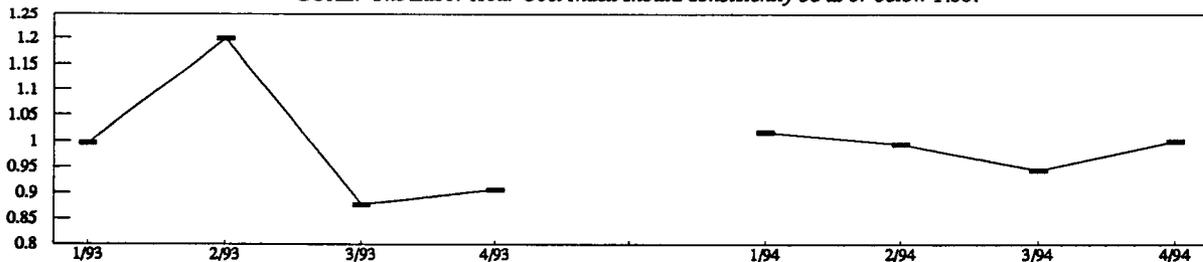
GOAL: Actual NOR/Budgeted NOR should equal 1.00



In FY94, costs are below the plan by nearly \$15M. This was primarily due to a more intensive management of material cost. Revenue also exceeded the plan by \$1.59 per hour which resulted in a favorable NOR. The NOR exceeded the plan by \$7.2M.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



Labor Hour Cost exceeded the plan by only \$.17 (0.2%). This resulted from the fact that overtime exceeded the plan due to completion of prior year unliquidated obligations and to the completion of year-end production schedules.

ANNISTON ARMY DEPOT

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
---------------------	------	------	------	------	------	------	------	------

THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue (\$)	62,318,000	75,471,000	52,085,000	68,704,000	52,023,000	67,851,000	63,880,000	81,457,000
Total Cost (\$)	67,023,000	97,140,000	24,160,000	71,972,000	66,325,000	58,082,000	53,633,000	78,461,000
Direct Materials (\$)	35,075,000	52,519,000	(14,935,000)	18,546,000	25,131,000	21,564,000	17,131,000	29,290,000
Throughput (\$)	27,243,000	22,952,000	67,020,000	50,158,000	26,892,000	46,287,000	46,749,000	52,167,000
Operating Expense (\$)	31,948,000	44,621,000	39,095,000	53,426,000	41,194,000	36,518,000	36,502,000	49,171,000

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	27,243,000	22,952,000	67,020,000	50,158,000	26,892,000	46,287,000	46,749,000	52,167,000
Longterm Inventory (\$)	101,890,000	102,058,000	102,774,000	109,798,000	107,234,403	122,387,304	101,832,440	98,713,933
INDEX	0.27	0.22	0.65	0.46	0.25	0.38	0.46	0.53

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

PROCESS DAYS

TOTAL PROCESS DAYS/NUMBER OF ITEMS = AVERAGE PROCESS DAYS

Mt Tanks Process Days				8,335	6,232	4,641	5,269	5,599
Number of Items				121	93	78	90	112
AVG PROCESS DAYS				68.88	67.01	59.50	58.54	49.99

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST)/

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	65,775,000	138,872,000	208,678,000	280,517,000	62,540,000	132,211,000	204,268,000	273,208,000
Cum Budg Cost (\$)	68,752,000	142,832,000	218,406,000	295,025,000	66,325,000	132,009,000	203,145,000	271,654,000
Budgeted NOR INDEX	0.96	0.97	0.96	0.95	0.94	1.00	1.01	1.01
Cum Actual Revenue (\$)	62,318,000	137,789,000	189,874,000	258,578,000	52,023,000	119,874,000	183,735,000	265,211,000
Cum Actual Cost (\$)	67,023,000	164,163,000	188,323,000	260,295,000	66,325,000	124,407,000	178,040,000	256,501,000
Actual NOR INDEX	0.93	0.84	1.01	0.99	0.78	0.96	1.03	1.03
NOR INDEX	0.97	0.86	1.06	1.04	0.83	0.96	1.03	1.03

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH)/

(CUMULATIVE BUDGETED LABOR HOUR COST/CUMULATIVE ACTUAL LABOR HOUR COST) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	68,752,000	142,832,000	218,406,000	295,025,000	66,325,000	132,009,000	203,145,000	271,654,000
Budgeted Total DLH	753,655	1,598,363	2,409,186	3,246,752	744,884	1,565,590	2,391,944	3,178,543
Bud Labor Hour Cost	\$91.22	\$89.36	\$90.66	\$90.87	\$89.04	\$84.32	\$84.93	\$85.46
Total Actual Cost (\$)	67,023,000	164,163,000	188,323,000	260,295,000	66,325,000	124,407,000	178,040,000	256,501,000
Actual Total DLH	737,432	1,532,232	2,367,749	3,161,415	730,900	1,482,197	2,220,203	2,995,334
Actual Labor Hour Cost	\$90.89	\$107.14	\$79.54	\$82.33	\$90.74	\$83.93	\$80.19	\$85.63
Labor Hour Cost INDEX	1.00	1.20	0.88	0.91	1.02	1.00	0.94	1.00

CORPUS CHRISTI ARMY DEPOT
CORPUS CHRISTI, TX

MAJOR WORKLOAD ACCOMPLISHED:

The depot repairs, overhauls and maintains Army helicopters, including the UH-1 Huey, the AH-1S Cobra, the UH-60 Black Hawk and the CH-47 Chinook. In addition, Corpus Christi is DESCOM's Center of Technical Excellence for the AH-64 Apache attack helicopter, the UH-60 Black Hawk and the new Light Helicopter (LHX) Program (engine and airframe).

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	2786
Military:	7

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

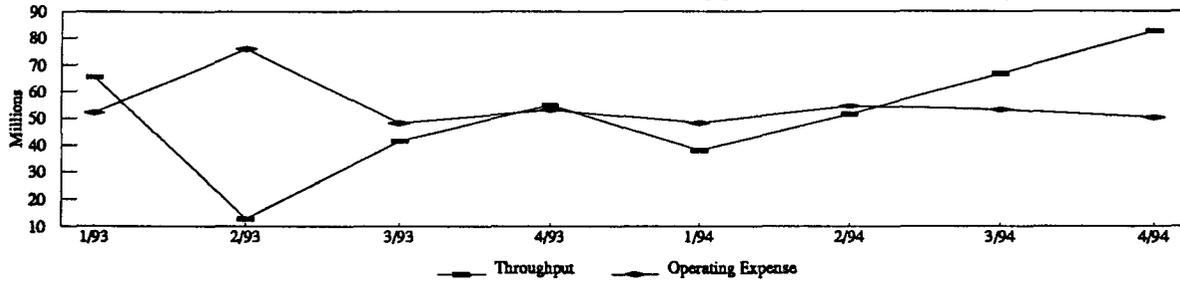
\$325,582,000

Customer support and expense reduction continue to be a major focus for the business of the depot. Scheduling work based upon executability and capacity is positively influencing the schedule indicator. Continuing emphasis on process improvements is expected to continue to improve the Process Days Indicator. It is relevant to recognize that process days for the Blackhawk encompasses four types of programs, A1, A2, IO, and BO; and while some predictability of cycle time is appropriate, the condition of the aircraft upon arrival determines the scope of work (time to perform).

CORPUS CHRISTI ARMY DEPOT

THROUGHPUT & OPERATING EXPENSE

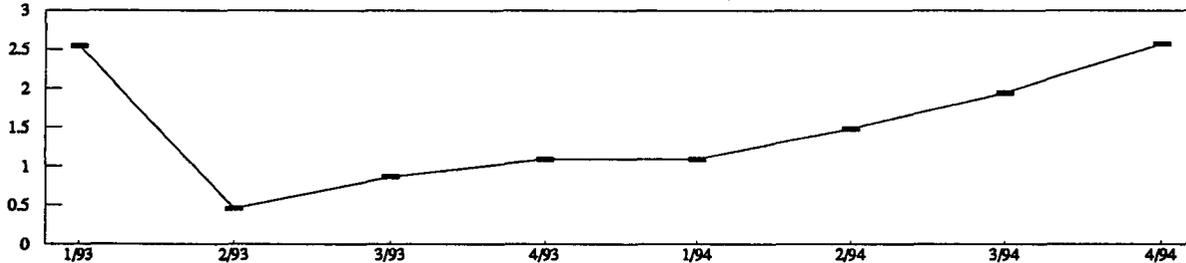
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



Revenue increased while actual costs decreased at a steady rate during FY94. Actual Direct Labor Hour costs decreased 12.3% in 4th Qtr FY94 versus 4th Qtr FY93.

CAPITAL INVESTMENT EFFECTIVENESS

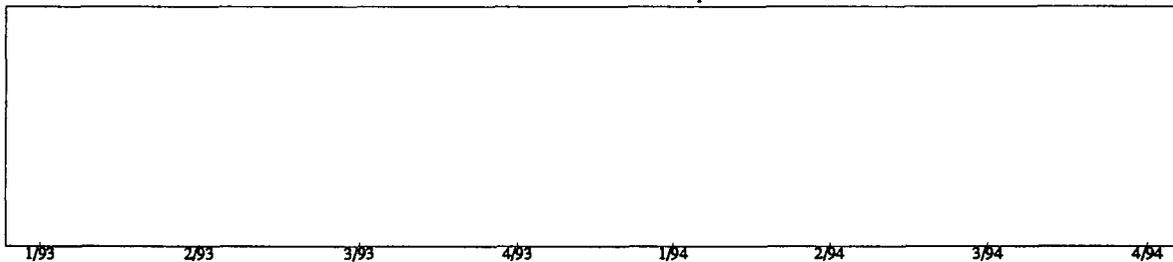
GOAL: Index Should Continually Increase



Increasing Throughput and decreasing book value of assets due to depreciation caused the positive acceleration of the Capital Investment Effectiveness Index.

SCHEDULE INDICATOR

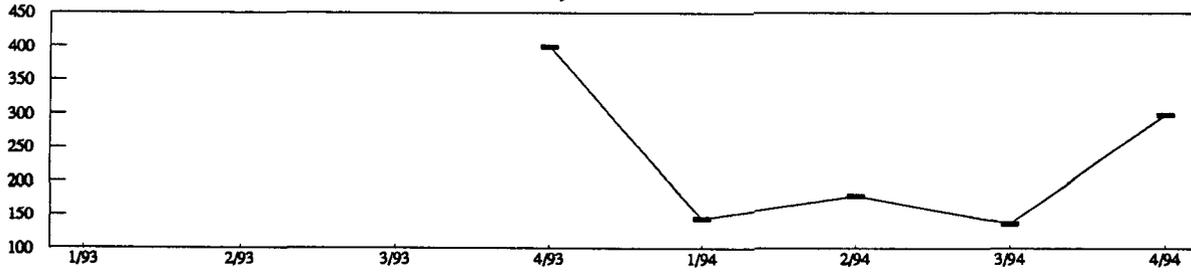
GOAL: Index Should Equal 1



CORPUS CHRISTI ARMY DEPOT

PROCESS DAYS

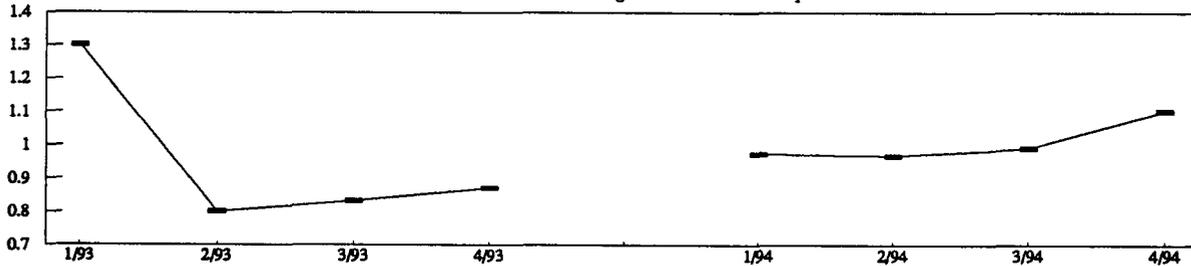
GOAL: Process Days Should show Continual Reduction



Process Days remained constant after declining dramatically from 4th Qtr FY93 until the completion of two crash-damaged aircraft, one from FY86 and the other from FY89. Inspect and Repair completed in the 4th Qtr FY94 increased from 136 to 145 days

NET OPERATING RESULTS

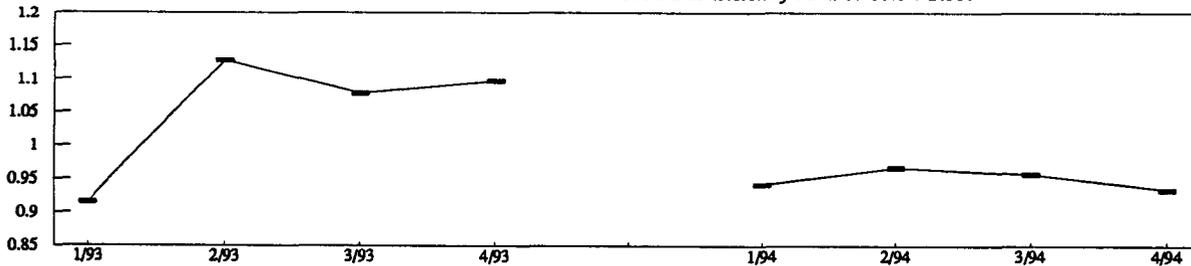
GOAL: Actual NOR/Budgeted NOR should equal 1.00



Renegotiation of several PRONs at year-end IPR was a major reason for actual NOR to exceed budgeted NOR. Actual operating expenses were less than budgeted due to a material return credit of \$11M from ATCOM.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



Labor Hour Cost show a favorable consistent trend for FY94. Actual direct labor hours were consistently higher than budgeted, while actual costs were consistently lower than planned. The \$11M material return credit from ATCOM influenced these results.

**LETTERKENNY ARMY DEPOT
CHAMBERSBURG, PA**

MAJOR WORKLOAD ACCOMPLISHED:

Major workload included the production of 128 M109 self-propelled howitzers, 31 light recovery vehicles, 14 towed howitzers, 18 Patriot launchers, 6 complete Hawk systems, 8 Hawk shops, 30 Avenger fire units, and approximately 9,900 secondary items .

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	1367
Military:	10

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

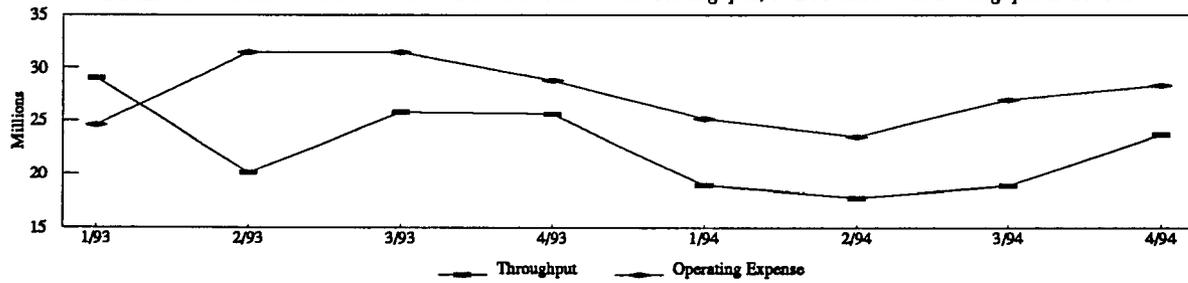
\$136,433,000

Transitioning equipment, upgrading maintenance facilities, recruiting, and training all characterize LEAD's present effort in support of the tactical missile consolidation (e.g., during the 3rd Qtr, the AIM-7 test equipment was validated ahead of schedule). Highspeed Anti-Radiation Missile (HARM) peculiar equipment is installed and ready for use. As of May 94, LEAD completed first article test on AVENGER/ATAS Argon Bottle Refurbishment Certification Test Sets. The first Field Artillery Ammunition Supply Vehicle (FAASV) was sent to Yuma Proving Ground for testing. This was the first of 99 to be converted by LEAD to the M992A2 configuration. The converted vehicle is compatible with the M109A6 Paladin self-propelled artillery. FAASVs will be converted on a schedule to match Paladin fielding. LEAD accepted an Air Force program of 30 Sparrow AIM-7M missiles, and a Navy program for 11. Work began in the 4th Qtr. First article test was completed in September for the HELLFIRE launcher. This is the fifth missile to transition. LEAD fielded the second AVENGER system to Europe on schedule and with positive results. The Joint Engineering Data Management Information and Control System (JEDMICS), an automated mass storage system for mechanical data, was installed at LEAD. LEAD is the first depot to receive JEDMICS. Initial FY94 projections showed sufficient workload to execute the budgeted direct labor hours with minimum carryover to FY95. Revisions and decrements cut new orders by 16% and resulted in a carryover of approximately 4.2 months, including exclusions (fabrications/FMS). Available personnel were used in other mission areas, in self-help projects, and in supporting tactical missile consolidation.

LETTERKENNY ARMY DEPOT

THROUGHPUT & OPERATING EXPENSE

GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



Letterkenny Army Depot did not receive all of the workload it could accomplish. Because most depot costs are fixed in the year of execution, any decrease in assigned workload will have a negative impact on all indicators.

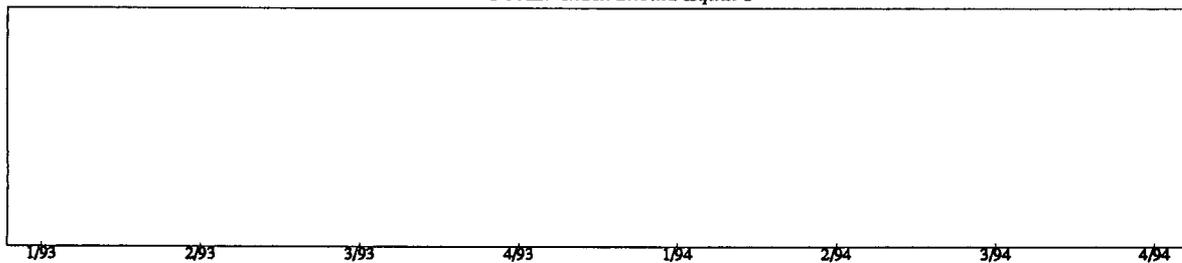
CAPITAL INVESTMENT EFFECTIVENESS

GOAL: Index Should Continually Increase



SCHEDULE INDICATOR

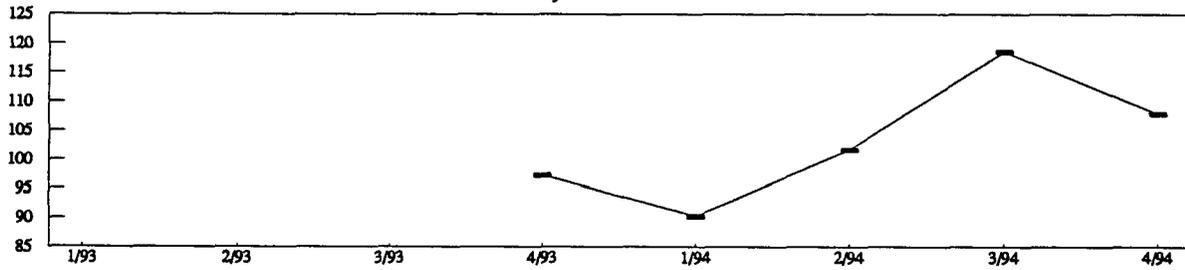
GOAL: Index Should Equal 1



LETTERKENNY ARMY DEPOT

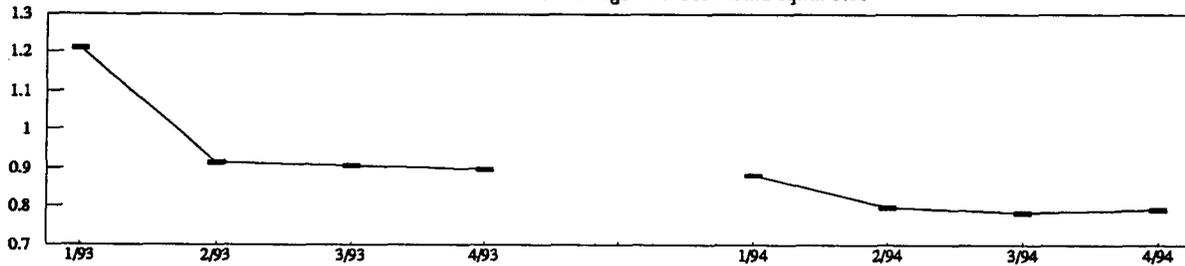
PROCESS DAYS

GOAL: Process Days Should show Continual Reduction



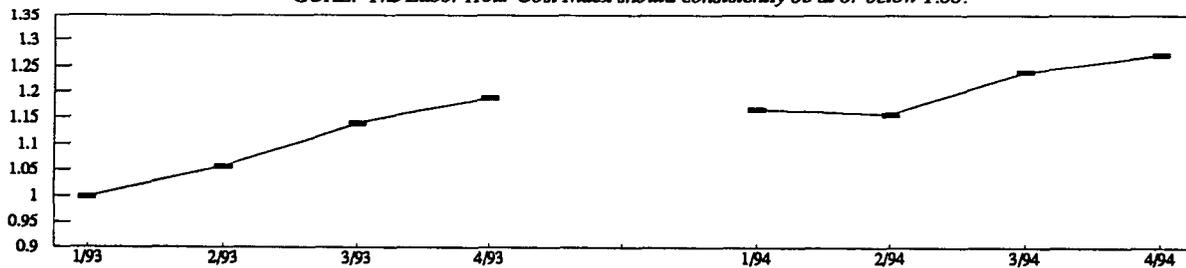
NET OPERATING RESULTS

GOAL: Actual NOR/Budgeted NOR should equal 1.00



LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



LETTERKENNY ARMY DEPOT

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
---------------------	------	------	------	------	------	------	------	------

THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue (\$)	38,114,000	24,371,000	31,790,000	28,215,000	23,849,000	20,903,000	26,668,000	31,182,000
Total Cost (\$)	33,608,000	35,683,000	37,451,000	31,438,000	30,098,000	26,629,000	34,791,000	35,805,000
Direct Materials (\$)	9,046,000	4,261,000	6,035,000	2,633,000	4,953,000	3,133,000	7,822,000	7,461,000
Throughput (\$)	29,068,000	20,110,000	25,755,000	25,582,000	18,896,000	17,770,000	18,846,000	23,721,000
Operating Expense (\$)	24,562,000	31,422,000	31,416,000	28,805,000	25,145,000	23,496,000	26,969,000	28,344,000

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	29,068,000	20,110,000	25,755,000	25,582,000	18,896,000	17,770,000	18,846,000	23,721,000
Longterm Inventory (\$)	17,845,000	27,586,000	27,362,000	23,503,000	23,664,320	24,289,834	16,009,953	26,357,823
INDEX	1.63	0.73	0.94	1.09	0.80	0.73	1.18	0.90

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

PROCESS DAYS

TOTAL PROCESS DAYS/NUMBER OF ITEMS = AVERAGE PROCESS DAYS

Paladin Process Days				1,460	1,083	1,424	2,134	971
Number of Items				15	12	14	18	9
AVG PROCESS DAYS				97.33	90.25	101.71	118.56	107.89

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST)/

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	37,393,000	79,842,000	121,256,000	161,744,000	32,097,000	67,090,000	103,197,000	138,500,000
Cum Budg Cost (\$)	39,901,000	81,034,000	124,518,000	163,710,000	35,697,000	67,949,000	103,918,000	136,433,000
Budgeted NOR INDEX	0.94	0.99	0.97	0.99	0.90	0.99	0.99	1.02
Cum Actual Revenue (\$)	38,114,000	62,485,000	94,275,000	122,490,000	23,849,000	44,752,000	71,420,000	102,602,000
Cum Actual Cost (\$)	33,608,000	69,291,000	106,742,000	138,180,000	30,098,000	56,727,000	91,518,000	127,323,000
Actual NOR INDEX	1.13	0.90	0.88	0.89	0.79	0.79	0.78	0.81
NOR INDEX	1.21	0.92	0.91	0.90	0.88	0.80	0.79	0.79

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH)/

(CUMULATIVE BUDGETED LABOR HOUR COST/CUMULATIVE ACTUAL LABOR HOUR COST) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	39,901,000	81,034,000	124,518,000	163,710,000	35,697,000	67,949,000	103,918,000	136,433,000
Budgeted Total DLH	458,460	974,499	1,472,858	1,960,062	379,403	788,926	1,218,971	1,648,915
Bud Labor Hour Cost	\$87.03	\$83.15	\$84.54	\$83.52	\$94.09	\$86.13	\$85.25	\$82.74
Total Actual Cost (\$)	33,608,000	69,291,000	106,742,000	138,180,000	30,098,000	56,727,000	91,518,000	127,323,000
Actual Total DLH	386,817	788,250	1,106,478	1,390,986	274,159	568,792	864,973	1,206,475
Actual Labor Hour Cost	\$86.88	\$87.90	\$96.47	\$99.34	\$109.78	\$99.73	\$105.80	\$105.53
Labor Hour Cost INDEX	1.00	1.06	1.14	1.19	1.17	1.16	1.24	1.28

RED RIVER ARMY DEPOT
TEXARKANA, TX

MAJOR WORKLOAD ACCOMPLISHED:

RRAD is the primary depot for overhaul and conversion of the M113 Armored Personnel Carrier family of vehicles. In the trend to shift to more advanced weapons systems, RRAD has become the designated maintenance point for the overhaul and conversion of the Bradley Fighting Vehicle and Multiple Launch Rocket System. RRAD is also the Army's Theatre Readiness Monitoring Facility for the PATRIOT system.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	1642
Military:	5

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

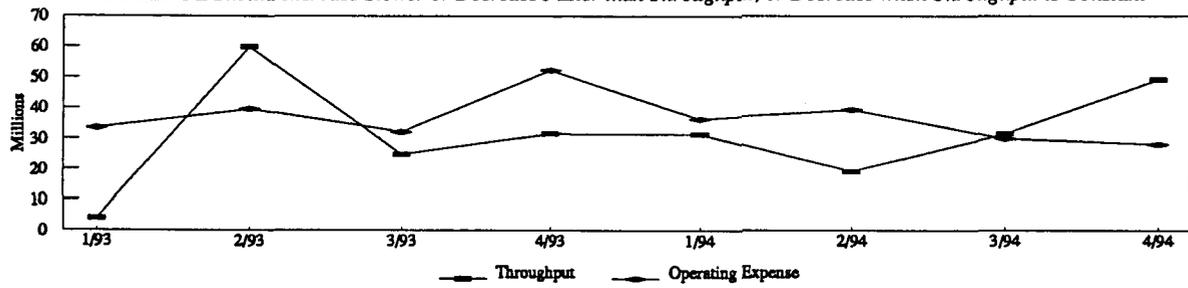
\$218,773,000

RRAD is designated the organic source of repair for the M911/M747 Heavy Equipment Transporter System (HETS). For FY94, RRAD produced 358 Bradley Fighting Vehicles, 512 M113 Armored Personnel Carriers, and 12 Multiple Launch Rocket Systems. After a turbulent beginning, RRAD finished FY94 with a NOR loss of approximately \$2M, a \$14M improvement from the planned loss of \$16M.

RED RIVER ARMY DEPOT

THROUGHPUT & OPERATING EXPENSE

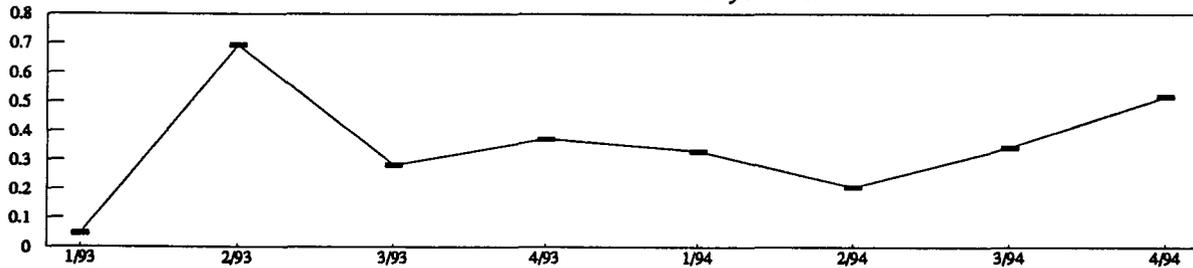
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



The pattern of actual Operating Expenses exceeding actual revenue (Throughput) reflected directed loss of \$16M. RRAD finished FY94 with a \$2M loss by decreasing operating costs rather than increasing prices/revenue.

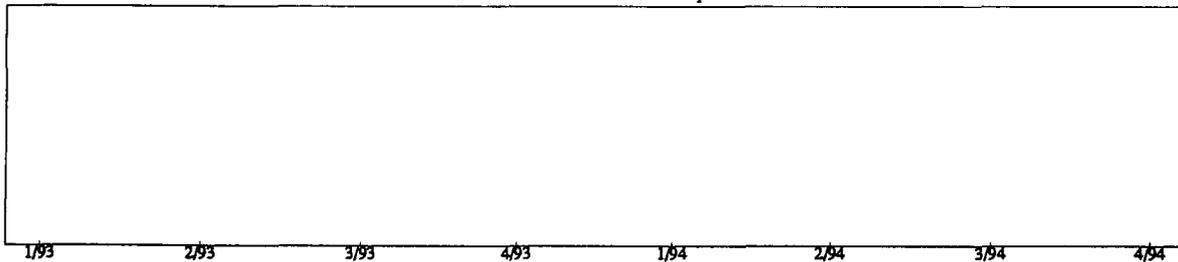
CAPITAL INVESTMENT EFFECTIVENESS

GOAL: Index Should Continually Increase



SCHEDULE INDICATOR

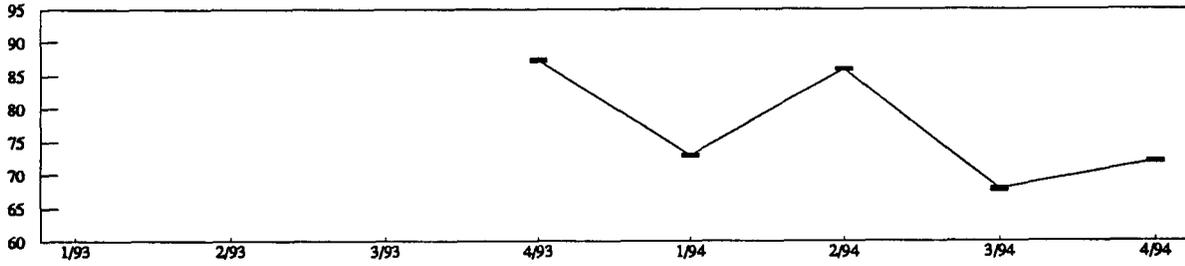
GOAL: Index Should Equal 1



RED RIVER ARMY DEPOT

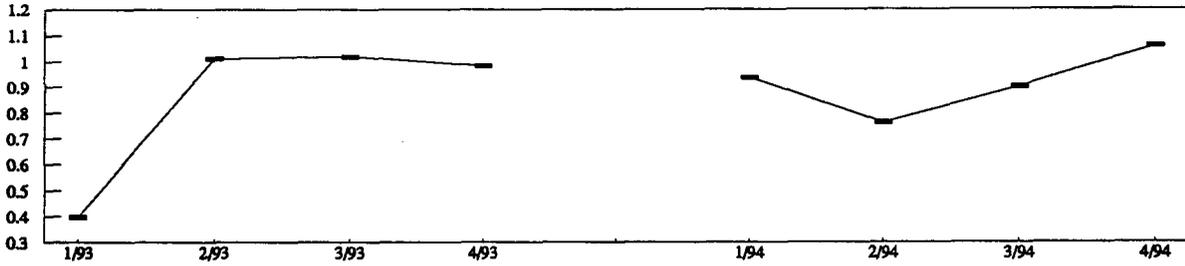
PROCESS DAYS

GOAL: Process Days Should show Continual Reduction



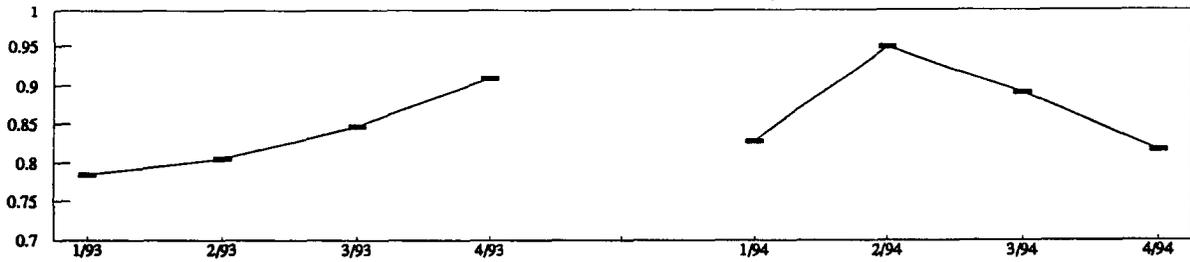
NET OPERATING RESULTS

GOAL: Actual NOR/Budgeted NOR should equal 1.00



LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



Labor Hour Cost Index was below 1.00 for both FY93 and FY94, and the 4th Qtr FY94 actual labor hour cost, \$79.32, is 12% below the 4th Qtr FY93 cost of \$90.14.

RED RIVER ARMY DEPOT

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue (\$)	15,975,000	72,660,000	53,261,000	52,637,000	33,867,000	32,192,000	43,700,000	55,932,000
Total Cost (\$)	45,407,000	52,366,000	60,584,000	73,347,000	38,732,000	52,420,000	42,118,000	34,787,000
Direct Materials (\$)	11,953,000	12,735,000	28,412,000	21,000,000	2,350,000	12,990,000	12,078,000	6,630,000
Throughput (\$)	4,022,000	59,925,000	24,849,000	31,637,000	31,517,000	19,202,000	31,622,000	49,302,000
Operating Expense (\$)	33,454,000	39,631,000	32,172,000	52,347,000	36,382,000	39,430,000	30,040,000	28,157,000

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	4,022,000	59,925,000	24,849,000	31,637,000	31,517,000	19,202,000	31,622,000	49,302,000
Longterm Inventory (\$)	83,668,000	86,415,000	87,954,000	85,014,000	95,409,007	92,857,704	92,012,986	95,055,023
INDEX	0.05	0.69	0.28	0.37	0.33	0.21	0.34	0.52

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

PROCESS DAYS

TOTAL PROCESS DAYS/NUMBER OF ITEMS = AVERAGE PROCESS DAYS

Bradleys Process Days				3,841	2,920	4,386	2,848	3,965
Number of Items				44	40	51	42	55
AVG PROCESS DAYS				87.30	73.00	86.00	67.81	72.09

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST)

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	55,874,000	118,085,000	179,805,000	241,450,000	43,224,000	93,751,000	147,136,000	203,220,000
Cum Budg Cost (\$)	63,375,000	131,874,000	204,900,000	282,542,000	46,277,000	98,599,000	161,000,000	218,773,000
Budgeted NOR INDEX	0.88	0.90	0.88	0.85	0.93	0.95	0.91	0.93
Cum Actual Revenue (\$)	15,975,000	88,635,000	141,896,000	194,533,000	33,867,000	66,059,000	109,759,000	165,691,000
Cum Actual Cost (\$)	45,407,000	97,773,000	158,357,000	231,704,000	38,732,000	91,152,000	133,270,000	168,057,000
Actual NOR INDEX	0.35	0.91	0.90	0.84	0.87	0.72	0.82	0.99
NOR INDEX	0.40	1.01	1.02	0.98	0.94	0.76	0.90	1.06

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH)

(CUMULATIVE BUDGETED LABOR HOUR COST/CUMULATIVE ACTUAL LABOR HOUR COST) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	63,375,000	131,874,000	204,900,000	282,542,000	46,277,000	98,599,000	161,000,000	218,773,000
Budgeted Total DLH	642,239	1,370,316	2,107,969	2,853,688	519,729	1,102,412	1,682,745	2,252,511
Bud Labor Hour Cost	\$98.68	\$96.24	\$97.20	\$99.01	\$89.04	\$89.44	\$95.68	\$97.12
Total Actual Cost (\$)	45,407,000	97,773,000	158,357,000	231,704,000	38,732,000	91,152,000	133,270,000	168,057,000
Actual Total DLH	586,337	1,261,408	1,922,682	2,570,353	524,672	1,073,522	1,562,798	2,118,750
Actual Labor Hour Cost	\$77.44	\$77.51	\$82.36	\$90.14	\$73.82	\$84.91	\$85.28	\$79.32
Labor Hour Cost INDEX	0.78	0.81	0.85	0.91	0.83	0.95	0.89	0.82

TOBYHANNA ARMY DEPOT
TOBYHANNA, PA

MAJOR WORKLOAD ACCOMPLISHED:

Tobyhanna's major mission responsibilities include the repair, overhaul, modification, conversion, test and new system maintenance planning of both strategic and tactical communications and electronic equipment.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	2235
Military:	27

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

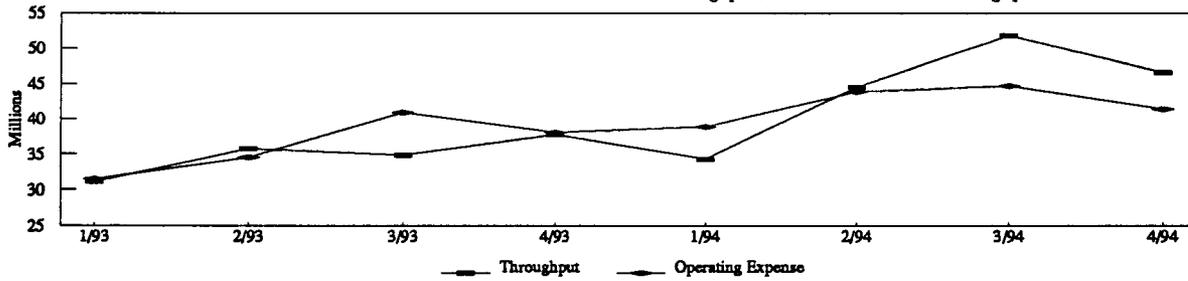
\$207,537,000

These operating indicators depict a positive, increasing Throughput. Actual revenue was higher than planned due to the receipt of unprogrammed workload which had less material, supply, and equipment expenditures than the original workload it replaced. The reductions in cost resulted in an increased Net Operating Result Index (NOR) and a reduction in actual cost per direct labor hour.

TOBYHANNA ARMY DEPOT

THROUGHPUT & OPERATING EXPENSE

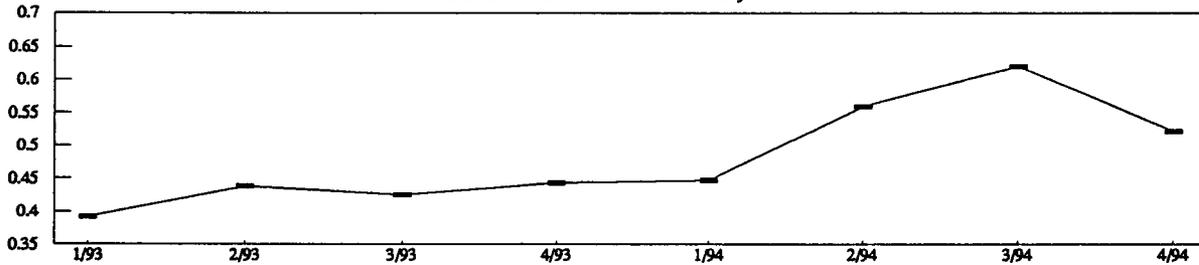
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



FY94 Throughput shows an overall positive trend compared to FY93 due to an increase in customer workload. Operating expenses remained under control as the direct result of cost-cutting measures and year-end adjustments of estimated expenses to actual expenses.

CAPITAL INVESTMENT EFFECTIVENESS

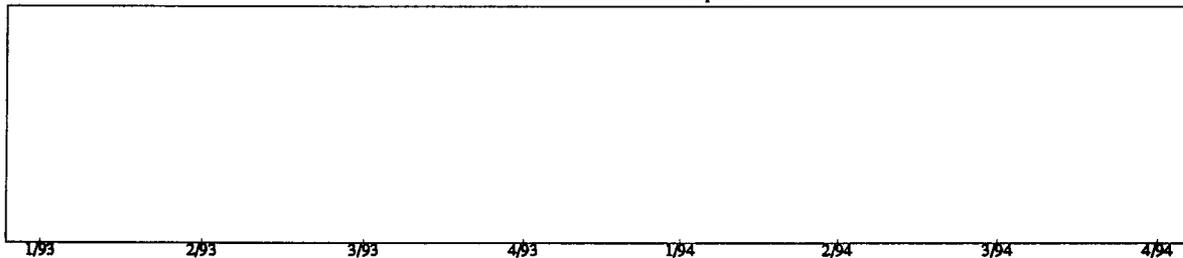
GOAL: Index Should Continually Increase



Capital Investment Effectiveness increased in FY94 due to an increase in customer workload.

SCHEDULE INDICATOR

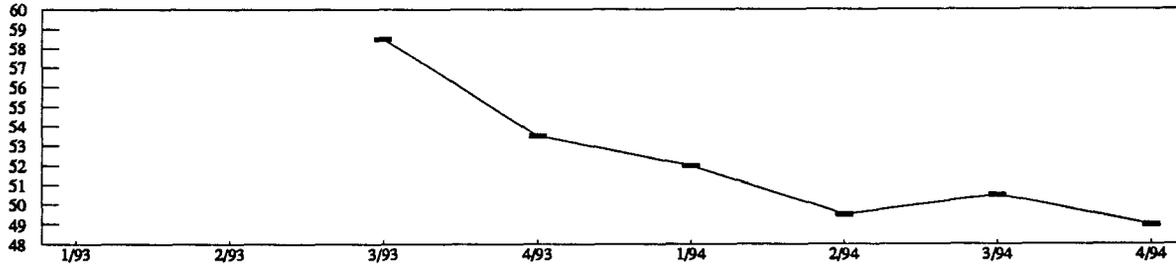
GOAL: Index Should Equal 1



TOBYHANNA ARMY DEPOT

PROCESS DAYS

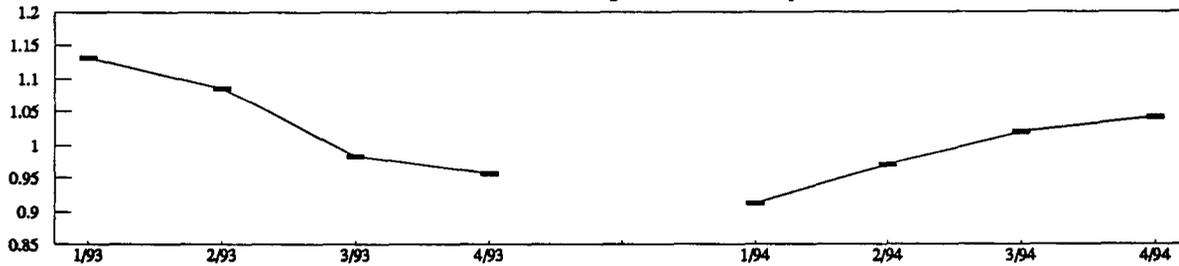
GOAL: Process Days Should show Continual Reduction



Process days for the PCM Tele Terminal reflect a continuing positive downward trend.

NET OPERATING RESULTS

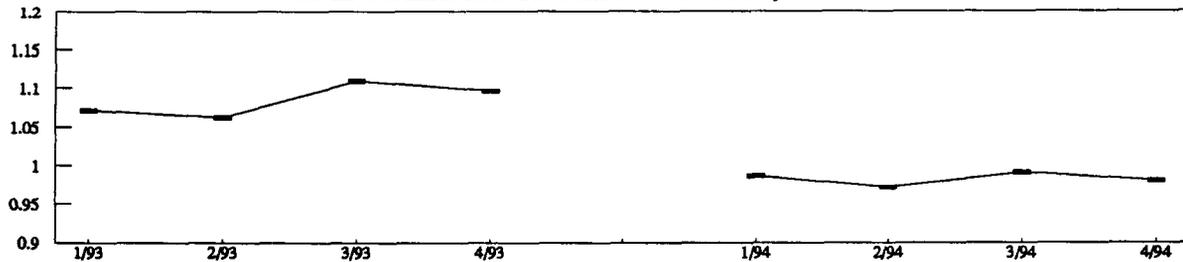
GOAL: Actual NOR/Budgeted NOR should equal 1.00



Completion of unprogrammed workload such as Rack 41's and workload for Army Reserves and National Guard were the primary reasons for the increase of actual revenue over planned revenue. Decreased costs were primarily the result of decreased material, supply and equipment expenditures.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



Decrease is attributable to an underachievement of direct labor hours due to workload shortfalls in overhaul areas, a snow emergency day, and the non-receipt of funding for numerous programs such as the RTC-524, VRC-12, voice multiplexer avionics, and surveillance radar programs. The direct labor hour shortfall has contributed to the cost decrease because of the slow receipt of workable authorizations.

TOBYHANNA ARMY DEPOT

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue (\$)	39,960,000	46,747,000	45,084,000	45,035,000	41,151,000	51,885,000	61,661,000	54,607,000
Total Cost (\$)	40,348,000	45,526,000	51,092,000	45,310,000	45,686,000	51,233,000	54,552,000	49,398,000
Direct Materials (\$)	8,849,000	10,946,000	10,188,000	7,243,000	6,814,000	7,360,000	9,842,000	8,015,000
Throughput (\$)	31,111,000	35,801,000	34,896,000	37,792,000	34,337,000	44,525,000	51,819,000	46,592,000
Operating Expense (\$)	31,499,000	34,580,000	40,904,000	38,067,000	38,872,000	43,873,000	44,710,000	41,383,000

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	31,111,000	35,801,000	34,896,000	37,792,000	34,337,000	44,525,000	51,819,000	46,592,000
Longterm Inventory (\$)	79,285,000	81,650,000	81,994,000	85,214,000	76,764,000	79,562,000	83,508,000	89,261,000
INDEX	0.39	0.44	0.43	0.44	0.45	0.56	0.62	0.52

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

PROCESS DAYS

TOTAL PROCESS DAYS/NUMBER OF ITEMS = AVERAGE PROCESS DAYS

PCM Tele Terminal Process Days			117	107	104	99	101	98
Number of Items			2	2	2	2	2	2
AVG PROCESS DAYS			58.50	53.50	52.00	49.50	50.50	49.00

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST)

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	35,084,000	76,902,000	122,433,000	170,438,000	49,814,000	104,698,000	157,114,000	207,537,000
Cum Budg Cost (\$)	40,086,000	82,660,000	125,128,000	168,006,000	50,492,000	105,800,000	156,921,000	207,537,000
Budgeted NOR INDEX	0.88	0.93	0.98	1.01	0.99	0.99	1.00	1.00
Cum Actual Revenue (\$)	39,960,000	86,707,000	131,791,000	176,826,000	41,151,000	93,036,000	154,697,000	209,304,000
Cum Actual Cost (\$)	40,348,000	85,874,000	136,966,000	182,276,000	45,686,000	96,919,000	151,471,000	200,869,000
Actual NOR INDEX	0.99	1.01	0.96	0.97	0.90	0.96	1.02	1.04
NOR INDEX	1.13	1.09	0.98	0.96	0.91	0.97	1.02	1.04

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH)

(CUMULATIVE BUDGETED LABOR HOUR COST/CUMULATIVE ACTUAL LABOR HOUR COST) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	40,086,000	82,660,000	125,128,000	168,006,000	50,492,000	105,800,000	156,921,000	207,537,000
Budgeted Total DLH	759,000	1,524,000	2,322,000	3,105,000	767,932	1,587,306	2,406,861	3,211,357
Bud Labor Hour Cost	\$52.81	\$54.24	\$53.89	\$54.11	\$65.75	\$66.65	\$65.20	\$64.63
Total Actual Cost (\$)	40,348,000	85,874,000	136,966,000	182,276,000	45,686,000	96,919,000	151,471,000	200,869,000
Actual Total DLH	713,000	1,490,000	2,291,000	3,072,000	704,089	1,496,517	2,344,000	3,170,000
Actual Labor Hour Cost	\$56.59	\$57.63	\$59.78	\$59.33	\$64.89	\$64.76	\$64.62	\$63.37
Labor Hour Cost INDEX	1.07	1.06	1.11	1.10	0.99	0.97	0.99	0.98



NAVAL AVIATION DEPOTS

NADEP CHERRY POINT
CHERRY POINT, NC

MAJOR WORKLOAD ACCOMPLISHED:

AIRCRAFT: AV-8B Harrier II, A-4 Skyhawk, C-130 Hercules, F-4 Phantom II
(Drone Conversion, USAF RF-4C, F4-E & F-4G), H-46 Sea Knight
and CH-53 Sea Stallion

ENGINES: F402, J79, T400, T58, T64 and T76

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	3614
Military:	74

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

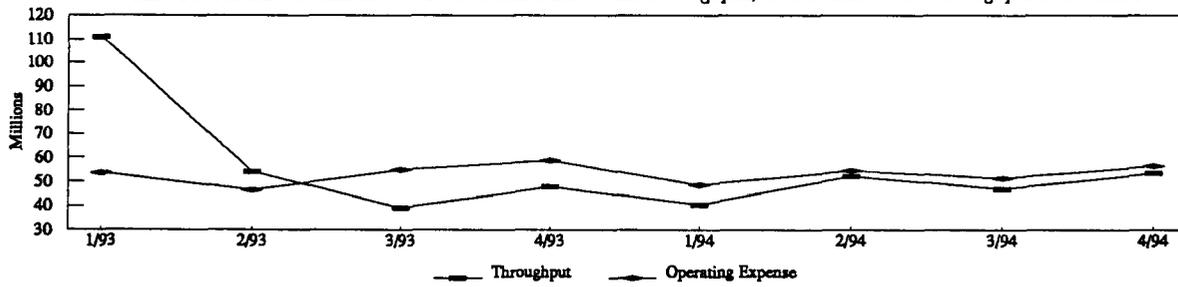
\$349,162,996

Throughout FY94, NADEP Cherry Point continued to make improvements in its financial and overall process days indicators, while placing a great deal of emphasis on the transition of workload and personnel as a result of BRAC 93 decisions. During FY94, Cherry Point's rolls grew by 725 individuals. NADEP Cherry Point began transitioning the H-1, H-2, H3, H-53, H-60 and A-4 manufacturing workload. The NADEP also established capability for 247 H-53 components. Cherry Point has successfully transitioned the CH-53E aircraft from Pensacola, completing the first aircraft 44 calendar days ahead of schedule. Prototype inductions of the CH-53D, MH-53E and the RH-53D aircraft have been accomplished on schedule.

NADEP CHERRY POINT

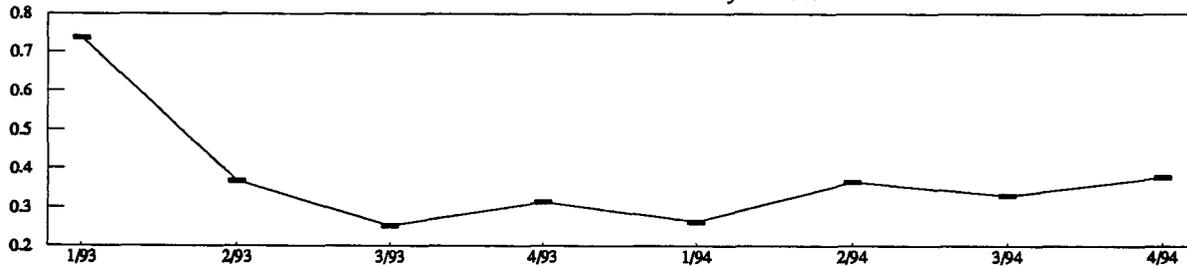
THROUGHPUT & OPERATING EXPENSE

GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



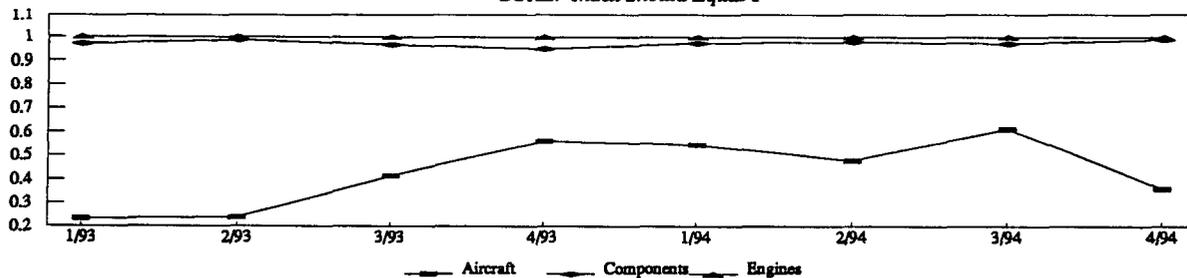
CAPITAL INVESTMENT EFFECTIVENESS

GOAL: Index Should Continually Increase



SCHEDULE INDICATOR

GOAL: Index Should Equal 1

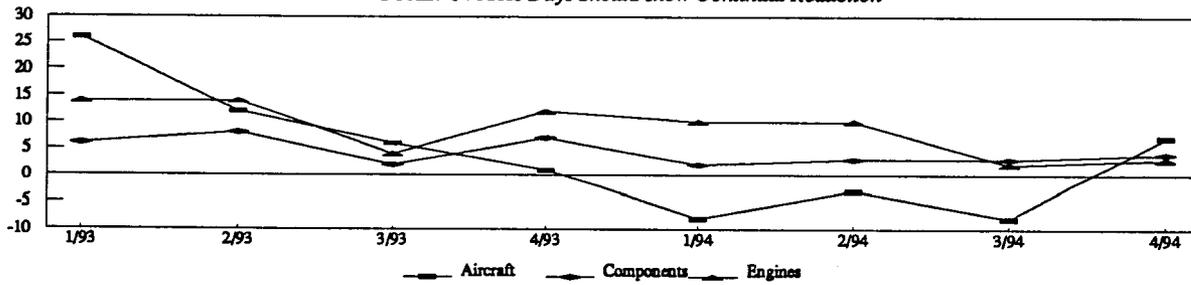


The Schedule Indicator for aircraft shows overall improvement although it was slightly down in the 4th Qtr FY94. Experienced depot personnel have been reassigned to aircraft programs that are transitioning to Cherry Point and there is an overall learning curve associated with the new programs. A breakdown by the number of days aircraft missed schedule is: 5 aircraft < 10 days, 4 aircraft < 20 days, and 7 aircraft >20 days.

NADEP CHERRY POINT

PROCESS DAYS

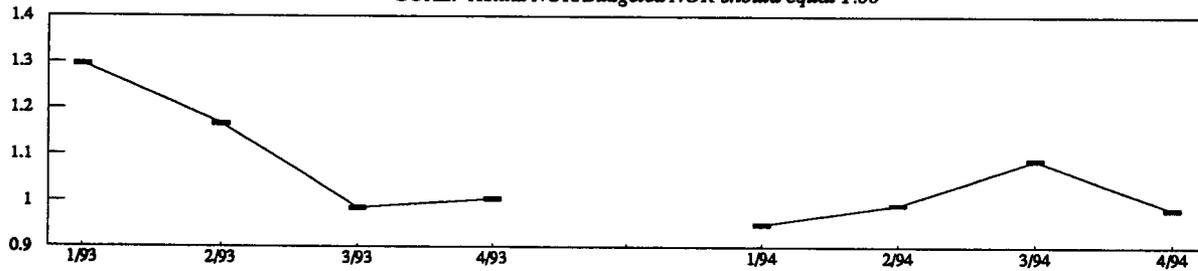
GOAL: Process Days Should show Continual Reduction



The slight rise in aircraft Process Days in the 4th Qtr FY94 was a result of increased emphasis on the product line of a major customer.

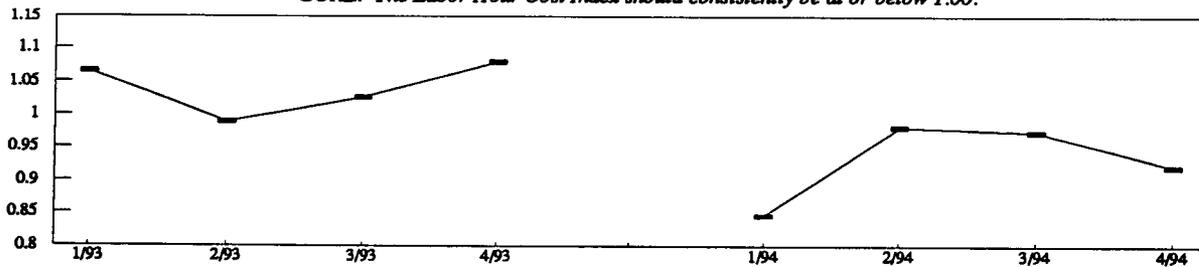
NET OPERATING RESULTS

GOAL: Actual NOR/Budgeted NOR should equal 1.00



LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



NADEP CHERRY POINT

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue	148,921,214	82,727,888	72,614,456	80,742,869	68,316,637	85,517,345	81128023	85500122
Total Cost	91,592,760	74,957,009	88,561,174	91,779,039	76,403,144	87,852,085	85614928	88558573
Direct Materials	37,975,147	28,567,052	33,582,562	32,961,667	27,825,216	33,289,236	34275681	32031346
Throughput	110,946,067	54,160,836	39,031,894	47,781,202	40,491,421	52,228,109	46,852,342	53,468,776
Operating Expense	53,617,613	46,389,957	54,978,612	58,817,372	48,577,928	54,562,849	51,339,247	56,527,227

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput	110,946,067	54,160,836	39,031,894	47,781,202	40,491,421	52,228,109	46,852,342	53,468,776
Longterm Inventory	150,663,991	147,362,957	154,971,548	152,405,903	154,080,793	143,292,994	142,115,251	141,832,131
INDEX	0.74	0.37	0.25	0.31	0.26	0.36	0.33	0.38

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

Aircraft Scheduled	26	21	29	16	11	23	26	25
Aircraft Completed	6	5	12	9	6	11	16	9
INDEX	0.23	0.24	0.41	0.56	0.55	0.48	0.62	0.36
Components Scheduled	2,835	2,521	3,987	4,445	3,999	3,646	3815	4087
Components Completed	2,750	2,488	3,856	4,223	3,897	3,571	3711	4044
INDEX	0.97	0.99	0.97	0.95	0.97	0.98	0.97	0.99
Engines Scheduled	130	109	92	93	70	94	86	100
Engines Completed	130	109	92	93	70	94	86	100
INDEX	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

PROCESS DAYS

AVG ACTUAL (WEIGHTED) - AVG PLANNED (WEIGHTED) = PROCESS DAYS VARIANCE

Aircraft Planned	74	84	68	42	115	119	109	97
Aircraft Actual	100	96	74	43	107	116	101	104
VARIANCE	26	12	6	1	-8	-3	-8	7
Components Planned	30	28	26	24	27	28	27	29
Components Actual	36	36	28	31	29	31	30	33
VARIANCE	6	8	2	7	2	3	3	4
Engines Planned	39	39	32	30	41	34	34	31
Engines Actual	53	53	36	42	51	44	36	34
VARIANCE	14	14	4	12	10	10	2	3

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue	105,626,000	207,238,000	305,553,000	371,837,000	77,062,000	157,215,000	223,444,000	353,914,000
Cum Budg Cost	84,227,000	173,895,000	252,447,000	336,561,000	81,693,000	166,421,000	258,391,000	367,024,000
Budgeted NOR INDEX	1.25	1.19	1.21	1.10	0.94	0.94	0.86	0.96
Cum Actual Revenue	148,921,214	231,649,101	304,263,557	385,007,426	68,316,637	153,833,982	234,962,004	320,462,126
Cum Actual Cost	91,592,780	166,549,790	255,110,963	346,890,003	76,428,055	164,255,229	249,870,157	338,428,730
Actual NOR INDEX	1.63	1.39	1.19	1.11	0.89	0.94	0.94	0.95
NOR INDEX	1.30	1.17	0.99	1.00	0.95	0.99	1.09	0.98

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE TOTAL DLH) /

(CUMULATIVE TOTAL BUDGETED COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost	84,227,000	173,895,000	252,447,000	336,561,000	81,693,000	166,421,000	258,391,000	367,024,000
Budgeted Total DLH	769,000	1,590,000	2,294,000	3,084,000	611,000	1,441,000	2,204,000	3,030,000
Bud Labor Hour Cost	109.53	109.37	110.05	109.13	133.70	115.49	117.24	121.13
Total Actual Cost	91,592,780	166,549,790	255,110,963	346,890,003	76,428,055	164,255,229	249,870,157	338,428,730
Actual Total DLH	784,792	1,540,291	2,260,262	2,941,452	675,883	1,449,773	2,188,559	3,033,821
Actual Labor Hour Cost	116.71	108.13	112.87	117.93	113.08	113.30	114.17	111.55
Labor Hour Cost INDEX	1.07	0.99	1.03	1.08	0.85	0.98	0.97	0.92

NADEP JACKSONVILLE
JACKSONVILLE, FL

MAJOR WORKLOAD ACCOMPLISHED:

P-3 Orions, A-7E's, Components, and Engines (J52 and F404), calibration, GSE, engineering and manufacturing.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	3109
Military:	29

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

\$343,130,648

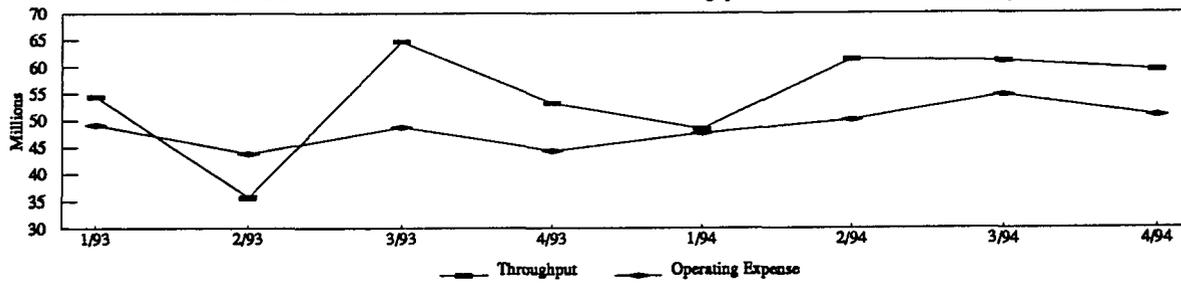
NADEP JAX was awarded the 1994 Florida Governor's Business Leadership Award.

The J52 engine contract was begun in second quarter.

NADEP JACKSONVILLE

THROUGHPUT & OPERATING EXPENSE

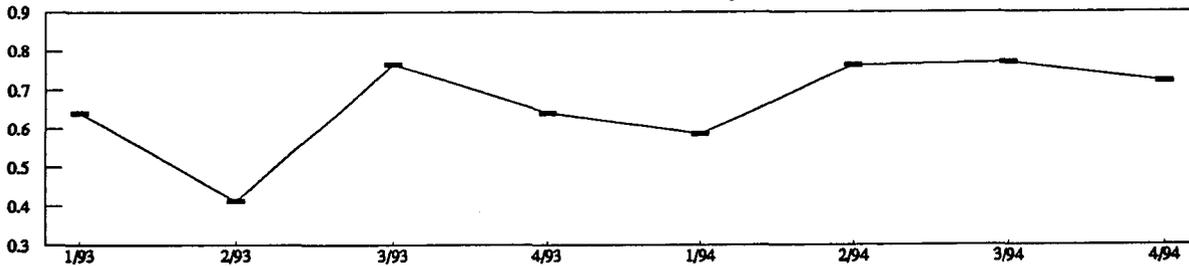
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



BRAC-93 funding delays reduced Throughput and year end close-out adjustments caused the apparent reduction in operating expense.

CAPITAL INVESTMENT EFFECTIVENESS

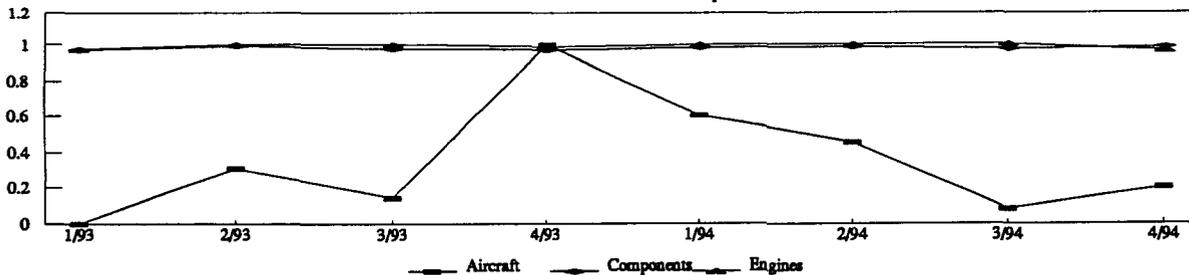
GOAL: Index Should Continually Increase



The BRAC-93 funding delays have disrupted this indicator.

SCHEDULE INDICATOR

GOAL: Index Should Equal 1

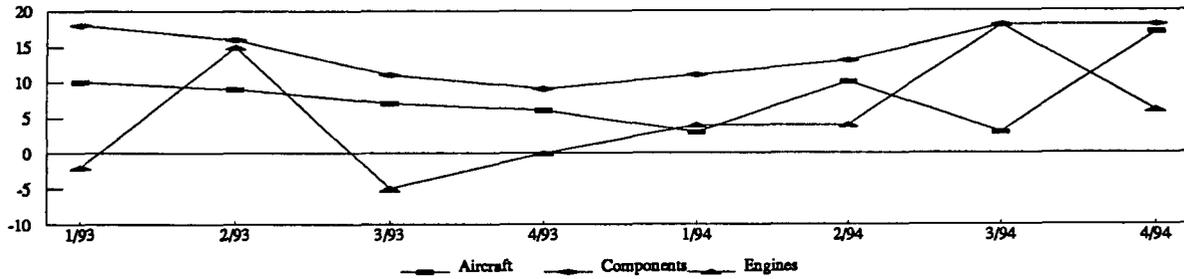


Aircraft not completed on schedule either required major repairs or were intentionally delayed to accelerate work on other aircraft to meet mandatory customer completion dates.

NADEP JACKSONVILLE

PROCESS DAYS

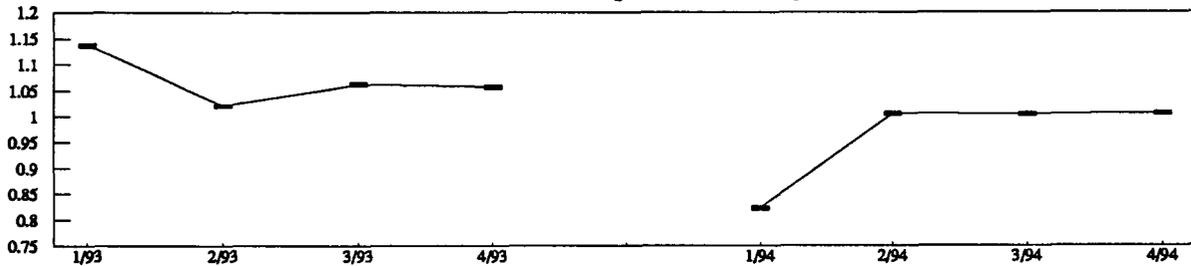
GOAL: Process Days Should show Continual Reduction



Some aircraft completed in FY94 required major repairs which increased process days. Increase in process days for engines was mostly attributable to material constraints.

NET OPERATING RESULTS

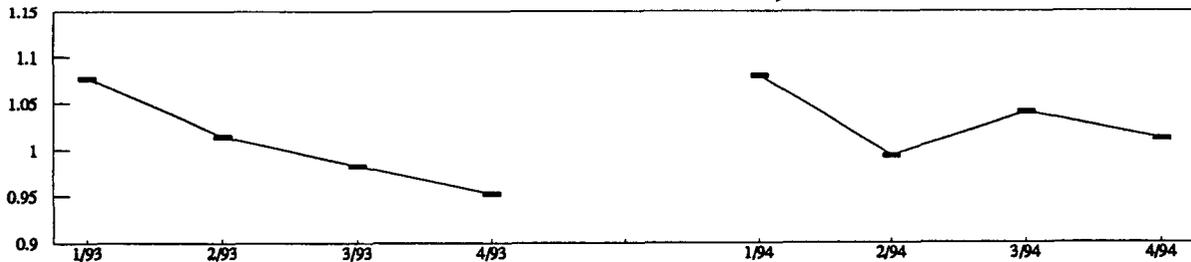
GOAL: Actual NOR/Budgeted NOR should equal 1.00



NADEP JAX was the only naval aviation depot to complete FY94 with a positive NOR.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



Delay of the BRAC-93 workload transition due to lack of funding, combined with staffing action to accomplish those transitions have put upward pressure on the labor hour cost. This was offset by year end close-out adjustments.

NADEP JACKSONVILLE

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue (\$)	98,730,000	82,512,000	107,661,000	99,057,000	86,077,000	93,358,000	98,875,000	88,691,000
Total Cost (\$)	93,394,000	90,684,000	91,661,000	90,226,000	85,295,000	82,009,000	92,581,000	80,100,000
Direct Materials (\$)	44,260,000	46,864,000	42,966,000	45,888,000	37,738,000	31,975,000	37,870,000	29,367,000
Throughput (\$)	54,470,000	35,648,000	64,695,000	53,169,000	48,339,000	61,383,000	61,005,000	59,324,000
Operating Expense (\$)	49,134,000	43,820,000	48,695,000	44,338,000	47,557,000	50,034,000	54,711,000	50,733,000

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	54,470,000	35,648,000	64,695,000	53,169,000	48,339,000	61,383,000	61,005,000	59,324,000
Longterm Inventory (\$)	84,880,000	86,300,000	84,593,000	82,768,000	82,373,000	80,481,000	79,186,000	82,169,000
INDEX	0.64	0.41	0.76	0.64	0.59	0.76	0.77	0.72

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

Aircraft Scheduled	9	13	7	7	5	11	13	10
Aircraft Completed	0	4	1	7	3	5	1	2
INDEX	0.00	0.31	0.14	1.00	0.60	0.45	0.08	0.20
Components Scheduled	3,955	3,402	5,623	5,893	5,638	5,269	5,067	4,961
Components Completed	3,838	3,370	5,474	5,705	5,533	5,180	4,924	4,848
INDEX	0.97	0.99	0.97	0.97	0.98	0.98	0.97	0.98
Engines Scheduled	150	154	137	147	152	129	86	135
Engines Completed	146	154	137	145	152	129	86	129
INDEX	0.97	1.00	1.00	0.99	1.00	1.00	1.00	0.96

PROCESS DAYS

AVG ACTUAL (WEIGHTED) - AVG PLANNED (WEIGHTED) = PROCESS DAYS VARIANCE

Aircraft Planned	125	61	80	30	65	52	52	73
Aircraft Actual	135	70	87	36	68	62	55	56
VARIANCE	10	9	7	6	3	10	3	17
Components Planned	27	26	25	25	25	25	24	23
Components Actual	45	42	36	34	36	38	42	41
VARIANCE	18	16	11	9	11	13	18	18
Engines Planned	43	38	50	43	35	37	37	12
Engines Actual	41	53	45	43	39	41	55	18
VARIANCE	-2	15	-5	0	4	4	18	6

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST) = NOR INDEX

Cum Budg Revenue (\$)	85,726,000	177,939,000	277,442,000	378,959,000	99,397,000	182,750,000	277,031,000	375,190,000
Cum Budg Cost (\$)	92,241,000	184,482,000	281,288,000	378,095,000	81,090,000	171,277,000	259,736,000	349,434,000
Budgeted NOR INDEX	0.93	0.96	0.99	1.00	1.23	1.07	1.07	1.07
Cum Actual Revenue (\$)	98,730,000	181,241,000	288,903,000	387,959,000	86,077,000	179,435,000	278,310,000	367,001,000
Cum Actual Cost (\$)	93,394,000	184,077,000	275,738,000	365,965,000	85,295,000	167,304,000	259,885,000	339,986,000
Actual NOR INDEX	1.06	0.98	1.05	1.06	1.01	1.07	1.07	1.08
NOR INDEX	1.14	1.02	1.06	1.06	0.82	1.01	1.00	1.01

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE TOTAL DLH) /

(CUMULATIVE TOTAL BUDGETED COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	92,241,000	184,482,000	281,288,000	378,095,000	81,090,000	171,277,000	259,736,000	349,434,000
Budgeted Total DLH	745,000	1,506,000	2,267,000	2,990,000	696,000	1,492,000	2,347,000	3,203,000
Bud Labor Hour Cost	123.81	122.50	124.08	126.45	116.51	114.80	110.67	109.10
Total Actual Cost (\$)	93,394,000	184,077,000	275,738,000	365,965,000	85,295,000	167,304,000	259,885,000	339,986,000
Actual Total DLH	700,000	1,481,000	2,261,000	3,039,000	678,000	1,466,000	2,258,000	3,079,000
Actual Labor Hour Cost	133.42	124.29	121.95	120.42	125.80	114.12	115.10	110.42
Labor Hour Cost INDEX	1.08	1.01	0.98	0.95	1.08	0.99	1.04	1.01

**NADEP NORTH ISLAND
SAN DIEGO, CA**

MAJOR WORKLOAD ACCOMPLISHED:

F/A-18 Hornet, C-2 Greyhound, E-2 Hawkeye, S-3 Viking, F-14 In-Service Repair, F/A-18 Center Barrel Splice, ASO/DMISA/FMS components, LM2500 and T64 engines, manufacturing, mobile (van) manufacturing, F-5/T38 adversary support, avionics, support equipment, shipboard repair, calibration, and engineering/software.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	3587
Military:	29

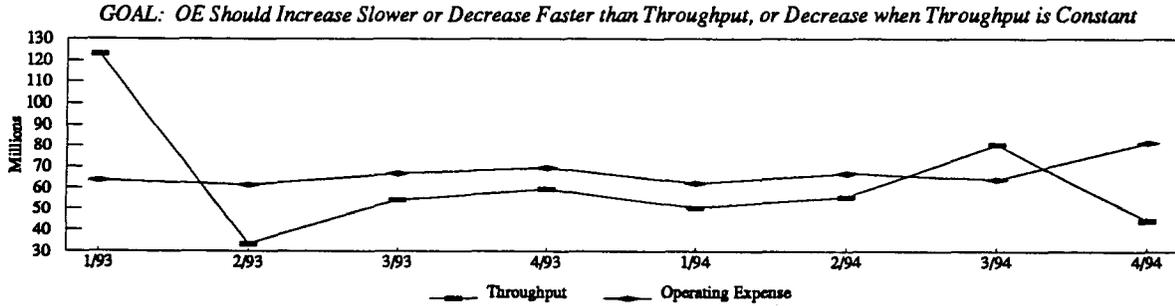
CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

\$328,715,000

Naval Aviation Depot North Island provides a wide range of engineering, calibration, manufacturing, overhaul and repair services performed on aircraft, engines, ships, and components. The Depot's Primary Standards Laboratory provides primary calibration standards for Navy and other DoD agencies. In addition to functioning as the Navy's largest bearing repair facility, the Depot dispatches field teams to deployed ships and aviation units world wide. North Island is also one of the three DoD depots that has large engine overhaul capability. Management of the Depot is committed to Total Quality Leadership involving suppliers, customers and fellow NAVAIR TEAM as an integral part of operational planning. Over a quarter of the Depot's work effort is dedicated to support of the Navy's frontline F/A-18, E-2, C-2, and S-3 carrier aircraft. The Depot's extensive engineering and software specialists provide state of the art cradle to grave support for aircraft and other customer programs. North Island's cost and financial performance is generally improving. In particular, Net Operating Results and Labor Hour Cost are significantly improved, while Capital Investment Effectiveness shows continuing dramatic gains. The F/A-18 Aircraft schedule and process days performance has improved significantly as compared to the first two quarters of FY94. The improvement is due to the completion of all "must meet" scheduled aircraft, which caused priority shifts. The second contributor centered around specific process improvements such as revalidation of the work requirement specification and its resultant process streamlining, material requirements forecasting and disciplined asset management, and schedule accounting at all levels of aircraft process. These elements accounted for 80% of the total performance improvement illustrated.

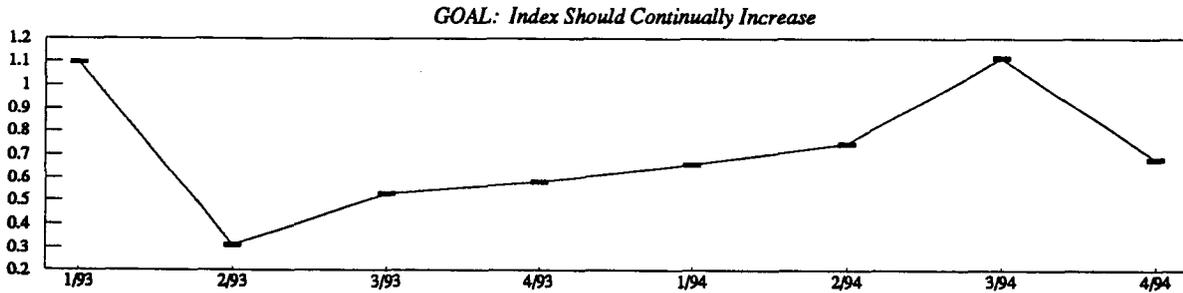
NADEP NORTH ISLAND

THROUGHPUT & OPERATING EXPENSE



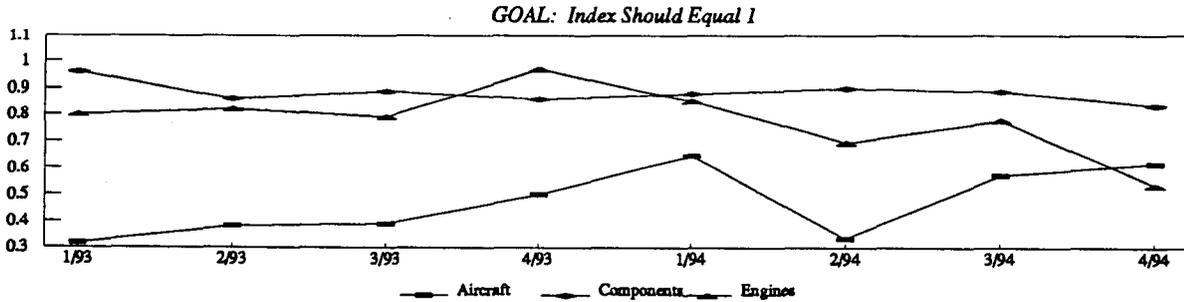
In 1st and 2nd Qtr FY93, Throughput data exhibited anomalous variations because of a Defense Business Operating Fund accounting policy change. And, a financial programming change (revenue recognition) incorporated in 3rd Qtr FY94 and removed in 4th Qtr FY94 caused revenue to be overstated in 3rd Qtr FY94. The Throughput and Operating Expense index is constant with previous quarters if 3rd Qtr aberrations are ignored.

CAPITAL INVESTMENT EFFECTIVENESS



Long-term inventory has decreased from \$143M at the end of FY92 to \$65M at the end of FY94. A steady upward trend in this index has been the result. Note: The financial programming change previously explained also impacted this index in 4th Qtr FY94.

SCHEDULE INDICATOR

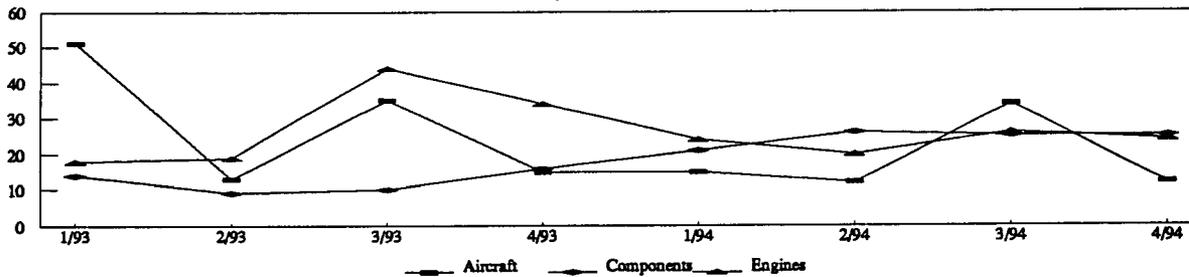


Aircraft schedule performance improvements illustrated above are due to enhanced material management, and the employment of a "standardized" program management/scheduling tool.

NADEP NORTH ISLAND

PROCESS DAYS

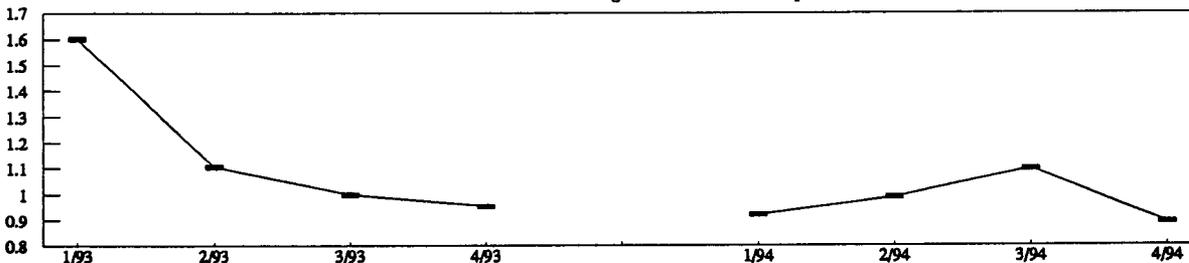
GOAL: Process Days Should show Continual Reduction



Aircraft process days performance has improved due to work requirement specification revalidation, and the resulting process of "tailoring" to optimize process operation integration.

NET OPERATING RESULTS

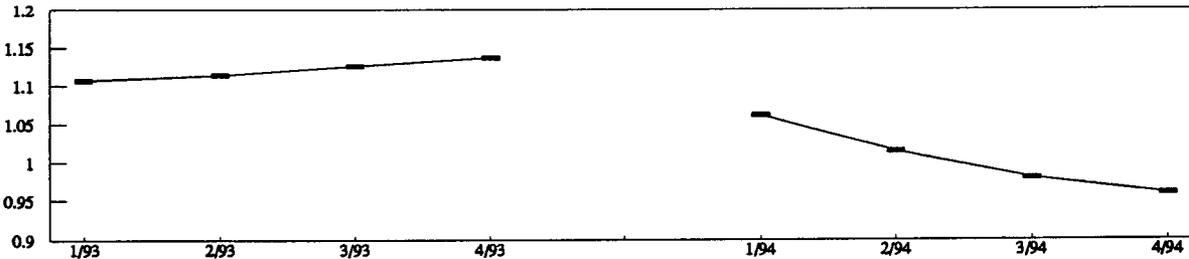
GOAL: Actual NOR/Budgeted NOR should equal 1.00



This index is impacted by revenue and exhibits the same type of 3rd Qtr FY94 spike found in the Throughput and Operating Expense index. Normalized data reflects a favorable indexing trend.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



Current performance reflects a concerted effort to reduce indirect costs within the depot.

NADEP NORTH ISLAND

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue (\$)	142,279,930	58,470,677	77,311,100	80,146,185	67,412,008	77,838,189	100,944,845	60,754,116
Total Cost (\$)	82,888,620	86,547,802	89,837,567	90,073,560	79,374,182	88,901,343	84,824,684	97,464,829
Direct Materials (\$)	19,251,286	25,001,962	23,047,106	20,666,717	17,131,273	22,122,878	20,815,123	16,363,547
Throughput (\$)	123,028,644	33,468,715	54,263,994	59,479,468	50,280,735	55,715,311	80,129,722	44,390,569
Operating Expense (\$)	63,637,334	61,545,840	66,790,461	69,406,843	62,242,909	66,778,465	64,009,561	81,101,282

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	123,028,644	33,468,715	54,263,994	59,479,468	50,280,735	55,715,311	80,129,722	44,390,569
Longterm Inventory (\$)	112,242,283	107,441,605	102,762,506	102,372,051	76,208,285	74,396,575	71,824,858	65,099,304
INDEX	1.10	0.31	0.53	0.58	0.66	0.75	1.12	0.68

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

Aircraft Scheduled	19	21	18	12	17	27	14	13
Aircraft Completed	6	8	7	6	11	9	8	8
INDEX	0.32	0.38	0.39	0.50	0.65	0.33	0.57	0.62
Components Scheduled	2,296	2,748	3,579	4,084	4,284	3,820	3,845	3,750
Components Completed	2,202	2,364	3,184	3,508	3,772	3,445	3,419	3,123
INDEX	0.96	0.86	0.89	0.86	0.88	0.90	0.89	0.83
Engines Scheduled	50	50	43	35	27	23	18	15
Engines Completed	40	41	34	34	23	16	14	8
INDEX	0.80	0.82	0.79	0.97	0.85	0.70	0.78	0.53

PROCESS DAYS

AVG ACTUAL (WEIGHTED) - AVG PLANNED (WEIGHTED) = PROCESS DAYS VARIANCE

Aircraft Planned	230	261	262	269	258	376	332	233
Aircraft Actual	281	274	297	284	273	388	366	245
VARIANCE	51	13	35	15	15	12	34	12
Components Planned	30	30	27	25	25	25	25	24
Components Actual	44	39	37	41	46	51	50	49
VARIANCE	14	9	10	16	21	26	25	25
Engines Planned	45	46	47	47	69	69	69	69
Engines Actual	63	65	91	81	93	89	95	93
VARIANCE	18	19	44	34	24	20	26	24

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST) = NOR INDEX

Cum Budg Revenue (\$)	69,785,000	145,691,000	224,046,000	302,401,000	76,000,000	141,037,000	218,472,000	322,185,000
Cum Budg Cost (\$)	65,117,000	135,947,000	209,061,000	282,175,000	82,634,000	161,817,000	246,862,000	328,715,000
Budgeted NOR INDEX	1.07	1.07	1.07	1.07	0.92	0.87	0.88	0.98
Cum Actual Revenue (\$)	142,279,930	200,750,607	278,061,707	358,207,892	67,412,008	145,250,197	246,195,042	306,949,158
Cum Actual Cost (\$)	82,888,620	169,436,422	259,273,989	349,347,549	79,374,182	168,275,525	253,100,209	350,565,038
Actual NOR INDEX	1.72	1.18	1.07	1.03	0.85	0.86	0.97	0.88
NOR INDEX	1.60	1.11	1.00	0.96	0.92	0.99	1.10	0.89

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH) /

(CUMULATIVE TOTAL BUDGETED COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	65,117,000	135,947,000	209,061,000	282,175,000	82,634,000	161,817,000	246,862,000	328,715,000
Budgeted Total DLH	808,000	1,686,000	2,594,000	3,501,000	883,000	1,622,000	2,470,000	3,205,000
Bud Labor Hour Cost	80.59	80.63	80.59	80.60	93.58	99.76	99.94	102.56
Total Actual Cost (\$)	82,888,620	169,436,422	259,273,989	349,347,549	79,374,182	168,275,525	253,100,209	350,565,038
Actual Total DLH	929,394	1,885,888	2,855,144	3,808,726	798,846	1,663,128	2,582,939	3,560,266
Actual Labor Hour Cost	89.19	89.84	90.81	91.72	99.36	101.18	97.99	98.47
Labor Hour Cost INDEX	1.11	1.11	1.13	1.14	1.06	1.01	0.98	0.96



NAVAL SHIPYARDS

LONG BEACH NAVAL SHIPYARD
LONG BEACH, CA

MAJOR WORKLOAD ACCOMPLISHED:

Surface ship overhaul, alteration and repair.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	2955
Military:	33

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

\$327,980,000

Long Beach Naval Shipyard completed 5 ships in FY94. Three were completed on time and two were completed late for a total of 15 days late for the FY. The late completions were due to new work and material delays.

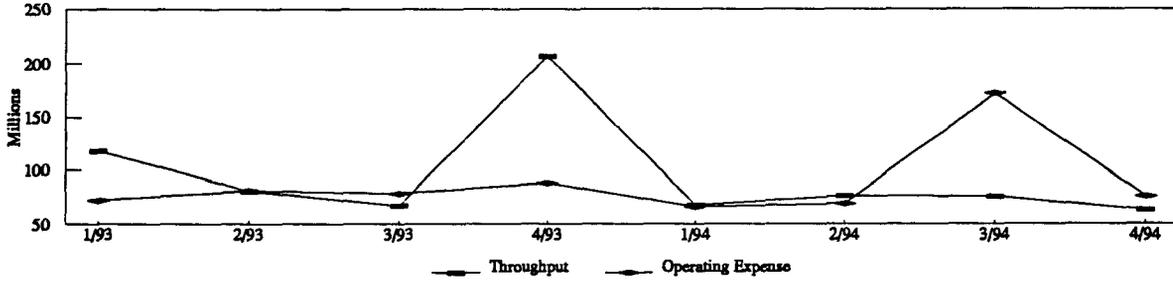
Operating expenses exceeded Throughput due to an unplanned reduction in workload. The shipyard budgeted for 3,781,044 direct labor manhours of workload and only executed 3,475,343 manhours. This loss of workload caused labor costs to exceed the budgeted rate by about 8% and actual NOR to exceed the budgeted NOR by 7%.

Naval shipyard workloads are generally being reduced across the board due to reductions in force structure.

LONG BEACH NAVAL SHIPYARD

THROUGHPUT & OPERATING EXPENSE

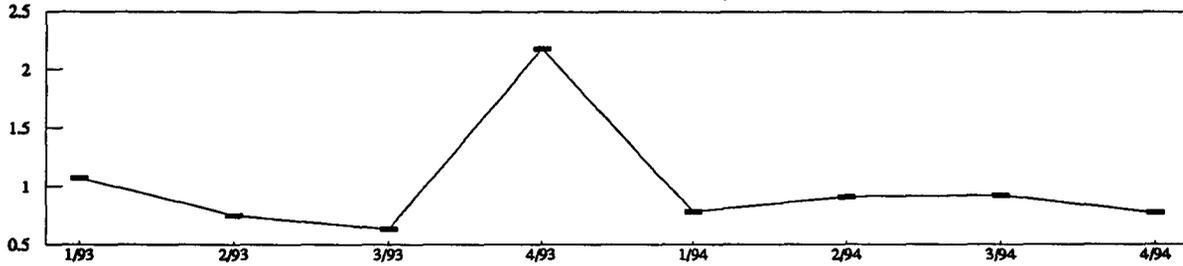
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



Shipyards operating expenses exceeded Throughput slightly due to the unplanned loss in workload for the year.

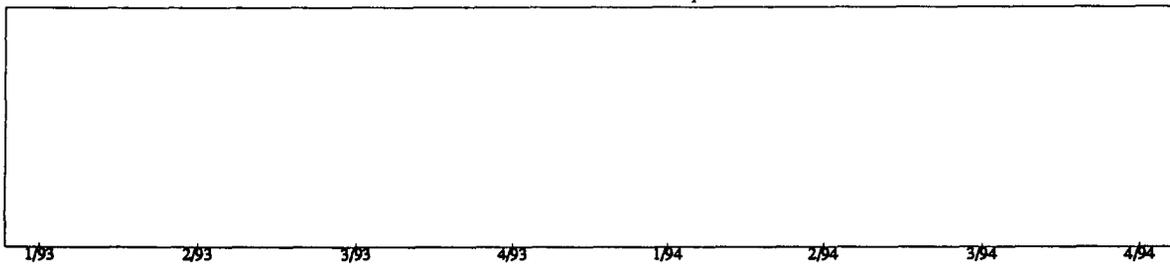
CAPITAL INVESTMENT EFFECTIVENESS

GOAL: Index Should Continually Increase



SCHEDULE INDICATOR

GOAL: Index Should Equal 1

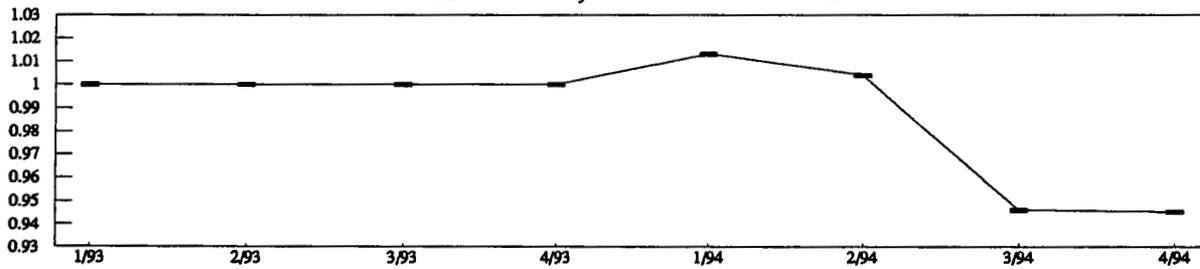


NAVSEA does not report on this indicator.

LONG BEACH NAVAL SHIPYARD

PROCESS DAYS

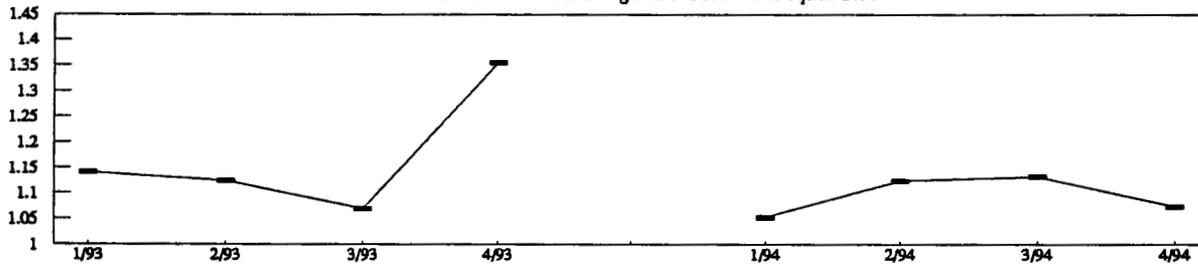
GOAL: Process Days Index Should be 1.00 or Above



The 3rd and 4th Qtr FY94 index is attributable to three ships which were completed slightly late due to new work and material delays.

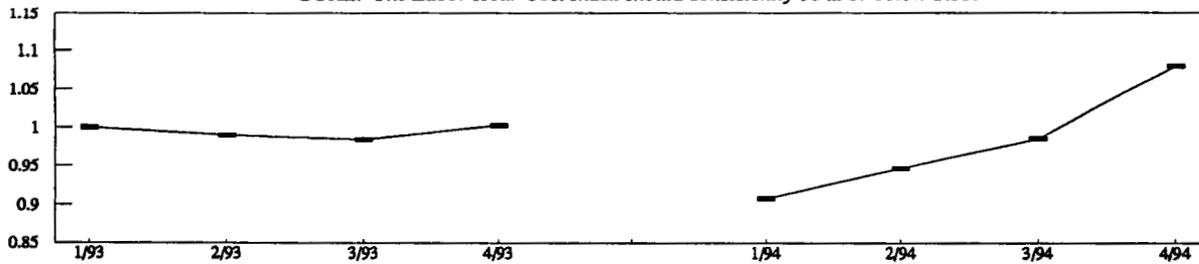
NET OPERATING RESULTS

GOAL: Actual NOR/Budgeted NOR should equal 1.00



LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



LONG BEACH NAVAL SHIPYARD

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue(\$)	124,583,857	89,155,324	75,511,819	213,345,000	72,196,000	83,418,000	82,336,000	69,796,000
Total Cost (\$)	79,193,092	89,670,861	86,941,047	95,337,000	70,596,000	76,053,000	177,973,000	82,450,000
Direct Materials (\$)	6,312,334	7,936,631	7,833,035	6,531,000	3,937,000	6,373,000	6,075,000	6,080,000
Throughput (\$)	118,271,523	81,218,693	67,678,784	206,814,000	68,259,000	77,045,000	76,261,000	63,716,000
Operating Expense (\$)	72,880,758	81,734,230	79,108,012	88,806,000	66,659,000	69,680,000	171,898,000	76,370,000

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	118,271,523	81,218,693	67,678,784	206,814,000	68,259,000	77,045,000	76,261,000	63,716,000
Longterm Inventory (\$)	109,763,853	109,248,725	106,751,062	94,876,000	87,495,000	84,793,000	82,977,000	82,525,000
INDEX	1.08	0.74	0.63	2.18	0.78	0.91	0.92	0.77

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

PROCESS DAYS

SCHEDULED FLOW DAYS/ACTUAL FLOW DAYS

Scheduled Flow Days	676	396	109	457	540	256	475	242
Actual Flow Days	676	396	109	457	533	255	502	256
INDEX	1.00	1.00	1.00	1.00	1.01	1.00	0.95	0.95

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	117,549,000	182,920,000	257,381,000	344,745,000	80,001,000	154,440,000	225,259,000	288,202,000
Cum Budg Cost (\$)	85,278,000	162,443,000	243,336,000	326,532,000	82,393,000	163,600,000	240,760,000	308,842,000
Budgeted NOR INDEX	1.38	1.13	1.06	1.06	0.97	0.94	0.94	0.93
Cum Actual Revenue (\$)	124,583,857	213,739,181	289,251,000	502,596,000	72,196,000	155,614,000	237,950,000	307,746,000
Cum Actual Cost (\$)	79,193,092	168,863,953	255,805,000	351,142,000	70,596,446	146,649,000	224,622,000	307,072,000
Actual NOR INDEX	1.57	1.27	1.13	1.43	1.02	1.06	1.06	1.00
NOR INDEX	1.14	1.12	1.07	1.36	1.05	1.12	1.13	1.07

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	85,278,000	162,443,000	243,336,000	326,532,000	82,393,000	163,600,000	240,760,000	308,842,000
Budgeted Total DLH	1,311,936	2,304,776	3,373,776	4,436,520	918,680	1,792,180	2,756,041	3,781,044
Bud Labor Hour Cost	\$65.00	\$70.48	\$72.13	\$73.60	\$89.69	\$91.29	\$87.36	\$81.68
Total Actual Cost (\$)	79,193,092	168,863,953	255,805,000	351,142,000	70,596,000	146,649,000	224,622,000	307,072,000
Actual Total DLH	1,218,067	2,418,292	3,599,997	4,752,007	866,538	1,696,494	2,605,941	3,475,343
Actual Labor Hour Cost	\$65.02	\$69.83	\$71.06	\$73.89	\$81.47	\$86.44	\$86.20	\$88.36
Labor Hour Cost INDEX	1.00	0.99	0.99	1.00	0.91	0.95	0.99	1.08

**NORFOLK NAVAL SHIPYARD
PORTSMOUTH, VA**

MAJOR WORKLOAD ACCOMPLISHED:

Overhaul, repair, alteration and inactivation of submarines, surface ships, and aircraft carriers and reactor compartment disposal and hull recycling.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	7563
Military:	108

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

\$656,660,000

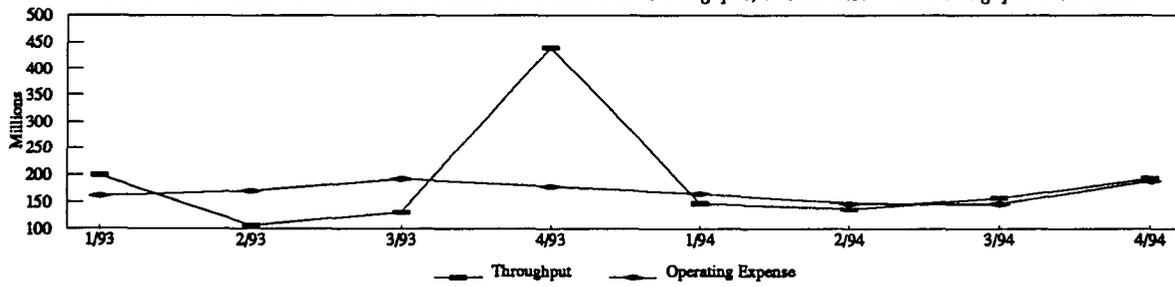
The shipyard completed 11 depot maintenance availabilities for the Fleet during FY94. The 3rd Qtr completions were slightly ahead of schedule and the 4th Qtr ships were slightly behind schedule. The two 4th Qtr ships were late by a total of 33 days due to new work directed by the customer.

Throughput exceeded operating expenses slightly. The shipyard executed less direct labor manhours of workload than budgeted, causing an increase in the hourly rate for the year.

NORFOLK NAVAL SHIPYARD

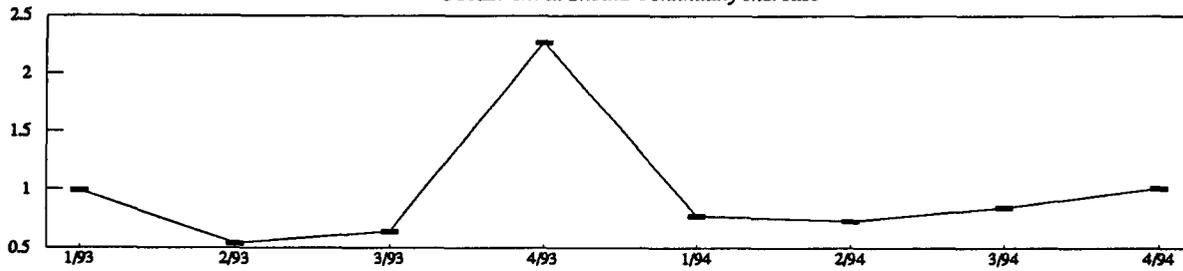
THROUGHPUT & OPERATING EXPENSE

GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



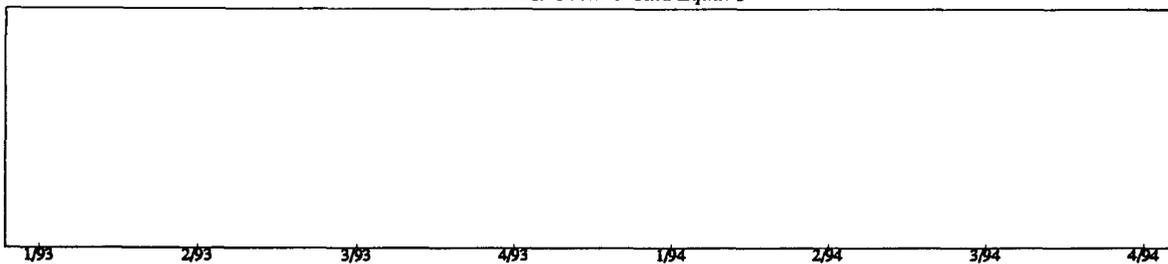
CAPITAL INVESTMENT EFFECTIVENESS

GOAL: Index Should Continually Increase



SCHEDULE INDICATOR

GOAL: Index Should Equal 1

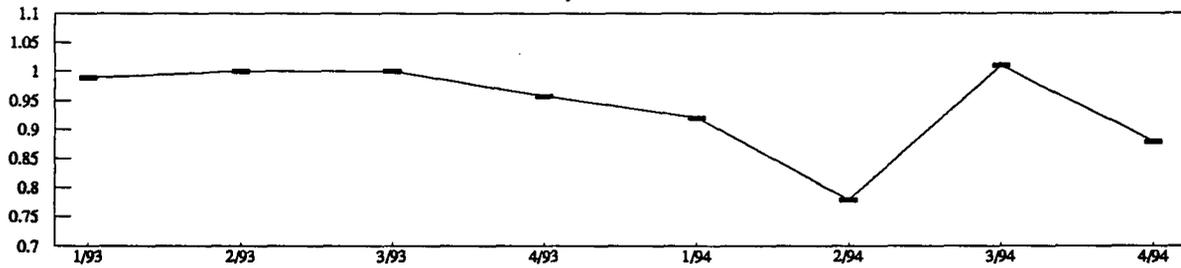


NAVSEA does not report this indicator.

NORFOLK NAVAL SHIPYARD

PROCESS DAYS

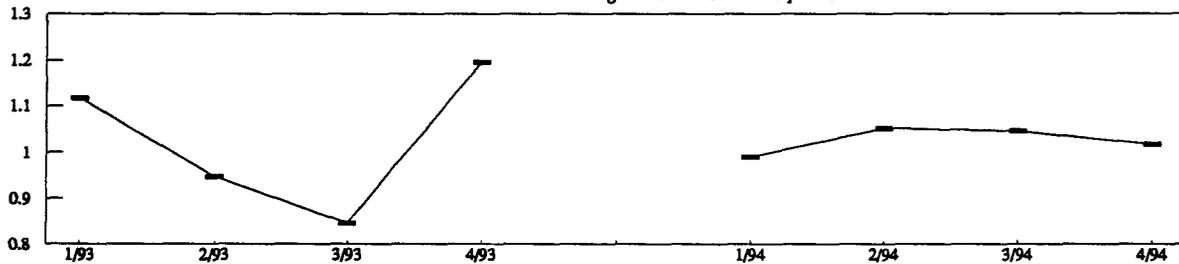
GOAL: Process Days Index Should be 1.00 or Above



The 3rd Qtr FY94 completions have been adjusted for subsequent schedule extensions. The 4th Qtr FY94 index is attributable to new work on two ships.

NET OPERATING RESULTS

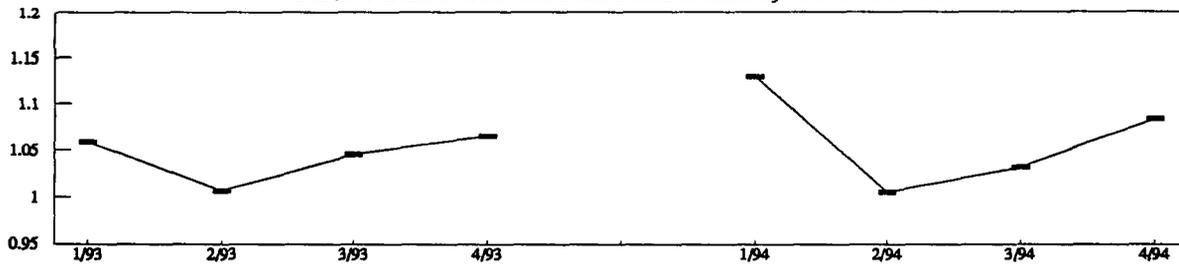
GOAL: Actual NOR/Budgeted NOR should equal 1.00



The actual NOR index exceeded the budgeted NOR index slightly due to the loss of workload.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



The actual labor costs exceeded the budgeted labor hour costs by 8% due to the unplanned loss of workload and delayed RIF approval during FY94.

NORFOLK NAVAL SHIPYARD

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue(\$)	215,947,510	123,623,025	147,184,465	455,881,000	164,183,000	146,384,000	170,792,000	212,957,000
Total Cost (\$)	177,566,217	187,707,348	208,834,435	194,713,000	181,711,000	156,291,000	160,091,000	208,749,000
Direct Materials (\$)	16,421,623	16,898,566	15,948,811	15,874,000	16,345,000	8,967,000	13,484,000	19,542,000
Throughput (\$)	199,525,887	106,724,459	131,235,654	440,007,000	147,838,000	137,417,000	157,308,000	193,415,000
Operating Expense (\$)	161,144,594	170,808,782	192,885,624	178,839,000	165,366,000	147,324,000	146,607,000	189,207,000

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	199,525,887	106,724,459	131,235,654	440,007,000	147,838,000	137,417,000	157,308,000	193,415,000
Longterm Inventory (\$)	201,445,994	196,714,592	204,012,000	193,935,000	190,975,000	187,651,000	185,962,000	191,317,000
INDEX	0.99	0.54	0.64	2.27	0.77	0.73	0.85	1.01

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

PROCESS DAYS

SCHEDULED FLOW DAYS/ACTUAL FLOW DAYS

Scheduled Flow Days	434	454	364	480	624	1338	313	240
Actual Flow Days	439	454	364	501	678	1717	310	273
INDEX	0.99	1.00	1.00	0.96	0.92	0.78	1.01	0.88

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	170,090,000	318,634,000	485,593,000	652,553,000	139,840,000	272,659,000	450,618,000	634,437,000
Cum Budg Cost (\$)	156,264,000	324,322,000	484,747,000	637,588,000	153,122,000	312,661,000	488,293,000	656,660,000
Budgeted NOR INDEX	1.09	0.98	1.00	1.02	0.91	0.87	0.92	0.97
Cum Actual Revenue (\$)	215,947,510	339,570,535	486,755,000	942,636,000	164,183,000	310,567,000	481,359,000	694,316,000
Cum Actual Cost (\$)	177,566,217	365,273,565	574,108,000	768,821,000	181,711,000	338,002,000	498,093,000	706,842,000
Actual NOR INDEX	1.22	0.93	0.85	1.23	0.90	0.92	0.97	0.98
NOR INDEX	1.12	0.95	0.85	1.20	0.99	1.05	1.05	1.02

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	156,264,000	324,322,000	483,987,000	637,588,000	153,122,000	312,661,000	488,293,000	656,660,000
Budgeted Total DLH	3,003,832	5,550,976	8,332,000	10,897,864	2,371,721	4,626,801	7,115,164	9,759,050
Bud Labor Hour Cost	\$52.02	\$58.43	\$58.09	\$58.51	\$64.56	\$67.58	\$68.63	\$67.29
Total Actual Cost (\$)	177,566,217	365,273,565	574,108,000	768,821,000	181,711,000	338,002,000	498,093,000	706,842,000
Actual Total DLH	3,223,063	6,207,238	9,447,690	12,324,121	2,490,207	4,973,143	7,026,541	9,684,280
Actual Labor Hour Cost	\$55.09	\$58.85	\$60.77	\$62.38	\$72.97	\$67.97	\$70.89	\$72.99
Labor Hour Cost INDEX	1.06	1.01	1.05	1.07	1.13	1.01	1.03	1.08

PEARL HARBOR NAVAL SHIPYARD
PEARL HARBOR, HA

MAJOR WORKLOAD ACCOMPLISHED:

Submarine and surface ship overhaul, alteration and repair.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	4255
Military:	50

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

\$214,775,392

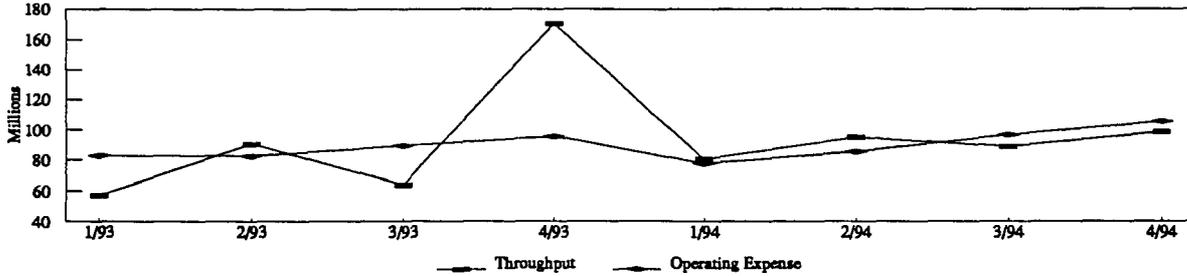
The shipyard completed 8 ships during FY 94, with the four 4th Qtr ships finishing slightly ahead of schedule.

Operating expenses exceeded Throughput by approximately \$7M due to a reduction in workload during FY 94. The shipyard budgeted for 4,033,586 direct labor manhours of worklaod and only executed 3,846,825 direct labor hours which adversely impacted both the labor hour cost and net operating results.

PEARL HARBOR NAVAL SHIPYARD

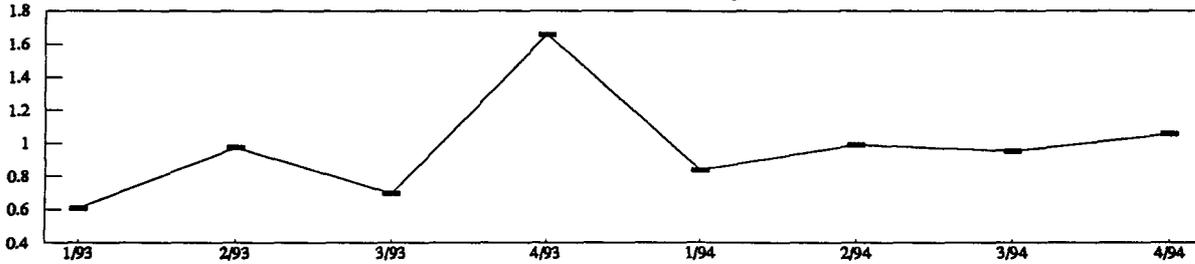
THROUGHPUT & OPERATING EXPENSE

GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



CAPITAL INVESTMENT EFFECTIVENESS

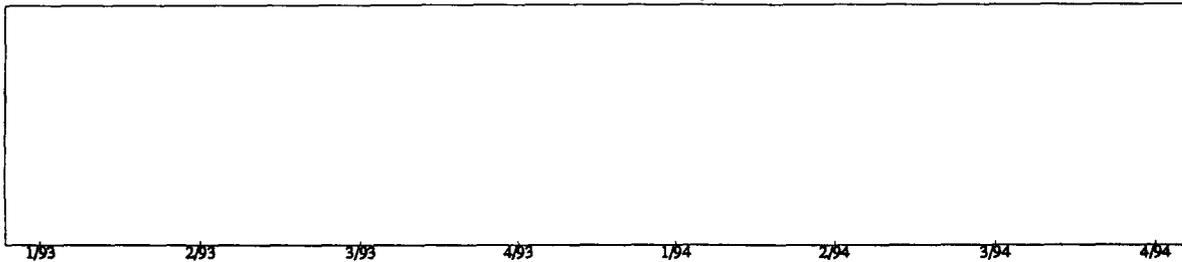
GOAL: Index Should Continually Increase



Operating expenses exceeded Throughput by approximately \$7M due to a reduction in FY94 workload directed by the customers.

SCHEDULE INDICATOR

GOAL: Index Should Equal 1

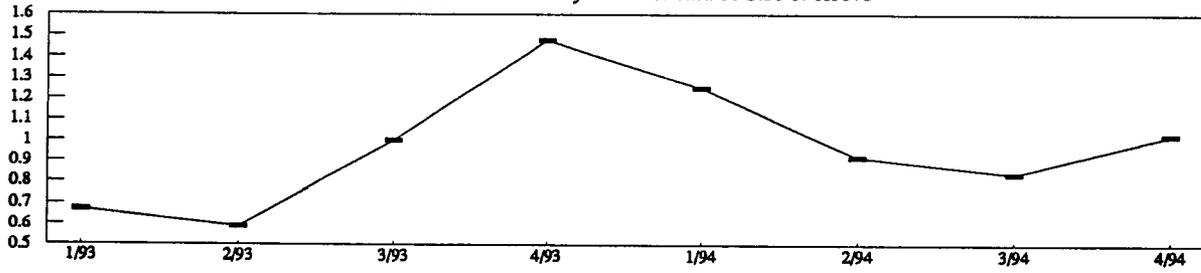


NAVSEA does not report this indicator.

PEARL HARBOR NAVAL SHIPYARD

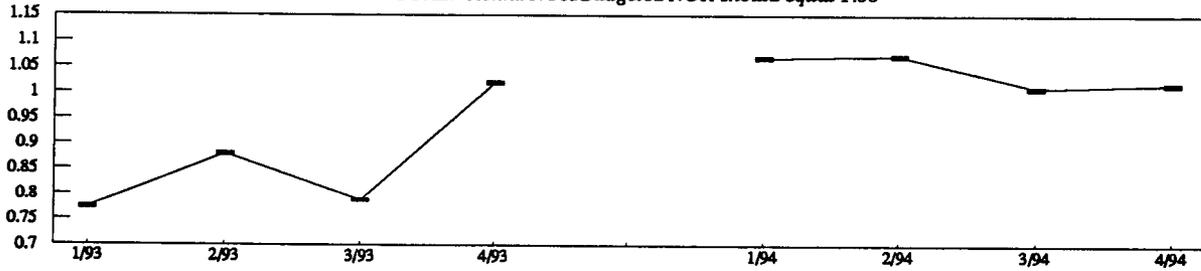
PROCESS DAYS

GOAL: Process Days Index Should be 1.00 or Above



NET OPERATING RESULTS

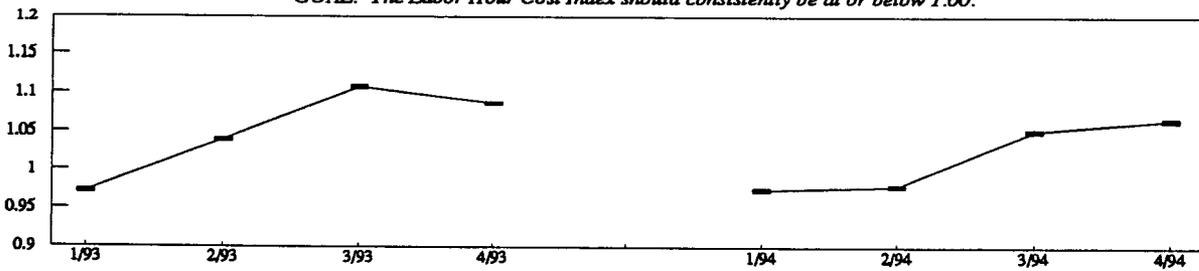
GOAL: Actual NOR/Budgeted NOR should equal 1.00



Actual costs exceeded revenues by 1% due to a loss of workload.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



Actual labor costs exceeded the budgeted rate by 7% due to the unanticipated loss of workload.

PORTSMOUTH NAVAL SHIPYARD
PORTSMOUTH, NH

MAJOR WORKLOAD ACCOMPLISHED:

Overhaul, repair and alteration of submarines

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	4220
Military:	106

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

\$345,675,000

The shipyard completed a Depot Maintenance Period (DMP) on the USS Pittsburgh (SSN 720) during FY94. The ship completed 5.5 months late due to unplanned growth in the work package.

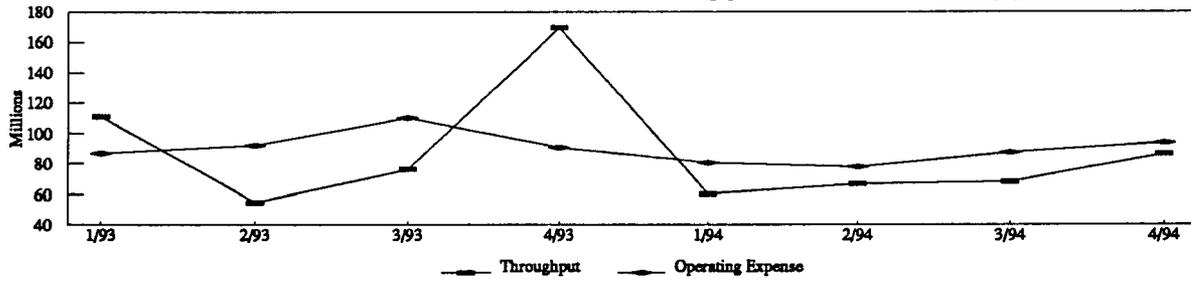
In FY94, the shipyard budgeted for 4,955,240 direct labor manhours of workload and executed only 4,211,204 manhours due to workload reductions by the Fleet. This condition adversely impacted both labor costs and net operating results.

Portsmouth Naval Shipyard also experienced increased operating expenses due to a delay in RIF approval.

PORTSMOUTH NAVAL SHIPYARD

THROUGHPUT & OPERATING EXPENSE

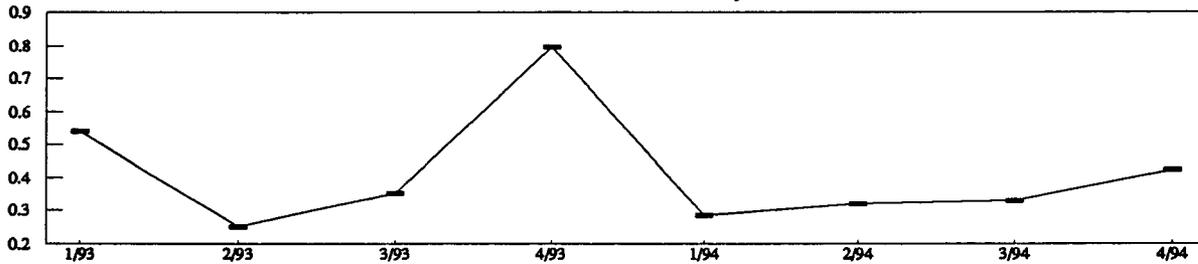
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



Operating Expenses exceed Throughput due to unexpected workload reductions.

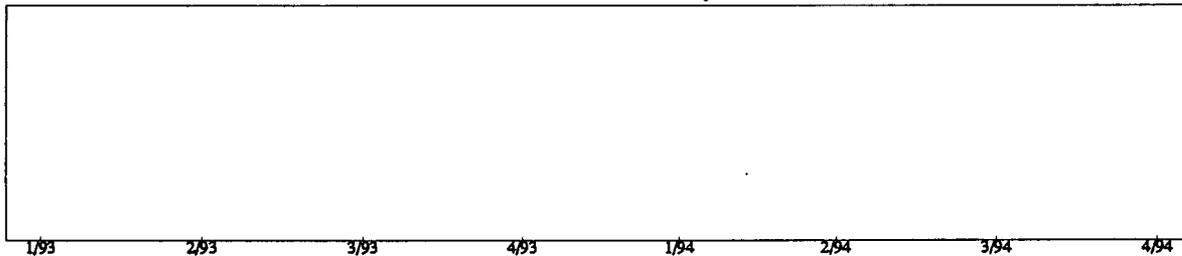
CAPITAL INVESTMENT EFFECTIVENESS

GOAL: Index Should Continually Increase



SCHEDULE INDICATOR

GOAL: Index Should Equal 1

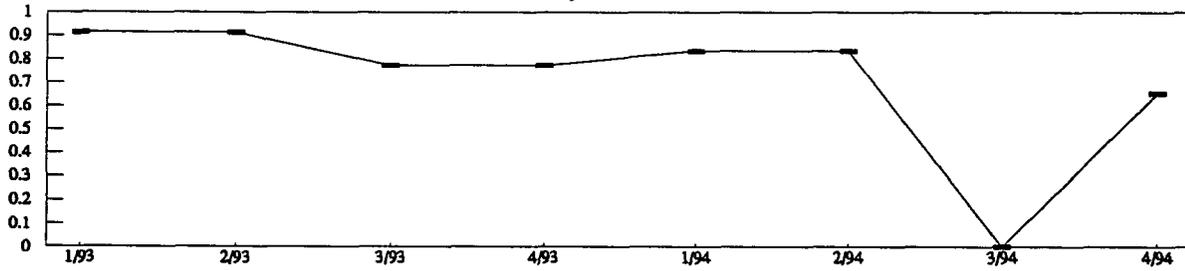


NAVSEA does not report this indicator.

PORTSMOUTH NAVAL SHIPYARD

PROCESS DAYS

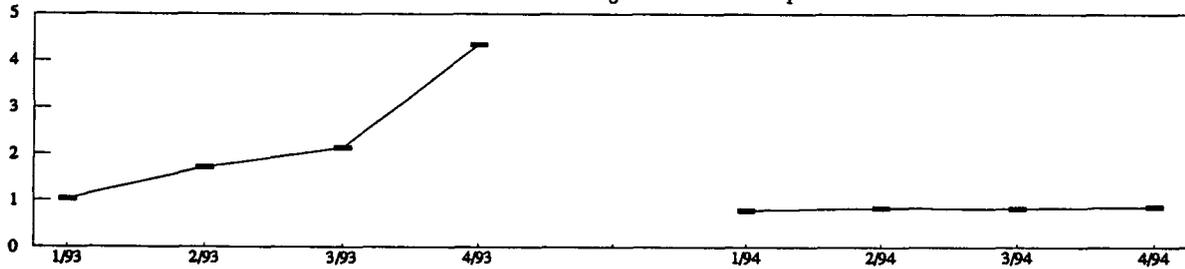
GOAL: Process Days Index Should be 1.00 or Above



No ships were scheduled or completed during the 3rd Qtr FY94. The 4th Qtr FY94 index is due to growth and new work on the USS Pittsburgh DMP.

NET OPERATING RESULTS

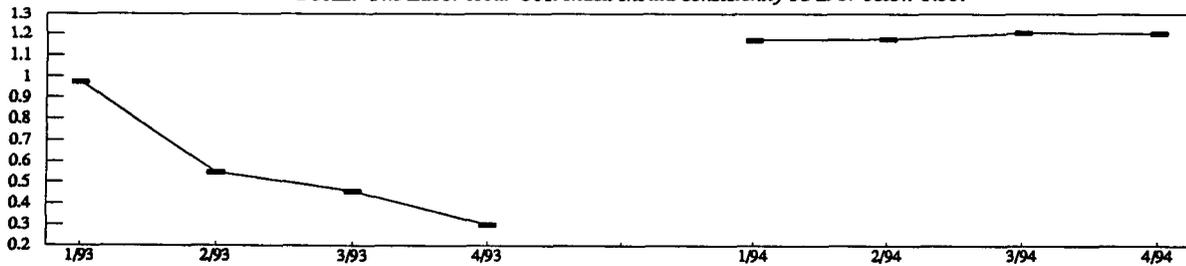
GOAL: Actual NOR/Budgeted NOR should equal 1.00



FY94 NOR reflects an unplanned workload reduction.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



The unplanned workload reduction, coupled with a delay in RIF approval adversely impacted shipyard labor costs for FY94.

PORTSMOUTH NAVAL SHIPYARD

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue(\$)	115,299,851	60,277,568	80,946,581	173,093,000	63,920,000	69,540,000	71,984,000	91,504,000
Total Cost (\$)	91,172,121	97,309,549	115,107,330	94,355,000	83,844,000	80,564,000	91,202,000	98,991,000
Direct Materials (\$)	4,378,389	5,244,520	4,856,091	3,710,000	3,313,000	2,736,000	3,755,000	5,185,000
Throughput (\$)	110,921,462	55,033,048	76,090,490	169,383,000	60,607,000	66,804,000	68,229,000	86,319,000
Operating Expense (\$)	86,793,732	92,065,029	110,251,239	90,645,000	80,531,000	77,828,000	87,447,000	93,806,000

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	110,921,462	55,033,048	76,090,490	169,383,000	60,607,000	66,804,000	68,229,000	86,319,000
Longterm Inventory (\$)	205,482,999	219,979,619	215,830,937	212,531,000	213,625,570	209,272,631	207,146,000	203,477,000
INDEX	0.54	0.25	0.35	0.80	0.28	0.32	0.33	0.42

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

PROCESS DAYS

SCHEDULED FLOW DAYS/ACTUAL FLOW DAYS

Scheduled Flow Days	764	764	913	913	426	426	0	316
Actual Flow Days	837	837	1180	1180	509	509	0	483
INDEX	0.91	0.91	0.77	0.77	0.84	0.84	0.00	0.65

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST) = NOR INDEX

Cum Budg Revenue (\$)	106,090,000	182,080,000	268,753,000	357,626,000	81,838,000	159,652,000	245,515,000	336,745,000
Cum Budg Cost (\$)	86,836,000	172,852,000	257,147,000	341,187,000	84,054,000	163,974,000	252,162,000	345,862,000
Budgeted NOR INDEX	1.22	1.05	1.05	1.05	0.97	0.97	0.97	0.97
Cum Actual Revenue (\$)	115,299,851	175,577,419	256,524,000	429,617,000	63,920,000	133,460,000	205,444,000	296,948,000
Cum Actual Cost (\$)	91,172,121	97,309,549	115,107,330	94,355,000	83,844,000	164,408,000	255,610,000	354,601,000
Actual NOR INDEX	1.26	1.80	2.23	4.55	0.76	0.81	0.80	0.84
NOR INDEX	1.04	1.71	2.13	4.34	0.78	0.83	0.83	0.86

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	86,836,000	172,852,000	257,147,000	341,187,000	84,054,000	163,974,000	252,162,000	345,862,000
Budgeted Total DLH	1,320,144	2,740,832	4,198,120	5,810,152	1,204,262	2,349,297	3,612,785	4,955,240
Bud Labor Hour Cost	\$65.78	\$63.07	\$61.25	\$58.72	\$69.80	\$69.80	\$69.80	\$69.80
Total Actual Cost (\$)	91,172,121	97,309,549	115,107,330	94,355,000	83,844,000	164,408,000	255,610,000	354,601,000
Actual Total DLH	1,421,790	2,820,282	4,099,591	5,349,280	1,023,324	2,000,175	3,030,681	4,211,204
Actual Labor Hour Cost	\$64.12	\$34.50	\$28.08	\$17.64	\$81.93	\$82.20	\$84.34	\$84.20
Labor Hour Cost INDEX	0.97	0.55	0.46	0.30	1.17	1.18	1.21	1.21

**PUGET SOUND NAVAL SHIPYARD
BREMERTON, WA**

MAJOR WORKLOAD ACCOMPLISHED:

Overhaul, alteration, inactivation and repair of submarines, aircraft carriers and surface ships, reactor compartment disposal and hull recycling

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	10593
Military:	78

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

\$797,232,000

Puget Sound Naval Shipyard executed 12,254,515 direct labor manhours to complete 8 major availabilities during FY 94. The shipyard was budgeted for 13,481,544 manhours, which is a 1,227,029 manhours loss in workload for the fiscal year.

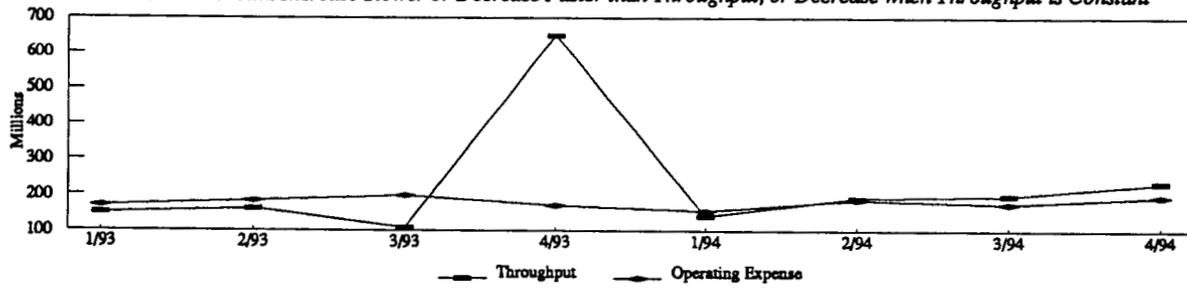
The shipyard completed virtually all ships on or ahead of schedule with 2 ships completed early, 4 ships completed on time and 2 ships late for a total of 38 days early for the FY.

Shipyard Throughput exceeded operating expenses by a comfortable margin of \$39M and revenues exceeded cost by 7%. Labor costs exceeded the budgeted rate due to the loss of workload.

PUGET SOUND NAVAL SHIPYARD

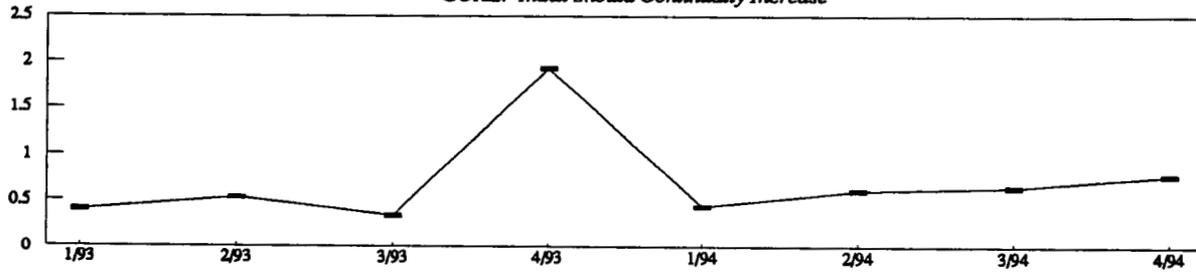
THROUGHPUT & OPERATING EXPENSE

GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



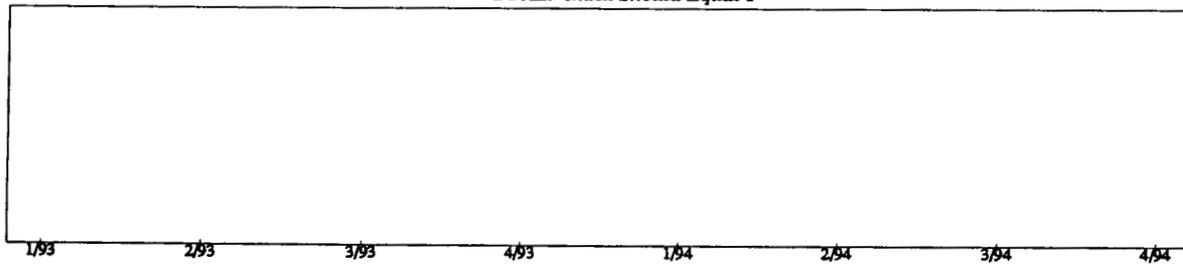
CAPITAL INVESTMENT EFFECTIVENESS

GOAL: Index Should Continually Increase



SCHEDULE INDICATOR

GOAL: Index Should Equal 1

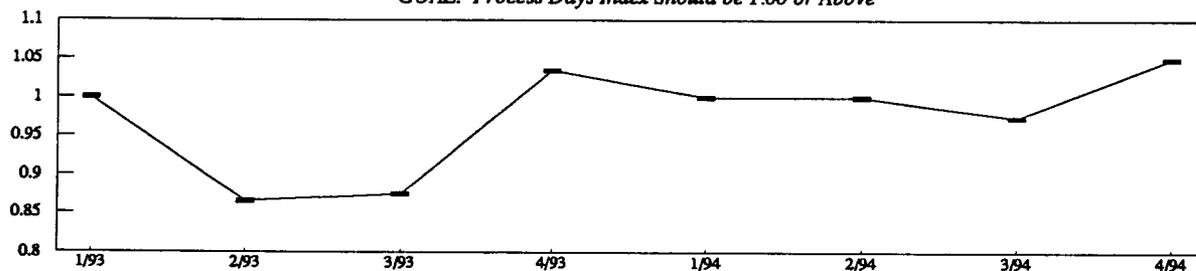


NAVSEA does not report this indicator.

PUGET SOUND NAVAL SHIPYARD

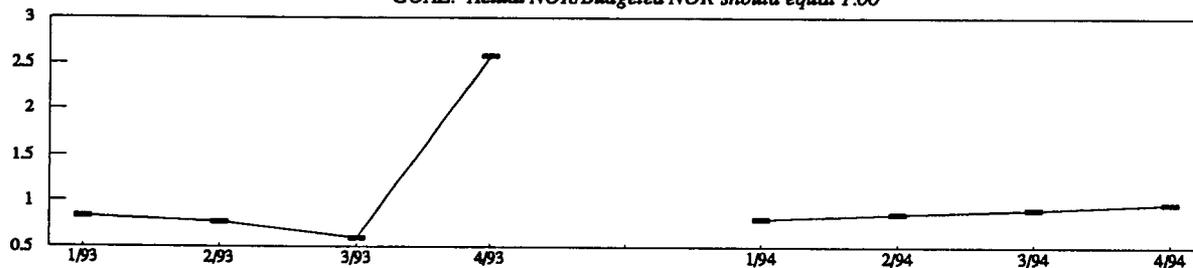
PROCESS DAYS

GOAL: Process Days Index Should be 1.00 or Above



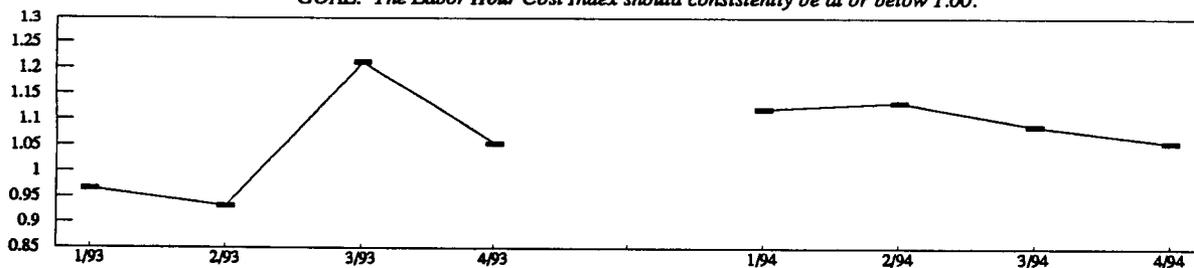
NET OPERATING RESULTS

GOAL: Actual NOR/Budgeted NOR should equal 1.00



LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



Actual labor costs exceeded the budgeted hourly rate due to a 1.2M manhour loss of workload.

PUGET SOUND NAVAL SHIPYARD

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue(\$)	168,461,134	176,446,064	118,641,802	665,554,000	156,112,000	200,121,000	212,545,000	250,114,000
Total Cost (\$)	189,405,099	199,642,356	208,844,667	185,585,878	170,638,000	194,240,000	189,599,000	211,100,000
Direct Materials (\$)	19,326,355	16,036,120	10,765,525	16,030,000	16,370,000	9,338,000	16,256,000	17,279,000
Throughput (\$)	149,134,779	160,409,944	107,876,277	649,524,000	139,742,000	190,783,000	196,289,000	232,835,000
Operating Expense (\$)	170,078,744	183,606,236	198,079,142	169,555,878	154,268,000	184,902,000	173,343,000	193,821,000

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	149,134,779	160,409,944	107,876,277	649,524,000	139,742,000	190,783,000	196,289,000	232,835,000
Longterm Inventory (\$)	369,284,482	300,567,629	313,006,049	335,543,049	315,257,000	312,213,000	302,991,000	301,185,000
INDEX	0.40	0.53	0.34	1.94	0.44	0.61	0.65	0.77

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

PROCESS DAYS

SCHEDULED FLOW DAYS/ACTUAL FLOW DAYS

Scheduled Flow Days	181	1835	1270	720	256	1019	1632	1742
Actual Flow Days	181	2121	1453	696	256	1019	1676	1660
INDEX	1.00	0.87	0.87	1.03	1.00	1.00	0.97	1.05

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	197,216,000	191,673,000	158,497,000	245,715,000	198,236,000	424,060,000	652,465,000	872,514,000
Cum Budg Cost (\$)	186,187,000	169,138,000	167,305,000	176,841,000	176,000,000	377,747,000	583,117,000	797,232,000
Budgeted NOR INDEX	1.06	1.13	0.95	1.39	1.13	1.12	1.12	1.09
Cum Actual Revenue (\$)	168,481,134	176,445,064	118,641,802	665,554,000	156,112,000	356,293,000	568,778,000	818,892,000
Cum Actual Cost (\$)	189,405,099	199,642,356	208,844,667	185,585,878	170,638,000	364,878,000	554,477,000	765,577,000
Actual NOR INDEX	0.89	0.88	0.57	3.59	0.91	0.98	1.03	1.07
NOR INDEX	0.84	0.78	0.60	2.58	0.81	0.87	0.92	0.98

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	186,187,000	169,138,000	167,305,000	176,841,000	176,000,000	377,747,000	583,117,000	797,232,000
Budgeted Total DLH	3,264,663	2,969,079	2,946,071	3,075,011	3,123,916	6,710,052	10,229,924	13,481,544
Bud Labor Hour Cost	\$57.03	\$56.97	\$56.79	\$57.51	\$56.34	\$56.30	\$57.00	\$59.14
Total Actual Cost (\$)	189,405,099	199,642,356	208,844,667	185,585,878	170,638,000	364,878,000	554,477,000	765,577,000
Actual Total DLH	3,440,751	3,761,667	3,035,339	3,059,561	2,701,766	5,719,435	8,943,809	12,254,515
Actual Labor Hour Cost	\$55.05	\$53.07	\$68.80	\$60.66	\$63.16	\$63.80	\$62.00	\$62.47
Labor Hour Cost INDEX	0.97	0.93	1.21	1.05	1.12	1.13	1.09	1.06



**AIR FORCE AIR LOGISTICS CENTERS
AND
SPECIALIZED CENTERS**

AEROSPACE GUIDANCE AND METROLOGY CENTER
NEWARK AFB, OH

MAJOR WORKLOAD ACCOMPLISHED:

Minuteman III MGS Peacekeeper MGCS B-1B INU F-15 IMU F-16 INU
F-117 IMU KC-135 INU PADS IMU DMINS IMU TMDE
Carousel IMU SPN-GEANS IMU ESGN IMU Displacement Gyro

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian: 828
Military: 5

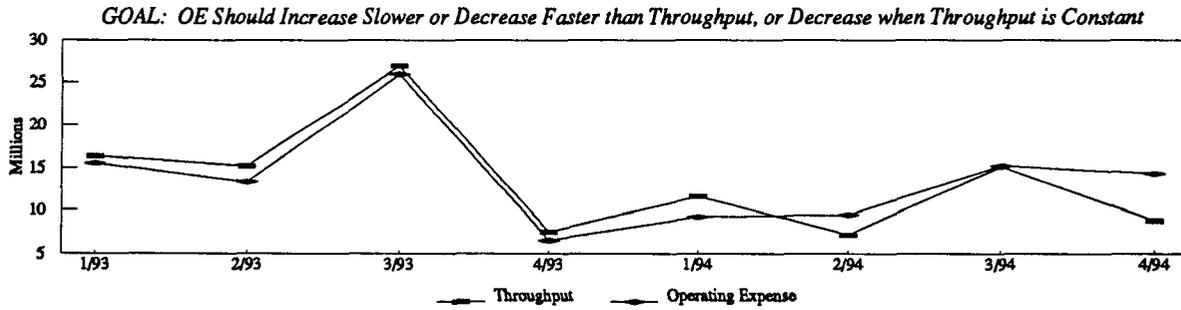
CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

\$81,600,000

Aerospace Guidance and Metrology Center 3rd and 4th quarter operations indicators were adversely affected by higher than anticipated Repairable Support Division (RSD) material costs and a planned FY94 budgeted loss of \$7.5 million. Our Direct Product Labor Hours (DPAH) were also less than budgeted due to decreased customer requirements in the following workloads: LN-39, Carousel, CN1375, 7901A, PADS, and software development. These three factors have reduced our revenue, increased total cost, affected our schedule indicator and increased our labor hour costs.

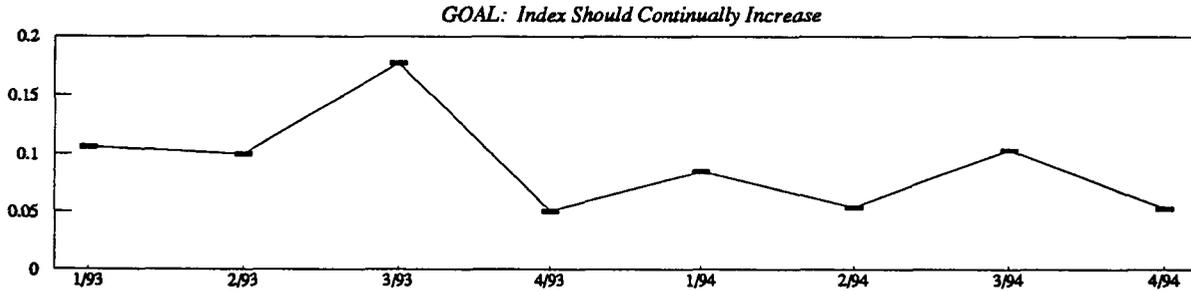
AEROSPACE GUIDANCE AND METROLOGY CENTER

THROUGHPUT & OPERATING EXPENSE



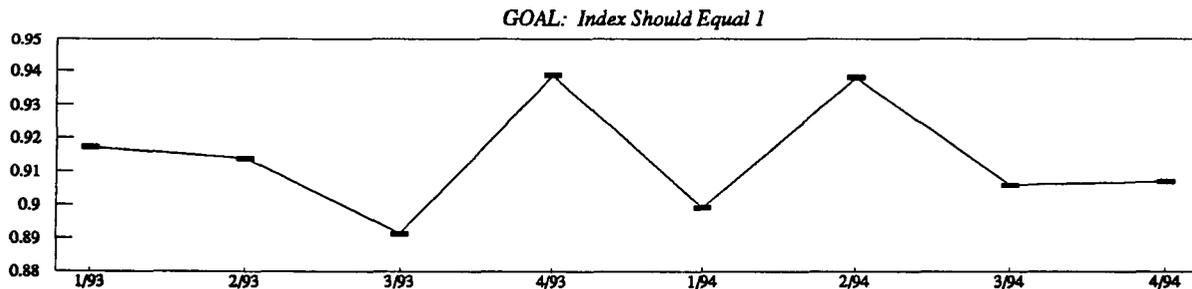
A decrease in 3rd & 4th quarter customer requirements, causing reduced revenue, coupled with increased material and RSD charges has resulted in decreased throughput and an increase in our operating expenses.

CAPITAL INVESTMENT EFFECTIVENESS



An increase of \$20 million in funded/unfunded equipment has increased our long term inventory value. This increase was driven by the purchase of 11 Automatic Depot Inertial Navigation Test Stations (ADINTS) in support of the B-1B, F-16, and Advanced Cruise Missile (ACM) workloads. The reduction in throughput and this increase in long term inventory value has resulted in a decrease in our capital investment effectiveness.

SCHEDULE INDICATOR

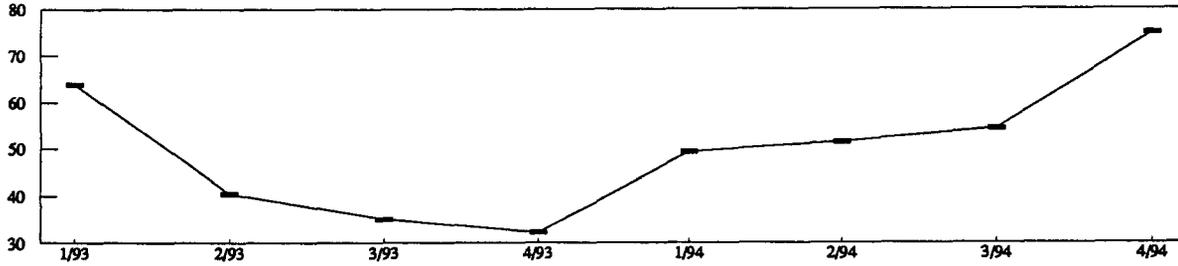


The main driver for our 3rd quarter schedule indicator was a result of a late start of our new Ring Laser Gyro workload. The 4th quarter schedule indicator was caused by the lack of parts used in the repair of our Carousel module workload.

AEROSPACE GUIDANCE AND METROLOGY CENTER

PROCESS DAYS

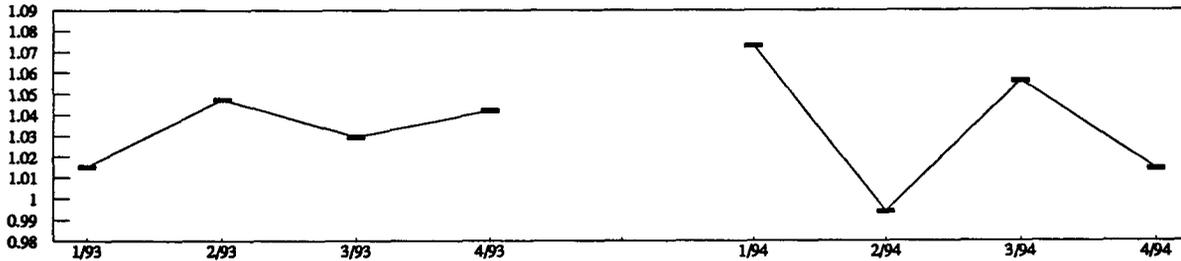
GOAL: Process Days Should show Continual Reduction



AGMC uses 7 workloads as "pacing items" (3 IMU/INU, 2 Gyro, 1 Velocity Meter and the Minuteman III Missile Guidance Set). Two of our pacing workloads, 7901 Gyro and Carousel IMU, had significantly longer turn around times. These two workloads produced units with longer than average time awaiting parts. These units coupled with reduced receipts increased our overall process days indicator.

NET OPERATING RESULTS

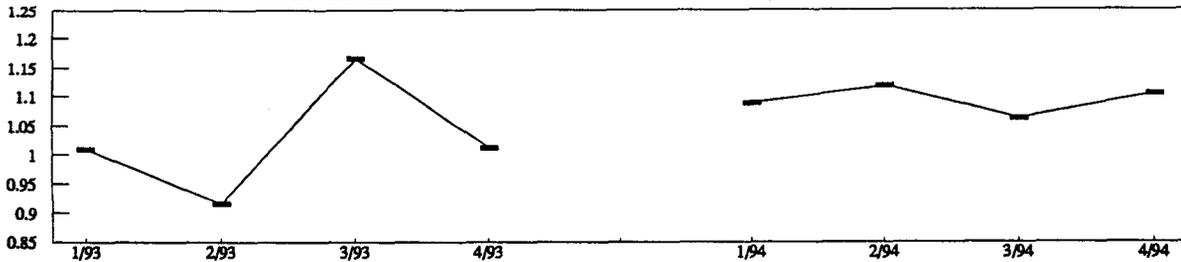
GOAL: Actual NOR/Budgeted NOR should equal 1.00



The FY94 2nd quarter actual costs were higher as a result of an erroneous RSD charge of \$1.3 million for 20 Fuel Saver computers. This error was corrected in the 3rd quarter, causing our cumulative actual cost to be artificially higher in the 2nd quarter and lower in the 3rd quarter.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



Reduced customer requirements in the following workloads have caused a decrease in our total direct labor hours: LN-39, Carousel, CN 1375 Gyro, 7901A Gyro, PADS and software development. These 6 workloads account for 107 thousand production hours that were budgeted but did not generate.

AEROSPACE GUIDANCE AND METROLOGY CENTER

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue(\$)	20,300,000	19,800,000	32,200,000	10,000,000	19,506,000	18,381,000	18,735,000	16,244,000
Total Cost (\$)	19,466,000	17,929,000	31,255,000	9,054,000	17,122,000	20,675,000	18,859,000	21,789,000
Direct Materials (\$)	3,957,000	4,575,000	5,333,000	2,485,000	7,888,000	11,196,000	3,584,000	7,447,000
Throughput (\$)	16,343,000	15,225,000	26,867,000	7,515,000	11,618,000	7,185,000	15,151,000	8,797,000
Operating Expense (\$)	15,509,000	13,354,000	25,922,000	6,569,000	9,234,000	9,479,000	15,275,000	14,342,000

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	16,343,000	15,225,000	26,867,000	7,515,000	11,618,000	7,185,000	15,151,000	8,797,000
Longterm Inventory (\$)	153,627,378	152,125,269	151,005,859	147,948,833	137,182,208	133,719,085	146,014,132	166,225,597
INDEX	0.11	0.10	0.18	0.05	0.08	0.05	0.10	0.05

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

Components Scheduled	3,379	2,941	2,855	2,995	2,985	2,903	2,938	2,680
Components Completed	3,099	2,688	2,545	2,812	2,684	2,724	2,662	2,431
INDEX	0.92	0.91	0.89	0.94	0.90	0.94	0.91	0.91

PROCESS DAYS

DATE INDUCTED - DATE COMPLETED = PROCESS DAYS

Components Process Days	57,895	33,371	29,210	31,109	51,010	53,913	54,557	48,266
Number of Items	907	824	833	966	1,034	1,048	1,004	645
AVG PROCESS DAYS	63.83	40.50	35.07	32.20	49.33	51.44	54.34	74.83

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	20,678,000	45,381,000	70,655,000	95,217,000	19,569,000	40,779,000	61,423,000	81,754,000
Cum Budg Cost (\$)	20,091,000	44,372,000	69,082,000	93,717,000	18,432,000	40,437,000	64,916,000	89,283,000
Budgeted NOR INDEX	1.03	1.02	1.02	1.02	1.06	1.01	0.95	0.92
Cum Actual Revenue (\$)	20,339,000	40,059,000	72,288,000	82,272,000	19,506,000	37,887,000	56,622,000	72,866,000
Cum Actual Cost (\$)	19,466,000	37,395,000	68,650,000	77,704,000	17,122,000	37,797,000	56,656,000	78,445,000
Actual NOR INDEX	1.04	1.07	1.05	1.06	1.14	1.00	1.00	0.93
NOR INDEX	1.02	1.05	1.03	1.04	1.07	0.99	1.06	1.01

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	20,091,000	44,372,000	69,082,000	93,717,000	18,432,000	40,437,000	64,916,000	89,283,000
Budgeted Total DLH	279,802	573,612	873,642	1,165,012	241,126	505,517	765,146	1,019,722
Bud Labor Hour Cost	\$71.80	\$77.36	\$79.07	\$80.44	\$76.44	\$79.99	\$84.84	\$87.56
Total Actual Cost (\$)	19,466,000	37,395,000	68,650,000	77,704,000	17,122,000	37,797,000	56,656,000	78,445,000
Actual Total DLH	268,532	527,816	744,189	954,954	205,779	422,747	628,270	811,675
Actual Labor Hour Cost	\$72.49	\$70.85	\$92.25	\$81.37	\$83.21	\$89.41	\$90.18	\$96.65
Labor Hour Cost INDEX	1.01	0.92	1.17	1.01	1.09	1.12	1.06	1.10

**AEROSPACE MAINT AND REGENERATION CENTER
DAVIS-MONTHAN AFB, AZ**

MAJOR WORKLOAD ACCOMPLISHED:

Prepare A/C for long/short term storage, represerve A/C in storage and maintain A/C in storage. Withdraw A/C from storage and prepare them for flyaway. Remove parts and assemblies from stored aircraft and cover overland deliveries. Deliver A/C to museums and transport of A/C to gunnery/bombing ranges. EPA clean-up on static display A/C and miscellaneous special projects. Also elimination site for B-52's under terms of Strategic Arms Reduction Treaty.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	576
Military:	

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

\$41,355,000

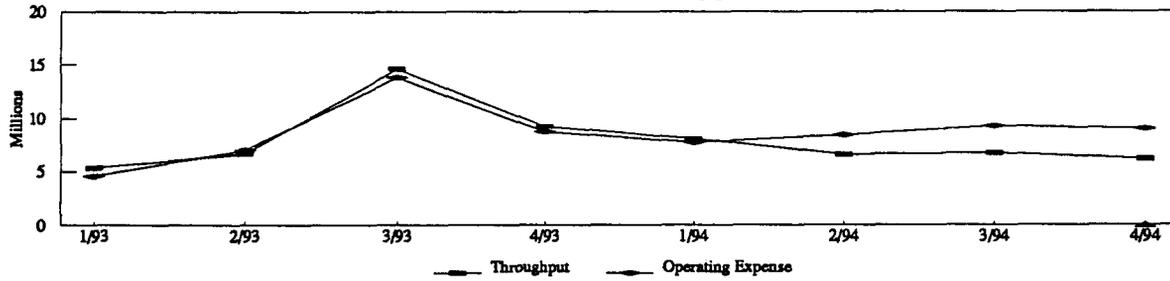
AMARC is a service organization that provides for storage, regeneration and disposal of aircraft and related aerospace items as well as selected non-aero-space, out-sized and specialized items. Encompassing 2,600 acres, AMARC currently has more than 4,950 aircraft in storage with an acquisition value of nearly \$15.9B. Related aerospace items in storage include production tooling, engines, pylons, pylon load adapters and airframe components. In FY94, AMARC received 735 aircraft valued at \$4B. In addition, nearly 3,000 line items of tooling were added to the inventory. In FY94, AMARC returned 197 aircraft and 28,612 parts and components valued at \$994M. With an operating budget of \$49M, this equates to a return of \$20 in goods and services for every dollar spent. AMARC eliminated 57% of the 350 B-52 heavy bombers in accordance with the Strategic Arms Reduction Treaty and manages over 104,000 line items of aircraft production tooling, including equipment from the B-1, C-141 and A-10 production lines.

Performance of the indicators was affected by a requirement to meet a programmed loss of \$7.7M for FY94, a change in the method of depreciation occurring in the 2nd and 3rd Qtr of FY93, the completion of the F-106 Full Scale Aerial Target Program, construction to primary facilities involved in the process-in activity and non-materialization of the jet engine intermediate maintenance (JEIM) workload.

AEROSPACE MAINT AND REGENERATION CENTER

THROUGHPUT & OPERATING EXPENSE

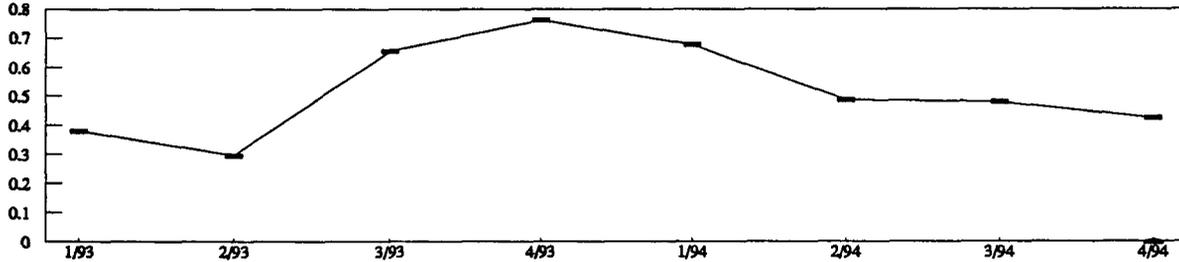
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



Headquarters requirement mandating a \$7.7M loss for FY94 and a reduction in revenue generated from existing project workloads caused expenses to be greater than throughput.

CAPITAL INVESTMENT EFFECTIVENESS

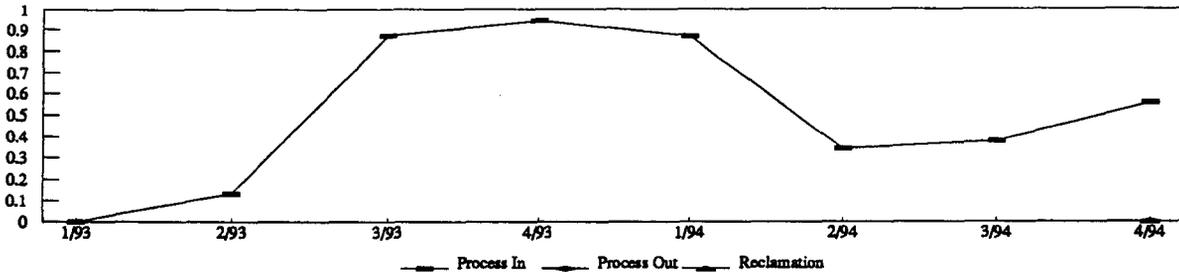
GOAL: Index Should Continually Increase



Downward movement resulted from audit finding leading to adjustments in depreciation accounts and inventory build-up in preparation for the F-4 drone program.

SCHEDULE INDICATOR

GOAL: Index Should Equal 1

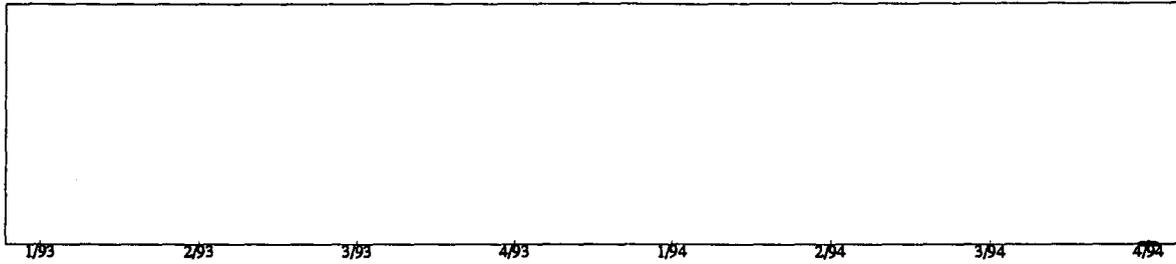


OUT: 1st half FY94 downturn due to end of F106 program & increase in parts and manhour requirements from earlier priority demands. 2nd half upturn due to end of F106 program and improvement in workload preplanning activity. **OUT:** FY94 trend impacted by large number of F16s needing det. cord removal. Small upturn result of A/C undergoing minimum preservation in per designated requirements. **RECLAMATION:** Procedures used to establish delivery date under 29% increase in demand for priority removal items led

AEROSPACE MAINT AND REGENERATION CENTER

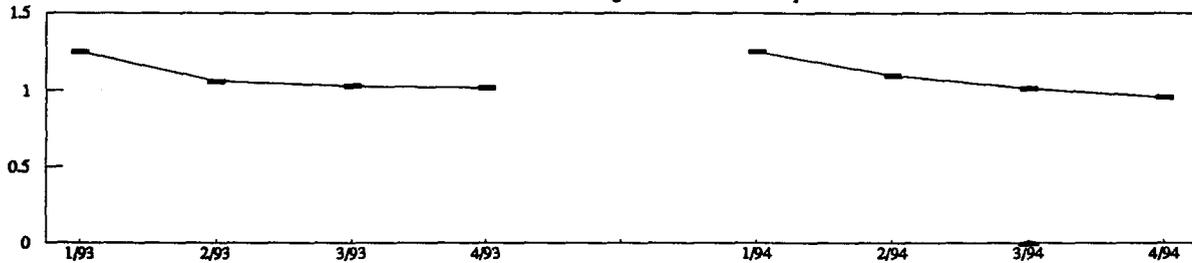
PROCESS DAYS

GOAL: Process Days Should show Continual Reduction



NET OPERATING RESULTS

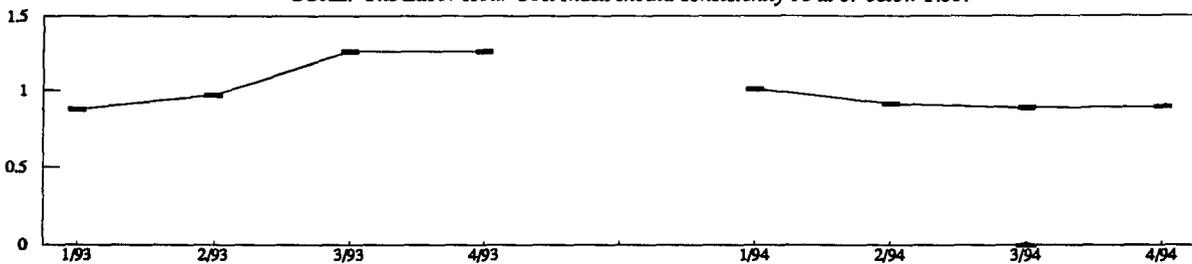
GOAL: Actual NOR/Budgeted NOR should equal 1.00



Experience with prior drone programs contributed to AMARC's ability to more accurately forecast drone program costs.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



Donor aircraft were identified to supply parts/components for drone program aircraft, thereby reducing RSD costs to the customer. Better resource utilization among AMARC's processes lowered costs.

AEROSPACE MAINT AND REGENERATION CENTER

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue (\$)	8,065,290	8,771,277	17,392,903	12,076,475	11,186,659	7,756,327	7,251,886	8,128,640
Total Cost (\$)	7,304,171	9,122,414	16,613,840	11,578,115	10,842,390	9,578,398	9,764,927	10,927,247
Direct Materials (\$)	2,707,077	2,107,650	2,795,750	2,847,166	3,136,783	1,174,951	539,444	1,967,852
Throughput (\$)	5,358,213	6,663,627	14,597,153	9,229,309	8,049,876	6,581,376	6,712,442	6,160,788
Operating Expense (\$)	4,597,094	7,014,764	13,818,090	8,730,949	7,705,607	8,403,447	9,225,483	8,959,395

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	5,358,213	6,663,627	14,597,153	9,229,309	8,049,876	6,581,376	6,712,442	6,160,788
Longterm Inventory (\$)	14,069,828	22,428,755	22,235,538	12,114,825	11,879,928	13,511,504	13,989,677	14,520,569
INDEX	0.38	0.30	0.66	0.76	0.68	0.49	0.48	0.42

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

Process In Scheduled	103	45	78	208	93	85	95	75
Process In Completed	0	6	68	196	81	29	36	42
INDEX	0.00	0.13	0.87	0.94	0.87	0.34	0.38	0.56
Process Out Scheduled	13	20	29	22	16	16	15	6
Process Out Completed	10	13	26	20	6	6	7	6
INDEX	0.77	0.65	0.90	0.91	0.38	0.38	0.47	1.00
Reclamation Scheduled	903	906	865	758	847	772	1164	1577
Reclamation Completed	872	897	857	752	841	753	1093	1385
INDEX	0.97	0.99	0.99	0.99	0.99	0.98	0.94	0.88

PROCESS DAYS

TOTAL PROCESS DAYS/NUMBER OF ITEMS = AVERAGE PROCESS DAYS

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	7,672,000	16,843,000	26,295,000	35,702,000	10,050,000	19,860,000	30,523,000	41,355,000
Cum Budg Cost (\$)	8,719,000	17,423,000	26,110,000	35,017,000	11,509,000	23,445,000	35,632,000	48,145,000
Budgeted NOR INDEX	0.88	0.97	1.01	1.02	0.87	0.85	0.86	0.86
Cum Actual Revenue (\$)	8,065,290	16,836,567	34,229,470	46,305,945	11,866,659	18,942,590	26,194,872	34,323,512
Cum Actual Cost (\$)	7,304,171	16,425,585	33,040,425	44,618,540	10,842,390	20,420,788	30,185,715	41,675,866
Actual NOR INDEX	1.10	1.03	1.04	1.04	1.09	0.93	0.87	0.82
NOR INDEX	1.25	1.06	1.03	1.02	1.25	1.10	1.01	0.96

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	8,719,000	17,423,000	26,110,000	35,017,000	11,509,000	23,445,000	35,632,000	48,145,000
Budgeted Total DLH	154,550	312,821	470,687	628,309	160,778	321,348	491,006	662,792
Bud Labor Hour Cost	\$56.42	\$55.70	\$55.47	\$55.73	\$71.58	\$72.96	\$72.57	\$72.64
Total Actual Cost (\$)	7,304,171	16,425,585	33,040,425	44,618,540	10,842,390	20,420,788	30,185,715	41,112,962
Actual Total DLH	148,291	304,328	477,494	640,995	149,750	307,696	470,764	635,085
Actual Labor Hour Cost	\$49.26	\$53.97	\$69.20	\$69.61	\$72.40	\$66.37	\$64.12	\$64.74
Labor Hour Cost INDEX	0.87	0.97	1.25	1.25	1.01	0.91	0.88	0.89

**OGDEN AIR LOGISTICS CENTER
HILL AFB, UT**

MAJOR WORKLOAD ACCOMPLISHED:

F/RF-4 Phantom, F-16 Fighting Falcon, LGM-30 Minuteman Missile, LGM-118A Peacekeeper Missile, GBU-15 Laser Guided Bomb, Simulators/Training Devices, AGM-65 Maverick Missile, Cruise Missiles, Landing Gear, Wheels & Brakes, Air Munitions, Explosives, Photonics, Aircraft Instruments, and Aircraft Guns.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	4765
Military:	278

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

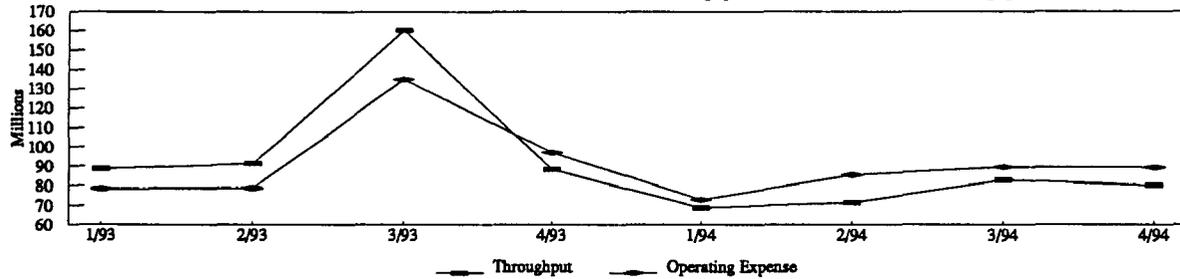
\$417,116,000

There are at least four items of interest that have had a significant impact on the performance of these indicators. During the 1st Qtr FY93, DMRD 904 became effective, which required the costs of Repairable Support Division (RSD) material be added to the data systems that track production costs and revenue. RSD material is used to repair an item that belongs to an organization other than the depot (such as Air Combat Command). The costs associated with this material are then considered in the profit and loss aspect of depot performance, which makes those costs more accurate when considering the total cost of doing business. When the data systems were reprogrammed to address RSD material, the systems did not consistently recognize the costs in the debit and credit accounting format. Most of these problems have been resolved; there are a few, however, which are being dealt with on a case by case basis. The second item was a change in the accounting procedures called "Revenue Recognition." In the past some of the costs and most of the revenues were counted in the data system once the end product was completed. Under revenue recognition, costs and revenues are counted as the product moves through the WIP phase. This new procedure became effective during the 3rd Qtr FY93, at which time costs and revenues accumulated to date for those items in the WIP were added to the system in a "lump sum" entry. This caused the costs to be artificially high for the Qtr. Both of these items will have a short term impact on these performance measures. The third item is anticipated workload did not materialize as planned. Fourth, materials for the F/A-18 workload were not available in a timely manner causing the schedule and flowdays indicators for aircraft to show an undesirable trend.

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THROUGHPUT & OPERATING EXPENSE

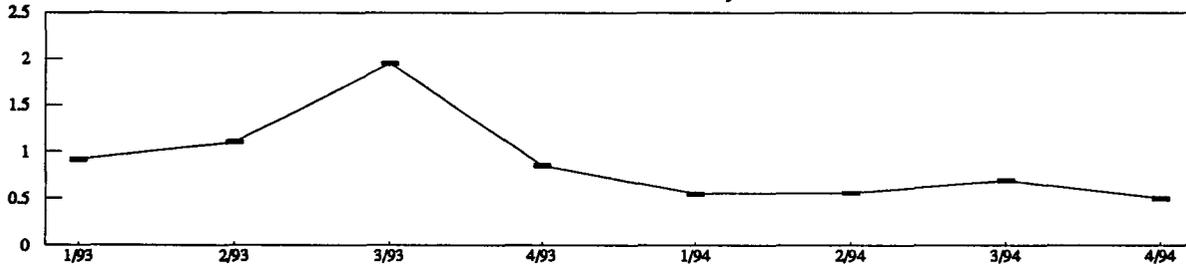
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



At the beginning of FY93, data system problems resulted from the implementation of DMRD 904. The data system was prevented from recognizing all of the costs and revenues accumulated during the Qtr. The large increase in total cost and revenue during 3rd Qtr FY93 was due to the change in revenue recognition. T has been lower than OE since 4th Qtr FY93 because workload has not materialized at the anticipated rate. In the 4th Qtr FY94, T was down because fewer hours were sold than in the previous quarter.

CAPITAL INVESTMENT EFFECTIVENESS

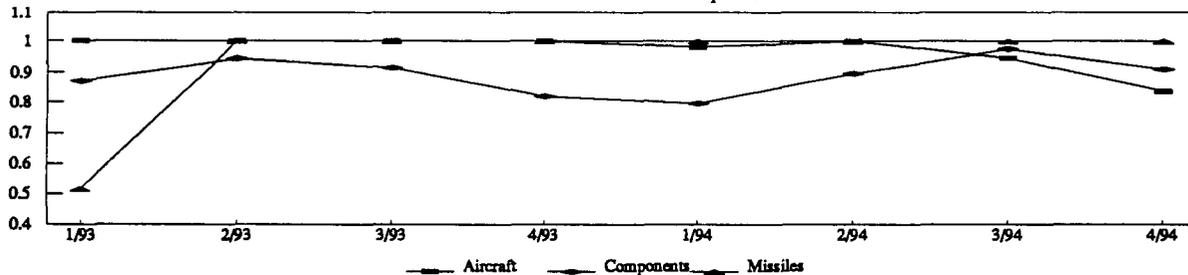
GOAL: Index Should Continually Increase



The inception of DMRD 904 resulted in data system problems that caused the system to show costs and sales to be lower than they actually were during 1st Qtr FY93. The accounting procedure change in revenue recognition (costs and sales) has caused throughput to be artificially high in 3rd Qtr FY93. The trend from 4th Qtr FY93 through 4th Qtr FY94 is the result of a "wall to wall" inventory of capital equipment as well as significant adjustments to the G017 System to correct programming problems.

SCHEDULE INDICATOR

GOAL: Index Should Equal 1

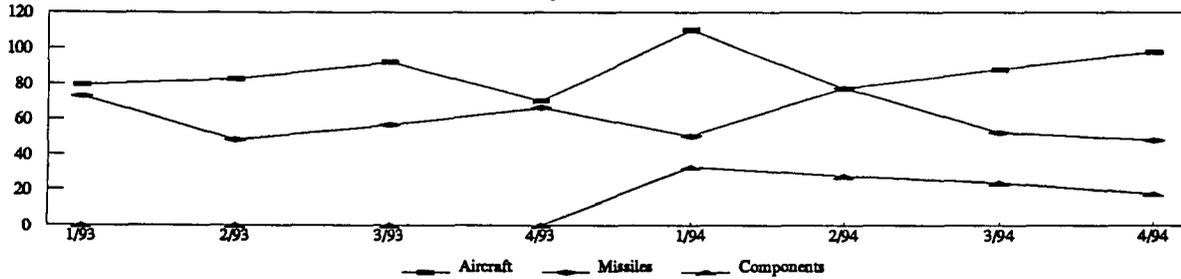


Components dropped during 4th Qtr FY93, 1st Qtr FY94 and 4th Qtr FY94 due to carryover of workload. Second Qtr FY94 data improved once these assets began to produce. This is an annual cycle due to the manner in which workload is inducted. Aircraft dropped during 3rd and 4th Qtr FY94 due to non-availability of kit components and other aircraft material specifically related to the F/A-18 workload. F-16 aircraft were on time 100% for all of FY94, and C-130 aircraft were on time 96% for all of FY94.

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PROCESS DAYS

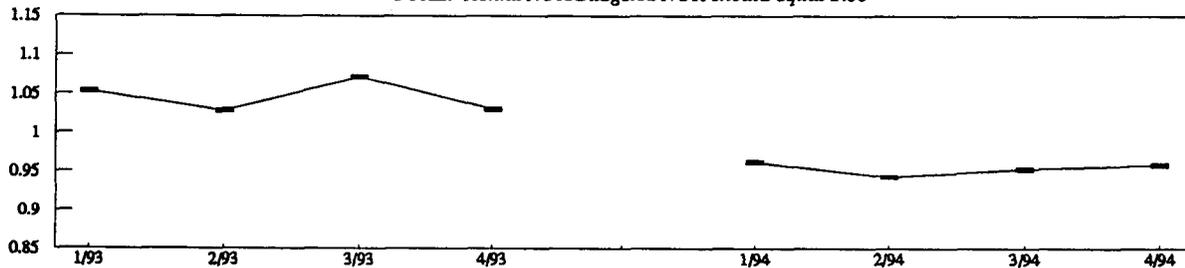
GOAL: Process Days Should show Continual Reduction



The component data represents the average number of process days per item of the 20 unique stock numbered items tracked. Changes to the sample population may be required to make this indicator as meaningful as possible. The increasing trend in aircraft flowdays during 2nd Qtr through 4th Qtr FY94 is due to an increase of modification work packages, contract workload, and parts/material problems associated with the F/A-18 aircraft.

NET OPERATING RESULTS

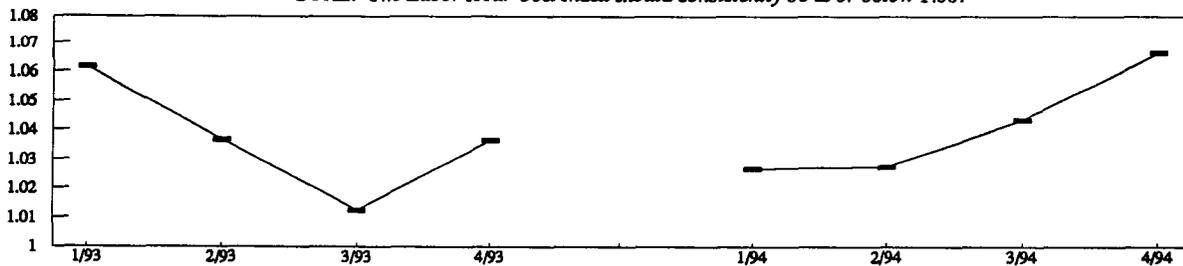
GOAL: Actual NOR/Budgeted NOR should equal 1.00



The downward movement in NOR from 1st Qtr FY93 to 2nd Qtr FY94 was due to workload not materializing at the expected level. In 4th Qtr FY94 a loss occurred in aircraft due to overhead and G&A costs being spread across a smaller workload base. Production hours in aircraft were 12% below target. Additional losses occurred in depreciation, RSD material and labor.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



LHC continues to be above 1.0 for several reasons. Large credits in RSD material were recognized in FY93, but the offsetting debits were recorded in FY94. There was little history when the RSD targets were being developed which hindered our budgeting accuracy. Other reasons for the trend in FY94 were: operational TDY continued to be higher than targeted due to unplanned FMS TDY, increased missile transportation by truck rather than by aircraft, a change in missile storage sites, and excess manpower.

OGDEN AIR LOGISTICS CENTER

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue(\$)	94,469,584	118,478,007	173,399,132	102,308,869	89,526,439	89,689,031	102,929,530	102,154,277
Total Cost (\$)	84,290,145	105,944,813	148,133,848	111,076,294	93,560,121	103,617,908	109,317,971	111,097,879
Direct Materials (\$)	5,727,736	27,109,843	13,187,951	13,866,514	20,410,394	17,953,619	19,757,987	21,798,124
Throughput (\$)	88,741,848	91,368,164	160,211,181	88,442,355	69,116,045	71,735,412	83,171,543	80,356,153
Operating Expense (\$)	78,562,409	78,834,970	134,945,897	97,209,780	73,149,727	85,664,289	89,559,984	89,299,755

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	88,741,848	91,368,164	160,211,181	88,442,355	69,116,045	71,735,412	83,171,543	80,356,153
Longterm Inventory (\$)	96,481,634	82,873,535	82,067,497	103,667,859	124,885,068	127,771,046	119,710,432	160,112,844
INDEX	0.92	1.10	1.95	0.85	0.55	0.56	0.69	0.50

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

Aircraft Scheduled	86	84	74	66	55	65	78	74
Aircraft Completed	86	84	74	66	54	65	74	62
INDEX	1.00	1.00	1.00	1.00	0.98	1.00	0.95	0.84
Components Scheduled	20,845	20,650	19,967	23,524	22,432	19,902	18,678	17,177
Components Completed	18,153	19,523	18,293	19,292	17,873	17,855	18,243	15,665
INDEX	0.87	0.95	0.92	0.82	0.80	0.90	0.98	0.91
Missiles Scheduled	70	36	41	39	54	39	52	43
Missiles Completed	36	36	41	39	54	39	52	43
INDEX	0.51	1.00	1.00	1.00	1.00	1.00	1.00	1.00

PROCESS DAYS

TOTAL PROCESS DAYS/NUMBER OF ITEMS = AVERAGE PROCESS DAYS

Aircraft Process Days	6,837	6,955	6,823	4,620	6,050	5,018	6,897	6,286
Number of Items	86	84	74	66	55	65	78	64
AVG PROCESS DAYS	79.50	82.80	92.20	70.00	110.00	77.20	88.42	98.22
Missiles Process Days	2,621	1,746	2,324	2,582	2,737	3,019	2,742	2,087
Number of Items	36	36	41	39	54	39	52	43
AVG PROCESS DAYS	72.81	48.50	56.68	66.21	50.69	77.41	52.73	48.53
Components Process Days					3,658	1,882	481	503
Number of Items					112	68	20	28
AVG PROCESS DAYS					32.66	27.68	24.05	17.96

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	94,469,000	228,316,000	336,991,000	450,223,000	80,270,000	189,780,000	294,902,000	407,240,000
Cum Budg Cost (\$)	88,785,000	209,724,000	316,290,000	426,665,000	80,662,000	196,913,000	305,419,000	424,153,000
Budgeted NOR INDEX	1.06	1.09	1.07	1.06	1.00	0.96	0.97	0.96
Cum Actual Revenue (\$)	94,469,584	212,947,591	386,346,723	488,655,592	89,526,439	179,215,470	282,145,000	384,299,000
Cum Actual Cost (\$)	84,290,145	190,234,958	338,368,806	449,445,100	93,560,121	197,178,029	306,496,000	417,594,000
Actual NOR INDEX	1.12	1.12	1.14	1.09	0.96	0.91	0.92	0.92
NOR INDEX	1.05	1.03	1.07	1.03	0.96	0.94	0.95	0.96

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	90175215	203138000	311596000	420453000	101466000	206047000	312865000	417116000
Budgeted Total DLH	1703164	3354717	5032074	6735238	1393723	2824704	4326000	5786350
Bud Labor Hour Cost	\$52.95	\$60.55	\$61.92	\$62.43	\$72.80	\$72.94	\$72.32	\$72.09
Total Actual Cost (\$)	90175218	202190348	298836564	407467689	104447446	212470714	314991000	422144000
Actual Total DLH	1604374	3220679	4765986	6296586	1397284	2834744	4174000	5491000
Actual Labor Hour Cost	\$56.21	\$62.78	\$62.70	\$64.71	\$74.75	\$74.95	\$75.47	\$76.88
Labor Hour Cost INDEX	1.06	1.04	1.01	1.04	1.03	1.03	1.04	1.07

**OKLAHOMA CITY AIR LOGISTICS CENTER
TINKER AFB, OK**

MAJOR WORKLOAD ACCOMPLISHED:

Bombers (B-52 and B-1), tankers (KC-135), and other special purpose aircraft, (C/EC-135, E-3, and E-6), missile and aircraft engines, aircraft, engine, and exchangeable components (aircraft structural components, engine accessories, pneudraulics/hydraulics/pneumatics, oxygen/gas generating equipment, engine and flight instruments, unique avionics and software).

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	6174
Military:	62

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

\$926,007,000

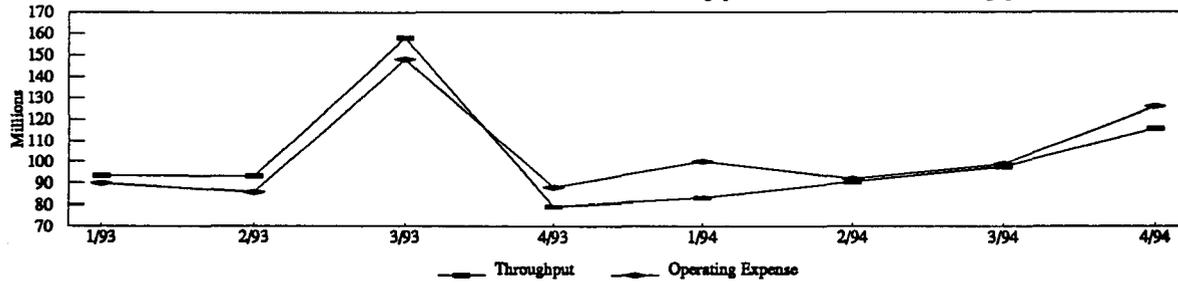
Oklahoma City ALC has successfully delivered ahead of schedule or on-time all aircraft, engines, and exchangeables for third and fourth quarter of FY94. Throughput has increased \$36.6M during FY94. The Capital Investment Index continued to improve in FY94 for a total increase of 65% with a reduction in inventory value of \$40.5M. The overall trend in Process Days continues in a positive direction with a total decrease of 58 days for aircraft, engines, and exchangeables in the fourth quarter of FY94. Actual Labor Hour Cost has continued to be lower than Budgeted Labor Hour Cost for the past eight quarters by an average of \$12.00.

Innovations to improve C/KC-135 inspection processes, aggressive parts procurement, and establishment of C/KC-135 work center structural repair team had a positive effect on Throughput, Scheduling, and Process Days indicators. The work center team, comprised of highly trained structural repair mechanics; has expedited aircraft structural repair processes. The team is activated when the aircraft has completed the normal repair process and is then moved to the task team area to accomplish identified repairs. Their goal is to meet customer schedules, reduce cost, and improve production flow.

OKLAHOMA CITY AIR LOGISTICS CENTER

THROUGHPUT & OPERATING EXPENSE

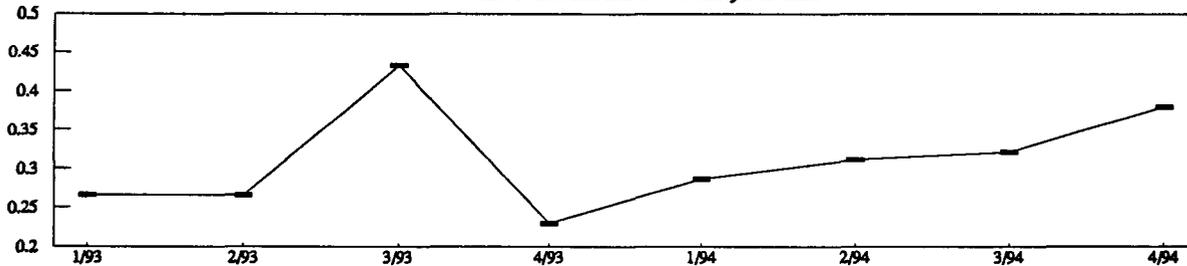
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



FY94 Operating Expense exceeds Throughput due to Program Budget Decisions (PBDs) which included the return of FY92 profits. Increased training to develop a multi-skilled work force has resulted in an Operating Expense increase of only 1.2% and will result in cost avoidance for the future.

CAPITAL INVESTMENT EFFECTIVENESS

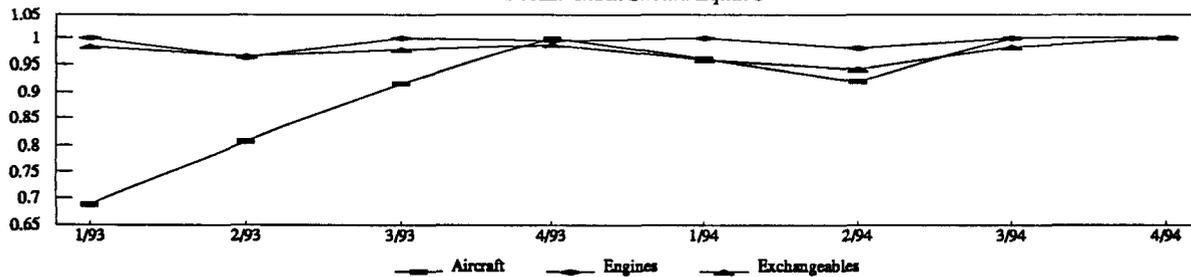
GOAL: Index Should Continually Increase



The index continues to improve in FY94 for a total increase of 65% from FY93. Long Term Inventory shows a positive trend with a decrease of \$40.5M from FY93 to FY94.

SCHEDULE INDICATOR

GOAL: Index Should Equal 1

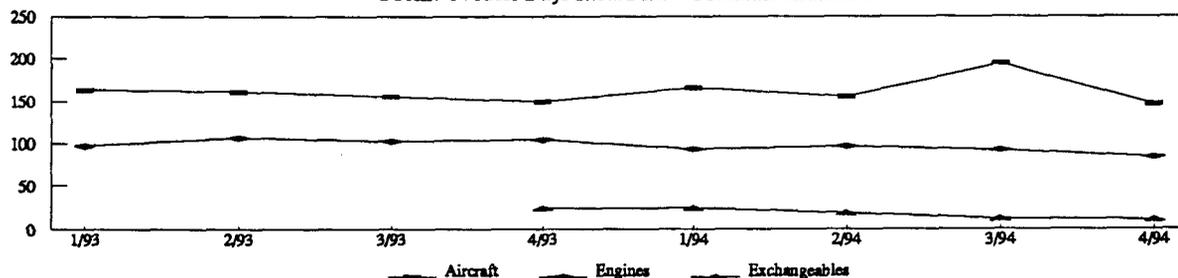


Acft: New inspection processes, specialty repair teams, and improved parts availability are showing positive results for all aircraft. Eng: Increased emphasis on "just in time" scheduling of manpower, equipment, and facilities has improved scheduling function. Exch: Production percentage increase can be attributed to a team effort identifying manpower, capacity, parts, and dollars, earlier in the repair process.

OKLAHOMA CITY AIR LOGISTICS CENTER

PROCESS DAYS

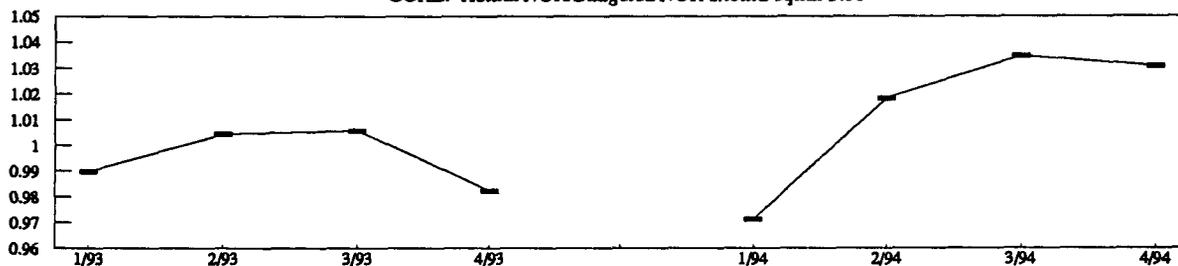
GOAL: Process Days Should show Continual Reduction



Acft: The positive trend during FY93 and FY94 is driven by improved inspection and repair processes. The perturbation in FY94 is resultant of E-3 and C-135 corrosion control and structural repair process changes. Eng: Improved training, management emphasis, and process improvement have resulted in decreased flow days on all engines. Exch: The decrease can be attributed to a process improvement which allows for a "just in time" induction of assets to the overhaul shop.

NET OPERATING RESULTS

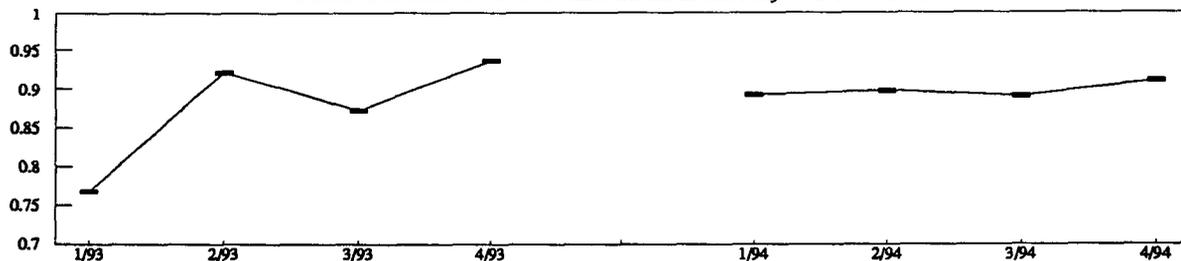
GOAL: Actual NOR/Budgeted NOR should equal 1.00



Budgeted Operating results for FY94 reflect a \$60.9M loss driven by Program Budget Decisions (PBDs) which directed the return of profits for FY92. Actual loss was reduced to \$29.5M by cost reduction initiatives. The cost reduction initiatives resulted in the actual NOR Index exceeding the budgeted NOR Index by 1.5%.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



During the past eight quarters actual labor hour cost averaged \$12.00 less than the budgeted labor hour cost. The total labor hour cost for 4/93 and 4/94 is \$91.99 and \$106.20, respectively. This includes material, which is much higher at an engine repair center. Without material, the labor hour cost for 4/94 is \$59.44.

OKLAHOMA CITY AIR LOGISTICS CENTER

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue (\$)	117,502,000	138,627,163	233,208,862	153,290,905	147,566,860	176,519,491	189,718,187	196,948,197
Total Cost (\$)	113,852,000	131,353,149	223,252,393	162,147,819	164,401,016	177,851,233	191,028,734	206,942,939
Direct Materials (\$)	23,895,981	45,511,616	75,000,527	73,942,834	64,263,796	85,740,413	92,004,387	80,929,679
Throughput (\$)	93,606,019	93,115,547	158,208,335	79,348,071	83,303,064	90,779,078	97,713,800	116,018,518
Operating Expense (\$)	89,956,019	85,841,533	148,251,866	88,204,985	100,137,220	92,110,820	99,024,347	126,013,260

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	93,606,019	93,115,547	158,208,335	79,348,071	83,303,064	90,779,078	97,713,800	116,018,518
Longterm Inventory (\$)	351,988,721	350,285,649	365,792,000	345,470,647	290,375,902	291,461,574	304,710,727	304,935,946
INDEX	0.27	0.27	0.43	0.23	0.29	0.31	0.32	0.38

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

Aircraft Scheduled	16	26	24	23	25	25	19	23
Aircraft Completed	11	21	22	23	24	23	19	23
INDEX	0.69	0.81	0.92	1.00	0.96	0.92	1.00	1.00
Engines Scheduled	240	240	205	201	184	198	179	169
Engines Completed	240	231	205	200	184	194	179	169
INDEX	1.00	0.96	1.00	1.00	1.00	0.98	1.00	1.00
Exchangeables Scheduled	26,859	28,365	21,800	22,241	22,048	23,620	22,129	22,795
Exchangeables Completed	26,393	27,363	21,300	21,936	21,133	22,254	21,729	22,795
INDEX	0.98	0.96	0.98	0.99	0.96	0.94	0.98	1.00

PROCESS DAYS

TOTAL PROCESS DAYS/NUMBER OF ITEMS = AVERAGE PROCESS DAYS

Aircraft Process Days	2,617	4,198	3,731	3,432	4,312	3,720	3,689	3,356
Number of Items	16	26	24	23	26	24	19	23
AVG PROCESS DAYS	163.56	161.46	155.46	149.22	165.85	155.00	194.16	145.91
Engines Process Days	5,062	4,250	3,074	3,125	2,622	5,046	3,792	3,702
Number of Items	52	40	30	30	28	52	41	44
AVG PROCESS DAYS	97.35	106.25	102.47	104.17	93.64	97.04	92.49	84.14
Exchangeables Process Days				248	249	193	128	117.9
Number of Items				10	10	10	10	10
AVG PROCESS DAYS				24.80	24.90	19.30	12.80	11.79

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	148,801,000	335,215,000	516,948,000	715,069,000	175,038,000	386,774,000	606,292,000	828,635,000
Cum Budg Cost (\$)	142,705,000	322,365,000	497,760,000	689,315,000	189,402,000	415,968,000	651,124,000	889,566,000
Budgeted NOR INDEX	1.04	1.04	1.04	1.04	0.92	0.93	0.93	0.93
Cum Actual Revenue (\$)	117,502,000	256,129,163	489,338,025	642,628,930	147,566,860	324,086,351	513,804,538	710,752,735
Cum Actual Cost (\$)	113,852,000	245,205,149	468,457,542	630,605,361	164,401,016	342,252,250	533,280,985	740,223,924
Actual NOR INDEX	1.03	1.04	1.04	1.02	0.90	0.95	0.96	0.96
NOR INDEX	0.99	1.00	1.01	0.98	0.97	1.02	1.03	1.03

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	171443000	340932000	519857000	699902000	198873000	415781000	638238000	859844000
Budgeted Total DLH	1814193	3508224	5293716	7131928	1732095	3567953	5455344	7375334
Bud Labor Hour Cost	\$94.50	\$97.18	\$98.20	\$98.14	\$114.82	\$116.53	\$116.99	\$116.58
Total Actual Cost (\$)	112839126	287826316	416035753	599381670	167559503	354234453	534060387	733053440
Actual Total DLH	1554166	3212236	4855629	6515892	1634596	3384351	5120934	6902256
Actual Labor Hour Cost	\$72.60	\$89.60	\$85.68	\$91.99	\$102.51	\$104.67	\$104.29	\$106.20
Labor Hour Cost INDEX	0.77	0.92	0.87	0.94	0.89	0.90	0.89	0.91

SACRAMENTO AIR LOGISTICS CENTER
McCLELLAN AFB, CA

MAJOR WORKLOAD ACCOMPLISHED:

F-111, F-15, A-10, KC-135, Communications-Electronics, Space Systems, Ground Power Generators

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	5386
Military:	213

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

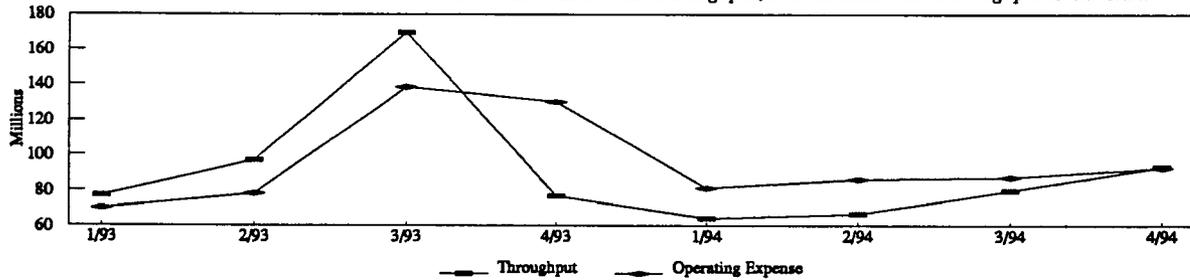
\$509,000,000

External factors, of which we have limited control, affecting all centers, influenced Throughput and increased Operating Expense. To compensate for these and other drivers, all Directorates met in March 94 to identify ideas and areas that could reduce targeted losses. Through the targeted \$20M to reduce loss was not met, varied efforts resulted in a \$5M loss savings. Labor Hour Costs were negatively affected due to workloads not generating. The steady trend of increase in Capital Investment Effectiveness was a result of the turn in of excess and outdated industrial plant equipment. Total inventory was reduced by \$30M since October 1993. This trend is expected to continue. The negative trend in Net Operating Results is due to KC-135 structural problems and learning curves associated with KC-135 PDM. Process Days Indicator reduction was due to unplanned repair work on the KC-135s during the quarters that these aircraft were originally scheduled to produce (3rd Qtr FY93 to 3rd Qtr FY94), and an increase for the quarters that they are adjusted to (4th Qtr FY94). The A-10s, F-15s, and F-111s were on or ahead of schedule. The Schedule Indicator downward direction was due to manpower shortages, facility constraints, and outgoing fuel leaks.

SACRAMENTO AIR LOGISTICS CENTER

THROUGHPUT & OPERATING EXPENSE

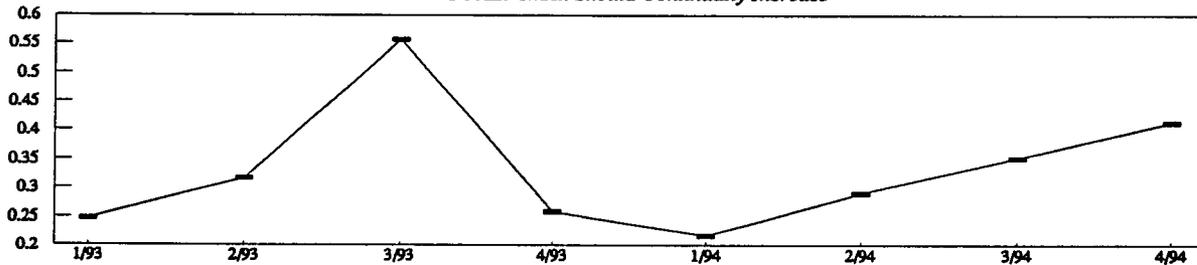
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



Though final operating expenses were greatly reduced through cost cutting initiatives, Throughput was still exceeded. This was due to reduced revenue rates which were established to return past year profitable operating results.

CAPITAL INVESTMENT EFFECTIVENESS

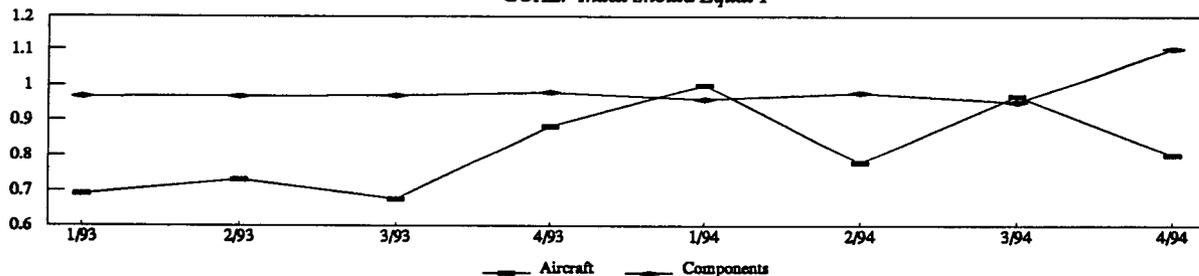
GOAL: Index Should Continually Increase



The capital equipment inventory has decreased by 110 line items since 1 Oct 93. This was driven by efforts to turn in excess and out-dated industrial plant equipment. The total inventory value was reduced by \$30M since 1 Oct 93. Additionally, the Capital Purchases Program allocation has been reduced in FY95, significantly affecting the acquisition of additional capital equipment items.

SCHEDULE INDICATOR

GOAL: Index Should Equal 1

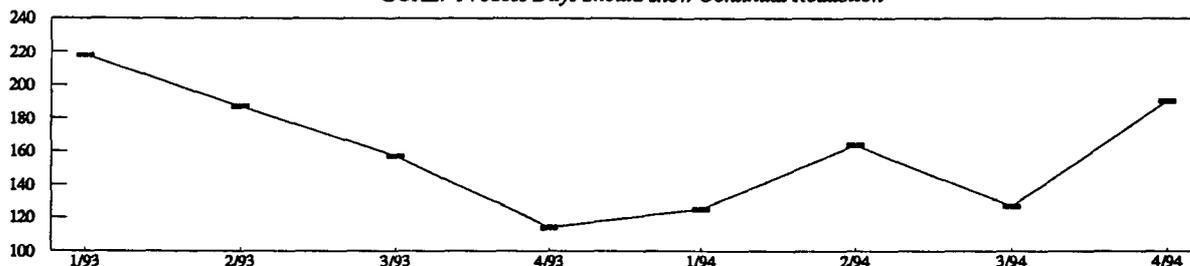


Five KC-135s and one A-10 missed their Aircraft and Missile Maintenance, Production Compression Report (AMREP) dates. Manpower shortages, facility constraints and outgoing fuel leaks were primary causes of the downward direction of the indicator in 4th Qtr FY94. Implementation of Programmed Depot Maintenance Standard System (PDMSS), modification of facilities, and fuel process review are being accomplished to reduce these problems.

SACRAMENTO AIR LOGISTICS CENTER

PROCESS DAYS

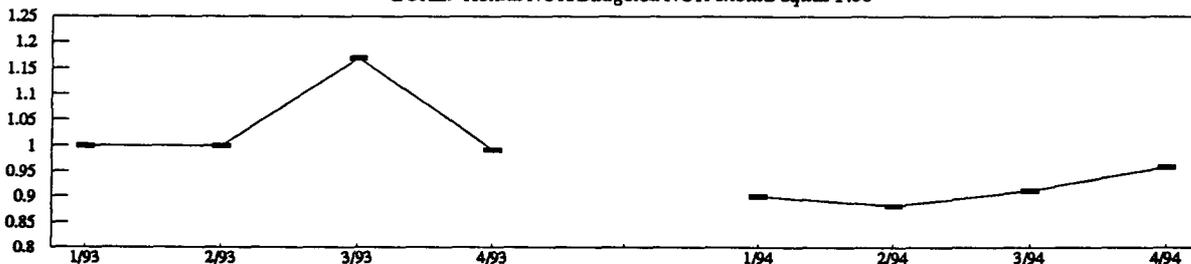
GOAL: Process Days Should show Continual Reduction



Average process days increased in 4th Qtr FY94 due to production of 10 long flow aircraft. 8 F-111s exceeded 260 flow days & two KC-135s exceeded 250 flow days. Major unplanned repair work on KC-135s (wing attach fitting replacement) caused reduction of Process Days indicator during the Qtrs that these aircraft were first scheduled to produce (3/93 to 3/94), an increase for the Qtrs that they are adjusted to (4/94). The KC-135 increases were approved by the SPD.

NET OPERATING RESULTS

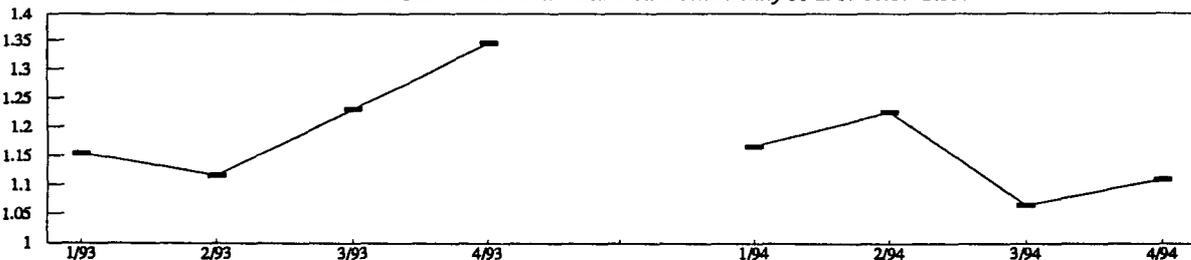
GOAL: Actual NOR/Budgeted NOR should equal 1.00



There we continued inefficiencies as a result of higher than budgeted indirect costs and lower than projected yields. Higher than the Budgeted Repairable Support Division (RSD) material costs associated with PDM of F-15s and F-111s were contributors. KC-135 structural problems and the learning curve associated with KC-135 PDM were major influences in the loss position.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



The actual labor cost index exceeds the 1% criteria due strictly to budgeted versus actual total DLH. Total actual DLH was 716K below budget. The 716K variance in DLH directly caused the actual labor hour cost rate to be substantially higher than originally projected. Projected total DLH was not met due to workloads not generating, inefficiency, and overly ambitious projection. Total actual versus projected cost variance was only \$4.3M or 0.8% below budget.

SACRAMENTO AIR LOGISTICS CENTER

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue(\$)	77,812,754	109,303,513	202,402,302	115,396,797	97,751,519	114,967,486	117,521,936	117,037,805
Total Cost (\$)	70,670,158	90,604,249	170,958,547	168,706,901	114,925,022	134,649,095	125,043,649	116,426,076
Direct Materials (\$)	671,414	12,363,222	32,592,933	38,531,454	33,664,149	48,410,631	37,732,565	23,874,837
Throughput (\$)	77,141,340	96,940,291	169,809,369	76,865,343	64,087,370	66,556,855	79,789,371	93,162,968
Operating Expense (\$)	69,998,744	78,241,027	138,365,614	130,175,447	81,260,873	86,238,464	87,311,084	92,551,239

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	77,141,340	96,940,291	169,809,369	76,865,343	64,087,370	66,556,855	79,789,371	93,162,968
Longterm Inventory (\$)	311,521,589	306,441,546	304,879,562	297,006,083	294,640,723	229,188,312	226,867,766	225,770,092
INDEX	0.25	0.32	0.56	0.26	0.22	0.29	0.35	0.41

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

Aircraft Scheduled	42	52	34	34	27	27	31	30
Aircraft Completed	29	38	23	30	27	21	30	24
INDEX	0.69	0.73	0.68	0.88	1.00	0.78	0.97	0.80
Components Scheduled	26,148	24,706	24,344	25,290	24,541	23,889	24,684	21,263
Components Completed	25,266	23,889	23,598	24,756	23,514	23,334	23,446	23,420
INDEX	0.97	0.97	0.97	0.98	0.96	0.98	0.95	1.10

PROCESS DAYS

TOTAL PROCESS DAYS/NUMBER OF ITEMS = AVERAGE PROCESS DAYS

Aircraft Process Days					3,375	3,931	4,055	5,330
Number of Items					27	24	32	28
AVG PROCESS DAYS	218.00	187.00	157.00	114.00	125.00	163.79	126.72	190.36

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	77,812,754	187,116,267	296,792,267	412,040,267	103,616,338	219,975,338	346,740,338	470,503,338
Cum Budg Cost (\$)	70,670,157	161,274,406	296,280,406	405,847,406	109,832,179	228,018,179	358,887,179	495,397,179
Budgeted NOR INDEX	1.10	1.16	1.00	1.02	0.94	0.96	0.97	0.95
Cum Actual Revenue (\$)	77,812,754	187,116,267	389,518,569	504,915,366	97,751,519	212,719,005	330,240,941	447,278,746
Cum Actual Cost (\$)	70,670,158	161,274,407	332,232,954	500,939,855	114,925,052	249,574,147	374,617,796	491,043,872
Actual NOR INDEX	1.10	1.16	1.17	1.01	0.85	0.85	0.88	0.91
NOR INDEX	1.00	1.00	1.17	0.99	0.90	0.88	0.91	0.96

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	70670157	161274406	296280406	405847406	109832179	228018179	358887179	495397179
Budgeted Total DLH	1694134	3415386	5044557	6659180	1579848	3281620	4947550	6589975
Bud Labor Hour Cost	\$41.71	\$47.22	\$58.73	\$60.95	\$69.52	\$69.48	\$72.54	\$75.17
Total Actual Cost (\$)	70670158	161274407	332232954	500939855	114925052	249574147	374617796	491043872
Actual Total DLH	1467067	3057101	4592907	6106839	1415762	2927025	4844446	5873794
Actual Labor Hour Cost	\$48.17	\$52.75	\$72.34	\$82.03	\$81.18	\$85.27	\$77.33	\$83.60
Labor Hour Cost INDEX	1.15	1.12	1.23	1.35	1.17	1.23	1.07	1.11

**SAN ANTONIO AIR LOGISTICS CENTER
KELLY AFB, TX**

MAJOR WORKLOAD ACCOMPLISHED:

C-5 Cargo Aircraft, TF39 Engine (C-5 Aircraft), F100 Engine (F-15 & F-16 Aircraft), T56 Engine (C-130 Aircraft) and related exchangeables. Gas turbine engines, secondary power systems, auxiliary power units, starters and related exchangeables. Manual and automatic test equipment exchangeables, fuel accessories and nuclear components.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	6041
Military:	69

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

\$759,700,000

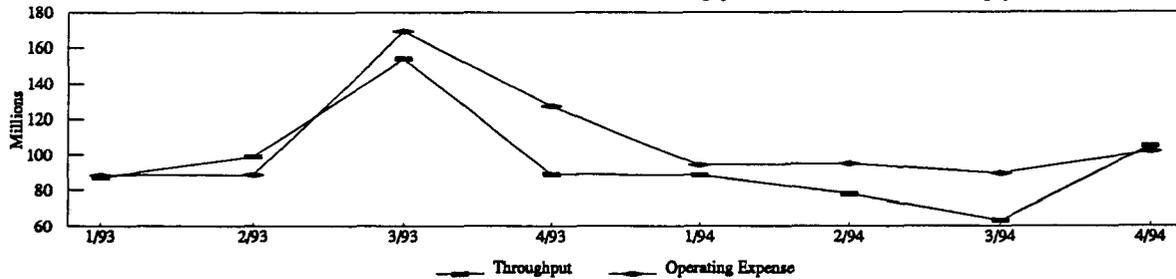
Both the depot maintenance personnel level and current year industrial fund budget numbers above have increased since the last submission of this report. Both increases are the result of increased workload at this center. SA-ALC has been instrumental in attaining local manufacturing workload from the Navy depot at Pensacola as well as T56 engine workload from Alameda. SA-ALC also acquired T-38 and F-5 gearbox workload from the Navy. All of these efforts are the result of base closures and pursuit of consolidations of like workloads to achieve both economies of scale in production as well as to preclude the cost of establishing another organic repair source.

In addition to the above, SA-ALC was instrumental in the early completion of a modification to the large aircraft paint hanger. This early completion allowed SA-ALC to terminate a contract to paint C-5 aircraft at a contractor's facility. This resulted in both dollar and flow day savings to the customer.

SAN ANTONIO AIR LOGISTICS CENTER

THROUGHPUT & OPERATING EXPENSE

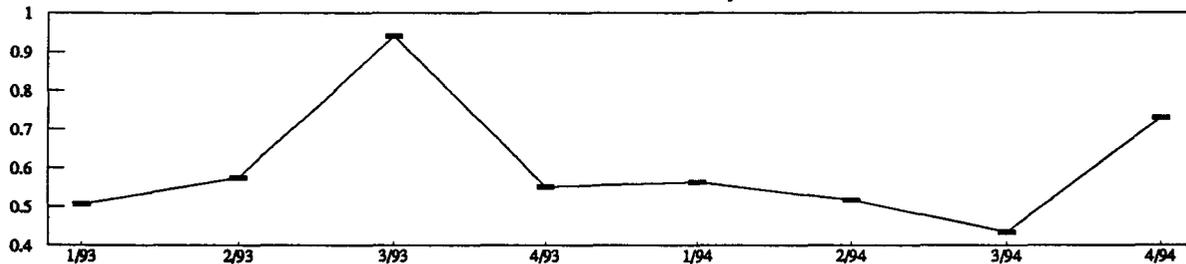
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



A 3rd Qtr FY94 reversal of credit returns accumulated over a period of time and resulted in a higher than normal direct material expense. This caused an inflated reduction to Throughput for that time period.

CAPITAL INVESTMENT EFFECTIVENESS

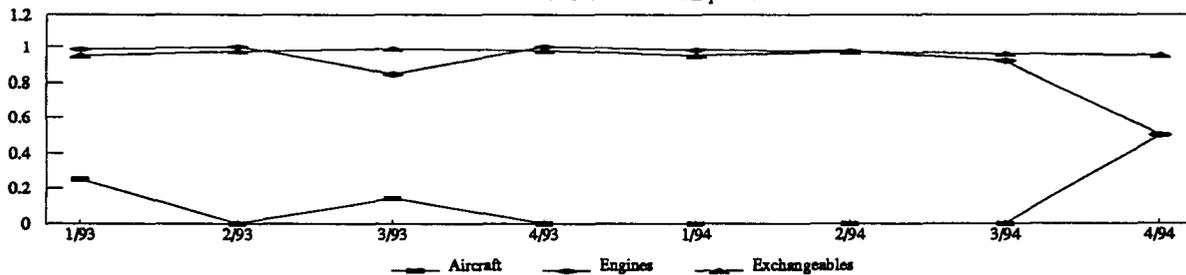
GOAL: Index Should Continually Increase



The fluctuation in the 3rd and 4th Qtr FY94 time period is due to a 3rd Qtr FY94 recapture of improper credit returns coupled with historically higher revenue in the 4th Qtr.

SCHEDULE INDICATOR

GOAL: Index Should Equal 1

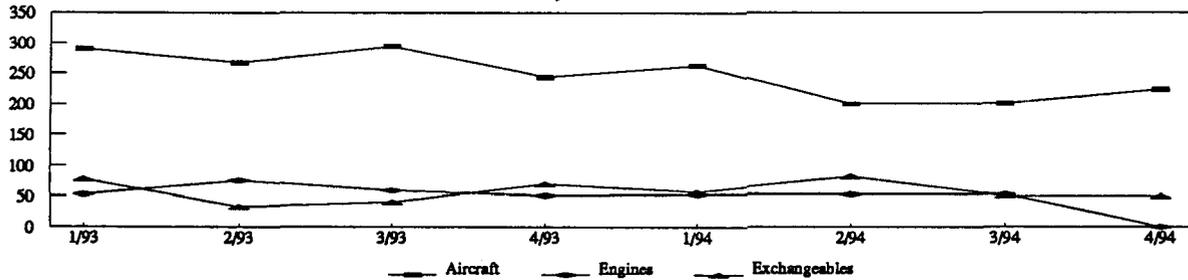


The reduction to Schedule Conformance for engines is caused by the early completion of five F100 engines. The engines were produced in 3rd Qtr FY93, but the close-out project directive verifying a schedule change is not available.

SAN ANTONIO AIR LOGISTICS CENTER

PROCESS DAYS

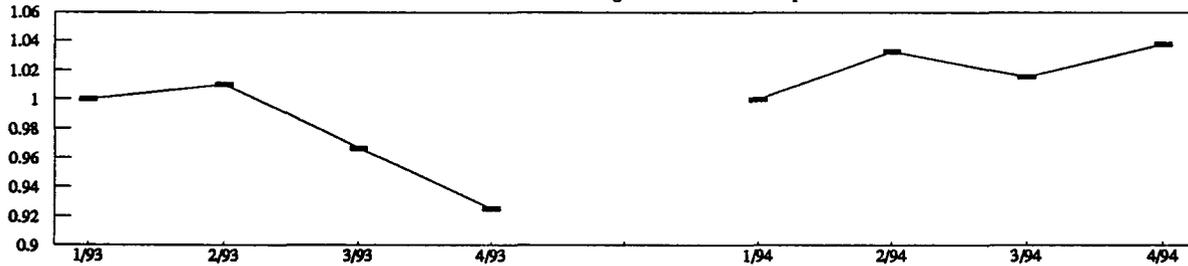
GOAL: Process Days Should show Continual Reduction



The engine reported for this measure has changed. SA-ALC previously reported on the TF39 engine. This engine is no longer produced as a "whole up" engine, but is totally under the two levels of maintenance concept. We have revised the input to reflect F100-PW-220E overhaul.

NET OPERATING RESULTS

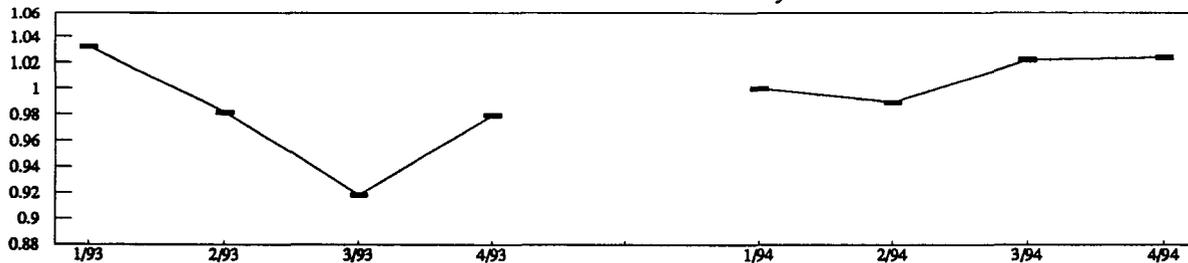
GOAL: Actual NOR/Budgeted NOR should equal 1.00



The relative stability of this indicator is the result of increased management emphasis on maintaining cost to budget tolerances.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



Increased emphasis on forecasting costs has contributed to the low relative variance in this indicator.

SAN ANTONIO AIR LOGISTICS CENTER

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue(\$)	114,906,000	143,451,000	204,073,000	155,321,000	144,866,000	144,650,000	179,375,000	198,236,000
Total Cost (\$)	116,225,000	132,863,000	219,247,000	193,463,000	150,582,000	161,380,000	205,497,000	195,184,000
Direct Materials (\$)	27,907,000	44,251,000	50,121,000	66,367,000	56,483,000	66,550,000	116,148,000	93,355,000
Throughput (\$)	86,999,000	99,200,000	153,952,000	88,954,000	88,383,000	78,100,000	63,227,000	104,881,000
Operating Expense (\$)	88,318,000	88,612,000	169,126,000	127,096,000	94,099,000	94,830,000	89,349,000	101,829,000

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	86,999,000	99,200,000	153,952,000	88,954,000	88,383,000	78,100,000	63,227,000	104,881,000
Longterm Inventory (\$)	171,710,000	172,233,000	163,443,000	161,160,000	156,722,000	151,086,000	145,897,000	143,670,000
INDEX	0.51	0.58	0.94	0.55	0.56	0.52	0.43	0.73

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

Aircraft Scheduled	8	9	7	2	5	6	5	4
Aircraft Completed	2	0	1	0	0	0	0	2
INDEX	0.25	0.00	0.14	0.00	0.00	0.00	0.00	0.50
Engines Scheduled	62	69	59	46	51	37	25	22
Engines Completed	61	69	50	46	50	36	23	11
INDEX	0.98	1.00	0.85	1.00	0.98	0.97	0.92	0.50
Exchangeables Scheduled	28,179	32,303	28,211	25,581	20,179	20,162	22,513	19,435
Exchangeables Completed	26,713	31,394	27,883	24,969	19,146	19,562	21,557	18,421
INDEX	0.95	0.97	0.99	0.98	0.95	0.97	0.96	0.95

PROCESS DAYS

TOTAL PROCESS DAYS/NUMBER OF ITEMS = AVERAGE PROCESS DAYS

Aircraft Process Days	1,452	1,604	2,354	1,220	1,311	1,003	1,005	1,119
Number of Items	5	6	8	5	5	5	5	5
AVG PROCESS DAYS	290.40	267.33	294.25	244.00	262.20	200.60	201.00	223.80
Engines Process Days	1,537	1,824	1,475	1,479	1,007	371	265	0
Number of Items	29	24	25	29	19	7	5	0
AVG PROCESS DAYS	53.00	76.00	59.00	51.00	53.00	53.00	53.00	
Exchangeables Process Day	2,345	1,461	4,793	23,070	9,909	15,482	12,288	11,446
Number of Items	30	45	119	330	174	187	243	229
AVG PROCESS DAYS	78.17	32.47	40.28	69.91	56.95	82.79	50.57	49.98

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	114,906,000	296,249,000	470,991,000	647,599,000	144,886,000	322,708,000	537,410,000	722,299,999
Cum Budg Cost (\$)	116,225,000	288,525,000	461,219,000	642,011,000	150,582,000	359,152,000	602,207,000	800,879,000
Budgeted NOR INDEX	0.99	1.03	1.02	1.01	0.96	0.90	0.89	0.90
Cum Actual Revenue (\$)	114,906,000	258,357,000	462,430,000	617,751,000	144,886,000	289,536,000	468,911,000	667,147,000
Cum Actual Cost (\$)	116,225,000	249,088,000	468,335,000	661,798,000	150,582,000	311,962,000	517,458,000	712,642,000
Actual NOR INDEX	0.99	1.04	0.99	0.93	0.96	0.93	0.91	0.94
NOR INDEX	1.00	1.01	0.97	0.93	1.00	1.03	1.02	1.04

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	98280000	309663000	490755000	664822000	158308000	391014000	610342000	802803000
Budgeted Total DLH	1862000	3849000	5842000	7857000	1580000	3356000	5227000	6838000
Bud Labor Hour Cost	\$52.78	\$80.45	\$84.00	\$84.62	\$100.19	\$116.51	\$116.77	\$117.40
Total Actual Cost (\$)	98280000	291955000	428855000	616493000	158308000	363025000	544104000	735401000
Actual Total DLH	1804000	3696000	5560000	7437000	1580000	3149000	4557000	6116000
Actual Labor Hour Cost	\$54.48	\$78.99	\$77.13	\$82.90	\$100.19	\$115.28	\$119.40	\$120.24
Labor Hour Cost INDEX	1.03	0.98	0.92	0.98	1.00	0.99	1.02	1.02

WARNER ROBINS AIR LOGISTICS CENTER
ROBINS AFB, GA

MAJOR WORKLOAD ACCOMPLISHED:

F-15, C-130 & C-141, various missiles, Electronic Warfare Systems and Avionics Systems, Vehicles & Special Operations Forces (SOF) aircraft.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	6142
Military:	80

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

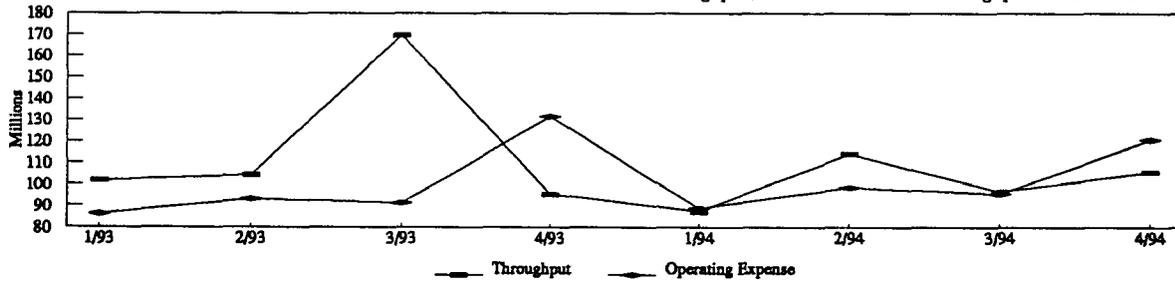
\$605,265,000

In addition to the major workload previously described, the WR-ALC Team manages approximately 190,000 items that range from gunnery equipment to aerospace comm/nav equipment, including Global Positioning Systems. WR-ALC is the only organic source for the F-15 Multi-Stage Improvement Program modification which averages approximately 64 process days over and above the typical PDM aircraft. The F-15 production effort here continues to show a reduction in process days. Aircraft process days in the C-141 area showed an increase in 4th Qtr FY94 due to a parts supportability problem for the lower wing panel replacement on one particular aircraft. This as well as inside facility constraints caused delays in the PDM area as well. Decreasing unprogrammed C-141 aircraft inputs will also help to concentrate resources in critical areas. Additional work package requirements added by our customers caused the C-130 production area to increase its process days. There are improvement initiatives in C-130 production, like the purchase of a wiring analyzer to check flowdays. The devastating flood which occurred at the beginning of the 4th Qtr provided an opportunity of service to surrounding communities; however, it had an adverse impact on operations. This can be seen in the area of Operating Expense which exceeded Throughput. Wr-ALC would have experienced a higher Throughput for 4th Qtr if not for the flood which brought about a \$6.3M loss of revenue. Even so, Throughput has managed to increase slightly for 3rd to 4th Qtr. This resulted in a positive effect on Capital Investment Effectiveness. NOR remains above the index because of end-of-year adjustments to labor material. Despite all turmoil of the flood and the challenge of downsizing, Team Robins is continuing to strive for continuous improvement.

WARNER ROBINS AIR LOGISTICS CENTER

THROUGHPUT & OPERATING EXPENSE

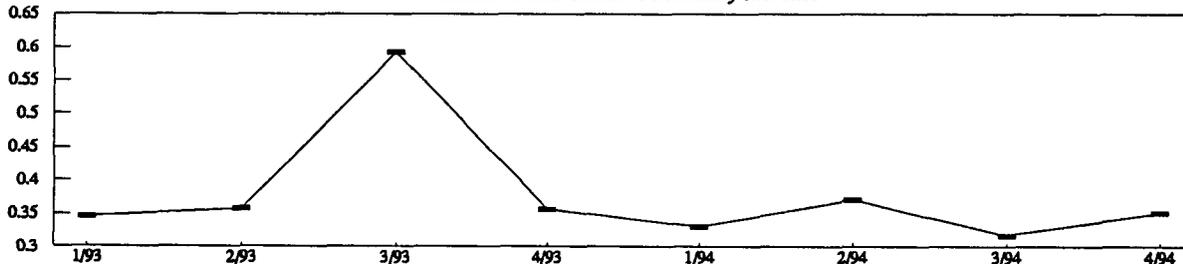
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



\$13M in unallocated direct material expenses were captured as production overhead in 4th Qtr FY94. This overstated both Throughput and Operating Expenses by this amount. Additionally, \$12M in expenses were captured in the last quarter (versus throughout the first 3 quarters), further overstating 4th Qtr FY94 Operating Expenses. Major drivers were labor acceleration factor (\$8M), hazardous waste disposal (\$1.3M), equipment/maintenance (\$.6M), HQ & DFAS costs (\$2.2M), and backorder cancellation (\$.3M).

CAPITAL INVESTMENT EFFECTIVENESS

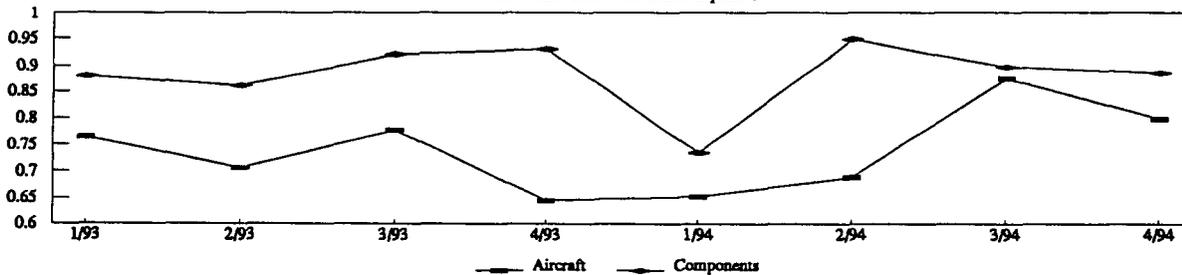
GOAL: Index Should Continually Increase



Long term inventory continues a steady decline due to increased focus on capacity utilization. Throughput has increased over 3rd Qtr FY93 because of accelerated end-of-year sales.

SCHEDULE INDICATOR

GOAL: Index Should Equal 1

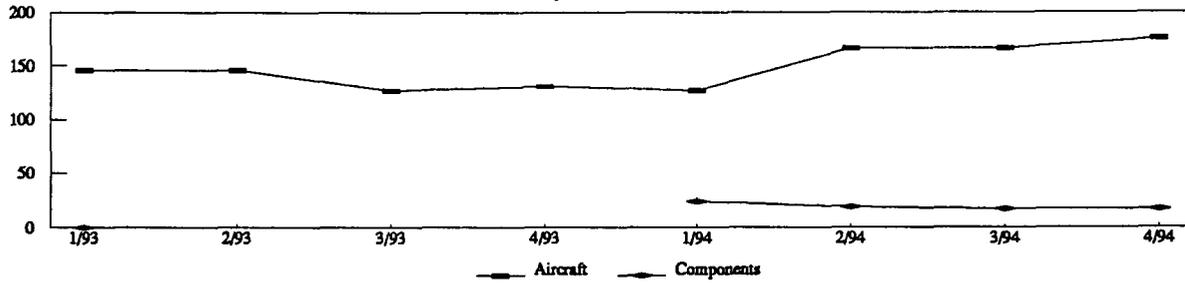


As with process days, parts supportability problems with the C-141 wing panel replacement have resulted in aircraft not making their scheduled completion dates. Facility constraints are also a major factor particularly when panel replacements are unscheduled. C-130 had one late aircraft in 3rd Qtr FY94. This aircraft was the first to receive a PDM in conjunction with the Special Operations Forces Improvement and Night Vision Imaging System. F-15s were at 93% for 3rd Qtr FY94 and 100% for the 4th Qtr.

WARNER ROBINS AIR LOGISTICS CENTER

PROCESS DAYS

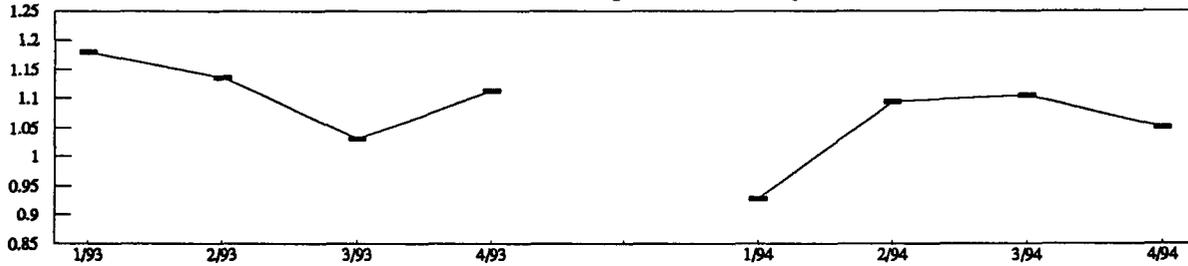
GOAL: Process Days Should show Continual Reduction



C-130 flow days increased due to additional work requirements added to the aircraft by the customer after the aircraft was put in work. C-141 flow days increased in 4th Qtr FY94 due to one aircraft which spent 183 days in storage awaiting parts for lower wing panel replacement. C-141 flow days would be 18 less, excluding this aircraft. F-15 flow days (PDM, PDM/MSIP, ACI) remained constant throughout the year.

NET OPERATING RESULTS

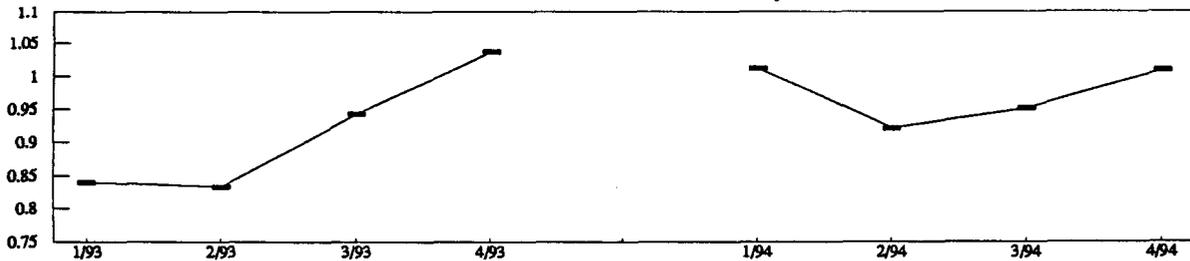
GOAL: Actual NOR/Budgeted NOR should equal 1.00



NOR is above the 1.0 goal due to efforts to reduce overhead costs which were \$11.5M less than planned for 4th Qtr FY94. This is the result of lowered expenses in utilities (\$1.1M), depreciation (\$4.4M), and JLSC (\$6.0M).

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



Normal trend is for end-of-year cost to be higher due to end-of-year accounting adjustments in labor and material. Adjustments typically include posting actual expenses versus estimated expenses and capturing any unallocated expenses before the end of the year.

WARNER ROBINS AIR LOGISTICS CENTER

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue(\$)	120,016,000	118,443,000	224,659,000	132,683,000	127,708,000	163,946,000	140,619,000	151,838,000
Total Cost (\$)	104,296,000	107,109,000	146,352,000	168,816,000	129,196,000	148,223,000	139,506,000	166,818,000
Direct Materials (\$)	18,127,000	13,982,000	55,132,000	37,302,000	40,509,000	49,793,000	44,125,000	46,108,000
Throughput (\$)	101,889,000	104,461,000	169,527,000	95,381,000	87,199,000	114,153,000	96,494,000	105,730,000
Operating Expense (\$)	86,169,000	93,127,000	91,220,000	131,514,000	88,687,000	98,430,000	95,381,000	120,710,000

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	101,889,000	104,461,000	169,527,000	95,381,000	87,199,000	114,153,000	96,494,000	105,730,000
Longterm Inventory (\$)	294,130,000	292,109,000	286,146,000	267,119,000	263,830,000	307,216,000	304,157,000	300,929,000
INDEX	0.35	0.36	0.59	0.36	0.33	0.37	0.32	0.35

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

Aircraft Scheduled	34	34	36	31	23	29	24	35
Aircraft Completed	26	24	28	20	15	20	21	28
INDEX	0.76	0.71	0.78	0.65	0.65	0.69	0.88	0.80
Components Scheduled	27,116	26,126	26,650	25,846	30,220,000	31,389,000	26,031	22,747
Components Completed	23,856	22,498	24,564	24,076	22,225,000	29,814,000	23,363	20,148
INDEX	0.88	0.86	0.92	0.93	0.74	0.95	0.90	0.89

PROCESS DAYS

TOTAL PROCESS DAYS/NUMBER OF ITEMS = AVERAGE PROCESS DAYS

Aircraft Process Days								
Number of Items								
AVG PROCESS DAYS	146.00	146.00	127.00	131.00	127.00	166.00	166.00	175.00
Components Process Days								
Number of Items								
AVG PROCESS DAYS					24.00	19.00	17.00	17.00

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	115,562,000	244,490,000	378,739,000	510,124,000	127,702,000	289,398,000	433,209,000	575,642,000
Cum Budg Cost (\$)	118,477,000	246,185,000	378,052,000	501,699,000	119,964,000	301,309,000	452,038,000	605,673,000
Budgeted NOR INDEX	0.98	0.99	1.00	1.02	1.06	0.96	0.96	0.95
Cum Actual Revenue (\$)	120,015,000	238,459,000	369,707,000	595,800,000	127,708,000	291,653,000	432,471,000	582,910,000
Cum Actual Cost (\$)	104,296,000	211,405,000	357,757,000	526,573,000	129,196,000	277,418,000	408,458,000	583,362,000
Actual NOR INDEX	1.15	1.13	1.03	1.13	0.99	1.05	1.06	1.00
NOR INDEX	1.18	1.14	1.03	1.11	0.93	1.09	1.10	1.05

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	120386000	245015000	369707000	494646000	129186000	300894000	451623000	605258000
Budgeted Total DLH	1776000	3610000	5510000	7402000	1867000	3853000	5887000	7888000
Bud Labor Hour Cost	\$67.78	\$67.87	\$67.10	\$66.83	\$69.19	\$78.09	\$76.72	\$76.73
Total Actual Cost (\$)	104296000	211405000	357757000	526573000	129196000	277418000	416926000	583743000
Actual Total DLH	1832000	3737000	5655000	7595000	1844000	3854000	5713000	7533000
Actual Labor Hour Cost	\$56.93	\$56.57	\$63.26	\$69.33	\$70.06	\$71.98	\$72.98	\$77.49
Labor Hour Cost INDEX	0.84	0.83	0.94	1.04	1.01	0.92	0.95	1.01



**MARINE CORPS
DEPOT MAINTENANCE ACTIVITIES**

MARINE CORPS DEPOT MAINT ACTIVITY, ALBANY GA
ALBANY, GA

MAJOR WORKLOAD ACCOMPLISHED:

Communications and electronics equipment, combat vehicles, ordnance and weapons, automotive equipment, amphibious vehicles and equipment, construction equipment, general purpose equipment, automatic test support equipment and calibration support.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	1081
Military:	9

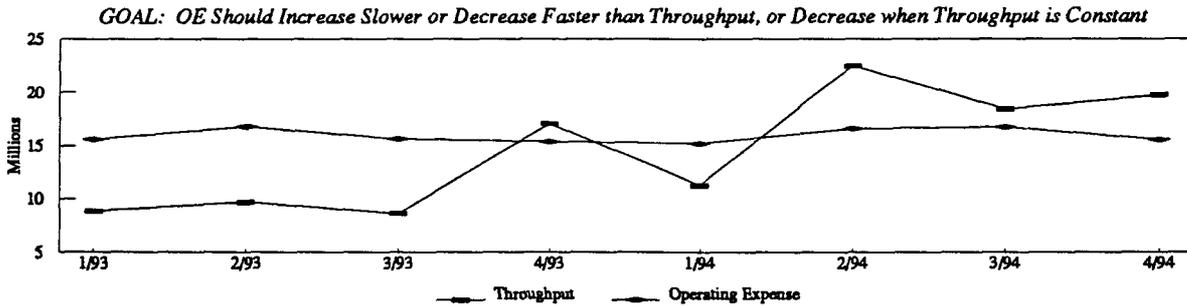
CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

\$78,572,000

In FY93, there was a planned loss of accumulated operating results (AOR) directed by the Defense Business Operating Fund (DBOF). This loss was achieved through a negative surcharge applied against our total stable labor rate therefore reducing our revenue. In addition, workload increased significantly to meet priority maritime prepositioned ships (MPS) requirements and Southwest Asia rollback requirements. During this period, additional temporary employees were hired to meet workload requirements which increased costs significantly. In FY94, there was a planned gain of AOR; therefore, Throughput exceeded operating expenses. In addition, total cost was lower than anticipated due to a decrease in direct material purchases which resulted in a lower Labor Hour Cost Index than planned. For these reasons, the indicators as identified in this report may vary from the goal as explained and justified in the narrative for each indicator.

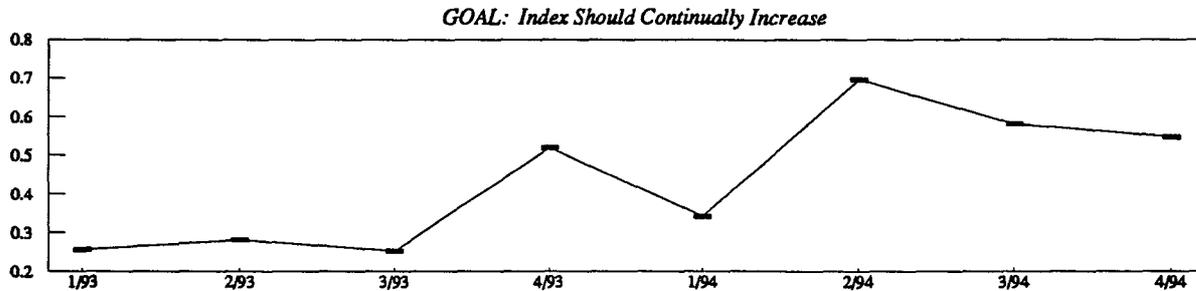
MARINE CORPS DEPOT MAINT ACTIVITY, ALBANY GA

THROUGHPUT & OPERATING EXPENSE



There was a planned revenue loss of \$16M in FY93, causing Throughput (T) to be lower than Operating Expense (OE) except 4th Qtr when revenue increased due to increase in production to bring carryover down. A positive surcharge was applied to the stable labor rate in FY94, causing T to exceed OE except for 1st Qtr. 1st Qtr FY94 DLH were much lower than planned, causing T to be lower than OE. 2nd Qtr FY94 revenue increased substantially as a result of an increase in DLHs that were not produced in 1st Qtr.

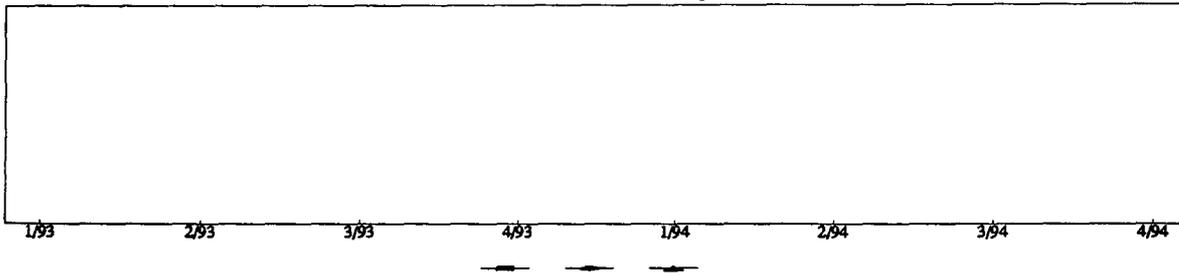
CAPITAL INVESTMENT EFFECTIVENESS



Due to planned loss of Revenue in FY93, Throughput decreased significantly, therefore decreasing investment ratio. In FY94, 2nd Qtr effectiveness increased significantly due to increase in production to overcome shortfall in 1st Qtr. In 4th Qtr FY94, long term inventory increased over \$4M as a result of a new MILCON project being added to our inventory, thereby decreasing investment ratio.

SCHEDULE INDICATOR

GOAL: Index Should Equal 1

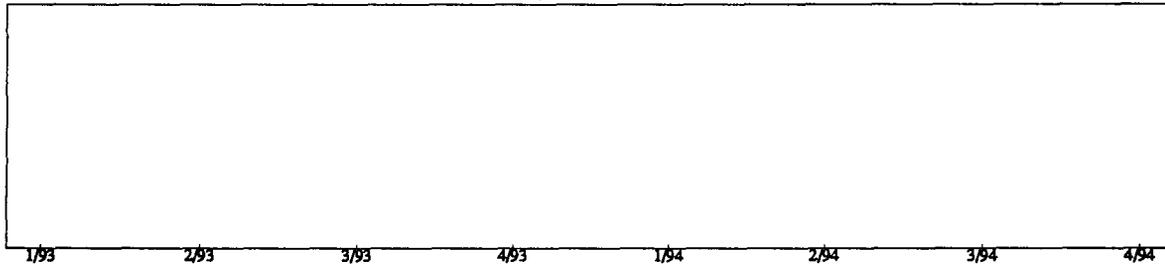


The Marine Corps is not required to submit Schedule Indicator Data.

MARINE CORPS DEPOT MAINT ACTIVITY, ALBANY GA

PROCESS DAYS

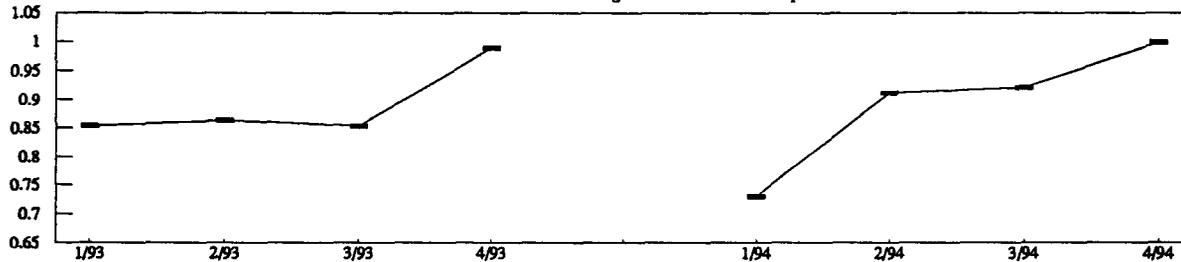
GOAL: Process Days Should show Continual Reduction



At this time, sufficient data is not available in the current system to compute actual process days as calculated in the Depot Maintenance Operations Indicators Handbook. The Maintenance Center is currently implementing a business plan along with a system that will track process days for every item inducted into the depot.

NET OPERATING RESULTS

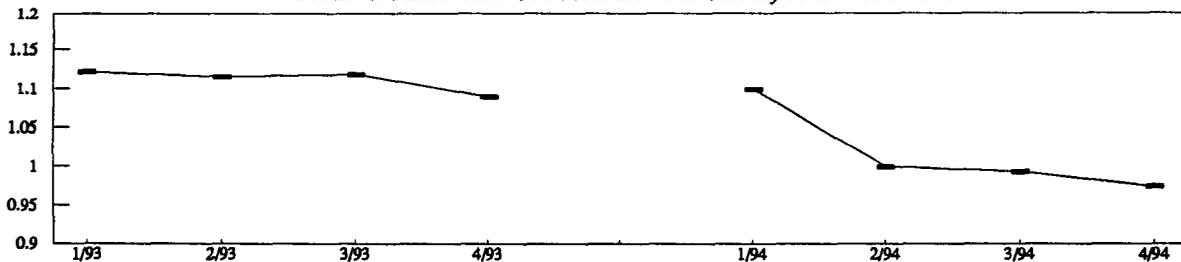
GOAL: Actual NOR/Budgeted NOR should equal 1.00



In both FY93 and FY94, the desired NOR index of 1.0 was achieved by the end of each FY. In each year, NOR increases as the year progresses. This is due to more revenue being earned later in the year as a result of increased production throughout the year and fixed price gains being realized in the 4th Qtr.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



In FY93, cost exceeded budget due to an increase in temporary employees and an increase in overtime, both required to meet workload requirements. In FY94, actual unit cost was lower than planned due to a decrease in direct material purchases.

MARINE CORPS DEPOT MAINT ACTIVITY, ALBANY GA

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue (\$)	14,188,692	15,760,664	15,170,737	22,596,734	17,583,173	29,106,009	24,210,739	24,878,067
Total Cost (\$)	20,949,214	22,843,917	22,218,733	20,889,077	21,528,218	23,194,356	22,587,993	20,736,785
Direct Materials (\$)	5,331,948	6,043,467	6,573,224	5,530,171	6,358,817	6,590,103	5,854,344	5,243,397
Throughput (\$)	8,856,744	9,717,197	8,597,513	17,066,563	11,224,356	22,515,906	18,356,395	19,634,670
Operating Expense (\$)	15,617,266	16,800,450	15,645,509	15,358,906	15,169,401	16,604,253	16,733,649	15,493,388

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	8,856,744	9,717,197	8,597,513	17,066,563	11,224,356	22,515,906	18,356,395	19,634,670
Longterm Inventory (\$)	34,428,132	34,332,652	33,895,261	32,795,977	32,782,334	32,330,581	31,568,679	35,882,048
INDEX	0.26	0.28	0.25	0.52	0.34	0.70	0.58	0.55

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

PROCESS DAYS

TOTAL PROCESS DAYS/NUMBER OF ITEMS = AVERAGE PROCESS DAYS

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST)=NOR INDEX

Cum Budg Revenue (\$)	14,193,000	28,726,000	43,925,000	59,453,000	23,956,000	47,238,000	72,864,000	100,202,000
Cum Budg Cost (\$)	17,961,000	36,384,000	55,712,000	75,494,000	21,422,000	41,262,000	63,739,000	92,024,000
Budgeted NOR INDEX	0.79	0.79	0.79	0.79	1.12	1.14	1.14	1.09
Cum Actual Revenue (\$)	14,188,692	29,949,356	45,120,093	67,716,827	17,583,173	46,689,182	70,899,921	95,777,988
Cum Actual Cost (\$)	21,039,948	43,947,530	67,013,462	86,900,941	21,528,218	44,722,574	67,310,567	88,047,352
Actual NOR INDEX	0.67	0.68	0.67	0.78	0.82	1.04	1.05	1.09
NOR INDEX	0.85	0.86	0.85	0.99	0.73	0.91	0.92	1.00

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	17,961,000	36,384,000	55,712,000	75,494,000	21,422,000	41,262,000	63,739,000	92,025,000
Budgeted Total DLH	353,086	715,236	1,095,199	1,484,220	370,357	728,768	1,146,913	1,599,085
Bud Labor Hour Cost	\$50.87	\$50.87	\$50.87	\$50.86	\$57.84	\$56.62	\$55.57	\$57.55
Total Actual Cost (\$)	21,039,948	43,947,530	67,013,462	86,900,941	21,528,218	44,722,574	67,310,567	88,047,352
Actual Total DLH	368,456	773,889	1,176,617	1,568,741	338,584	789,986	1,219,811	1,570,447
Actual Labor Hour Cost	\$57.10	\$56.79	\$56.95	\$55.40	\$63.58	\$56.61	\$55.18	\$56.07
Labor Hour Cost INDEX	1.12	1.12	1.12	1.09	1.10	1.00	0.99	0.97

MARINE CORPS DEPOT MAINT ACTIVITY, BARSTOW CA
BARSTOW, CA

MAJOR WORKLOAD ACCOMPLISHED:

Missiles, communications and electronics equipment, combat vehicles, ordnance and weapons, automotive equipment, amphibious vehicles and equipment, construction equipment, and general purpose equipment

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	1060
Military:	8

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

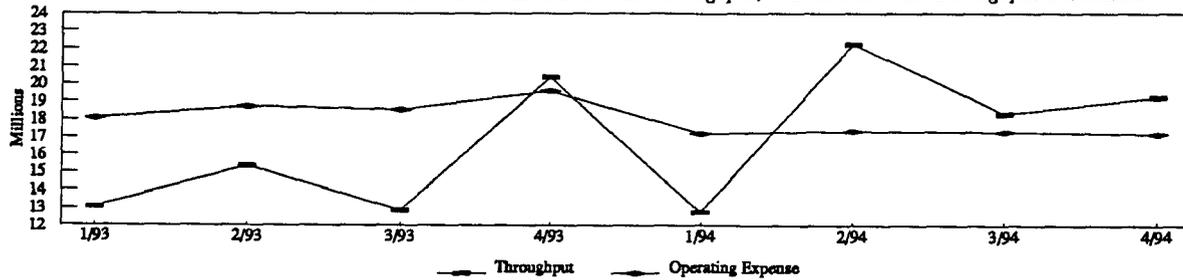
\$93,014,698

During the two year period shown, revenue and operating results were negatively affected by planned losses to compensate for previous years surplus. Increases in interservice workload as well as Marine Corps non-Master Work Schedule programs were able to offset the decrease in Master Work Schedule funding, thus facilitating revenue generation. Finally, the impact of the Federal Employees Compensation Act on operating expenses and labor costs has been absorbed as previously predicted, and costs are again under control.

MARINE CORPS DEPOT MAINT ACTIVITY, BARSTOW CA

THROUGHPUT & OPERATING EXPENSE

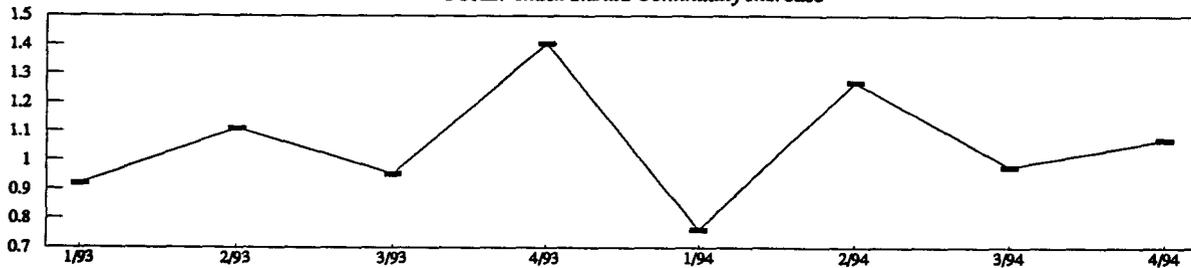
GOAL: OE Should Increase Slower or Decrease Faster than Throughput, or Decrease when Throughput is Constant



There has been an overall trend towards improvement as indicated by the upward shift of the entire Throughput curve for FY93 to FY94, as well as continual decline of the Operating Expense curve. The 2nd Qtr FY94 spike in Throughput was due to full receipt of Master Work Schedule funding and high point of the year in number of direct labor hour employees. In terms of goal, the trend has been positively reversed.

CAPITAL INVESTMENT EFFECTIVENESS

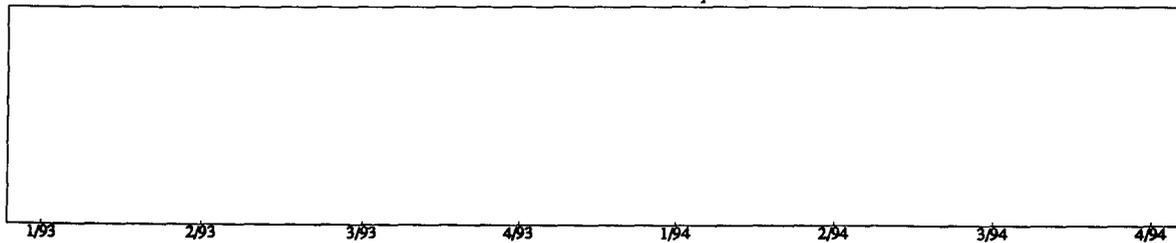
GOAL: Index Should Continually Increase



This measure closely parallels the previous graph of Throughput. This is because as Throughput has increased, it has done so at a faster rate than that of long term inventory's slow rise.

SCHEDULE INDICATOR

GOAL: Index Should Equal 1

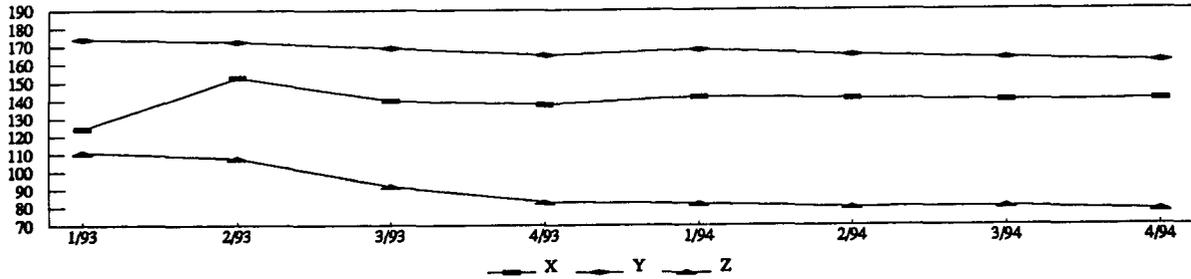


Marine Corps is not required to furnish Schedule Indicator data.

MARINE CORPS DEPOT MAINT ACTIVITY, BARSTOW CA

PROCESS DAYS

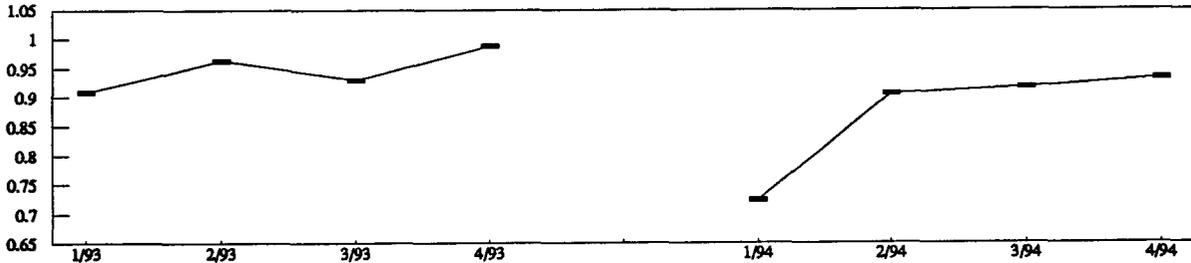
GOAL: Process Days Should show Continual Reduction



Even with a decrease in the number of items being worked and the associated increase in set up costs, we have been able to show a continual downward trend in average process days. It should again be noted that the Y process time includes a 30-45 day time frame for staging queue.

NET OPERATING RESULTS

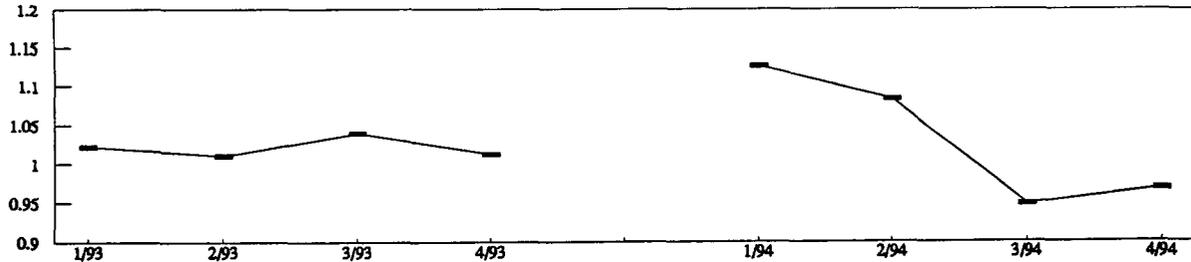
GOAL: Actual NOR/Budgeted NOR should equal 1.00



FY94 reflects a consistent trend towards the goal of the 1.00 index.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



There has been a marked improvement from FY93, despite increased labor costs due to higher wage rates. The overall goal of being below 1.00 was met for the entire year, as shown by the .97 cumulative index for the 4th Qtr of FY94.



DEFENSE LOGISTICS AGENCY DEPOTS

**DIRECTORATE OF IPE OPS, MECHANICSBURG PA
MECHANICSBURG, PA**

MAJOR WORKLOAD ACCOMPLISHED:

Manage the DoD level maintenance program for Industrial Plant Equipment (IPE), including operations of all major DoD IPE repair, rebuild, retro-fit and remanufacturing facilities and provide on-site customer support world-wide.

DEPOT MAINTENANCE PERSONNEL LEVEL:

Civilian:	128
Military:	0

CURRENT YEAR INDUSTRIAL FUND BUDGET (\$):

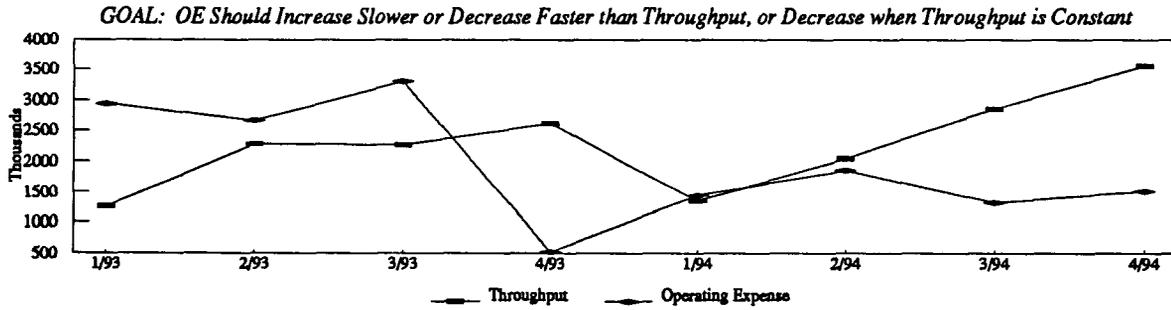
\$11,000,000

The Industrial Plant equipment Repair Facility provides repair and rebuild service of industrial machinery and supplies the needs of the Armed Forces in time of national emergency. Field services are provided by the maintenance personnel and the Richmond service support personnel. Field services available include assessments, repairs, inspections, and installations of machinery and accessories, plant design and layout, relocation and safety guarding.

Based on estimated workload from the Services, an average billable hourly rate was established to cover the cost of operations. This rate also recovers the HQ and G&A costs associated with the mission. Workload is projected based on the number of direct workers and available productive hours. During FY94, workload increased greatly during 3rd and 4th Qtrs, resulting in a positive NOR for the FY.

DIRECTORATE OF IPE OPS, MECHANICSBURG PA

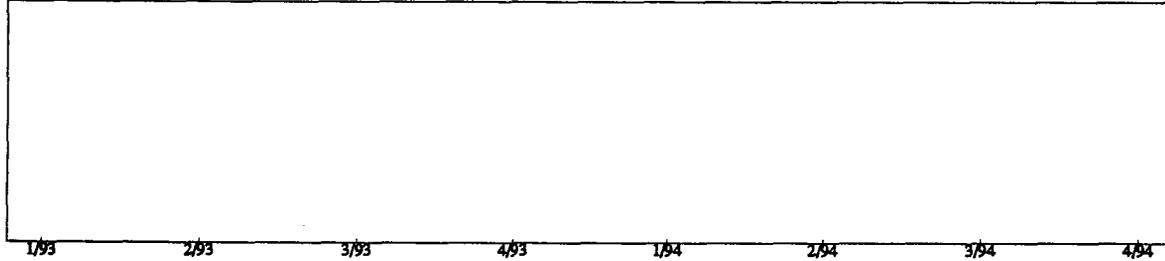
THROUGHPUT & OPERATING EXPENSE



The increase in Throughput is a result of the increased workload generating revenue.

CAPITAL INVESTMENT EFFECTIVENESS

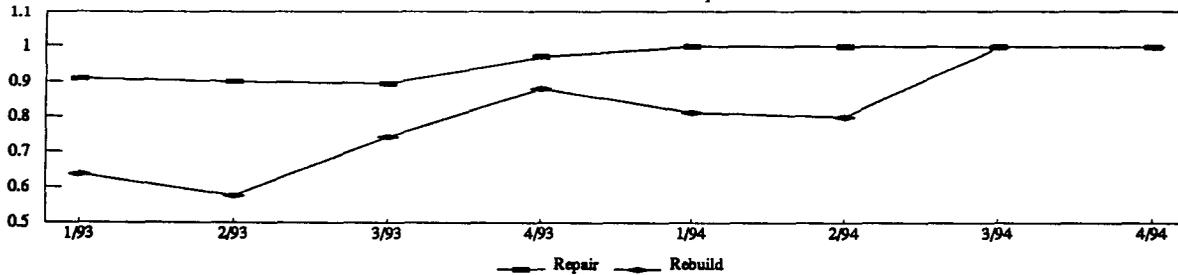
GOAL: Index Should Continually Increase



DGSC-M is in the process of determining the value of our in-use equipment.

SCHEDULE INDICATOR

GOAL: Index Should Equal 1

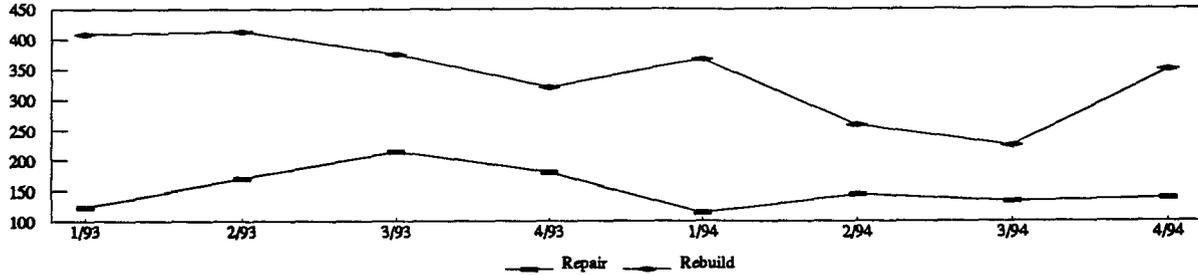


DGSC-M had 28 items scheduled for repair and 28 items completed for the 3rd Qtr FY94, 25 items scheduled for repair and 25 items completed repair for 4th Qtr FY94. There were 20 items scheduled for rebuild and 20 items completed for the 3rd Qtr FY94, 13 items scheduled and 13 items completed rebuild for the 4th Qtr FY94.

DIRECTORATE OF IPE OPS, MECHANICSBURG PA

PROCESS DAYS

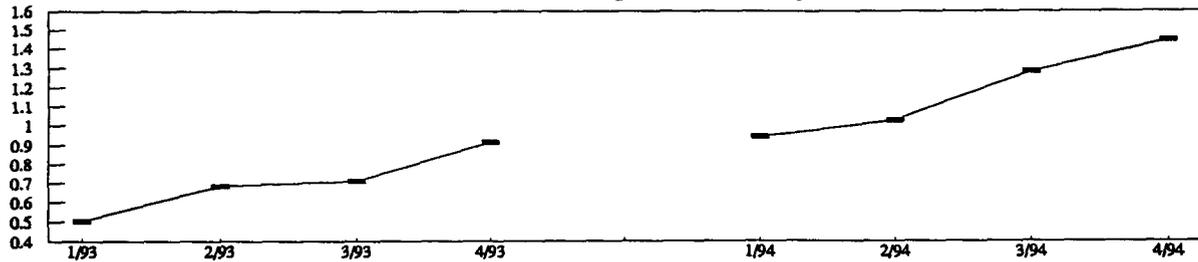
GOAL: Process Days Should show Continual Reduction



Processing time for DGSC-M repair averaged 133 days. Total processing days were 3,729 for 28 items in the 3rd Qtr FY94 and 3,465 total days for 25 items in the 4th Qtr FY94. Rebuild total process days for the 3rd Qtr FY94 were 4,483 for 20 items and 4,541 days for 13 items in the 4th Qtr FY94.

NET OPERATING RESULTS

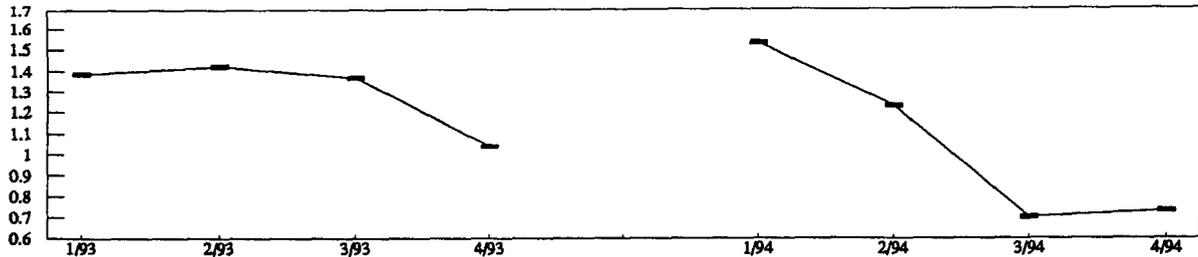
GOAL: Actual NOR/Budgeted NOR should equal 1.00



The goal for revenue is to exceed cost and result in a positive NOR. The billable hourly rate is established to recover the cost of operating the maintenance facility as well as HQ indirect and G&A costs. FY94 showed an upward trend of improvement, finishing the year above our NOR goal.

LABOR HOUR COST

GOAL: The Labor Hour Cost Index should consistently be at or below 1.00.



The budgeted labor hour cost is computed on the total recoverable budget cost and projected billable hours. This does not include material costs, for purposes of the data conforming to the Annual Operating Budget. As workload increased during the year, the labor hour costs decreased.

DIRECTORATE OF IPE OPS, MECHANICSBURG PA

Quarter/Fiscal Year	1/93	2/93	3/93	4/93	1/94	2/94	3/94	4/94
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THROUGHPUT & OPERATING EXPENSE

REVENUE-DIRECT MATERIAL = THROUGHPUT

TOTAL COST-DIRECT MATERIAL = OPERATING EXPENSE

Revenue(\$)	1,716,000	2,790,000	3,108,000	3,568,000	1,535,346	2,269,358	3,600,210	4,601,171
Total Cost (\$)	3,401,000	3,173,000	4,151,000	1,477,000	1,628,488	2,078,796	2,061,073	2,552,560
Direct Materials (\$)	460,000	508,000	843,000	950,000	184,518	216,623	741,230	1,040,749
Throughput (\$)	1,256,000	2,282,000	2,265,000	2,618,000	1,350,828	2,052,735	2,858,980	3,560,422
Operating Expense (\$)	2,941,000	2,665,000	3,308,000	527,000	1,443,970	1,862,173	1,319,843	1,511,811

CAPITAL INVESTMENT EFFECTIVENESS

THROUGHPUT/LONGTERM INVENTORY

Throughput (\$)	1,256,000	2,282,000	2,265,000	2,618,000	1,350,828	2,052,735	2,858,980	3,560,422
Longterm Inventory (\$)	0	0	0	0	0	0	0	0
INDEX								

SCHEDULE INDICATOR

UNITS COMPLETED ON TIME/UNITS SCHEDULED

Repair Scheduled	33	20	19	36	11	21	28	25
Repair Completed	30	18	17	35	11	21	28	25
INDEX	0.91	0.90	0.89	0.97	1.00	1.00	1.00	1.00
Rebuild Scheduled	22	33	35	25	16	10	20	13
Rebuild Completed	14	19	26	22	13	8	20	13
INDEX	0.64	0.58	0.74	0.88	0.81	0.80	1.00	1.00

PROCESS DAYS

TOTAL PROCESS DAYS/NUMBER OF ITEMS = AVERAGE PROCESS DAYS

Repair Process Days	2,845	1,365	2,143	2,345	1,253	3,043	3,729	3,465
Number of Items	23	8	10	13	11	21	28	25
AVG PROCESS DAYS	123.70	170.63	214.30	180.38	113.91	144.90	133.18	138.60
Rebuild Process Days	13486	12395	11636	5446	5879	2586	4483	4541
Number of Items	33	30	31	17	16	10	20	13
AVG PROCESS DAYS	408.67	413.17	375.35	320.35	367.44	258.60	224.15	349.31

NET OPERATING RESULTS

(CUM ACTUAL REVENUE/CUM ACTUAL COST) /

(CUM BUDGETED REVENUE/CUM BUDGETED COST) = NOR INDEX

Cum Budg Revenue (\$)	3,578,000	7,156,000	10,735,133	14,707,385	2,466,506	4,218,218	5,686,528	7,998,727
Cum Budg Cost (\$)	3,578,000	7,156,000	10,735,133	14,707,385	2,466,506	4,218,218	5,686,528	7,998,727
Budgeted NOR INDEX	1.00							
Cum Actual Revenue (\$)	1,715,000	4,505,000	7,611,000	11,179,000	1,535,346	3,804,704	7,404,915	12,006,089
Cum Actual Cost (\$)	3,401,000	6,574,000	10,725,000	12,202,000	1,628,488	3,707,284	5,768,358	8,320,920
Actual NOR INDEX	0.50	0.69	0.71	0.92	0.94	1.03	1.28	1.44
NOR INDEX	0.50	0.69	0.71	0.92	0.94	1.03	1.28	1.44

LABOR HOUR COST

(CUMULATIVE TOTAL ACTUAL COST/CUMULATIVE ACTUAL TOTAL DLH) /

(CUMULATIVE TOTAL BUDGET COST/CUMULATIVE BUDGETED TOTAL DLH) = LABOR HOUR COST INDEX

Total Budgeted Cost (\$)	3,109,000	6,218,000	9,327,000	12,638,000	2,701,740	5,360,016	4,912,354	6,803,233
Budgeted Total DLH	41,000	82,000	123,000	167,000	31,640	62,771	57,528	79,672
Bud Labor Hour Cost	\$75.83	\$75.83	\$75.83	\$75.68	\$85.39	\$85.39	\$85.39	\$85.39
Total Actual Cost (\$)	2,941,000	5,606,000	8,914,000	9,441,000	1,443,970	3,306,143	4,331,274	7,280,171
Actual Total DLH	28,000	52,000	86,000	120,000	11,034	31,388	72,500	116,800
Actual Labor Hour Cost	\$105.04	\$107.81	\$103.65	\$78.68	\$130.87	\$105.33	\$59.74	\$62.33
Labor Hour Cost INDEX	1.39	1.42	1.37	1.04	1.53	1.23	0.70	0.73

APPENDIX A

DMOIS REPORTING SERVICE DEPOT MAINTENANCE ACTIVITIES

ARMY

Anniston Army Depot
Corpus Christi Army Depot
Letterkenny Army Depot
Red River Army Depot
Tobyhanna Army Depot

NAVAIR

Naval Aviation Depot Cherry Point
Naval Aviation Depot Jacksonville
Naval Aviation Depot North Island

NAVSEA

Long Beach Naval Shipyard
Norfolk Naval Shipyard
Pearl Harbor Naval Shipyard
Portsmouth Naval Shipyard
Puget Sound Naval Shipyard

AIR FORCE

Aerospace Guidance and Metrology Center
Aerospace Maintenance and Regeneration Center
Ogden Air Logistics Center
Oklahoma City Air Logistics Center
Sacramento Air Logistics Center
San Antonio Air Logistics Center
Warner Robins Air Logistics Center

MARINE CORPS

Marine Corps Logistics Base Albany
Marine Corps Logistics Base Barstow

APPENDIX A (Cont.)

DMOIS REPORTING SERVICE DEPOT MAINTENANCE ACTIVITIES

DEFENSE LOGISTICS AGENCY

Directorate of Industrial Plant Equipment Operations Mechanicsburg

APPENDIX B

**SERVICE/DLA POINTS OF CONTACT
FOR
DEPOT MAINTENANCE OPERATIONS INDICATOR REPORT DATA**

ARMY

Mr Carl Chirico

Address: Commander
US Army Depot System Command
Attn: AMSDS-RM-A (Mr Carl Chirico)
Chambersburg, PA 17201-4170

Phone: DSN 570-9034 Commercial (717) 267-9034

NAVAIR

Ms Carol Gaines

Address: Commanding Officer
Naval Aviation Depot North Island
Attn: Code 521 (Ms Carol Gaines)
P.O. Box 357058
San Diego, CA 92135-7058

Phone: DSN 735-3027 Commercial (619) 545-3027

NAVSEA

Mr Jim Jeter

Address: Commander
Naval Sea Systems Command
Attn: SEA-07221 (Mr Jim Jeter)
2531 Jefferson David Highway
Arlington, VA 22242-5160

Phone: DSN 332-3859 Commercial (703) 602-3859

AIR FORCE

Mr Charles Cooke

Address: Headquarters
Air Force Materiel Command
Attn: LGPP (Mr Charles Cooke)
4375 Chidlaw Road Suite 6
Wright-Patterson AFB, OH 45433-5001

Phone: DSN 787-4307 Commercial (513) 257 -4307

APPENDIX B (Cont.)

**SERVICE/DLA POINTS OF CONTACT
FOR
DEPOT MAINTENANCE PERFORMANCE MEASUREMENT SYSTEM DATA**

MARINE CORPS

Mr Harold Eidson

Address: Commander Marine Corps Logistics Bases
Code 88-2 (Mr Harold Eidson)
814 Radford Blvd
Albany, GA 31704-5000

Phone: DSN 567-6803 Commercial (912) 439-6803

DEFENSE LOGISTICS AGENCY

Ms Mary Kay Cyrus

Address: Commander
Defense General Supply Center
Office of Planning and Resource Management
DGSC-RR (Ms Mary Kay Cyrus)
Richmond, VA 23297-5226

Phone: DSN 695-4522 Commercial (804) 279-4841

APPENDIX C

GLOSSARY

A1	Overhaul
A2	Crash Damage
A/C	Aircraft
ACM	Advanced Cruise Missile
ADINTS	Automatic Depot Inertial Navigation Test Stations
AFMC	Air Force Materiel Command
AGM	Air to Ground Missile
AGMC	Aerospace Guidance and Metrology Center
ALC	Air Logistics Center
AMARC	Aerospace Maintenance and Regeneration Center
AMC	Army Materiel Command
AMC	Air Mobility Command
AMREP	Aircraft and Missile Maintenance, Production Compression Report
ANAD	Anniston Army Depot
AOR	Accumulated Operating Results
ATCOM	Aviation & Troop Support Command
AVLB	Armored Vehicle Launched Bridge
BO	Progressive Maintenance
BRAC	Base Closure and Realignment Commission
CCAD	Corpus Christi Army Depot
CECOM	US Army Communications Electronics Command
CHYPT	Naval Aviation Depot Cherry Point
DBOF	Defense Business Operating Fund
DDMC	Defense Depot Maintenance Council
DESCOM	US Army Depot Systems Command
DFAS	Defense Finance & Accounting Service
DLA	Defense Logistics Agency
DLH	Direct Labor Hours
DMBA	Depot Maintenance Business Area
DMP	Depot Maintenance Period
DMPMS	Depot Maintenance Performance Measurement System
DOD	Department of Defense
DPAH	Direct Product Actual Hour
EPA	Environmental Protection Agency
FAASV	Field Artillery Ammunition Supply Vehicle

APPENDIX C (Cont.)

GLOSSARY

HARM	High Speed Anti-Radiation Missile
HETS	Heavy Equipment Transporter System
IMU	Inertial Measurement Unit
INU	Inertial Navigation Unit
IO	Repair
IPE	Industrial Plant Equipment
IPR	In Process Review
JAX	Naval Aviation Depot Jacksonville
JEDMICS	Joint Engineering Drawing Management Information Control System
JPCG-DM	Joint Policy Coordinating Group on Depot Maintenance
JPMG	Joint Performance Measurement Group
LBNSY	Long Beach Naval Shipyard
LEAD	Letterkenny Army Depot
LGM	Land Based Guided Missile
MBT	Main Battle Tank
MCLBA	Marine Corps Logistics Base Albany
MCLBB	Marine Corps Logistics Base Barstow
MLRS	Multiple Launch Rocket System
MPS	Maritime Prepositioned Ships
NADEP	Naval Aviation Depot
NADOC	Naval Aviation Depot Operations Center
NAVAIR	Naval Air Systems Command
NAVSEA	Naval Sea Systems Command
NNSY	Norfolk Naval Shipyard
NOR	Net Operating Results
NORIS	Naval Aviation Depot North Island
OC-ALC	Oklahoma City Air Logistics Center
OE	Operating Expense
OO-ALC	Ogden Air Logistics Center
OSD	Office of the Secretary of Defense

APPENDIX C (Cont.)

GLOSSARY

PADS	Position Azimuth Determining System
PBD	Program Budget Decision
PCM	Pulse Code Modulation
PDM	Prgrammed Depot Maintenance
PDMSS	Prgrammed Depot Maintenance Standard System
PHNSY	Pearl Harbor Naval Shipyard
PNCLA	Naval Aviation Depot Pensacola
PRON	Procurement Request Order Number
PSNSY	Puget Sound Naval Shipyard
PTNSY	Portsmouth Naval Shipyard
RCIRON	Reliability Centered Inspect and Repair Only as Necessary
RIF	Reduction In Force
RRAD	Red River Army Depot
RSD	Reparable Support Division
RTC-524	Receiver Transmitter
SA-ALC	San Antonio Air Logistics Center
SM-ALC	Sacramento Air Logistics Center
SOF	Special Operations Forces
TEAD	Tooele Army Depot
TOAD	Tobyhanna Army Depot
TQM	Total Quality Management
VRC-12	Vehicle Radio Communication
WIP	Work In Process
WR-ALC	Warner-Robins Air Logistics Center

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950424-3

FROM: FLOOD, WILLIAM G.	TO: DAVIS, J. B.
TITLE: VICE-PRESIDENT	TITLE: COMMISSIONER
ORGANIZATION: SDS INTERNATIONAL	ORGANIZATION: DBCRC
INSTALLATION (S) DISCUSSED: AIR LOGISTIC CENTERS	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT	COMMISSION MEMBERS	FYI	ACTION	INIT
CHAIRMAN DIXON				COMMISSIONER CORNELLA			
STAFF DIRECTOR	✓			COMMISSIONER COX			
EXECUTIVE DIRECTOR				COMMISSIONER DAVIS	✓		
GENERAL COUNSEL	✓			COMMISSIONER KLING			
MILITARY EXECUTIVE				COMMISSIONER MONTOYA			
				COMMISSIONER ROBLES			
DIR./CONGRESSIONAL LIAISON		Ⓢ		COMMISSIONER STEELE			
DIR./COMMUNICATIONS				REVIEW AND ANALYSIS			
				DIRECTOR OF R & A	✓		
EXECUTIVE SECRETARIAT				ARMY TEAM LEADER			
				NAVY TEAM LEADER			
DIRECTOR OF ADMINISTRATION				AIR FORCE TEAM LEADER	✓		
CHIEF FINANCIAL OFFICER				INTERAGENCY TEAM LEADER			
DIRECTOR OF TRAVEL				CROSS SERVICE TEAM LEADER		X	
DIR./INFORMATION SERVICES							

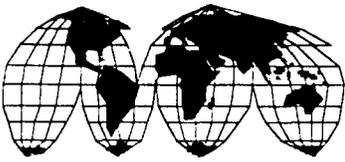
TYPE OF ACTION REQUIRED

<input type="checkbox"/>	Prepare Reply for Chairman's Signature	<input checked="" type="checkbox"/>	Prepare Reply for Commissioner's Signature
<input type="checkbox"/>	Prepare Reply for Staff Director's Signature	<input type="checkbox"/>	Prepare Direct Response
X	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

FORWARDING COPY OF 1995 DEPOT HANDBOOK,
 "A GUIDE TO USAF AIR LOGISTICS CENTERS"

Due Date: 950501	Routing Date: 950424	Date Originated: 950417	Mail Date:
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SDS
International

April 17, 1995

Gen James B. Davis
Defense Base Realignment Commission
1700 N. Moore Street
Arlington, VA 22202

Please refer to this number
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Dear Gen Davis,

Thought you might be interested in this piece of work from my company. We have had many requests for the document since it seems to be one-of-a-kind. If you need (or want) anything related to the subject, we will try to get it for you.

As you can see, I am right down the street from you in Crystal City. If I can be of assistance please call (703) 553-7526.

Sincerely,

William G. Flood
Senior Vice President

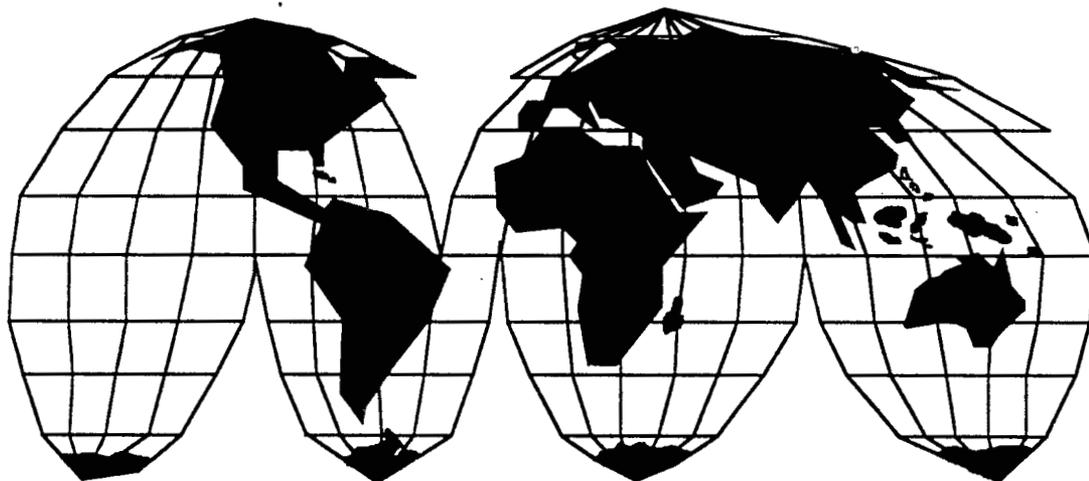
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1995 Depot Handbook

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A Guide To USAF Air Logistics Centers

3 April 1995





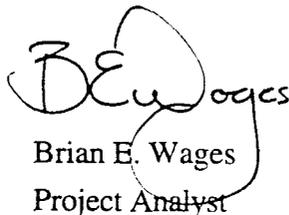
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Introduction

The Department of Defense's network of supply and maintenance depots remains excessive for the military force structure that exists today. Attempts by senior DoD officials to encourage the Services to pare down surplus depot infrastructure voluntarily -- by promoting workload consolidation, greater interservicing, and the privatization of most "non-Core" depot maintenance functions -- have had only moderate success. Aided by Congressmen representing depot-dominated constituencies, Service logisticians have compiled impressive records of resisting turf encroachment, both from the private sector and other Services.

It is in the best interests of national aerospace development for commercial firms to obtain more military depot workload. Since the Services are unlikely to surrender it willingly, a comprehensive, well-thought-out marketing campaign will be necessary. The first step in mounting such a campaign is to study the competition. This **Depot Handbook** meets that need by providing essential relevant information on the capabilities, capacities, and operating environment of private aerospace industry's major competitors: the Air Force's five Air Logistic Centers. On a closely related issue, the **Depot Handbook** provides a status update on the current 1995 base realignment and closure process.

This document was prepared using unclassified, open-source material. It draws on insights provided during interviews with senior Department of Defense (DoD) personnel, military staff officers, and Congressional staff members. Questions or comments should be directed to SDS International which alone remains responsible for report contents.


Brian E. Wages
Project Analyst

SDS International

One Crystal Park • 2011 Crystal Drive • Suite 100 • Arlington, Virginia 22202-3709 • (703) 553-7525 • Fax (703) 979-7447

1995 Depot Handbook

A Guide To USAF Air Logistics Centers (ALC)

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1995 Depot Handbook

A Guide To USAF Air Logistics Centers

1.0 Overview

Title 10 of the United States Code requires DoD activities to "maintain a logistics capability (including personnel, equipment and facilities) to ensure a ready and controlled source of technical competence and resources necessary to ensure effective and timely response to a mobilization, . . . contingency, . . . or other emergency requirement."¹ Within the Air Force that task falls primarily under Air Force Materiel Command (AFMC), which is charged with managing the integrated research, development, test, acquisition, and sustainment of Air Force weapon systems. To accomplish these tasks, AFMC operates a number of laboratories, test centers, and logistics depots.

This Handbook provides a summary of information on AFMC's five logistics depots, known as Air Logistics Centers (ALC). The five are: Sacramento ALC (SM-ALC) at McClellan Air Force Base (AFB), California; Ogden ALC (OO-ALC) at Hill AFB, Utah; Oklahoma City ALC (OC-ALC) at Tinker AFB, Oklahoma; San Antonio ALC (SA-ALC) at Kelly AFB, Texas; and Warner Robins ALC (WR-ALC) at Robins AFB, Georgia. Each is discussed in the context of: the base on which it is located; its surrounding community; the depot functions it performs; the facilities, equipment, and special competencies that the individual ALC managers consider make their depot unique; and workload. Much of the information was extracted from ALC inputs to the DoD Joint Cross-Service Group charged with reviewing all military depots in developing DoD's 1995 base closure and realignment recommendations. Manpower, mission, and workload changes associated with DoD's BRAC 95 closure/realignment recommendations are not reflected herein except as specifically noted. Information and data are current as of February 1995, and are presented in the following format:

Field and Facilities. Provides an indication of an air base's suitability to support additional aircraft and missions, and to conduct test and training activities.

¹Title 10, United States Code, Chapter 146, Section 2464.

Major Tenants. Lists other key military activities operating at the base.

Relationship to Local Community. Shows an ALC base's economic impact in its immediate area.

Specialization. Identifies each ALC's areas of expertise by listing the commodity groups for which it has been designated a *Service Center of Excellence* (Technical Repair Center) and its *Technology Application Program Management (TAPM)* assignments.²

Unique Facilities/Equipment. Identifies ALC facilities, equipment, and capabilities considered unique or one-of-a-kind.³ Lists may not be all-inclusive.

Workload. Data tables showing each ALC's potential maximum workload capacity, its existing workload capacity, its actual programmed workload, and that amount of the programmed workload identified as "Core" for fiscal years (FY) 1996 and 1999. Workload figures are shown as thousands of Direct Labor Hours (kDLH) and are aggregated according to the DoD commodity group reference system shown on the following page. (Workload Tables are explained in detail at **Attachment 7**.)

²Military depots assigned primary responsibility for the maintenance and repair of specific weapon systems, system components, or categories of components are known as *Centers of Excellence* for those systems, components, or categories of components. *Technology Application Program Management (TAPM)* responsibility pertains to advanced technologies and equates to being designated the organization of primary responsibility within DoD for developing a particular technology, disseminating information on it to appropriate companies and agencies, and encouraging both its employment in new military products and -- where possible -- its insertion into older ones.

³This Handbook reports on those facilities, equipment, and capabilities that have been identified by the depots themselves as being unique or of particular importance. It was not within the scope of this study to verify ALC claims as to the uniqueness of such assets or competencies, or to attempt to determine their *utility* (through clarifying the amount of workload they process, frequency of use, future requirement for use in light of the projected retirement of the assets or systems they service, or whether or not the facility, equipment, or capability could be modified to service other systems or components). In many cases, it was not possible to determine from the source material whether it was a particular item of maintenance equipment or the facility containing it that was unique, as in the cases of buildings with special TEMPEST shielding, shock mounts, and special insulation. Likewise, in many cases it was not possible to determine whether some facility or capability was independent and separate or was embedded in a larger facility/competency as a sub-component or specialty. In some cases, the capabilities highlighted were not directly associated with depot maintenance activity, as with laboratories collocated with a depot maintenance operation but not actually performing maintenance work. It also was often not possible to determine whether special equipment could be relocated to another depot, or whether a comparable maintenance capability existed in private industry.

Workload and areas of specialization are categorized in accordance with the DoD-established commodity groups reference system shown below:

DoD Commodity Groups List	
<p>1. Aircraft Airframes:</p> <p>a. Rotary</p> <p>b. VSTOL</p> <p>c. Fixed Wing</p> <p>(1) Transport / Tanker / Bomber</p> <p>(2) Command and Control</p> <p>(3) Light Combat</p> <p>(4) Admin / Training</p> <p>d. Other</p> <p>2. Aircraft Components</p> <p>a. Dynamic Components</p> <p>b. Aircraft Structures</p> <p>c. Hydraulic/Pneudraulic</p> <p>d. Instruments</p> <p>e. Landing Gear</p> <p>f. Aviation Ordnance</p> <p>g. Avionics/Electronics</p> <p>h. APUs</p> <p>i. Other</p> <p>j. Manufacture and Fabrication</p> <p>3. Engines (Gas Turbine) (GTE)</p> <p>a. Aircraft</p> <p>b. Tank</p> <p>c. Blades / Vanes (Type 2)</p> <p>4. Missiles and Missile Components</p> <p>a. Strategic</p> <p>b. Tactical / MLRS</p> <p>5. Amphibians</p> <p>a. Vehicles</p> <p>b. Components (less GTE)</p> <p>6. Ground Combat Vehicles</p> <p>a. Self-propelled</p> <p>b. Tanks</p> <p>c. Towed Combat Vehicles</p> <p>d. Components (less GTE)</p>	<p>7. Ground and Shipboard Communications and Electronic Equipment</p> <p>a. Radar</p> <p>b. Radio Communications</p> <p>c. Wire Communications</p> <p>d. Electronic Warfare</p> <p>e. Navigation Aids</p> <p>f. Electro-Optics / Night Vision Equipment</p> <p>g. Satellite Control / Space Sensors</p> <p>8. Automotive / Construction Equipment</p> <p>9. Tactical Vehicles</p> <p>a. Tactical Automotive Vehicles</p> <p>b. Components</p> <p>10. Ground General Purpose Items</p> <p>a. Ground Support Equipment (except aircraft)</p> <p>b. Small Arms / Personal Weapons</p> <p>c. Munitions / Ordnance</p> <p>d. Ground Generators</p> <p>e. Other</p> <p>11. Sea Systems</p> <p>a. Ships</p> <p>b. Weapon Systems</p> <p>12. Software</p> <p>a. Tactical Systems</p> <p>b. Support Equipment</p> <p>13. Special Interest Items</p> <p>a. Bearings Refurbishment</p> <p>b. Calibration (Type I)</p> <p>c. Test, Measurement, and Diagnostic Equipment (TMDE)</p> <p>14. Other</p>

Table 1-1: Commodity Groups List

Note: Shading denotes commodity groups in which the ALCs do not have significant workload.

2.0 Sacramento ALC (SM-ALC)

Sacramento ALC is the Air Force's F-111 and A-10 depot. It provides logistical support (supply and maintenance) for these and other assigned aircraft, for multiple aircraft electrical and pneumatic systems, and for ground-based communications and electronic equipment. Commensurate with its advanced capabilities in composites, electro-optics, and microelectronics, it also has responsibility within DoD for the development and fielding of advanced composites, fiber optics and fiber optic connectors, and very high speed integrated circuits (VHSIC).

2.1 McClellan AFB, California

McClellan AFB is an AFMC-operated installation located approximately nine miles north of downtown Sacramento, California. Sacramento is Northern California's major interior transportation hub. It is located on the main railroad line running into the San Francisco Bay area from the East Coast, and sits at the junction of Interstate 5, the West Coast's primary north-south artery (extending from San Diego to Vancouver, British Columbia), and Interstate 80, a principal east-west roadway crossing the American Midwest (running from New York to San Francisco). The nearest deep-water ocean port is at Oakland approximately 70 miles away. Oakland can be accessed overland or via the Sacramento River (through the Sacramento Port Facility).

2.1.1 Field and Facilities

McClellan AFB has one 10,600-foot concrete runway with appropriate aircraft arresting gear and 471,550 square yards (approximately 97 acres) of usable aircraft parking apron. Permanently assigned aircraft require over 50 percent of the apron space. Four C-141-equivalent aircraft can be loaded or unloaded at one time for mobility/contingency operations.⁴ Four C-141-equivalent aircraft can be refueled at one time. The base does not have an operational fuel hydrant system.

⁴The limiting factor is material handling equipment (MHE).

The base does not control or manage any ranges. The nearest suitable special-use airspace⁵ is as shown below:

Warning/Restricted/Military Operating Area (MOA)	W-260	134 NM
Low-altitude MOA:	W-260	134 NM
Supersonic MOA:	W-283	170 NM
Scorable gunnery range complex:	Fallon B-19	130 NM
Electronic Combat range:	Fallon TACTS	188 NM
Air combat maneuvering instrumentation range:	Fallon TACTS	188 NM

Travis and Beale AFBs and Mather Field (formerly Mather AFB) all lie within a 50-mile radius of the base. The nearest ground force installation where joint training can be accomplished is Army Fort Hunter Liggett, 160 NM from McClellan. The nearest Navy installation where joint training can be accomplished is Naval Air Station (NAS) Fallon, 130 NM from McClellan

2.1.2 Major Tenants

Major associate units on McClellan AFB include: Headquarters 4th Air Force, Air Force Reserve (AFRES); 940th Air Refueling Group (ARG), AFRES; Defense Distribution Depot, McClellan (DDMC), Defense Logistics Agency (DLA); and the Defense Megacenters, Sacramento, (DMCS), Defense Information Services Agency (DISA).

Headquarters, 4th Air Force. 4th Air Force is one of the three Numbered Air Forces (NAF) comprising the AFRES. It commands five airlift wings (AW) operating C-130, C-141, and C-5 transports; one special operations wing (SOW) operating MC- and AC-130 aircraft; one airmobility wing (AMW) operating C-130 transports and KC-10 and KC-135 tankers; and one aeromedical airlift group (AAG) operating C-9 aeromedical airlift transports. The Commander, 4th Air Force, his headquarters element, and one ARG are stationed at McClellan. The headquarters employs approximately 400 personnel.

940th ARG. The 940th ARG (AFRES) operates 10 KC-130E tanker aircraft and provides aerial refueling support for both active-duty and gained forces. Approximately 900 personnel are in the unit. (Note: the 940th was slated to relocate from McClellan to nearby Beale AFB in late 1994. As of 3 April 1995, that move has yet to be undertaken.)

Defense Distribution Depot, McClellan (DDMC). Operated by DLA, DDMC stocks, stores, and issues defense goods. Categorized as a Collocated Depot, the DLA operation interfaces closely with the SM-ALC depot maintenance activity by providing repairable carcasses to the ALC which, in turn, returns the items to serviceable status and

⁵Military Operating Area (MOA) with a minimum size of 2100 square nautical miles (NM) and an altitude block of at least 20,000 feet within 200 NM. Low-altitude MOA with a minimum size of 2100 square NM and a floor no higher than 2000 feet above ground level (AGL) within 600 NM. Supersonic MOA with a minimum size of 4200 square NM within 300 NM. Scorable gunnery range capable of or having tactical or conventional targets and strafe within 800 NM.

re-enters them into the DLA distribution system. It employs approximately 600 personnel.

Defense Megacenter, Sacramento (DMCS). Identified in BRAC 93 as the site for one of 16 DoD data processing and telecommunication "megacenters" to be operated under the umbrella of DISA, DMCS is responsible for data processing workloads for the Navy, Air Force, and Air National Guard in a region encompassing Northern California, Oregon, and Washington. DMCS has approximately 150 employees working out of a recently constructed 76,000-square-foot facility that serves regional data processing requirements and houses the only DISA Continental US (CONUS) AUTODIN switching center west of Oklahoma.⁶

2.1.3 Relationship to Local Community

McClellan AFB is located in the Sacramento Metropolitan Statistical Area (MSA). Total population (FY 92) is 1,148,000. Total employment (FY 93) is 764,000. Average annual job growth is 14,000 and average annual per capita income is \$20,400.

Work force population at McClellan:

Active duty military	3,000
Reserve military	1,200
Civilian	<u>10,600</u>
Total	14,800

McClellan AFB is the largest industrial employer in Northern California. The work force annual payroll (military and civilian) is \$516 million. This produces a local area economic impact of approximately \$2.2 billion. The total value of McClellan's land (3,786 acres), buildings (549 non-residence and 693 residence), and infrastructure is estimated at \$2.2 billion.⁷

The estimated impact of base closure would be the loss of 31,000 jobs (13,000 direct, 18,000 indirect), 4.1% of the Sacramento MSA employment total. Combined with other Sacramento MSA job losses from prior BRAC decisions (1,600 jobs), the cumulative impact of McClellan's

⁶During BRAC 93, the Commissioners identified 43 DISA information processing centers for closure with their workloads to be consolidated at 16 megacenters.

⁷This is the value figure reflected in documents released recently by the base Public Affairs Office. While no detailed explanation was offered as to how this estimate was reached, it most probably is a more accurate reflection of *market value* than the figures presenting *replacement value* shown in the chart at Attachment 1, *Air Force Depot Capacity/Plant Comparisons*, which were provided in response to the Joint Cross-Service Group data call.

closure in BRAC 95 (if closure was directed) would be to increase the total employment loss to 4.3% of the Sacramento MSA's total.

It is estimated that the one-time closure costs associated with shuttering McClellan AFB would amount to \$514 million. Return on investment would be achieved in 5 years.

2.2 Sacramento ALC Depot

While the F-111 and A-10 are Sacramento ALC's primary assigned aircraft, the depot also provides a second source of repair for the F-15 and KC-135, and has been designated to assume responsibility for the F-22 when that aircraft begins entering service at the turn of the century. The F-117 and F-22 Program Managers are located at the depot. Additionally, Sacramento ALC manages a broad variety of: aircraft-related electronic accessories, hydraulic/pneudraulic components, and flight control instruments; battle tank and man-portable weapon system electronic components and electro-optics (night vision devices); and over 200 ground communications systems, including ground control equipment used to track and control space vehicles. It operates the McClellan Nuclear Radiation Center (MNRC), which has the only industrial nuclear reactor in DoD, and a fighter-sized non-destructive inspection (NDI) facility that reportedly is one of the most comprehensive in the US.

DoD's submission to the 1995 Base Realignment and Closure (BRAC 95) Commission proposed realigning workloads among the Air Force depots to consolidate selected specialties at each. The specialty areas recommended for consolidation at Sacramento ALC are: composites and plastics, hydraulics, instruments/displays (with some unique work retained at other ALCs), electrical/mechanical support equipment, and injection molding.

2.2.1 Specialization

Sacramento ALC is designated a *Service Center of Excellence* for the following systems:

Aircraft Airframes: F-111, A-10, T-39, F-22 (planned); Aircraft Battle Damage Repair.

Aircraft Components (Hydraulic/Pneudraulic): actuators, servo actuators, accumulators, valves, servo valves, cylinders, motors, manifolds, pumps, control boxes, servo dampers, dash pots, reservoirs, gearboxes, brake assemblies, snubber assemblies, filter assemblies, compensators, fan assemblies, mode selector assemblies, and pitch control ratio assemblies.

Aircraft Components (Instruments): accelerometers, altimeters, transducers, central air data computers, flight data recorders, attitude indicators, horizontal situation indicators, stall warning, position transmitter indicators, cockpit voice recorders, standard flight data recorders, and crash survivable flight data recorders.

Aircraft Components (Avionics/Electronics): airborne generators, generator control units, control panels, voltage regulators, inverters, frequency converters, power supplies, battery chargers, motors, aircraft linear/rotary actuators, aircraft screw jacks, winches, gear boxes, miscellaneous electro-mechanical devices, and accessories.

Ground Communications and Electronic Equipment (Radar, Radio, Wire): peculiar C3I test equipment; various radio, television, communications, and navigation systems; indicator group; computer group; search radar equipment; electronic countermeasures equipment; meteorological instruments and apparatus; radar training devices; automated data processing equipment; and computer central processing units.

Ground Communications and Electronic Equipment (Electro-optics/Night Vision Equipment): common power control units, electronics units, M-1 power control unit, laser rangefinders, driver viewers, M-1 thermal imaging system, tank thermal sight, integrated sight unit, man-portable common thermal night sights, ground laser target designators, ground vehicular laser locator/designators, individual and crew-served weapons night sights, night vision goggles, and aviator night vision imaging systems.

Ground General Purpose Items (Ground Power Generators): 5-to-200 kilowatt gasoline, diesel, and turbine powered stationary and mobile generator units for ground communications, bare base operations, forward air control use, disaster relief requirements, and any other need for routine or emergency AC electrical power.

Ground General Purpose Items (Other): Rigid wall shelters.

Sacramento ALC has the following *Technology Application Program Management* assignments:

Fiber optics and fiber optic connectors
Micro-electronics [Very high speed integrated circuits (VHSIC)]
Advanced composites

2.2.2 Unique Facilities/Equipment/Capabilities

SM-ALC officials have identified the following facilities, equipment, and/or capabilities as unique to the depot:

F-111 Cold Proof Facility. This is the only certified F-111 structural test facility in existence. It is an 8500 square foot (SF) enclosed environmental chamber used for testing F-111 aircraft in a flight simulation environment. Aircraft airframes are stressed on a wing fixture at sweep angles of 26 and 54 degrees, from -3G to +7G, at temperatures down to -40° (produced by a complex system for vaporizing liquid nitrogen), to detect

catastrophic structural failures. The chamber also has an advanced acoustic system capable of detecting secondary failures, such as popped rivets, broken bolts, and cracked panels.

McClellan Nuclear Radiation Center (MNRC). The MNRC is the only reactor facility in the Air Force and is the only DoD licensed source for providing Neutron Transmutation Doping for silicon use in the semiconductor industry. It is a 4500 SF facility with heavy radiation shielding for the one megawatt research-type reactor. It is used to perform neutron radiography of aircraft structures for non-destructive inspection (NDI) purposes, to assess the survivability of electro-optic components in nuclear and space environments, and for related general testing purposes.

NDI Facility. In conjunction with the MNRC, this reportedly is the most comprehensive fighter-sized NDI facility in the defense industry. It has 8000 SF of heavily shielded production space with state-of-the-art equipment for NDI using x-ray, ultrasound, mag particle, dye penetrant, and eddy current techniques. It includes robotic and conventional applications and can be used to inspect an entire aircraft as well as components.

Near-Field Test Range with 1000-meter Tower, Near Field Probe, and Munson Test Track. This complex of related facilities is used for testing the Army's TPQ-36/37 *Fire Finder* phased array radar. Transferred from the Sacramento Army Depot, it includes a 3900 SF close-tolerance anechoic chamber with precision alignment rails for positioning the radar in the chamber to calibrate near range beam pattern. The tower provides provides target simulation. The test track is a military-specification (mil-spec) designed bumpy road simulating rough terrain which is used to stress the *Fire Finder* system between burn-in and final calibration. While this complex is the only DoD test facility, Hughes is the system prime contractor and reportedly has duplicate or comparable capability.

Hydraulics/Pneudraulics Component Repair Complex. Claimed to be the most advanced facility of its kind in the world, this complex provides the largest aircraft-related hydraulic and pneudraulic overhaul and repair capability in DoD. It consists of 3 modern buildings with 186,000 SF of production space designed to provide unique power, fluid, and air systems. It has five separate hard-plumbed hydraulic manifold systems with 4000 psi working pressure proofed to 6000 psi, thousands of feet of stainless steel piping, and 70 hydraulic test stands. The facility has controlled temperature/humidity and sustains a 300,000 class air particle clean room environment, and includes a 100,000 class metrology lab and 100,000 class laminar flow stations. It has a computer operated mechanized material handling system, precision lapping equipment, and precision measuring equipment. Its high tolerance **Flow Grind** capability with specialized grinding equipment is believed to be world-class.

Air Force Ground Communications Electronics Overhaul and Repair Complex. The complex consists of 14 separate buildings with some 473,000 SF of production space used to manufacture, overhaul, repair, modify, integrate, and test systems ranging from hand-held radios to computer integrated radar systems. Two of the larger facilities in the complex, with 75,000 SF each, are special reinforced steel structures with filtered power, special security, and TEMPEST shielding. These are used for the insertion of advanced microelectronic technologies into fielded systems. Special skills and equipment are used to perform depot maintenance on several broad categories of systems. **Ground Communications** systems include LF/HF/VHF/UHF radios, troposcatter systems, microwave systems, and ground-based jammers. **Air Traffic Control and Navigation** systems include ILS, PAR, TACAN, and VOR equipment. **Radar** systems

include phased array and feedhorn types, fixed site and mobile equipment, height-finder, search, three-dimensional, and over-the-horizon backscatter sets. **Meteorology** systems include storm-tracking radars, satellite tracking systems, and weather forecasting equipment. **Miscellaneous** systems include microwave, electronic imagery, sensors, copy exploitation, and electronic warfare training devices. The complex also deals with **IFF** equipment, along with **Telephone and Teletype** systems. Under these broad categories, the complex works on components ranging from computers and television monitors to antennae and control systems for launching unmanned orbiters.

Aircraft Instrument and Electronic Component Facility. This 90,000 SF facility provides for the test and repair of the full range of pressure, temperature, humidity, time measurement, flight control and navigational instruments, and flight data recorders. Special competencies exist for reverse engineering (logistics retrofit engineering, or LRE), repair of unsupportable electronic equipment, large wire harness test automation, specialized test equipment manufacture, test system overhaul process development, and military-standard technical manual development.

Ground Power Generator and Engine Test Facility. This facility has a dynamometer test capability of up to 500 kilowatts to support work on ground power generators for all Air Force aircraft and ground support systems.

Laser Test Bed and Outdoor Laser Range. This complex houses the only test and calibration equipment of its kind and provides the capability to align hand-held and tank laser systems and laser-designating equipment. The equipment is readily relocatable.

AN/FPS-117/-118 Integrated Logistics Support Facility (ISF). This 3700 SF facility houses a reconfigurable phased array 592-class radar system that is used to test multiple separate production versions of the item.

Sacramento Injection Molding Facility. This reportedly is the largest facility of its kind in DoD and provides a test and development arena for the resolution of problems relating to composites and plastics. It manufactures parts using up to 20 pounds of material on dies up to 4 feet square. (A similar facility at Ogden ALC is limited to 16 ounces of material on dies no more than 16 inches square.)

Additional unique facilities/capabilities include:

F-111 Radome Test

ISF for Modular Control Equipment (MCE) (TYQ-23)

ISF for Communications Nodal Control Element (CNCE) (TSQ-111)

Electronic Warfare ISF (806L System)

ISF for Ground Wave Emergency Network (GWEN and COMSEC)

A-10/F-111 Avionics Integrated Support Facility

Electro-Optics and Night Vision (image intensification, thermal imagery, and lasers)

Optical Measurement System (laser mapping of parts)

2.2.3 Workload

The following table presents a breakout of the Sacramento ALC workload -- by DoD commodity group -- for FY 96 and FY 99. An explanation of the workload table is provided at Attachment 7.

Sacramento ALC Workload Chart
(In Thousands of Direct Labor Hours -- kDLH)

Relevant Commodity Groups	Potential Maximum Capacity		Existing Capacity		Programmed Total Workload		Programmed Core Workload	
	FY96	FY99	FY96	FY99	FY96	FY99	FY96	FY99
1. Aircraft Airframes								
c. Fixed Wing								
(1) Tanker / Transport / Bomber	945	983	809	819	636	570	441	441
(2) Command and Control								
(3) Light Combat	1,456	1,520	1,442	1,460	1,181	1,056	835	907
(4) Admin / Training								
d. Other	162	164	--	--	--	--	--	--
2. Aircraft Components								
b. Aircraft Structures	668	525	226	229	175	157	175	157
c. Hydraulic / Pneumatic	737	815	483	492	400	358	357	357
d. Instruments	524	542	278	281	215	193	215	193
e. Landing Gear								
f. Aviation Ordnance								
g. Avionics / Electronics	781	870	449	457	373	334	344	334
h. APUs								
i. Other								
j. Manufacture and Fabrication	853	720	590	513	460	354	460	354
3. Engines (Gas Turbine) (GTE)								
a. Aircraft								
c. Blades / Vanes								
4. Missiles and Missile Components								
a. Strategic								
b. Tactical / MLRS								
7. Ground Comm-Electronic Equip								
a. Radar	1,226	1,235	715	702	481	430	383	430
b. Radio Communications	679	734	336	340	231	207	177	177
c. Wire Communications	230	233	202	214	144	129	80	118
d. Electronic Warfare	10	7	--	--	--	--	--	--
e. Navigation Aids	482	501	276	279	190	170	165	165
f. Electro-optics/Night Vision Equip	167	215	157	180	127	109	127	109
g. Satellite Control/Space Sensors	184	186	171	173	117	105	32	32
10. Ground General Purpose Items								
c. Munitions / Ordnance								
d. Ground Generators	111	113	100	101	94	84	62	62
e. Other	66	61	66	61	66	59	--	--
12. Software								
a. Tactical Systems	455	452	397	401	323	289	211	211
b. Support Equipment	453	358	325	328	264	237	184	184
13. Special Interest Items								
a. Bearings Refurbishment								
c. TMDE								
14. Other	37	37	37	37	32	29	--	--
Total	10,227	10,271	7,058	7,068	5,509	4,871	4,249	4,231

Table 2-1: Sacramento ALC Workload Chart

3.0 Ogden ALC (OO-ALC)

Ogden ALC is DoD's primary depot for the repair and overhaul of aircraft landing gear, brakes, struts, and wheel assemblies, performing some 70 percent of the total DoD workload in this area. It is the Air Force's F-16 and C-130 depot, and provides the sole current source of repair for *Minuteman* and *Peacekeeper* silo-based intercontinental ballistic missiles (SBICBM). The center also conducts overhaul, modification, testing, and support functions for a wide range of other components, including rocket motors, small missiles, air munitions and guided bombs, photonics imaging and reconnaissance equipment, and simulators and training devices. Additionally, Ogden ALC has responsibility within DoD for developing and fielding new photonics, software, and reliability and maintainability (R&M) practices and standards.

3.1 Hill AFB, Utah

Hill AFB is an AFMC-operated installation located approximately eight miles south of Ogden, Utah, on the northern outskirts of Salt Lake City, the state's capital and major metropolitan center. It has ready access to the main railroad line running into San Francisco from the East Coast, and sits near the junction of Interstate 15, one of the primary north-south arteries in the Rocky Mountain region (extending from Calgary, Alberta, to San Diego), Interstate 84, a principal roadway linking Salt Lake City with Portland, Oregon, and Interstate 80, extending to the San Francisco Bay area. Portland and Oakland are the nearest deep-water ocean ports. Both are approximately 750 miles away and accessible by rail and highways. Hill AFB is within 750 air miles of any point along the US Western coastline.

3.1.1 Field and Facilities

Hill AFB has one 13,500-foot concrete runway with appropriate aircraft arresting gear and over 472,000 square yards (approximately 97 acres) of usable aircraft parking apron. Permanently assigned aircraft require over 87 percent of the apron space. Seven C-141- equivalent aircraft can be loaded or unloaded at one time for mobility/contingency operations.⁸ Twenty C-141- equivalent aircraft can be refueled at one time. The base has an operational fuel hydrant system.

⁸The limiting factor is material handling equipment (MHE).

The base currently controls the Utah Test and Training Range (UTTR), which includes both Restricted and MOA airspace.⁹ The range begins approximately 40 NM west of the base and encompasses over 17,000 square miles of airspace, the largest overland block of controlled airspace in DoD. With 2675 square miles of surface area, it provides full-scale weapons delivery capability for most air-to-surface and surface-to-surface weapons, and some air-to-air weapons. In conjunction with the Army's adjacent Dugway Proving Grounds, it offers almost 4000 square miles of impact area, a four-season climate, and terrain that varies from the 4300 foot desert floor to 12,000 foot mountains, making it ideal for the testing of cruise missiles. The range can accommodate most special weapons and has electronic warfare capability.

The nearest suitable special-use airspace¹⁰ is as shown below:

Warning/Restricted/MOA:	UTTR	90 NM
Low Altitude MOA:	UTTR	90 NM
Supersonic MOA:	Austin/Gabbs CN	246 NM
Scorable gunnery range complex:	Eagle/UTTR	50 NM
Electronic Combat range:	Kittycat/UTTR	71 NM
Air combat maneuvering instrumentation range:	UTTR	97 NM

Hill AFB is the sole AFB within the state of Utah. Mountain Home AFB, Idaho, is the next closest one at 205 miles away. The nearest ground force installation where joint training can be accomplished is Army Camp W. G. Williams, 42 NM from Hill. The nearest Navy installation where joint training can be conducted is NAS Fallon, 325 NM from Hill.

3.1.2 Major Tenants

Major associate units on Hill AFB include: 545th Test Group, AFMC; 388th Fighter Wing (FW), Air Combat Command (ACC); 419th Fighter Wing FW, AFRES; and Defense Distribution Depot, Ogden (DDHU), DLA.

545th Test Group. Manages operation of the UTTR. This responsibility includes the scheduling of training and test sorties for all military services along with the testing of munitions and rocket propellants.

⁹ Under DoD's recommendations for BRAC 95, AFMC would transfer management responsibility for operating the UTTR to Air Combat Command (ACC). While range availability could be reduced somewhat, the transfer would have little overall impact on Ogden ALC activities.

¹⁰MOA with a minimum size of 2100 square nautical miles (NM) and an altitude block of at least 20,000 feet within 200 NM. Low-altitude MOA with a minimum size of 2100 square NM and a floor no higher than 2000 feet above ground level (AGL) within 600 NM. Supersonic MOA with a minimum size of 4200 square NM within 300 NM. Scorable gunnery range capable of or having tactical or conventional targets and strafe within 800 NM.

388th FW. The 388th FW is part of the 12th Air Force, one of the four NAFs included in ACC. The 388th commands three operational squadrons of Block 50 F-16 fighter aircraft and is one of the Air Force's premier combat deployment units.

419th FW. The 419th FW is part of the 10th Air Force, which is one of three NAFs comprising the AFRES. The Wing includes the 466th Fighter Squadron (FS) operating F-16 aircraft at Hill and the 944th Fighter Group (FG) operating F-16 aircraft at Luke AFB.

Defense Distribution Depot, Ogden (DDHU). Operated by the DLA, DOHU receives, stores, and transports defense goods. It works closely with the OO-ALC depot maintenance activity by providing indoor and outdoor storage, packaging, and transportation functions for all non-explosive *Minuteman* and *Peacekeeper* missile assets. Approximately \$7 billion in goods are stored in over 3 million square feet of covered and open storage space. It employs approximately 1,100 personnel and is one of the 25 DLA depots remaining after 4 were earmarked for closure in BRAC 93. (Note: DDHU is one of four DLA depots DoD has recommended for closure in BRAC 95.¹¹)

3.1.3 Relationship to Local Community

Hill AFB is located in the Salt Lake City-Ogden MSA. Total population (FY 92) is 1,127,000. Total employment (FY 93) is 659,500. Average annual job growth is approximately 15,000, and average annual per capita income is \$16,900.

Work force population at Hill:

Active duty military	4,700
Reserve military	1,250
Civilian	<u>15,200</u>
Total	21,150

Of this total, approximately 10,400 (1,900 military and 8,500 civilian) work in the OO-ALC depot.

Hill AFB is the single largest basic employer in Utah. The work force annual payroll (military and civilian) is \$510 million. This produces an annual local area economic impact of

¹¹ DoD has recommended that DDHU be disestablished and all DLA activity there cease except for the operation of a 36,000 square foot cantonment for Army Reserve personnel. The decision is supported on the basis of declining storage requirements at the facility and the need to reduce infrastructure within the DLA. The other three Defense Distribution Depots recommended for closure in BRAC 95 include Memphis, Tennessee; Letterkenny, Pennsylvania; and Red River, Texas. DLA depots selected for disestablishment in BRAC 93 included: Charleston, South Carolina; Tooele, Utah; Oakland, California; and Pensacola, Florida. A DoD proposal to close the depot at Letterkenny, Pennsylvania, at that time was rejected by the BRAC Commission.

approximately \$1.7 billion. The total value of Hill's land (6,698 acres), buildings (1,475 residence and non-residence), and infrastructure is estimated at \$8 billion.¹²

The total estimated impact of base closure would be the loss of approximately 33,500 jobs (14,700 direct, 18,800 indirect), 5.1% of the Salt Lake City-Ogden MSA employment total. Considering other Salt Lake City-Ogden MSA job adjustments from prior BRAC decisions (1,500 jobs added as a result of consolidations in BRAC 93), the impact of Hill's closure in BRAC 95 (if closure was directed) would amount to 4.8% of the MSA total.

It is estimated that the one-time closure costs associated with shuttering Hill AFB would amount to \$1.4 billion. Return on investment would be achieved in 30 years.

3.2 Ogden ALC Depot

In addition to Ogden ALC's responsibility for landing gear, wheels, and brakes, the depot provides worldwide engineering and logistics management for the F-16, involving over 3,000 aircraft flown by 21 countries. It also maintains the C-130 and F-4, and provides extensive support for the Navy/Marine F/A-18. The center conducts overhaul, modification, testing, and support functions for a wide range of other aircraft components, including ejection seats, 20MM guns, ram air turbines, electrical/mechanical instruments, and missile launchers. Its proximity to the UTTR facilitates the depot's execution of its responsibilities for the US SBICBM fleet. Several of OO-ALC's facilities are located at Oasis on the UTTR, permitting the test, maintenance, and disposal of ICBM rocket motors/components under isolated conditions.

DoD's submission to the BRAC 95 Commission proposed realigning workloads among the Air Force depots to consolidate selected specialties at each. The specialty areas recommended for consolidation at Ogden ALC are: airborne electronic automatic equipment software, sheet metal repair and manufacturing, foundry operations, unique work with instruments/displays, airborne electronics, and plating.

3.2.1 Specialization

Ogden ALC is designated a *Service Center of Excellence* for the following systems:

¹²See Attachment 1, *Air Force Depot Capacity/Plant Comparisons*, Note 9, on *market value versus replacement value*.

Aircraft Components (Hydraulic/Pneudraulic): ram air turbines, missile control hydraulic actuation systems, LGM-30 (*Minuteman*) shock isolator.

Aircraft Components (Instruments): electrical/mechanical instruments, multi-function displays, and pressure/temperature/humidity/navigational instruments.

Aircraft Components (Landing Gear): wheels, brakes, struts, and related components for approximately 70 percent of DoD's landing gear inventory in all aircraft categories, including transport/tanker/bomber, command and control, light combat, and admin/training.

Aircraft Components (Aviation Ordnance): ejection seats, egress systems, 20- and 30-millimeter guns, missile launch control systems, gun racks, external fuel tanks, bomb racks, adapters, and pylons.

Aircraft Components (Other): photographic/reconnaissance/imaging equipment and physiological trainers.

Missiles and Missile Components (Strategic): LGM-30 (*Minuteman*) and LGM-118 (*Peacekeeper*) launch and launch control facility electronic equipment and flight control units, ground transportation and handling equipment, ground support equipment, rocket motors, cables, and pyrotechnic switches.

Missiles and Missile Components (Tactical): *Maverick*, *Sidewinder*, Short-Range Attack Missile (*SRAM*), Air Launched Cruise Missile (*ALCM*), Advanced Cruise Missile, *Paveway I* and *II*, GBU-15 Laser Guided Bombs (LGB), missile guidance control units, electro-optical, infrared, laser, and TV seeker control sensors, signal processing units, and missile test sets.

Ogden ALC has the following *Technology Application Program Management* assignments:

Photonics
Software Support Technology
Reliability and Maintainability Engineering

3.2.2 Unique Facilities/Equipment/Capabilities

OO-ALC officials have spotlighted the following facilities, equipment, and/or capabilities as unique to the depot:

Strategic Missile Integration Complex. This 5-building, 3-silo, 58,000 SF complex is one-of-a-kind within DoD. It is the only DoD facility capable of simulating launch scenarios with 90' vertical below-ground silos constructed to meet *Minuteman* and *Peacekeeper* silo hardness and operational requirements. The test site is a replica of an operational site and includes capsule and control equipment and interfaces, buried antenna systems, power and air supplies, and high-stress approach roads. Construction meets TEMPEST classified data processing and physical security requirements. Sensitive ICBM guidance system instruments and equipment are isolated by a large concrete seismic mass.

Survivability and Vulnerability Integration Center. This is a 4-building, 81,000 SF complex dedicated to the simulation testing of nuclear hardness, survivability, reliability, and electromagnetic compatibility of defense systems. The facilities simulate six environments required to test weapon system specifications such as those required for *Minuteman* and *Peacekeeper*. The environments include: nuclear radiation, provided by flash x-ray machines and a linear accelerator; airblast, provided by a blast load generator capable of simulating nuclear overblast pressures in excess of 1000 psi on buried structures; shock and vibration, provided by an eight-shaker triaxial system capable of supporting a 5000 pound test article; in-flight shock and vibration profiles, provided by the vibration facility; electromagnetic pulse events, provided by a laser triggered pulser of various waveform and energy capabilities; and electromagnetic interference (EMI) and compatibility testing, provided by EMI generators and fiber-optic instrumentation equipment in a large anechoic chamber simulating free space.

Missile Motor Dissection and Propellant Analysis Facilities. These include various specialized structures, pits, test stands, and buildings at Hill AFB and at Oasis on the UTTR, and offer DoD's only solid propellant NDI capability for motors associated with both small tactical missiles and large ICBMs. The facilities meet stringent explosive safety clear zone quantity distance requirements, combine heavy explosive shielding with patterned frangibility, and contain remote propellant machining equipment for motor repair. The **Computed Tomography Facility** provides extensive radiation containment and has a power source capable of generating energy levels from 11 to 15 million electronvolts, an output that is 14 to 36 times greater than other DoD computed tomography systems. The **High Energy X-Ray Facility** reportedly is the only such facility sited for explosives and is rated for 1,000,000 pounds of 1.3 class and 100,000 pounds of 1.1 class. **Static Test Pads** accommodate vertical and horizontal static rocket motor firing in environmentally controlled facilities.

Thermal Treatment Unit. This encompasses a 21,000 SF facility on a 21,000 acre remote site and is the only environmentally licensed propellant disposal site capable of disposing of *Minuteman* and *Peacekeeper* solid rocket motor propellants.

Automated Landing Gear Repair Facility. This is a 377,000 SF structure specifically designed to facilitate maximum efficiency in the overhaul, repair, modification, and testing of all-Service landing gear and gear components ranging in size from the small T-38 nose gear to the massive main gear trucks of the C-5. It is fully automated and includes such features as 12 foot minimum clearance jib cranes, outside dip and plating tanks, an overhead hoist system designed to load components from the largest gear systems onto machinery such as grinders, lathes, and hones, and walk-in continuous flow throughput ovens.

Photographic Image Quality Test and Cartographic Camera Calibration Facilities. These are multi-storey facilities for testing aerial photoreconnaissance and space-based sensors. All but the top floor are underground for enhanced vibration isolation and security. The **Quality Test** facility provides a single source of repair for sensitive imagery systems using multiple off-axis parabolic mirror collimators. The **Cartographic Camera Calibration** facility uses 121 collimators to calibrate cameras used for cartographic purposes.

Tactical Missile All-Up-Round Maintenance Facility. This explosive certified structure permits testing and repair of multiple fully loaded and fueled tactical missiles such as the *Maverick*.

Avionics Integrated Support Facility. With 144,000 SF, this facility is unique in both design and location. The entire facility is essentially a secure vault, radio frequency bonded, fenced, and requiring security code access. It houses a sensitive compartmented information facility (SCIF), radar anechoic chambers, software testing laboratories, storage libraries and workspace, and was designed to allow a full range of testing without transfer of electronic emanations into or out of the building. The facility has engineering laboratories for the development, test, and integration of software and hardware for the F-4, F-16, *Minuteman*, *Peacekeeper*, and the Air Force Mission Support System.

Additional unique facilities/capabilities include:

***Peacekeeper* and *Minuteman* Missile Storage and Repair Facility**
Missile Support Equipment Repair Facility
Compass Transmitter and Magnetic Azimuth Detector Test Facility
Underground 20MM Automatic Gun Test Firing Facility
F-16 Emergency Power Unit Test Facility
Ram Air Turbine Wind Tunnel
***Maverick/Sidewinder* Missile Guidance & Control Section Test/Repair Facilities**
Advanced Cruise Missile Imaging Radar System Test Facility
Hot Site Computer Recovery Facility
Cartridge Activated Device and Munitions Surveillance Testing Facilities
Cold/Heat Soak for *Minuteman* Motors
Lithium Battery Storage/Disposal
Physiological Trainer (Altitude Chamber) Maintenance and Repair
Fighter-Size Aircraft Robotics Bead Blast Stripping
Fighter-Size Aircraft Laser Automated Decoating System
Robotic Canopy Polisher
Investment Casting
Airborne Reconnaissance Overhaul Capability (Photo and Electro-Optical Sensors)
Optical Refurbishment Overhaul Capability
Imaging System Overhaul Traveling Teams
Software Technology Support Center
Neural Engineering and Self-Organizing System

3.2.3 Workload

The following table presents a breakout of the Ogden ALC workload -- by DoD commodity group -- for FY 96 and FY 99. The only commodity groups displayed in the table are those for which one or more of the five ALCs has a workload commitment. An explanation of the workload table is provided at Attachment 6.

Ogden ALC Workload Chart
(In Thousands of Direct Labor Hours -- kDLH)

Relevant Commodity Groups	Potential Maximum Capacity		Actual Capacity Projection		Total Workload Projection		Total Core Workload Projection	
	FY96	FY99	FY96	FY99	FY96	FY99	FY96	FY99
1. Aircraft Airframes								
c. Fixed Wing								
(1) Tanker / Transport / Bomber	469	469	469	469	631	543	631	543
(2) Command and Control								
(3) Light Combat	1,870	1,870	1,381	1,381	849	691	809	691
(4) Admin / Training								
d. Other								
2. Aircraft Components								
b. Aircraft Structures	311	311	311	311	234	241	170	241
c. Hydraulic / Pneumatic	41	41	41	41	13	13	13	13
d. Instruments	192	192	192	192	105	124	105	124
e. Landing Gear	1,028	1,028	1,028	1,028	514	488	514	488
f. Aviation Ordnance	419	419	419	419	138	104	138	104
g. Avionics / Electronics	812	812	511	511	389	430	389	430
h. APUs	89	89	89	89	27	29	27	29
i. Other	1,103	1,103	492	492	238	256	162	180
j. Manufacture and Fabrication	63	63	74	74	76	76	76	76
3. Engines (Gas Turbine) (GTE)								
a. Aircraft	101	101	101	101	122	146	9	102
c. Blades / Vanes								
4. Missiles and Missile Components								
a. Strategic	746	746	746	746	715	674	715	674
b. Tactical / MLRS	569	569	569	569	170	181	136	181
7. Ground Comm-Electronic Equip								
a. Radar								
b. Radio Communications								
c. Wire Communications								
e. Navigation Aids								
f. Electro-optics/Night Vision Equip								
g. Satellite Control/Space Sensors								
10. Ground General Purpose Items								
c. Munitions / Ordnance								
d. Ground Generators								
e. Other	103	103	103	103	110	120	110	120
12. Software								
a. Tactical Systems	755	755	755	755	664	653	664	653
b. Support Equipment	313	313	313	313	221	214	221	241
13. Special Interest Items								
a. Bearings Refurbishment	20	20	20	20	5	5	5	5
c. TMDE								
14. Other								
Total	9,005	9,005	7,614	7,614	5,221	4,988	4,895	4,895

Table 3-1: Ogden ALC Workload Chart

4.0 Oklahoma ALC (OC-ALC)

Oklahoma City ALC is the Air Force's primary center for the repair and maintenance of tanker and bomber aircraft, including the KC-135 and B-52. The depot also administers an inventory of over 17,000 aircraft and missile jet engines, ranging from the Korean War vintage J33 engine used with T-33 trainer aircraft to the advanced F118 used in the B-2 and the F107 and F112 used in cruise missiles. Matching its advanced capabilities in engine commodities and structural components, OC-ALC holds responsibility within DoD for fostering development in the areas of mechanical systems and nuclear hardness and survivability.

4.1 Tinker AFB, Oklahoma

Tinker AFB is an AFMC-operated installation located on the southeast edge of Oklahoma City, Oklahoma. As well as the state's metropolitan center and regional transportation hub, Oklahoma City is the both state's largest city and seat of government. Tinker AFB is accessible to one of the major rail systems crossing the southern US, and it sits at the intersection of two key interstate highways. Entrances to the base are on Interstate 40, the transcontinental artery extending from Wilmington, North Carolina to the Los Angeles metropolitan area. Nearby is Interstate 35, a central north-south freeway linking Duluth, Minnesota, with Laredo, Texas, a primary North American Free Trade Agreement (NAFTA) gateway into Mexico. The base is approximately 460 miles from deep-water ports on the Gulf of Mexico. Strategically located 200 miles south of the geographic center of the US, Tinker is within 1200 miles of 134 DoD and 56 Air Force installations. This location is about a day and a half by truck from most US cities.

4.1.1 Field and Facilities

Tinker AFB has two active runways. The primary is 11,100 feet long and is composed of both asphalt and concrete while the secondary is approximately 7,800 feet long. There are 705,652 square yards (approximately 146 acres) of usable aircraft parking apron, and permanently assigned aircraft require nearly 64 percent of the apron space. Six C-141- equivalent aircraft can be loaded or unloaded at one time for mobility/contingency operations.¹³ Ten C-141- equivalent aircraft can be refueled at one time. The base has an operational fuel hydrant system.

¹³The limiting factor is material handling equipment (MHE).

The base does not control or manage any ranges. The nearest suitable special-use airspace¹⁴ is as shown below:

Warning/Restricted/MOA:	None	
Low-altitude MOA:	O'Neill	394 NM
Supersonic MOA:	None	
Scorable gunnery range complex:	Falcon	79 NM
Electronic Combat range:	Razorback	162 NM
Air combat maneuvering instrumentation range:	Gulfport MDS	566 NM

The nearest Active Duty Air Force units are Vance AFB and Altus AFB, both Air Education and Training Command (AETC) bases located approximately 100 NM from Tinker. The closest ground force installation where joint training can be accomplished is Army Fort Sill, 68 NM from the base. The nearest Naval Unit where joint operational training could be accomplished is NAS Dallas, approximately 200 miles south. At Tinker itself, however, the Navy bases key components of its TACAMO (Take Charge and Move Out) command and control operation, including Fleet Air Reconnaissance Squadrons Three and Four of the Navy's Strategic Communications (STRATCOMM) Wing One.

4.1.2 Major Tenants

Major associate units on Tinker AFB include: 552nd Air Control Wing (ACW), ACC; 507th ARG, AFRES; Navy STRATCOMM Wing One; Defense Distribution Depot Oklahoma City (DDOO), DLA; and Oklahoma City Megacenters (DMCO), DISA.

552nd Air Control Wing. The 552nd ACW is part of 12th Air Force, one of the four NAFs under ACC. As part of the ACC's mobile strike force, the 552nd flies E-3 AWACS (Airborne Warning and Control System) aircraft with radar and other sensors to provide deep-look surveillance, warning, interception control, and airborne battle management. Tinker AFB contains the operator, source of repair for engine and airframe components, and support manager for the Wing. All USAF AWACS training also is conducted at Tinker.

507th ARG. As Oklahoma's only AFRES flying unit, the 507th commands the 465th Air Refueling Squadron (ARS) operating KC-135 aircraft at Tinker. (The unit formerly operated F-16s.) It is part of the 4th Air Force, one of the three NAFs comprising the AFRES. Oklahoma City ALC is the Wing's primary source of depot maintenance.

¹⁴MOA with a minimum size of 2100 square nautical miles (NM) and an altitude block of at least 20,000 feet within 200 NM. Low-altitude MOA with a minimum size of 2100 square NM and a floor no higher than 2000 feet above ground level (AGL) within 600 NM. Supersonic MOA with a minimum size of 4200 square NM within 300 NM. Scorable gunnery range capable of or having tactical or conventional targets and strafe within 800 NM.

Navy STRATCOMM Wing One. This one-of-a-kind-unit in the Navy operates out of Tinker because of its central location. Fleet Air Reconnaissance Squadrons Three and Four fly E-6 TACAMO aircraft to provide a secure communications link from the National Command Authorities and Joint Chiefs of Staff to the Navy's Ballistic Missile Submarine fleet. Air Force airframe artisans perform depot maintenance on the E-6 airplanes in Navy hangars while sailors perform field level work. Almost 1200 military and civilian personnel are assigned to the organization.

Defense Distribution Depot, Oklahoma City (DDOO). Operated by the DLA, DDOO receives, stores, issues, inspects, and ships defense goods, with the exception of munitions, for Tinker AFB. This activity includes material quality control, preservation and packaging, inventory, and transportation functions. It employs approximately 1100 personnel, nearly all civilian.

Defense Megacenter, Oklahoma City (DMOC). Identified in BRAC 93 as the site for one of 16 DoD data processing and telecommunication "megacenters" to be operated under the umbrella of the DISA, DMOC operates computer systems for Tinker and manages data processing workloads of 110 additional bases in 46 states. It employs 245 personnel, all civilian.

4.1.3 Relationship to Local Community

Tinker AFB is located in the Oklahoma City, Oklahoma MSA. Total population (FY 92) is 981,000. Total employment (FY 93) is approximately 583,000. Average annual job loss is 1,265, and average annual per capita income is \$17,640.

Work force population at Tinker:

Active duty military	7,400
Reserve military	235
Civilian	<u>14,400</u>
Total	22,035

Tinker AFB is Oklahoma's largest single-site employer. The work force annual payroll (military and civilian) is \$752 million. This produces a local area economic impact of approximately \$2 billion. No reliable estimate has been provided on the realistic market value of Tinker's land (5,031 acres), buildings (763 residence and non-residence), and infrastructure.¹⁵

The estimated impact of base closure would be the loss of 48,000 jobs (22,000 direct, 26,000 indirect), 8.2% of the Oklahoma City MSA employment total. If closure was directed as a result of BRAC 95, this would be the first BRAC decision to cause job losses in the MSA.

¹⁵See Attachment 1, *Air Force Depot Capacity/Plant Comparisons*, Note 9, on market value versus replacement value.

It is estimated that the one-time closure costs associated with shuttering Tinker AFB would amount to \$1.3 billion. Return on investment would be achieved in 42 years.

4.2 Oklahoma City ALC Depot

While the B-1, B-2, B-52, C-135, and E-3 are Oklahoma City ALC's primary assigned aircraft, the depot also repairs the VC-25, VC-136, and 25 other Contractor Logistics Support Aircraft. The Commodities Directorate tracks nearly 45,000 exchangeable and commodity items used on defense weapon systems. These multiple parts include radomes, fuel accessories, control valves, turbines, blades, altitude indicators, and oxygen regulators. In terms of software development, Oklahoma ALC is the first DoD organization to be certified by the Software Engineering Institute for Software Process Maturity Level Two.

DoD's submission to the BRAC 95 Commission proposed realigning workloads among the five ALCs to concentrate selected specialties at each. The specific areas recommended for consolidation at Oklahoma ALC are: airborne electronic automatic equipment software, machining manufacturing, airborne electronics, and plating.

4.2.1 Specialization

Oklahoma City ALC is designated a *Service Center of Excellence* for the following systems:

Aircraft Airframes: B-1B, B-2, B-52, C/KC/VC/EC/RC/OC/WC-135, and E-3.

Aircraft Components: aircraft related exchangeables (radomes, cowls/fairings, structural components), engine instruments and automatic flight controls, oxygen and other gas generating equipment, constant speed drives/integrated drive generators, air driven accessories, and air valve systems.

Engines (Gas Turbine) (Aircraft): J57, TF30, TF33, F101, F-107, F108, F110, F112 and F118; engine related exchangeables, including fuel accessories, control valves, filters, starters, turbines, compressors, and blades and vanes.

Software (Support Equipment): avionic automatic test equipment and industrial plant equipment software.

Oklahoma City has the following *Technology Application Program Management* assignments:

**Mechanical Systems
Nuclear Hardness and Survivability**

4.2.2 Unique Facilities/Equipment/Capabilities

OC-ALC officials have identified the following facilities, equipment, and/or capabilities as unique to the depot:

Air Accessories Overhaul/Test Facility. This 114,00 SF facility provides single source repair, overhaul, calibration, and testing of any air driven item in the Air Force inventory. It has 22 test cells designed to contain high-speed rotating components (such as air turbine motors) in the event of failure. The building houses equipment required to generate, control, and condition compressed air from ambient temperature to 300 PSIG and 800° F at flow rates of up to 8 pounds per second to simulate inflight operational conditions. One "super cell" is capable of boosting test capability to 800 PSIG, 1400° F, and 3-9 pounds per second. The facility produces over 16,000 items per year and will be able to support C-17 and F-22 components when these weapon systems come fully on line.

Cruise Missile Engine Facility. This 104,000 SF facility is reported to be the only DoD self-contained single source maintenance repair/test center specializing in cradle-to-grave overhaul and production testing of air launched cruise missile engines (F107 and F112).

Oxygen and Associated Equipment Overhaul Facility. Over 22 different types of life support equipment are overhauled annually in this 14,000 SF facility, with over 8000 items being repaired tested, and calibrated. The building is isolated to preserve a clean, dry, oil-free environment, and contains specialized chemical cleaning systems, overhaul and calibration equipment, and oxygen purging/filling systems. The facility is the only single source oxygen overhaul facility in the Air Force.

Avionics Integrated Support Facility. This is a 98,000 SF purpose designed facility constructed of specially designed brick and mortar with reinforced concrete floors, walls, and ceiling. It is the only B-1B/E-3/B-52/ALCM and Rotary Launcher complete avionics test facility in DoD, and provides single source software maintenance and integration of computer programs for these systems. The facility enables ground integration and test of avionics system software through the combined use of weapon system specific avionics components and one-of-a-kind hardware/software.

Jet Engine Test Facilities. The 61,000 SF of work space in these two special buildings contain a number of medium test cells and 4 single source test cells that are the only ones in DoD rated in the 100,000 pound thrust class. These high-performance cells are capable of handling up to 4000 pounds of air per second, up to 150,000 pounds per hour of fuel, and, for afterburner cooling, up to 5500 gallons per minute of water. An eleven foot centerline allows for the testing of engines with up to an 11 foot diameter inlet. A monorail system is used to transport engines from the buildup floor into the cell, providing a five-minute engine installation time. All cells are multi-engine capable. Each utilizes the Pacer Comet III Automated/Computerized Engine Test and Data Acquisition testing system. An Automatic Vibration Diagnostic system provides engine signature analysis and trim balance data. The facilities can be used for standard runs, endurance testing, and accelerated mission testing.

B-1B Compact Range Facility. This 9800 SF facility encloses an anechoic chamber mounted on an adjustable 19 x 37 foot isolated pad for protection against seismic vibration in the testing of the B-1B APQ-164 multi-functional radar antenna. It permits the antenna to be tested in both phased array and low observable antenna configurations.

Fuel Control and Accessories Consolidated Test Facility (CTF). The CTF is a 63,500 SF, \$13.6 million state-of-the-art facility designed to provide environmentally friendly, National Fire Protection Association rated safety controls to meet fuel wetted testing needs for engine controls and accessories. Completed in 1994, it houses an Automated Fuel Accessory Test System and has special charcoal filters and recycling distillation units to preclude the leakage of ozone depleting chemicals. It supports the performance of maintenance and repair on the multiple variants and configurations of F101, F108, F-110, F-118, TF30, and TF-33 engines, and has growth capability to accommodate others.

Materials Test Facility. This is a 27,000 SF laboratory configured to conduct crack growth rate and fatigue life testing on such aircraft components as wing skin and actuator rods. It also performs material properties determination in such areas as assessing adhesive strength. The facility uses five servo-hydraulic material test systems with programmable digital controllers to replicate in-flight cyclic loading of aircraft components.

Multiple Workload Industrial Complex. Shadowing almost 2.4 million SF (61 acres), this is the longest covered repair facility in DoD. It is used for special aircraft periodic depot maintenance (PDM), engine repair, aircraft/engine accessory overhaul, and depot repair for -135 airframe structure. It includes: a 500,000 SF highbay for handling aircraft ranging in size from -135s to A-7s, the entire area of which is supported by conveyers and overhead cranes; a 1,000,000 SF lowbay which has been reconfigured in many combinations (as dictated by workload and surge requirements) for maintenance of engines, aircraft structures, and aircraft and engine components; a 40,000 SF chemical cleaning facility (which also employs a unique **Carbon Dioxide Pellet Blasting System**); 50,000 SF of area for engine and component plating and plating preparation; a 42,000 SF heat treatment facility; 21,000 SF of automated-stacker vertical storage space; 12,000 SF of chemical and metallurgical labs; and almost 650,000 SF of administrative space.

B-2 Weapon System Support Center. This 124,000 SF facility will perform ground integration and test of B-2 systems software. A "B-2 Datalink" hub is located in the crypto vault of this facility providing classified electronic logistics management connectivity between Northrop Grumman, Tinker AFB, Wright-Patterson AFB, Whiteman AFB, Langley AFB, Edwards AFB, and the Pentagon.

Paint Hangar. Billed as "the premier aircraft paint facility in DoD," this is a 109,000 SF, two-bay hangar sized to perform corrosion control on any weapon system in the Air Force, including the C-5 and 747-size aircraft. Both docks are designed to allow complete stripping, washing, chemical treating, and painting. Each has an independent environmental control system. Multi-directional manlifts provide easy access to the upper portions of aircraft. The facility has centralized breathing air and chemical distribution systems for efficiency and ease of operation. The facility operates a prototype **Large Aircraft Robotic Paint Strip System** using high pressure water for paint removal on large, thin-skinned aircraft. Its **Paint Proportioning and Mix System** automatically measures, mixes, and delivers on demand only the amount of coating necessary.

Blade and Vanes Repair Center. OC-ALC is the only DoD center certified to repair F101 and F110 high pressure turbine blades. This 140,000 SF facility houses all of the processes for blade and vane inspection, repair, and recoating in a single location. It provides for automated cleaning, manual and automated inspection, welding (including microplasma welding, superalloy welding at elevated temperatures, and automated laser welding), machining, advanced electrophoretic coating, vibratory finishing, air and water flow testing, post-repair NDI, automated and high velocity plasma spray, shot peening, activated diffusion healing, and vane restrike.

E-3 Maintenance Hangar. Purpose designed, this facility is notable for facilitating maintenance and repair of the E-3 rotodome. "Texas Tower" platform maintenance workstands permit the servicing and repair of rotodomies in place, while overhead bridge crane systems can remove the 14,000 pound rotodome easily when required.

Additional unique facilities/capabilities include:

Engine/Automatic Flight Control Instruments Repair
Electrical Discharge Machining of Nozzles and Blades
Avionics Reliability Center for Inertial Navigation, Attitude Heading
Reference, and Automatic Flight Control Systems
High Force Axial Torsion Test System
Centralized Aircraft Support System

4.2.3 Workload

The following table presents a breakout of the Okiahoma City ALC workload -- by DoD commodity group -- for FY 96 and FY 99. The only commodity groups displayed in the table are those for which one or more of the five ALCs has a workload commitment. An explanation of the workload table is provided at Attachment 6.

Oklahoma City ALC Workload Chart
(In Thousands of Direct Labor Hours -- kDLH)

Relevant Commodity Groups	Potential Maximum Capacity		Actual Capacity Projection		Total Workload Projection		Total Core Workload Projection	
	FY96	FY99	FY96	FY99	FY96	FY99	FY96	FY99
1. Aircraft Airframes								
c. Fixed Wing								
(1) Tanker / Transport / Bomber	2,839	2,609	2,202	2,279	2,211	2,176	2,155	2,023
(2) Command and Control	459	688	266	289	355	570	301	512
(3) Light Combat								
(4) Admin / Training								
d. Other								
2. Aircraft Components								
b. Aircraft Structures	434	434	430	404	418	334	417	334
c. Hydraulic / Pneumatic	885	885	279	278	188	181	188	181
d. Instruments	712	712	238	227	290	264	290	264
e. Landing Gear								
f. Aviation Ordnance	1	1	1	1	--	--	--	--
g. Avionics / Electronics	218	218	172	218	62	139	62	93
h. APUs								
i. Other	817	817	584	594	213	217	126	131
j. Manufacture and Fabrication	294	294	158	162	95	97	95	97
3. Engines (Gas Turbine) (GTE)								
a. Aircraft	4,912	4,912	2,559	2,497	2,410	2,347	2,370	2,308
c. Blabdes / Vanes	529	529	155	155	54	76	54	76
4. Missiles and Missile Components								
a. Strategic								
b. Tactical / MLRS								
7. Ground Comm-Electronic Equip								
a. Radar								
b. Radio Communications								
c. Wire Communications								
e. Navigation Aids								
f. Electro-optics/Night Vision Equip								
g. Satellite Control/Space Sensors								
10. Ground General Purpose Items								
c. Munitions / Ordnance								
d. Ground Generators								
e. Other								
12. Software								
a. Tactical Systems	250	240	248	238	336	364	325	325
b. Support Equipment	446	455	446	455	412	339	299	299
13. Special Interest Items								
a. Bearings Refurbishment	62	62	12	10	11	15	11	15
c. TMDE	4	4	4	3	2	2	--	--
14. Other								
Total	12,863	12,863	7,753	7,811	7,058	7,122	6,695	6,658

Table 4-1: Oklahoma City ALC Workload Chart

5.0 San Antonio ALC (SA-ALC)

San Antonio ALC is the Air Force C-5, C-17, and T-38 depot facility. It is also the Air Force's primary center for the repair and overhaul of selected families of aircraft jet engines, engine-related exchangeables, and gas turbine engines for secondary power systems. It has responsibility for all Air Force nuclear ordnance and for reentry vehicle components, and manages cryptological equipment. Consistent with SA-ALC's high level of experience in metallurgy and manufacturing, the depot has responsibility within DoD for fostering the development of advanced metals and ceramics, and for pursuing advanced robotics.

5.1 Kelly AFB, Texas

Kelly AFB is an AFMC-operated installation located approximately 5 miles southwest of downtown San Antonio, Texas. San Antonio is the major interior transportation hub for highways and rail lines in south-central Texas. Increased traffic and development from NAFTA has supported the city's continually growing importance in this capacity. Kelly is adjacent to one of the major railroads crossing the southern US and other lines extending south into Mexico. It sits at the junctures of two major highways, including Interstate 10, the nation's southernmost transcontinental artery linking Jacksonville, Florida, with Los Angeles, and Interstate 35, a centralized north-south route extending from Duluth, Minnesota, through many major cities in the midwest and Texas down to Monterrey in the Nuevo Leon province of Mexico. The nearest deep-water port is on the Gulf of Mexico approximately 175 miles east. It can be accessed overland via Interstate 37, which junctures with Interstate 10 east of the base. Kelly's location is strategically valuable for operations in Central and South America, and the Caribbean.

5.1.1 Field and Facilities

Kelly AFB has one 11,550 foot concrete runway with appropriate aircraft arresting gear and 778,042 square yards (approximately 161 acres) of usable aircraft parking apron. Permanently assigned aircraft require nearly 42 percent of the apron space. Three C-141- equivalent aircraft can be loaded or unloaded at one time for mobility/contingency operations.¹⁶ Twenty C-141- equivalent aircraft can be refueled at one time. The base has an operational fuel hydrant system.

¹⁶The limiting factor in this case is trained load crews.

The base controls and manages Yankee Range, a 2,600-acre unscored tactical air-to-surface gunnery range located 68 NM miles south of the base. Although the Range lacks full-scale weapons delivery capability, it can be certified for laser use and has a limited capacity for ground threat simulation. The nearest suitable special-use airspace¹⁷ is as shown below:

Warning/Restricted/MOA:	W-228D	187 NM
Low-altitude MOA:	W-228D	187 NM
Supersonic MOA:	W-228A,B,C,D	190 NM
Scorable gunnery range complex:	McMullen	71 NM
Electronic Combat range:	Claiborne	316 NM
Air combat maneuvering instrumentation range:	Gulfport MDS	529 NM

Randolph AFB, located 18 miles northeast of Kelly, is the nearest Air Force installation with flying operations. Lackland AFB and Wilfred Hall Hospital are adjacent to Kelly, and Brooks Medical Center is approximately 10 miles away.¹⁸ The nearest ground force installation where joint training can be conducted is Army Fort Sam Houston, 29 NM from Kelly. The closest Navy installation where joint training can be accomplished is NAS Dallas, 217 miles north of the base.

5.1.2 Major Tenants

Major associate units on Kelly AFB include: Headquarters, Air Intelligence Agency (AIA); 433rd AW, AFRES; 149th Fighter Group (FG), Air National Guard (ANG); Defense Distribution Depot, San Antonio (DDST), DLA; and Defense Megacenters, San Antonio (DMSA), DISA.

Headquarters, Air Intelligence Agency. The AIA provides direct intelligence, security, electronic combat, foreign technology, and treaty-monitoring support to national decision-makers and field air component commanders. It furnishes combat commanders with data enabling them to decide when to exploit, jam, deceive, or destroy hostile military communications. It also presents tailored intelligence assessments in support of Air Force planning and policy formation. The AIA works in conjunction with the SA-ALC cryptologic depot maintenance program.

¹⁷MOA with a minimum size of 2100 square nautical miles (NM) and an altitude block of at least 20,000 feet within 200 NM. Low-altitude MOA with a minimum size of 2100 square NM and a floor no higher than 2000 feet above ground level (AGL) within 600 NM. Supersonic MOA with a minimum size of 4200 square NM within 300 NM. Scorable gunnery range capable of or having tactical or conventional targets and strafe within 800 NM.

¹⁸Primarily a medical research facility, Brooks has been fingered for closure by the Air Force as part of DoD's BRAC 95 hit list.

433rd AW. The 433rd AW is part of the 4th Air Force, one of the three NAFs comprising the AFRES. It commands the 68th Airlift Squadron (AS) which operates C-5 cargo aircraft in support of worldwide DoD military operations.

149th FG. The 149th FG is an ANG unit assigned under the major command of the ACC. It operates F-16 aircraft in both air-to-ground and air-to-air roles.

Defense Distribution Depot, San Antonio (DDST). Operated by the DLA, the depot stocks, stores, issues, and ships defense goods and materials used at Kelly, additional Air Force installations, and units of the other services in the San Antonio region. It works closely with SA-ALC by packaging and shipping repairable items to the depot, which, in turn, returns the goods to serviceable status and re-enters them into the DLA distribution system. It employs approximately 900 personnel, all civilian.

Defense Megacenter, San Antonio (DMSA). Identified in BRAC 93 as the site for one of 16 DoD data processing and telecommunication "megacenters" to be operated under the umbrella of the DISA, DMSA provides information processing services and products supporting the needs of the San Antonio region. Its functions are divided into four categories: application support, operational support, technical support, and business management support. The Center runs 61 application systems that support the depot maintenance activities of SA-ALC.

5.1.3 Relationship to Local Community

Kelly AFB is located in the San Antonio, Texas, MSA. Total population (FY 92) is 1,377,000. Total employment (FY 93) is 731,000. Average annual job growth is 13,750, and average annual per capita income is \$17,284. For the past five years, San Antonio consistently has been one of the top ten cities in the US in total annual net job creation (jobs added minus jobs lost).

Work force population at Kelly:

Active duty military	4,800
Reserve military	3,950
Civilian	<u>14,100</u>
Total	22,850

Kelly AFB is one of the largest single-site, high technology employers in southern Texas, and over 13,000 of Kelly's workers are affiliated with the ALC. The total work force annual payroll (military and civilian) is \$692 million. This produces a local area economic impact of approximately \$2 billion. No reliable estimate has been provided on the realistic market value of Kelly's land (3,996 acres), buildings, and infrastructure.¹⁹

¹⁹See Attachment 1, *Air Force Depot Capacity/Plant Comparisons*, Note 9, on *market value versus replacement value*.

The estimated impact of base closure would be the loss of 43,200 jobs (18,100 direct, 25,100 indirect), 5.9% of the San Antonio MSA employment total. Combined with other San Antonio MSA job losses from prior BRAC decisions (59 jobs), the cumulative impact of Kelly's closure in BRAC 95 (if closure was directed) would cause the total employment loss to remain at 5.9% of the MSA's total.

It is estimated that the one-time closure costs associated with closing Kelly AFB would amount to \$653 million. Return on investment would be achieved in 10 years.

5.2 San Antonio ALC Depot

While the center is well-known for managing and repairing engine modules and nuclear ordnance, and for manufacturing parts for engines and fuel systems, it conducts several additional operations of significant note. Along with supporting the Air Force's newest transport, the C-17, and the aging C-5 and T-38 fleets, the depot services C-131, A-37, OV-10A, and T-37 aircraft. In all, San Antonio ALC supports 33 types of aircraft, over 19,000 aircraft engines, and more than 50,000 auxiliary engines, which comprise three-quarters of the Air Force engine inventory. It manages all Air Force nuclear ordnance, all liquid missile propellants used by the Air Force and NASA (National Aeronautics and Space Administration), and the Air Force's fleet of boats and ships. The depot maintains some of the physically largest hangars and maintenance facilities in the US to accommodate the outsize transport fleet it supports.

DoD's submission to the BRAC 95 Commission recommended realigning workloads among the five Air Force depots to consolidate selected specialties at each. The specialty areas proposed for consolidation at San Antonio ALC are: foundry operations, industrial plant equipment software, and plating.

5.2.1 Specialization

San Antonio ALC is designated a *Service Center of Excellence* for the following systems:

Aircraft Airframes: C-5, C-17; paint and corrosion control for large-bodied aircraft.

Aircraft Components: fuel accessories, automatic test equipment, engine controls and instruments, automatic gearboxes, F-15 and F-16 secondary power systems, F-16 engine start system, conventional starters, and organic manufacturing.

Engines (Gas Turbine): J69, J85, TF34, TF39, F100, J60, F117, and T56; engine components and component fabrication; GTCs 180-5, 180-7, 397, 85-56, 85-70A, 85-71, 85-72A, 85-106A, 85-180L, 85-180(C), 165-1, 36-50, and *Patriot*.

Missiles and Missile Components (Strategic): components and equipment involved in nuclear weapon handling, test, delivery, launch, firing, and weapon control, including trailers, launchers, racks, and ICBM reentry vehicle (RV) microcircuits.

Software (Support Equipment): automatic test equipment software.

San Antonio has the following *Technology Application Program Management* assignments:

**Advanced Metals and Ceramics
Robotics and Automation**

5.2.2 Unique Facilities/Equipment/Capabilities

SA-ALC officials have identified the following facilities, equipment, and/or capabilities as unique to the depot:

Engine Test Facility. This 65,000 SF facility provides for testing all versions of the Pratt and Whitney F100 engine used in the F-15 and F-16, the TF-39 used in the C-5, the T56, and the TF39 Engine Build-Up Unit. The facility is capable of testing any turbofan, turboshaft, or turbojet engine in the DoD inventory. The current test cell configuration includes four universal turbofan and turbojet multi-engine capable test cells, two T56 turboshaft propeller test cells, and two T56 dynamometer test cells. All utilize the Pacer Comet III Automated/Computerized Engine Test and Data Acquisition test system, employ quick engine connect test adapters, a mechanized material handling system, inlet air turning vanes, an Automatic Vibration Diagnostic system, and a noise abatement treatment system. The facility also employs a Gas Path Analysis system for determining engine/module performance from thermo-mathematical relationships.

Advanced Fuel Accessories Repair and Test. This is a 50,000 SF facility specially designed to accommodate the configuration of the Advanced Fuel Accessories Test System for testing fuel wetted components. Test stations are fully automated and can evaluate a broad variety of different engine and airframe fuel accessories such as pumps, valves, fuel controls, and atomizers. The system is environmentally friendly and minimizes the explosion/fire hazard previously associated with fuel component repair.

Cryogenic Spin Test Facility. This is a 9500 SF building with special systems and shielding to permit cryogenic spin testing to be performed on engine disks in order to identify potential critical flaws. Disks are mounted on a special test assembly, balanced, lowered into an insulated and heavily shielded spin pit which is momentarily flooded with liquid nitrogen to cool the assembly (down to approximately -320° F), spun in the pit at 15,000 rpm for one minute, and then allowed to free spin to a stop some 20 minutes later. The facility contains five spin pits and special associated plumbing for the liquid nitrogen and pit vacuuming.

Gas Turbine Engine Repair and Test. This is a 137,000 SF facility that collocates multiple formerly-separate test systems and assembly shops. Approximately one-third of the production space is a near-clean-room environment with a 300,000 classification.

Unified Fuel Control Test Facility. This is a unique, "explosion-proof" 95,000 SF facility dedicated to the inspection, repair, and testing of F-100 engine unified fuel controls. It also possesses the capability to overhaul and test fuel nozzles for the F-100, T56, and TF39, fuel controls for the TF39 and T56, and fuel atomizers for smaller GTE. The building is equipped with special ventilation, fire detection and suppression, and blast-proofing systems. It encompasses 89 test stands that are predominantly computer controlled electro- and hydromechanical systems designed to simulate the conditions and inputs test items will face in use.

Aircraft NDI X-Ray Facility. Construction on this 60,000 SF facility began in mid-1994 and is scheduled for completion in mid-1995. It will enable SA-ALC to perform NDI and substrate evaluation for C-17, C-5, and smaller aircraft.

Large-Aircraft Depot Maintenance Hangar. With over one million SF of floorspace, this is the largest permanent bridge construction hangar in DoD and one of the largest in the world. Designed to support work on the C-5, it is capable of completely housing six of the massive aircraft simultaneously. Extra-high hangar doors, three track-mounted bridge cranes, and a 10,000 pound capacity remote controlled hoist for removal of the aircraft's horizontal stabilizer are among the hangar's purpose-designed features. High roofing pockets permit four C-5s to remain jacked at the same time.

Aircraft Corrosion Control/Depaint. This 88,000 SF facility is the only one of its size in DoD which uses non-carcinogenic Plastic Media Blasting to remove coatings from airframes. It is the only one with the capability for stripping C-5 aircraft and can also handle smaller weapon systems. Overhead "stacker cranes" provide hands-on three dimensional accessibility to the entire aircraft

Nuclear Weapon Components Repair and Test. SA-ALC possesses a unique set of facilities for conducting environmental stress screening which permits the repair and testing of ICBM RV components, nuclear related aircraft components, and nuclear munitions handling equipment. It is the only DoD installation with this composite capability. The underground **Multi-Use Centrifuge** can attain an acceleration rate of 200 Gs with an onset rate of 50 Gs per second. With a capacity of 50,000 G-pounds, it can accommodate a payload of up to 1000 pounds. It is used to simulate G forces and timing intervals required to arm fuses. The **High Impulse Transducer Test System** is a high performance piezoelectric accelerometer that produces a haversine mechanical shock event of up to 100 kgs to test the impact transducers found on RVs. The **Altitude Temperature Test Chamber** produces a thermal cycle/altitude test environment that can simulate altitudes of up to 200,000 feet with temperature ranges of from -10° up to +350° F with indefinite holding time throughout the range. The **Shielded Cable Tester** assesses a component's ability to perform to mil-spec with an acceptable amount of degradation. The three above-ground **Accelerator Rotary Centrifuges** can accelerate a 150 pound payload to 150 Gs at a radius of 63 inches. The unit has a capacity of 22,500 G-pounds and can accomplish acceleration/deceleration from 1 G to 150 Gs to 1 G in 15 seconds. A **Shock Machine Test System** can subject components weighing up to 500 pounds to various levels and types of shock and stress with max acceleration of 600 Gs or 30,000 Gs (with dual mass shock amplifier) and a min/max pulse duration of 2 microseconds min/80 microseconds max. An **Isothermal Storage Room** holds components in a dust-free and temperature/humidity controlled environment. The **Thermotron Temperature Chamber** stresses components with a programmable

temperature variance capability of from -100° F up to 300° F at a rate of up to 9° F per minute. The **Shielded Microwave Anechoic Test Facility** is equipped with unique, frequency-specific absorbent material and is used to evaluate the performance of *Minuteman* MK-12 RVs.

Additional unique facilities/capabilities include:

Textile Laboratory
Integrated Support Software Engineering Facility
Rubber Products Manufacturing
Production of X-Ray Quality Aluminum Castings
Stereolithography Pattern/Part Development
C-5 Engine Pylon Repair
Halon Recovery, Recycling, and Recharging Facility
Bicarbonate of Soda Blast Stripping of Jet Engine Components
Robotic Shot Peening System
Non-Contact Dimensional Inspection
Auto-Prompting Inspection System

5.2.3 Workload

The following table presents a breakout of the San Antonio ALC workload -- by DoD commodity group -- for FY 96 and FY 99. The only commodity groups displayed in the table are those for which one or more of the five ALCs has a workload commitment. An explanation of the workload table is provided at Attachment 6.

San Antonio ALC Workload Chart
(In Thousands of Direct Labor Hours -- kDLH)

Relevant Commodity Groups	Potential Maximum Capacity		Actual Capacity Projection		Total Workload Projection		Total Core Workload Projection	
	FY96	FY99	FY96	FY99	FY96	FY99	FY96	FY99
1. Aircraft Airframes								
c. Fixed Wing								
(1) Tanker / Transport / Bomber	3,251	3,251	1,542	1,573	1,006	821	833	821
(2) Command and Control								
(3) Light Combat								
(4) Admin / Training	795	795	388	2	341	--	--	--
d. Other								
2. Aircraft Components								
b. Aircraft Structures	162	162	93	90	56	57	17	19
c. Hydraulic / Pneumatic	4	4	3	4	3	3	2	3
d. Instruments	24	24	14	12	8	7	6	5
e. Landing Gear	15	15	6	8	4	5	4	4
f. Aviation Ordnance								
g. Avionics / Electronics	142	142	119	97	96	79	33	31
h. APUs	559	559	292	288	159	148	112	102
i. Other	443	443	235	288	302	340	91	93
j. Manufacture and Fabrication	1,058	1,058	298	417	123	152	120	120
3. Engines (Gas Turbine) (GTE)								
a. Aircraft	7,318	7,318	4,948	5,001	3,665	3,396	2,615	2,626
c. Blades / Vanes								
4. Missiles and Missile Components								
a. Strategic	200	200	107	109	99	100	58	57
b. Tactical / MLRS								
7. Ground Comm-Electronic Equip								
a. Radar								
b. Radio Communications								
c. Wire Communications								
e. Navigation Aids								
f. Electro-optics/Night Vision Equip								
g. Satellite Control/Space Sensors								
10. Ground General Purpose Items								
c. Munitions / Ordnance	6	6	2	3	2	3	1	2
d. Ground Generators								
e. Other								
12. Software								
a. Tactical Systems	26	26	19	20	19	16	18	14
b. Support Equipment	241	241	180	207	165	177	153	155
13. Special Interest Items								
a. Bearings Refurbishment								
c. TMDE	978	978	651	685	448	478	400	410
14. Other								
Total	15,220	15,220	8,897	8,804	6,496	5,782	4,463	4,463

Table 3-1: San Antonio ALC Workload Chart

6.0 Warner Robins ALC (WR-ALC)

Warner Robins ALC is the Air Force's F-15, C-130, and C-141 depot, providing cradle-to-grave logistics support and depot-level maintenance for these. Additionally, Warner Robins is a primary maintainer of sophisticated aircraft avionics systems and weapons, including the Low-Altitude Navigation and Targeting Infrared for Night (LANTIRN) system, and the AIM-120 Advanced Medium Range Air-to-Air Missile (AMRAAM). WR-ALC's proficiencies in airframe and avionics support have resulted in the center being assigned responsibility within DoD for promoting technology advancement in a number of related fields, including corrosion control and electronics systems architecture.

6.1 Robins AFB, Georgia

Robins AFB is an AFMC-operated installation located approximately 15 miles south-southeast of Macon, Georgia. In the center of the state, Robins is about two hours' travel time from the major transportation hub of Atlanta. It has access to the national railway system and sits within minutes of both Interstate 16 and Interstate 75. Interstate 16 links nearby Macon with Interstate 95, the main highway extending down the entire East Coast with access to the major waterports of Savannah, Georgia; Charleston, South Carolina; and Jacksonville, Florida. Interstate 75 is one of the principal north-south arteries east of the Mississippi River extending from Sault Saint Marie, Ontario to the Fort Myers metropolitan area of Florida. Savannah is the nearest deep-water ocean port at 136 NM away, and it can be reached directly overland via Interstate 16. Robins is the only East Coast Air Force facility with depot maintenance activity to support military requirements in peace and war.

6.1.1 Field and Facilities

Robins AFB has one 12,000-foot asphalt runway with appropriate aircraft arresting gear and 653,344 square yards (approximately 135 acres) of usable aircraft parking apron. Currently, permanently assigned aircraft require only 10 percent of the apron space. However, Robins is scheduled to become the US main operating base for the E-8 Joint Surveillance and Target Attack Radar System (Joint STARS), and beddown of those aircraft assets will reduce surplus ramp space appropriately. Six C-141-equivalent aircraft can be loaded or unloaded at one time

for mobility/contingency operations.²⁰ Eleven C-141-equivalent aircraft can be refueled at one time. The base has an operational fuel hydrant system.

The base does not control or manage any ranges. The nearest special-use airspace²¹ is as shown below:

Warning/Restricted/MOA:	None	
Low-Altitude MOA:	W-157A	200 NM
Supersonic MOA:	W-157A	200 NM
Scorable gunnery range complex:	Grand Bay	103 NM
Electronic Combat range:	Townsend	123 NM
Air combat maneuvering instrumentation range:	Tyndall ACMI	195 NM

The nearest Active Duty Air Force unit where active training can be accomplished is Dobbins AFB, 85 miles from Robins. The closest ground force installation where joint training can be accomplished is Army Fort Benning, 73 NM from the base. Beaufort Marine Corps Air Station (MCAS), 142 miles from Robins, is the nearest Naval/Marine unit where joint training can be accomplished.

6.1.2 Major Tenants

Major associate units currently on Robins AFB include: Headquarters, AFRES; 19th Air Refueling Wing (ARW), Air Mobility Command (AMC); 9th Space Warning Squadron (SWS), Air Force Space Command (AFSPC); 5th Combat Communications Group (CCG), ACC; Defense Distribution Depot, Warner Robins (DDWG), DLA; and Defense Megacenter, Warner Robins (DMWR), DISA. (Note: the 116th FW, ANG, currently based at Dobbins AFB, GA, and equipped with F-15s, is scheduled to relocate to Robins AFB at the beginning of 1996 and convert to the B-1B.)

Headquarters, AFRES. The Air Force Reserve supports the Active force by performing missions that encompass fighter, bomber, airlift, aerial re-fueling, rescue, and weather reconnaissance operations. It provides disaster relief in the US and supports national counterdrug efforts. The Reserve commands three numbered NAFs with nearly 78,000 reservists operating 400 aircraft ranging from F-16 fighters and B-52 bombers to C-5 transports and KC-135 tankers.

²⁰The limiting factor is load crews.

²¹MOA with a minimum size of 2100 square nautical miles (NM) and an altitude block of at least 20,000 feet within 200 NM. Low-altitude MOA with a minimum size of 2100 square NM and a floor no higher than 2000 feet above ground level (AGL) within 600 NM. Supersonic MOA with a minimum size of 4200 square NM within 300 NM. Scorable gunnery range capable of or having tactical or conventional targets and strafe within 800 NM.

19th ARW. Under AMC, the 19th ARW flies KC-135 aerial refuelers to provide global refueling for bomber, airlift, fighter, air defense, and special mission aircraft.

9th SWS. Under AFSPC, the 9th SWS operates and maintains a solid-state phased array PAVE PAWS detection radar. As part of the worldwide space and missile warning network, the radar provides missile early-warning data to US Space Command; North American Aerospace Defense Command; Chairman, Joint Chiefs of Staff, and the National Command Authorities.

5th CCG. Comprised of the 51st, 52nd, 53rd, and 54th Combat Communications Squadrons, the 5th CCG provides mobile and transportable command and control communications along air traffic control systems worldwide. Under the ACC, the Group's squadrons deploy in support of joint task force, combatant command, and Air Force flying wing operations and exercises.

Defense Distribution Depot, Warner Robins (DDWG). Operated by DLA, the Depot stocks, stores, packages, and transports defense goods for depot-level maintenance activities along with the active and reserve units on the base. DDWG also provides parts and equipment to armed forces located worldwide and foreign military customers. Most items maintained at Warner Robins support maintenance of F-15, C-130, and C-141 aircraft, along with navigation and airborne electronic warfare systems. WR-ALC works closely with DDWG by providing lab analysis of fuels and by repairing/testing electronic and structural components before they are re-entered into the DLA distribution system.

Defense Megacenter, Warner Robins (DMWR). Designated in BRAC 93 as the site for one of 16 data processing and telecommunication "megacenters" to be operated under the umbrella of the DISA, DMWR operates systems linking battle space applications to the battlefield via DoD and commercial satellites. The center houses mainframes and midtier computers running 24 hours a day, 7 days a week, to support over 170 data processing services for WR-ALC, AMC, AFRES, and ANG units.

6.1.3 Relationship to Local Community

Robins AFB is located in the Macon, Georgia, MSA. Total population (FY 92) is 296,000. Total employment (FY 93) is 157,800. Average annual job growth is 1,850, and average annual per capita income is \$17,542.

Work force population at Robins:

Active duty military	3,750
Reserve military	750
Civilian	<u>13,380</u>
Total	17,880

Robins AFB is Georgia's largest industrial complex. The work force annual payroll (military and civilian) is \$686 million. This produces a local area economic impact of approximately \$2 billion. No reliable estimate has been provided on the realistic market value of Robins' land (8,790 acres), buildings, and infrastructure.²²

The estimated impact of base closure would be the loss of 31,100 jobs (15,600 direct, 15,500 indirect), 19.7% of the Macon, Georgia, MSA employment total. Combined with other Macon MSA job losses from prior BRAC decisions (9 jobs), the cumulative impact of Robins' closure in BRAC 95 (if closure was directed) would cause the total employment loss to remain at 19.7%.

It is estimated that the one-time closure costs associated with closing Robins AFB would amount to \$1 billion. Return on investment would be achieved in 18 years.

6.2 Warner Robins ALC Depot

While the F-15, C-130, and C-141 are Warner Robins ALC's primary airframe responsibilities, the center manages over 200,000 items representing the full range of avionic functions and technology. These items fall into the categories of aerospace communications, navigation equipment, airborne bomb and gun-directing systems, target acquisition systems, and most airborne electronic warfare equipment. The depot supports the LANTIRN navigation and targeting system, the Joint Tactical Information Distribution System (JTIDS), and the Worldwide Military Command and Control System (WWMCCS). It holds responsibility for procurement, supply, and maintenance functions for most Air Force bases along the East Coast, as well as for the Atlantic Missile Test Range, Newfoundland, Labrador, Greenland, Iceland, Bermuda, the Azores, and all Air Force and Security Assistance Program activities in Europe, Africa, and the Middle East.

DoD's submission to the BRAC 95 Commission recommended realigning the workloads among the Air Force depots to focus selected specialties at each. The specialty areas proposed for consolidation at Warner Robins ALC are: tubing manufacturing, airborne electronic automatic equipment software, sheet metal repair and manufacturing, machining manufacturing, airborne electronics, electronic manufacturing (printed wire boards), and plating.

²²See Attachment 1, *Air Force Depot Capacity/Plant Comparisons*, Note 9, on market value versus replacement value.

6.2.1 Specialization

Warner Robins ALC is designated a *Service Center of Excellence* for the following systems:

Aircraft Airframes: F-15, C-130 transport, C-130 Special Operations Forces (SOF)/ Special Mission aircraft, and C-141.

Aircraft Components: flight data recorders, gyroscopes, fasteners, miniature precision instrument bearings, aging aircraft structures, airborne electronics technology repair, life support, radio frequency analysis measurement, C-130 propellers, electronic warfare systems, flexible computer integrated manufacturing, and special fuels testing.

Other: shelf-life extension data (Air Force Executive Agent), Joint Logistics Systems Center, physical sciences, and Depot Maintenance Management Information System.

Warner Robins has the following *Technology Application Program Management* assignments:

Power Systems
Environment Stress Screening
Advanced Electronics Systems Architecture
Force Management
Corrosion
Environmental Technology Needs
Product Data
Software Engineering
Electronic Manufacturing and Repair
Obsolete Micro-Electronics
Aircraft Manufacturing and Repair
Aircraft Structures Technology Needs

6.2.2 Unique Facilities/Equipment/Capabilities

WR-ALC officials have identified the following facilities, equipment, and/or capabilities as unique to the depot:

Avionics Complex. This avionics complex is the single largest electronics repair activity in DoD housing over 535,000 SF of environmentally controlled avionics design, test, repair, and manufacturing capacity. Its specialized capabilities provide for the full spectrum of workloads, from the latest surface mount technologies found in the LANTIRN and Joint STARS programs to 1930s' vacuum tube technologies found in the ARN-6 radio compass. **Antenna Microwave Radiation Pattern and Bore-sight** evaluation capabilities are supported by eight indoor antenna ranges with shielded anechoic chambers to prevent radio frequency noise from infiltrating into the surrounding production facility. Removable exterior walls facilitate the introduction/removal of antennae and test equipment. The F-111 range has a seismic isolation pad. The facility has an extensive capability for **Printed Wiring Board Manufacturing** in a 17,000 SF

section dedicated to the design and manufacture of double sided and multi-layered printed wiring boards. Design-to-purpose construction features in this area are typical of most parts of the facility and include an extensive industrial waste system, recessed flooring for wet processing areas, special exhaust systems, deionized water, explosion-proof rooms for chemical mixing and distribution, and floor-to-roof sealed walls to prevent chemical leakage that could contaminate other facility operations. The **Hybrid Microelectronics Manufacturing** section of the facility consists of 2600 SF of class 10,000 clean room with additional special utilities, including liquid/gaseous nitrogen dispensing and a static dissipative raised floor system to preclude electrostatic discharge. The **LANTIRN** technology repair center features a 2,000 SF class 10,000 clean room, a 400 SF laser light tight room, and other systems essential for overhaul, repair, and test of the system. The Avionics Complex also features 2 **Optic Repair** stations with isolated seismic foundations, 16 laser safe firing rooms with interlocked door seals, and a total of over 12,000 SF of **Clean Rooms** ranging from class 10,000 up to class 300,000. The facility has special security and access control, a unique software production facility, and multiple tooling and manufacturing shops to support its needs. Systems supported by the facility include Joint STARS, E-3, F-15, F-111, C/AC/MC-130, MH-53, MH-60, B-52, the Global Positioning System (GPS), Miniature Receive Transmit (MRT), and LANTIRN.

Avionics Integrated Support Facility (AISF). This is a 215,000 SF complex containing modular multi-system engineering facilities developed to support specific avionics subsystems. Its general capabilities include real time system integration testing, operational flight program (OFP) software development, testing/reconfiguration, compilation, configuration control, off-line subsystem analysis, data reduction, comprehensive self-diagnostics, and maintenance of software documents for a variety of operational and support systems. AISF facilities provide data communication and software data transmission to operational user units. AISFs resident to WR-ALC include LANTIRN, Joint Tactical Information and Distribution System Centralized Software Support Activity (JTIDS CSSA), SOF Extendible Integrated Support Environment (EISE), and PAVE TACK. The Electronic Warfare AISF (EWAISF) has a 10,000 SF sensitive compartmented information facility (SCIF), four electromagnetic screen rooms, two microwave anechoic chambers, and emergency power generation. The overall complex supports most major weapon systems, including Joint STARS, E-3, F/EF-111, F-15, C/AC/MC-130, MH-53, MH-60, B-52, C-141, F-16, GPS, MRT, OA-10, B-1B, C-5, and C-17.

Security Assistance Electronic Warfare Support Facility. This is a 21,000 SF facility constructed with Foreign Military Sales (FMS) funds to be used exclusively for FMS purposes. The facility includes labs within security vaults and has many of the same features found in the AISF complex. Included in the systems it supports are FMS versions of the ALR-46/69 electronic countermeasures (ECM) pod, the Royal Saudi Air Force F-15 Tactical Electronic Warning System (TEWS), and the Advanced Radar Warning Receiver/Countermeasures Dispenser (ARWR/CMD).

Gyro Repair Facility. This is a 69,000 SF facility purpose designed to support organic overhaul and testing of gyroscopes, accelerometers, and indicators. The entire facility is a certified clean room (75 percent to 300,000 class and 25 percent to 100,000 class), temperature/humidity-controlled, with extensive seismological stable piling. The facility houses 12 general purpose automatic test stations, 31 manual test stations, 9 mass spectrometer leak detector systems, 14 dynamic balancers, 2 random drift automated test stations, and a number of other specialized equipments.

Additional unique facilities/capabilities include:

- Aerospace Fastener Testing/Manufacturing**
- Miniature Precision Bearing Testing**
- Electronic Failure Analysis**
- Automated (Paperless) Depots**
- Corrosion Prevention/Control**
- Bicarbonate of Soda Paint Stripping**
- Computer Integrated Manufacturing**
- Metal Finishing Facility**
- F-111 Crew Escape Module Parachute Packing**
- F-15 Robotic Painting**
- Fluid Cell Press**
- Special Maintenance Hangars/Complexes for F-15, C-141, C/AC/MC-130
Aircraft and Component Refurbishment**
- Electron Beam Welder**
- Automated Aircraft Rework System**
- Metallograph Image Analysis System**
- Rheometrics Spectrometric Materials Analysis**

6.2.3 Workload

The following table presents a breakout of the Warner-Robins ALC workload -- by DoD commodity group -- for FY 96 and FY 99. The only commodity groups displayed in the table are those for which one or more of the five ALCs has a workload commitment. An explanation of the workload table is provided at Attachment 6.

Warner Robins ALC Workload Chart
(In Thousands of Direct Labor Hours -- kDLH)

Relevant Commodity Groups	Potential Maximum Capacity		Actual Capacity Projection		Total Workload Projection		Total Core Workload Projection	
	FY96	FY99	FY96	FY99	FY96	FY99	FY96	FY99
1. Aircraft Airframes								
c. Fixed Wing								
(1) Tanker / Transport / Bomber	2,104	2,104	2,104	2,104	2,544	1,349	2,376	1,349
(2) Command and Control								
(3) Light Combat	1,084	1,084	1,084	1,084	918	1,267	652	1,267
(4) Admin / Training								
d. Other								
2. Aircraft Components								
b. Aircraft Structures	801	801	656	656	472	477	472	477
c. Hydraulic / Pneumatic								
d. Instruments	503	503	412	412	296	299	296	299
e. Landing Gear	2	2	1	1	1	1	1	1
f. Aviation Ordnance	1	1	1	1	1	1	1	1
g. Avionics / Electronics	2,153	2,153	1,763	1,763	1,267	1,280	1,267	1,280
h. APUs								
i. Other	463	463	388	388	277	280	277	280
j. Manufacture and Fabrication	514	514	432	432	312	315	312	315
3. Engines (Gas Turbine) (GTE)								
a. Aircraft								
c. Blabdes / Vanes								
4. Missiles and Missile Components								
a. Strategic								
b. Tactical / MLRS	22	22	18	18	13	13	13	13
7. Ground Comm-Electronic Equip								
a. Radar	2	2	2	2	1	1	1	1
b. Radio Communications								
c. Wire Communications								
e. Navigation Aids								
f. Electro-optics/Night Vision Equip								
g. Satellite Control/Space Sensors								
10. Ground General Purpose Items								
c. Munitions / Ordnance								
d. Ground Generators								
e. Other								
12. Software								
a. Tactical Systems	1,358	1,358	795	795	764	888	764	888
b. Support Equipment	906	906	530	530	509	592	509	592
13. Special Interest Items								
a. Bearings Refurbishment								
c. TMDE								
14. Other								
Total	9,913	9,913	8,187	8,187	7,376	6,763	6,941	6,763

Table 6-1: Warner Robins ALC Workload Chart

7.0 1995 Base Realignment and Closure Process (BRAC 95)

7.1 Background

BRAC 95 is the last of three rounds of closure activity mandated under current legislation.²³ As late as mid-December 1994, defense analysts were anticipating that the list of military installations recommended for closure or realignment under BRAC 95 would be nearly as large as the lists from the three previous closure rounds combined.²⁴ This expectation had been supported repeatedly by DoD officials who were quick to point out during most of the year that, while military manpower and equipment had been cut by a third since the end of the Cold War, basing infrastructure had been reduced only by some 18 percent. In January 1995, initiating preparations for developing the Pentagon's BRAC 95 closure/realignment proposal, Deputy Secretary of Defense (DEPSECDEF) John Deutch established an "overall 15 percent reduction in plant replacement value" as "a minimum DoD-wide goal."²⁵ It was believed widely that military research facilities, laboratories, and depots would be particularly vulnerable, and that the Air Force, after avoiding heavy hits in these areas previously, stood to lose perhaps two of its five remaining depots.

Shortly before the end of 1994, however, Secretary of Defense (SECDEF) William J. Perry told surprised reporters that he expected the 1995 list to be about the same size as the list from BRAC 93. The rationale for this 'expectation undershoot' was given by DEPSECDEF Deutch in an interview shortly before the list was made public: "We need time," Deutch said, "to balance the base-closing costs and the base-closing savings, and complete the transfer of facilities to productive community use."²⁶ With defense funding at its lowest level in nearly half a century, and the recoupment of closure/realignment outlays requiring, on average, approximately seven years -- only after which can closure savings begin to be realized -- the Administration apparently was unwilling to squeeze Pentagon operational and procurement accounts any further.

²³The BRAC process and enabling legislation are explained at Attachment 2. For a detailed discussion of prior BRAC actions, see the SDS study *Promoting/Protecting Contractor-Provided Depot Maintenance*, 30 December 1994.

²⁴A summary of major base closures from prior BRAC rounds is at Attachment 3.

²⁵Deputy Secretary of Defense Memorandum, Subject: *1995 Base Realignments and Closures (BRAC 95)*, 7 January 1994.

²⁶Reported by Eric Schmitt, "Pentagon To Seek Scaled-Back List Of Base Closings," *New York Times*, 25 February 1995, p. 1.

The list of bases recommended by DoD for closure and realignment was released officially on 28 February 1995. True to Perry's promise, what originally was supposed to have been the "mother of all BRACs" turned out affecting only 146 military facilities in the US.²⁷ Of those, only 35 *major* installations were identified for closure or significant downsizing -- and it seemed a stretch to call some of them major. The manpower adjustments associated with these proposals amounted to a net *increase* of 4,400 military positions (the result of personnel returning home after the closure of US bases overseas) and a net loss of roughly 34,000 civilian positions.²⁸ Interestingly, none of the Air Force's ALCs were on the closure list although all five were identified for realignment action.

Rather than close any ALCs, the Air Force consolidated some workloads and accepted relatively modest manpower cuts at three of the depots. "The net effect of [Air Force] depot realignments," according to the DoD *Base Closure and Realignment Report*, will be "to transfer approximately 3.5 million direct labor hours and to eliminate 37 product lines across the five depots."²⁹ The formal report continued:

Programmed work reductions, downsizing through contracting or transfer to other Service depots, and the consolidation of workloads . . . result in the reduction of real property infrastructure equal to 1.5 depots, and a reduction in manhour capacity equivalent to about two depots. The proposed moves also make available over 25 million cubic feet of space to the Defense Logistics Agency for storage and other purposes, plus space to accept part of the Defense Nuclear Agency and other displaced Air Force missions.³⁰

As reported in a recent article in *Aviation Week & Space Technology*, the Air Force presented "a powerful argument that more money could be saved by reducing the size of all five aircraft maintenance depots than by closing one or two of them."³¹ SECDEF Perry is quoted as having found the arithmetic "compelling."³²

7.2 Depots -- A Special Interest Item

Military depots and depot capacity were to have received particularly close scrutiny by DoD in preparing its BRAC 95 closure/realignment list. The 1993 BRAC Commission had identified

²⁷The list of major facilities in the US and its territories identified for closure/realignment is at Attachment 4.

²⁸A list of net gains/losses by state is at Attachment 5.

²⁹DoD *Base Closure and Realignment Report*, p. 5-126.

³⁰*Ibid.*

³¹John D. Morocco, "Air Force To Trim, Not Close, Depots," *Aviation Week & Space Technology*, 6 March 1995, p. 22.

³²*Ibid.*

the need to pare down "the clearly excess capacity within the DoD depot system" as one of several *Issues for Further Consideration* in BRAC 95, and had pointed to two areas as offering opportunities to help do this: greater consolidation and interservicing of common workloads within the military depot structure, and more extensive exploitation of private-sector depot maintenance capability.³³

Noting in its final report that the Pentagon "has been attempting for approximately 20 years without significant success to interservice depot maintenance workload," the 1993 Commission attempted to promote broader interservicing in four specific commodity areas -- wheeled vehicles, rotary-wing aircraft, tactical missiles, and ground communications -- with its closure/realignment recommendations.³⁴ While some progress was made, the Commission still felt there were both the need and opportunity for more, and urged its successors to focus on the issue: "The efficiencies to be realized from interservicing dictate DoD conduct an exhaustive review and present its recommendations/actions during the 1995 [base closure] round."³⁵

Regarding privatization, the 1993 Commission came to the belief during its deliberations that the domestic sector could provide a potentially cost-effective option to DoD's in-house capability for repairing and maintaining its equipment. Further, they felt that moving work to the private sector could also have "a positive impact on maintaining the nation's industrial base."³⁶ Accordingly, the Commission "strongly" recommended that SECDEF "address the private-sector capability, within the context of an integrated national industrial philosophy, in his recommendations for the 1995 round of base closures."³⁷

The Administration's DoD leadership appeared to be paying heed to the advice . . . initially. In preparing for BRAC 95, DEPSECDEF Deutch directed the establishment of five Joint Cross-Service Groups to pinpoint common support functions in designated functional areas, and to "oversee DoD Component cross-service analyses of these common support functions" in identifying candidate bases for closure under BRAC 95.³⁸ (A sixth Joint Cross-Service Group was established to develop guidelines for measuring the economic impact of closure/realignment

³³1993 *Report to the President*, Defense Base Closure and Realignment Commission, 1 July 1993, p. 2-1. For a detailed examination of the depot issue, interservicing, and private sector capabilities, see the SDS study *Privatizing Depot Maintenance*, 1 November 1994.

³⁴1993 *Report to the President*, p. 2-1.

³⁵*Ibid.*

³⁶*Ibid.*, p. 2-2.

³⁷*Ibid.*

³⁸Deutch Memorandum, *1995 Base Realignment and Closures*.

recommendations.) The five functional areas were: depot maintenance, test and evaluation, laboratories, military treatment facilities, and undergraduate pilot training.

During the same time period in which the Joint Cross-Service Groups were beginning their activity, the privatization issue was being studied extensively by a Defense Science Board Task Force on Depot Maintenance. In its April 1994 report, this Board concluded that commercial firms did in fact offer a cost-effective alternative to publicly accomplished depot maintenance and recommended measures designed to bolster industry's opportunities to acquire depot workload.³⁹ Most of these recommendations were accepted by DoD and codified in a May 1994 memorandum on *Depot Maintenance Operations Policy* by Deutch.⁴⁰

The good intentions for promoting reductions in depot infrastructure through greater interservicing and privatization, however, began to unravel just after mid-year, well before the Services began to get serious about identifying base closure candidates. The push for greater privatization of depot activities was the first thread to be pulled loose. Concerned with the potential adverse impact on their constituents of reduced government workload, Congressmen representing depot-dominated districts responded to the *Depot Maintenance Operations Policy* memorandum with a strong display of bi-partisan protectionism by inserting "hooks" into the FY 95 Defense Authorization and Appropriation Bills that effectively prohibited DoD from implementing the Deutch-directed efficiency measures.

The decisive Democratic election upset in November to some degree constituted another thread working free. While it launched a supposedly new breed of populist, reform-minded Republicans toward Washington, ostensibly mandated to carve bloat out of the federal bureaucracy -- in fact, the very sort of allies that Defense base closure advocates had long been seeking⁴¹ -- the strong pro-military orientation of the new master-designates of the Capitol led the Administration into digging itself into a \$25 billion budgetary hole that subsequently left little room for significant base closure outlays.

³⁹*Depot Maintenance Management*. Report of the Defense Science Board Task Force, published by the Office of the Under Secretary of Defense for Acquisition & Technology, April 1994.

⁴⁰Deputy Secretary of Defense Memorandum, Subject: *Depot Maintenance Operations Policy*, 4 May 1994.

⁴¹Republican vows to do away with big government presented the Administration a unique win-win opportunity for proposing major reductions in the defense infrastructure. If a large BRAC list survived the all-or-none Congressional consideration process, the Administration could claim its share of the credit for fiscally responsible action on behalf of long-standing military desires to downsize basing. If the list were rejected by a Republican-dominated Congress, the Administration could accuse the opposing party of self-serving hypocrisy. From a cynical point of view, stacking the list with bases from low-vote, Republican-controlled districts (including, for example, Ogden ALC, Utah, and Oklahoma City ALC, Oklahoma, two Republican strongholds) would have presented the Administration with an opportunity to exact highly focused revenge in the bargain.

Even before they started preparing to swear in their new freshmen and claim committee gavels, Republican incumbents on the Hill intensified their attacks on the Administration's record of military funding. Asserting that the Democrats had managed to slash the defense budget drastically and still create a shortfall of between \$40 and \$150 billion over the Future Years Defense Program, they vowed to set things straight in the coming session.⁴² The Administration, smarting at Republican charges that military readiness had eroded under its stewardship as a result of the diversion of Operations and Maintenance (O&M) funding to pay for peace-keeping operations ("feel-good foreign policy"), and stung by accusations that the hefty reductions in Defense procurement accounts amounted to forcing the military to eat its seed corn (with implied dire consequence for future military capability), on 1 December 1994 announced a six-year, \$25 billion Presidential Defense Funding Initiative. This was derided by the Republicans as mere political smoke and mirrors (and, at any rate, insufficient), but it had the practical consequences of limiting the Administration's ability to cope with a large base closure pricetag. The \$3.8 billion required up front to finance DoD's relatively modest BRAC 95 proposal for BRAC 95 was a tough enough pill to swallow. With the 1996 presidential elections already much on everyone's mind in Washington, budget concerns, plus the potential angry reaction of voters hurt by base closures, appear to have figured prominently in holding the Administration's closure list down.

Yet another wayward thread was the inability of the five functional Joint Cross-Service Groups to reach agreement on appropriate interservicing and consolidation in all but a few instances. The full extent of this incapacity became apparent only with the publication of the *Base Closure and Realignment Report* in March 1995. Discussing the outcome of the Joint Cross-Service Group on Test and Evaluation, which was representative of the outcome in most of the groups, the report observed wryly:

Cross-servicing and downsizing . . . proved to be a considerable challenge. In general, the Military Departments concluded that preservation of core test facilities, which have irreplaceable land, air, and water ranges, precluded closures of major facilities and that cross-servicing of T&E functions would not be cost effective.⁴³

Referring to the Depot Maintenance Group, the report noted that, while its recommendations had been directly responsible for only limited cross-servicing, the recommendations had been

⁴² The \$40 billion figure was the Congressional Budget Office's estimate; \$150 billion, that of the General Accounting Office.

⁴³ *Base Closure and Realignment Report*, p. 4-3.

used by the Services to develop "what they believe to be more cost effective in-house solutions."⁴⁴

If deciding to keep work "in-house" was one of two themes common to Joint Cross-Servicing Group outcomes, the other was putting a positive, upbeat face on feverish unproductivity. This was done primarily by asserting that, even if the groups did not actually maximize cross-servicing, their deliberations "laid the foundation for further cross-servicing downstream, outside the BRAC process."⁴⁵ And in similar fashion, not unlike a politician requesting he be given just one more term in office to finish tasks not yet complete, SECDEF Perry already has suggested that one or two more closure rounds will be necessary in the future.

7.3 Courses of Action

It is reasonable to assume that, if the Administration requests enabling legislation for another round or two of base realignments, the Congress that pushed the line-item veto will grant the request. This presupposes that the current closure round proceeds essentially as laid out by DoD. Action on the do-it-again front, however, is unlikely until the current process has been brought to a successful conclusion.

That is not necessarily an assured thing. Of the eight members appointed to the BRAC 95 Commission (four by Republicans and four by Democrats), three have been highlighted so far for potential conflicts of interest (Al Cornella, Wendi Steele, and retired AF General J. B. Davis).⁴⁶ Cornella and Davis have recused themselves from deliberations in which the conflicts could surface. Steele, a close associate of Senator Don Nickles (R-OK), has declined to do so on the grounds that her principles and objectivity put her above such concerns. The proof will be in the process.

That process is now underway but with few solid indications where it is headed. Historically, BRAC commissions have largely accepted DoD-proposed closure lists, tinkering with them primarily at the margins. Whether the same pattern will be repeated this year remains in question. Commission Chairman Alan J. Dixon already has gone on record as stating that DoD's list of bases for closure is too small. "Even more installations will be added to the list of those marked for closing," Dixon has said, footnoting: "We've already made a determination

⁴⁴*Ibid.*

⁴⁵*Ibid.*

⁴⁶BRAC 95 Commission member biographies are included at Attachment 6.

that we will add some."⁴⁷ It is too early to judge to what extent the reality will catch up with the rhetoric.

8.0 Conclusions

√ **Depots Avoid Comparison With Private Sector.** ALCs perform many legitimate "Core" depot maintenance functions but appear also to be engaged extensively in research and maintenance/repair activity that is not inherently or exclusively military in nature. The extent to which these activities could be accomplished equally well in the private sector at comparable cost -- or more cheaply -- has not been examined thoroughly and systematically. Data provided by the ALCs does not encourage such an examination.

√ **Depots Are Insular and Insulated.** Information presented on -- and assessments made of -- depot uniqueness by individual ALCs indicates, to some degree, a lack of awareness on the part of depot managers of the facilities, equipment, and capabilities that exist today in private industry. In spite of sporadic sniping at each other, the individual ALCs do not even appear to be fully aware of the facilities, equipment, and capabilities resident at other ALCs.

√ **Depots Duplicate Competencies/Workload.** Clearly, there is extensive duplication of facilities, equipment, and workload among the ALCs. However, there is no information presented justifying that duplication in terms of total end items and weapon systems supported or other objective, quantifiable qualities. It is likely that a review of Navy/Marine and Army depots would reveal similarly repeated capabilities.

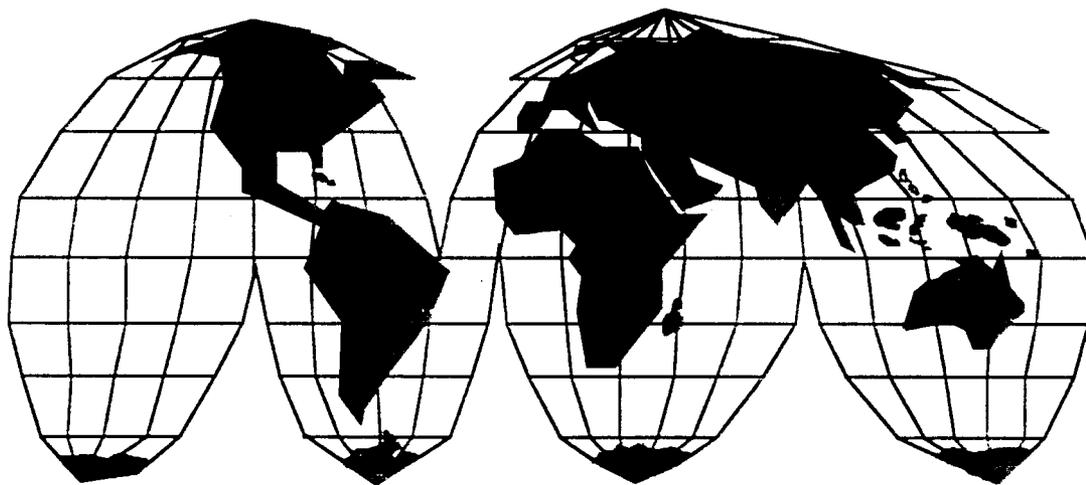
√ **Depot Self-Valuation Emphasizes the Subjective.** One-of-a-kind facilities, equipment, and capabilities are a source of much justifiable pride at each ALC. Unfortunately, this prevents the actual value ("cost benefit" or "cost utility") of these facilities, equipment, and capabilities from being measured objectively. Many facilities and equipment appear to exist solely or primarily to support small numbers of weapon systems that are in limited use with and/or being retired from the US military. In some cases, the only current user is a foreign military service. In no case is an *income capitalization* or similarly objective appraisal technique employed to justify the retention of capability or duplication of capacity. The application of such techniques could provide an objective basis for identifying uneconomic functions for transfer to the private sector.

⁴⁷Richard A. Serrano, "Panel Questions Decision to Close Long Beach Yard," *Los Angeles Times*, 7 March 1995, p. 1.

SDS International

Attachments

1. Air Force Depot Capacity/Plant Comparisons
2. Base Realignment and Closure Process
3. Prior BRAC Actions -- Major Base Closure Summary
4. BRAC 95 -- Proposed Major Base Closures/Realignments
5. DoD BRAC 95 Proposal -- Job Changes By State
6. Biographies of BRAC 95 Commissioners
7. Explanation of Workload Tables
8. Table of Acronyms



Air Force Depot Capacity/Plant Comparisons

Capacity, Workload, Facilities & Land ¹	Sacramento [SM-ALC] McClellan AFB, CA		Ogden [OO-ALC] Hill AFB, UT		Oklahoma City [OC-ALC] Tinker AFB, OK		San Antonio [SA-ALC] Kelly AFB, TX		Warner Robins [WR-ALC] Robins AFB, GA	
	FY96	FY99	FY96	FY99	FY96	FY99	FY96	FY99	FY96	FY99
Baseline (kDLH)										
Capacity Index (CI) ²	7,058	7,068	7,614	7,614	7,753	7,811	8,897	8,804	8,187	8,187
Programmed Workload ³	5,509	4,871	5,221	4,988	7,058	7,122	6,496	5,782	7,376	6,763
Utility Index (UI) ⁴	78%	69%	69%	66%	91%	91%	73%	66%	90%	83%
Core (kDLH)										
Required Core Capability ⁵	4,831	4,824	4,895	4,895	6,695	6,695	4,429+	4,429+	6,941	6,941
Req Core/CI	68%	68%	64%	64%	86%	86%	50%+	50%+	85%	85%
Programmed Core ⁶	4,249	4,231	4,895	4,895	6,695	6,658	4,463	4,463	6,941	6,763
Prgm Core/CI	60%	60%	64%	64%	86%	85%	50%	51%	85%	83%
Prgm Core/Req Core	88%	88%	100%	100%	100%	99%	100%+	100%+	100%	97% ⁶
Prgm Core/Prgm Workload	77%	87%	94%	98%	95%	94%	69%	78%	94%	100%
Potential (kDLH)										
Max Capacity ⁷	10,227	10,271	9,005	9,005	12,863	12,863	15,220	15,220	9,913	9,913
CI/Max	69%	69%	85%	85%	60%	61%	58%	58%	83%	83%
Prgm Workload/Max	54%	47%	58%	55%	55%	55%	43%	38%	74%	68%
Req Core/Max	47%	47%	54%	54%	52%	52%	29%+	29%+	70%	70%
Values (m\$)										
Workload ⁸	\$482	\$456	\$374	\$399	\$881	\$1,000	\$993	\$979	\$628	\$583
Plant Replacement Value ⁹	\$3,100	\$3,619	\$2,701	\$2,944	\$2,405	\$3,415	\$1,436	\$1,554	\$1,975	\$2,442
Workload/Plant Value	16%	13%	14%	14%	37%	29%	69%	63%	32%	24%
Facilities (kSF)										
Total (Substandard) ¹⁰	3,432 (88)		4,981 (1,866)		5,447 (290)		4,750 (1,146)		3,938 (992)	
Expansion Space ¹¹	1,168 (1,015)		1,318 (525)		1,844 (675)		489 (70)		775 (56)	
Real Estate (acres)										
Owned ¹²	3,786		962,021		5,020		4,661		8,720	
Developed	3,350		4,710		2,071		3,016		4,085	
Available to develop ¹³	436		9,406		266		962		502	

[Notes on following pages]

Notes for Table "Air Force Depot Capacity/Plant Comparisons"

[Source: Air Force Data Call Supplements submitted to Joint Cross Service Group on Depot Maintenance, February 1995]

1. **Capacity** in thousands of Direct Labor Hours (kDLH); **Workload** in kDLH or \$ millions (m\$); **Facilities** in thousands of square feet (kSF); **Land** in acres.
2. "Capacity Index" (CI) is defined as overall depot maintenance production capacity assuming existing facilities and equipment (plus funded, in-process facility and equipment improvements for FY99) and a single-shift, 40-hour work week.
3. Workload currently programmed for FYs shown.
4. "Utility Index" (UI) is "Programmed Workload" as a percentage of "Capacity Index" (Prgm Workload/CI).
5. Capability to be maintained by the ALC to perform depot maintenance work designated as "Core" (including both own-Service and other-Service requirements) in accordance with OUSD(L) Memorandum dated 15 November 1993, subject: Policy for Maintaining Core Depot Maintenance Capability. While the OUSD(L) policy memorandum provides broad guidance, the implementation of that guidance resulting in the designation of "Core" requirements is a Service function and is not wholly standardized between the Military Departments. "Required Core Capability" may include surge requirements as well as peacetime needs.
6. Programmed workload for the FYs shown that is assigned against "Core" maintenance functions.
7. "Maximum Potential Capacity" assuming current projected workload remains as assigned, sufficient production demand to justify maximum hiring with no significant new investment in capital equipment, no MILCON beyond that already approved and funded, and a single-shift, 40-hour work week.
8. Current workload projections for FYs shown expressed in millions of dollars.
9. Estimated replacement value (in FY95 dollars) of equipment and facilities (including buildings, pavements, and utilities) associated directly with depot maintenance activity. Note that this does not equate to "market value" as used in the commercial appraisal of real estate (which generally is determined through applying a combination of *cost*, *sales comparison*, and *income capitalization* techniques, and which must account for *demand* within a more universal market framework) and can be used only for "rough order of magnitude" comparisons between military installations so-valued. This artificiality is reflected in the detailed tabular data breakouts for each installation which reflect a steady appreciation in "value" of both facilities and equipment, irrespective of their *diminished utility* resulting from accrued depreciation (a function of *physical deterioration*, *functional obsolescence*, and *external obsolescence*).
10. Total area (in thousands of square feet) of buildings and special pads used to perform depot maintenance functions. Does not include general purpose space used by multiple organizations on a base, uncovered storage space, or ramp space. That part of the total that is contained in buildings rated "substandard" or "inadequate" is shown in parentheses.

11. Total additional space that could be obtained for depot maintenance functions (not administrative space) by reconfiguring and/or rehabilitating existing underutilized facilities to accept new or increased requirements. That part of the total that is contained in buildings rated "substandard" or "inadequate" is shown in parentheses.
12. Installation land owned by the government in the proximity of the depot maintenance area.
13. That owned land with no outstanding environmental constraints or operational restrictions. (Note that because some Ogden ALC facilities are sited on the Utah Test and Training Range (UTTR), the amount of land feasibly available for depot expansion there may be overstated.)

Base Realignment and Closure (BRAC) Process

After hundreds of military installations were shuttered in the 1970s following the end of the Vietnam War, members of Congress enacted Section 2687 of Title 10, United States Code (USC), in order to impede the base closure process and thereby protect their constituencies from the adverse economic consequences of such actions. This required the Department of Defense (DoD) to notify Congress if an installation became a closure or realignment candidate, and imposed expensive and time-consuming environmental evaluations on all prospective closure actions. The law effectively halted base closures.

By the mid-1980s, however, Congress began to recognize that base-structure bloat constituted an increasingly unacceptable burden on the military departments and was forcing DoD to direct an ever-greater percentage of diminished operating funds to the maintenance of unneeded facilities. Thus, Congress cooperated closely with the Secretary of Defense (SECDEF) in 1988 to develop a mechanism that would permit base structure to be reduced commensurately with force structure reductions while *insulating individual legislators from the political consequences*. The result was Public Law 100-526, enacted in October 1988, which created a BRAC Commission under SECDEF to independently study domestic base needs and recommend facilities for closure or realignment. The Commission subsequently recommended that 86 facilities be closed and 59 others be realigned.

In January 1990, the SECDEF attempted to implement additional base closures without prior coordination with Congress or the benefit of advice from an independent group (the 1988 BRAC Commission's charter had by then expired). In the face of Congressional protests that base selection had been politically influenced, agreement was reached between the executive and legislative branches to reestablish an objective (and, ostensibly, *politically neutral*) closure/realignment mechanism. The result this time was Public Law 101-510, signed in November of 1990, which established a BRAC process significantly different from that employed in 1988 and provided for BRAC recommendations to be made in 1991, 1993, and 1995. One of the two main changes between the new process and the one employed in 1988 was that, under the new system, proceedings were to be more open and involve actively soliciting input from the communities affected. The other was that, unlike 1988 when the BRAC Commission worked under SECDEF and itself identified and recommended facilities for closure, the new system cast the BRAC Commission in the role of independently reviewing and analyzing facility changes recommended by the SECDEF, and then reporting its conclusions directly to the President.

In 1991 the BRAC Commission recommended 34 base closures and 48 realignments. In 1993, the Commission added 73 installations for further consideration as potential closure/realignment candidates to the 165 facilities originally recommended by the SECDEF, and subsequently recommended 130 closures and 45 realignments. For 1995, the last year that existing legislation provides for BRAC activities, it had been predicted that more facilities would be recommended for closure/realignment than the total of all facilities affected during the previous three BRAC rounds.

Main Provisions of Public Law 101-510

Commission Membership. The BRAC Commission consists of eight members appointed by the President *with the advice and consent of the Senate*. Nominations must be submitted by the President to the Senate by not later than 3 January 1995 or the BRAC process for 1995 is terminated. In identifying nominees, the President should consult with the Speaker of the House of Representatives on two, the Senate majority leader on two, and the minority leaders in both houses on one each. For 1995, the only member nominated to and confirmed by the Senate so far is the Commission's chairman-designate, former Senator Alan Dixon (D-IL).

Base Selection Criteria. Bases are to be nominated, evaluated, and selected for closure or realignment on the basis of (a) six-year force-structure plans submitted by DoD as part of the FY96 Defense Budget process, and (b) specific selection criteria identified and published by the SECDEF by not later than 15 February 1995 (and not disapproved by a joint resolution of Congress before 15 March 1995). The prioritized criteria shown below were used in BRAC deliberations in both 1991 and 1993.

- | | |
|--------------------------|--|
| <u>Military</u> | 1. Mission requirements and operational readiness impacts. |
| | 2. Land, facility, and airspace availability. |
| | 3. Ability to accommodate contingency and mobilization requirements. |
| | 4. Cost and manpower implications. |
| <u>Investment</u> | 5. Extent/timing of potential costs and savings. |
| <u>Impacts</u> | 6. Economic impact on communities (including, for BRAC 95, cumulative impact in light of prior BRAC actions) |
| | 7. Ability of receiving communities' infrastructure to support change. |
| | 8. Environmental impact. |

Sequence of Events. All BRAC Commission members must be nominated to the Senate by not later than 3 January 1995. (While not covered by the law, it is reported that SECDEF has given all of the Services until 3 January to submit to him their recommendations for base closure and realignment.) The SECDEF must promulgate the list of military installations within the US being recommended for closure or realignment by not later than 15 March 1995. After holding public hearings and conducting deliberations, but by not later than 1 July, the BRAC Commission transmits its findings and conclusion to the President. The Commission can change any of the SECDEF's recommendations if it determines he deviated substantially from the force-structure plan and/or selection criteria. By 15 July the President must approve or disapprove the Commission's recommendations. If he approves, he transmits his certification to Congress which then has 45 legislative days to enact a joint resolution *disapproving* the recommendations. If it fails to do so, the indicated closures and realignments go into effect. If the President disapproves the Commission's recommendations, the Commission has until 15 August to submit to the President a revised list of recommendations. The President then has until 1 September to forward a certification of approval of the revised list to Congress, which again has 45 legislative days to enact a joint resolution of disapproval. If the President does not forward his certification of the revised list to Congress by 1 September, or if the Congress enacts a joint resolution of disapproval, the BRAC process for 1995 is terminated. The President and Congress must approve or disapprove the Commission's recommendations in their entirety. The process does not allow individual bases or facilities to be singled out.

Prior BRAC Actions -- Major Base Closure Summary⁴⁸ (US and Territories)

BRAC 88

16 Closures

Chanute AFB, IL	Philadelphia Naval Hospital, PA	Jefferson Proving Ground, IN
Mather AFB, CA	*Naval Station Galveston, TX	Lexington Army Depot, KY
Pease AFB, NH	*Naval Station Lake Charles, LA	Army Material Tech Lab, MA
George AFB, CA	Presidio of San Francisco, CA	Fort Douglas, UT
Norton AFB, CA	Fort Sheridan, IL	Cameron Station, VA
Naval Station Brooklyn, NY		

* Denotes facilities that were never opened

BRAC 91

26 Closures

Fort Benjamin Harrison, IN	Naval Station Long Beach, CA	Grissom AFB, IN
Fort Devens, MA	Philadelphia Naval Shipyard, PA	Loring AFB, ME
Fort Ord, CA	Naval Station Puget Sound, WA	Lowry AFB, CO
Sacramento Army Depot, CA	Tustin MCAS, CA	Myrtle Beach AFB, SC
Hunters Point Annex, CA	England AFB, LA	Richards-Gebaur ARS, MO
Chase Field NAS, TX	Bergstrom AFB, TX	Rickenbacker ANGB, OH
Moffett NAS, CA	Carswell AFB, TX	Williams AFB, AZ
Naval Station Philadelphia, PA	Eaker AFB, AK	Wurtsmith AFB, MI
Castle AFB, CA	Naval Electric Systems Engineering Center, San Diego, CA	

BRAC 93

28 Closures

Vint Hill Farms, VA	Naval Station Mobile, AL	Mare Island Naval Shipyard, Vallejo, CA
MCAS El Toro, CA	NAS Alameda, CA	Naval Aviation Depot Alameda, CA
Naval Hospital Oakland, CA	Naval Station Treasure Island, CA	Naval Training Center San Diego, CA
NAS Cecil Field, FL	Naval Aviation Depot Pensacola, FL	Naval Training Center Orlando, FL
NAS Agana, Guam	NAS Barbers Point, HI	NAS Glenview, IL
Naval Station Charleston, SC	Naval Station Staten Island, NY	Charleston Naval Shipyard, SC
NAS Dallas, TX	Homestead AFB, FL	O'Hare IAP ARS, IL
Plattsburgh AFB, NY	Gentile AFS, OH (DESC)	Naval Aviation Depot Norfolk, VA
K.I. Sawyer AFB, MI	Newark AFB, OH	Defense Personnel Support Center, Philadelphia, PA
Naval Electronic Systems Engineering Center, St. Inigoes, MD		

Table A3-1: Major Bases Closed (Prior)

⁴⁸List presents only facilities identified for **closure**, not those identified for **realignment**. Closures and realignments are considered "major" when they result in the loss of at least 300 military/civilian jobs.

Closure Summary By Service

Major Domestic Base Closures						
	Bases Start	BRAC 88	BRAC 91	BRAC 93	Bases Left	Reduction
Army	109	-7	-4	-1	97	11%
Navy Marine Corps	168	-4	-9	-20	135	20%
Air Force	206	-5	-13	-5	183	11%
Defense Agencies	12	0	0	-2	10	17%
	—	—	—	—	—	—
Totals	495	-16	-26	-28	425	15%

Table A3-2: By-Service Base Closure Summary (Prior)

Closure Summary By State

States With More Than 1 Major Base Closure					
State	BRAC 88	BRAC 91	BRAC 93	Total	% of All
CA	4	8	7	19	27
TX	1	3	1	5	7
FL	-	-	4	4	6
IL	2	-	2	4	6
PA	1	2	1	4	6
IN	1	2	-	3	4
NY	1	-	2	3	4
OH	0	1	2	3	4
SC	-	1	2	3	4
VA	1	-	2	3	4
LA	1	1	-	2	3
MA	1	1	-	2	3
MI	-	1	1	2	3
All Others	3	6	4	13	19
	—	—	—	—	—
Totals	16	26	28	70	100

Table A3-3: By-State Base Closure Summary (Prior)

**1995 Department of Defense BRAC List of
Major Facilities for Closure and Realignment⁴⁹
(US and Territories)**

Closures

Army		Navy		Air Force		DLA	
Installation	Δ Jobs ⁵⁰ : Net Gain/(Loss)	Installation	Δ Jobs: Net Gain/(Loss)	Installation	Δ Jobs: Net Gain/(Loss)	Installation	Δ Jobs: Net Gain/(Loss)
Fort McClellan, AL	(8,536)	Adak NAF, AK	(678)	North Highlands Air Guard Station, NY	0	Memphis Defense Depot, TN	(1,300)
Fort Chaffee, AR	(247)	Long Beach NSY, CA	(4,029)	Ontario IAP AGS, CA	0	Ogden Defense Depot, UT	(1,113)
Fitzsimons Amy Medical Center, CO	(2,903)	Guam SRF, GU	(663)	Rome Laboratory, NY	(1,067)	Red River Defense Depot, TX	(2,901)
Price Support Center, IL	(225)	Indianapolis NAWC-AD, IN	(2,841)	Roslyn AGS, NY	(44)	Letterkenny Defense Depot, PA	(378)
Savanna Army Depot Activity, IL	(450)	Louisville NSWC DET, KY	(1,464)	Springfield-Beckley MAP AGS, OH	0		
Fort Ritchie, MD	(2,344)	White Oak NSWC DET, MD	(202)	Greater Pittsburgh IAP ARS, PA	(387)		
Selfridge Army Garrison, MI	(609)	South Weymouth NAS, MA	(936)	Bergstrom Air Reserve Base, TX	(585)		
Bayonne Military Ocean Terminal, NJ	(1,367)	Meridian NAS, MS	(2,581)	Brooks AFB, TX	(3,759)		
Seneca Army Depot, NY	(325)	Lakehurst NAWC-AD, NJ	(1,763)	Reese AFB, TX	(2,083)		
Fort Indiantown Gap, PA	(521)	Warminster NAWC-AD, PA	(348)				
Red River Army Depot, TX	(2,901)						
Fort Pickett, VA	(254)						

Table A4-1: BRAC 95 -- Major Base Closures

⁴⁹Data extracted from News Release No. 095-95, "Secretary Perry Recommends Closing, Realigning 146 Bases," released by the Office of the Assistant Secretary of Defense (Public Affairs), 28 February 1995, and from the formal *Department of Defense Base Closure and Realignment Report* published by DoD in March 1995. Closures and realignments supposedly are considered "major" only when they result in the adjustment of at least 300 military/civilian jobs. A review of information included in the two sources cited, however, fails to clarify why bases such as the Air Force's North Highlands Air Guard Station, NY, are reflected as "Major Closures." Similarly, there is no explanation for the omission from the list of DLA's Defense Distribution Depots at Letterkenny, PA, and Red River, TX. They have been included here by the author.

⁵⁰Jobs include active, reserve, and student military personnel along with civilian and on-base contractor positions.

Realignments

Army		Navy		Air Force	
<i>Installation</i>	<i>Δ Jobs⁵¹: Net Gain/(Loss)</i>	<i>Installation</i>	<i>Δ Jobs: Net Gain/(Loss)</i>	<i>Installation</i>	<i>Δ Jobs: Net Gain/(Loss)</i>
Fort Greely, AK	(724)	Key West NAS, FL	(20)	McClellan AFB, CA	379
Fort Hunter Liggett, CA	(478)	Guam Naval Activities, GU	(2,421)	Onizuka AS, CA	(1,875)
Sierra Army Depot, CA	(592)	Corpus Christi NAS, TX	(142)	Eglin AFB, FL	719
Fort Meade (Hospital), MD	(129)	Keyport NUWC, WA	64	Robins AFB, GA	(534)
Detroit Arsenal, MI	186			Malmstrom AFB, MT	(779)
Fort Dix, NJ	(739)			Kirtland AFB, NM	(6,850)
Fort Hamilton, NY	(49)			Grand Forks AFB, ND	(1,625)
Charles E. Kelly Support Center, PA	(121)			Tinker AFB, OK	(704)
Letterkenny Army Depot, PA	(2,090)			Kelly AFB, TX	221
Fort Buchanan, PR	(182)			Hill AFB, UT	147
Dugway Proving Ground, UT	(1,096)				
Fort Lee (Hospital), VA	(205)				

Table A4-2: BRAC 95 -- Major Base Realignments

⁵¹ Jobs include active, reserve, and student military personnel along with civilian and on-base contractor positions.

**Department of Defense Recommended
BRAC 95 Job Changes by State⁵²**

STATE	Δ JOBS: GAINS/(LOSSES)		STATE	Δ JOBS: GAINS/(LOSSES)	
	Military ⁵³	Civilian ⁵⁴		Military	Civilian
Alabama	(5,877)	931	Montana	(719)	(60)
Alaska	(773)	(368)	Nebraska	0	0
Arizona	147	184	Nevada	87	85
Arkansas	(40)	(207)	New Hampshire	0	0
California	602	(3,988)	New Jersey	(758)	(1,866)
Colorado	(841)	(1,320)	New Mexico	(3,188)	(1,950)
Connecticut	13	(609)	New York	(41)	(1,415)
Delaware	0	0	North Carolina	703	0
District of Columbia	225	0	North Dakota	(1,506)	(119)
Florida	3,754	679	Ohio	1,313	512
Georgia	791	(613)	Oklahoma	1,870	(379)
Guam	(2,104)	(2,665)	Oregon	0	0
Hawaii	995	773	Pennsylvania	(221)	(3,379)
Idaho	123	3	Puerto Rico	(59)	(123)
Illinois	(72)	(588)	Rhode Island	522	572
Indiana	(23)	(1,027)	South Carolina	4,569	31
Iowa	0	0	South Dakota	0	0
Kansas	(10)	(4)	Tennessee	222	(996)
Kentucky	1,401	(1,395)	Texas	(375)	(6,606)
Louisiana	(39)	(60)	Utah	(173)	(1,889)
Maine	215	5	Vermont	0	0
Maryland	(481)	(1,211)	Virginia	4,354	(511)
Massachusetts	(628)	453	Washington	780	0
Michigan	0	(280)	West Virginia	0	(7)
Minnesota	0	0	Wisconsin	(6)	0
Mississippi	(1,519)	(710)	Wyoming	0	0
Missouri	1,164	(4,102)			
NET JOB ADJUSTMENTS				4,397	(34,219)

Table A5-1: BRAC 95 -- By-State Job Losses

⁵² Includes Guam, Puerto Rico, and the District of Columbia.

⁵³ Includes all active, reserve, and student personnel.

⁵⁴ Includes all civilian and on-base contractor positions.

1995 Base Realignment and Closure Commission

Member Biographies

ALAN J. DIXON, Chairman

Alan J. Dixon was confirmed by the US Senate October 7, 1994, as chairman of the Defense Base Closure and Realignment Commission.

Dixon, 67, is a senior partner in the corporate and business department of the St. Louis-based law firm of Bryan Cave, which he joined in 1993 after representing Illinois in the US Senate for 12 years. Until his defeat in the Democratic primary election in 1992, Dixon had enjoyed an unbroken string of 29 election victories dating from 1949 when, while attending law school, he was elected police magistrate in his hometown of Belleville, Illinois.

In 1988 and again in 1990, Democratic Senators elected him unanimously to serve as chief deputy whip, their number three leadership post.

During his Senate career, Dixon held important positions on the committees on Armed Services, Small Business, and Banking, Housing and Urban Affairs.

On the Armed Services Committee, he chaired the Subcommittee on Readiness, Preparedness and Sustainability, which oversees 38 percent of the US defense budget. The subcommittee was one of those responsible for making sure US manpower and weapons systems employed in the Persian Gulf War were adequate for the task. In 1990, he co-authored the legislation that created the commission he now chairs and the process under which the federal government operates to close realign military bases in the United States.

Dixon began a 20-year career in the Illinois General Assembly with election to the House of Representatives in 1950. As a legislator, he wrote or co-sponsored legislation that produced or nurtured the state's modern criminal code, the modern judicial article to the Illinois Constitution, the state's community college system, and its open meetings law.

He served as Illinois Treasurer from 1971-77, during which time his policies earned hundreds of millions of dollars for Illinois taxpayers and he established investment incentives for Illinois banks to encourage them to invest locally.

He was elected Illinois Secretary of State a margin of 1.3 million votes in 1976. In 1978, he was re-elected by 1.5 million votes, becoming the first candidate in Illinois history to carry all 102 counties in the state, including all 30 townships in suburban Cook County and all 50 wards in the City of Chicago.

He was the first Democratic statewide candidate to disclose the sources and amounts of all campaign contributions, and since 1970, his personal financial assets and liabilities were a matter of public record.

Dixon is a graduate of the University of Illinois and holds a law degree from Washington University in St. Louis. He and his wife, Jody, have three children and seven grandchildren.

AL CORNELLA

Al Cornella is the President of Cornella Refrigeration Inc., a Rapid City, South Dakota, firm specializing in commercial and industrial refrigeration. He is a US Navy Veteran with service in Vietnam and has been active in military issues for over a decade.

Cornella has also served on a number of boards and commissions in South Dakota, including the Rapid City Chamber of Commerce. During his tenure with the Chamber, he served as Chairman of the Board of Directors from 1991-1992 and as Chairman of the Military Affairs Committee.

In 1992, Mr. Cornella was appointed by former South Dakota Governor George Mickelson to serve on the State Commission on Hazardous Waste Disposal.

Mr. Cornella currently serves on the boards of the South Dakota Air and Space Foundation and the Rapid City Economic Development Loan Fund.

REBECCA G. COX

Rebecca G. Cox is currently a Vice President of Continental Airlines, Inc. She joined Continental in January, 1989. In 1993, she served as a Member of the Defense Base Closure & Realignment Commission.

Before joining Continental, Cox served as Assistant to the President and Director of the Office of Public Liaison, President Reagan's primary outreach effort to the private sector. She was also appointed by the President to serve as Chairman of the Interagency Committee for Women's Business Enterprise.

Prior to her 1987 White House appointment, Cox had served as Assistant Secretary for Governmental Affairs at the Department of Transportation. As Assistant Secretary, she was responsible for coordinating legislative strategies and non-legislative relationships between the Department and Congress, as well as ensuring a continuing Departmental program for effective communication and policy development with other Federal agencies, state and local governments, and national organizations.

Ms. Cox had previously served at the Department of Transportation as Counselor to Secretary Elizabeth Dole and as Deputy Assistant Secretary for Government Affairs.

Before coming to the Department of Transportation, Cox worked in the US Senate first as staff assistant, then legislative assistant and, finally, as Chief of Staff to US Senator Ted Stevens. As Chief of Staff, she was responsible for managing the Senator's Alaska staff, the leadership duties of the Office of the Assistant Majority Leader and the oversight of his Subcommittee assignments including those involving the Commerce, Appropriations, and Governmental Affairs Committees.

In 1976, she received a B.A. degree from Depauw University in Greencastle, Indiana and a Juris Doctorate degree from the Columbus School of Law, Catholic University, Washington, D.C. in 1981.

Ms. Cox resides in Newport Beach, California with her husband Chris and their two children.

PLANNED PROPERTY DISPOSALS AT SELECTED BASES CLOSED IN THE 1988 AND 1991 ROUNDS

December 1994

Base	Federal			Public benefit transfers					Econ dev transfer	Market sales	Undetermined	Total acres
	DOD	FWS/BLM	Other Federal	Homeless	Airports	Park/recreation	Education	Other				
Army MTL, MA						7					30	37
Bergstrom AFB, TX	356				2,860							3,216
Cameron Station, VA				8		64				93		165
Castle AFB, CA			660	8	1,581	18	132	13		365		2,777
Chanute AFB, IL	13				1,181	147	62			729		2,132
Chase NAS, TX								262		96		3,757
Davisville NCBC, RI	380		10			219			512		159	1,280
Eaker AFB, AR					1,690	484	300			3	809	3,286
England AFB, LA					2,282							2,282
Ft. Benjamin Harrison, IN	244			4		1,550			548	150	5	2,501
Ft. Devens, MA	5,598	800	360	20					2,633			9,311
Ft. Ord, CA	1,190	15,000		133	846	2,605	338		2,681		4,923	27,725
Ft. Sheridan, IL	310			46		103	4				249	712
Ft. Wingate AD, NM	13,000	8,812										21,812
George AFB, CA			900	34	2,300		63		1,443	328		5,068
Grissom AFB, IN	1,398								1,324			2,722
Jefferson Proving Ground, IN		17,500							2,764		5,000	55,264
Lexington AD, KY	4					210			566			780
Long Beach NS/NH, CA	592		17	26			62		178		57	932
Loring AFB, ME	1,223	6,600	25				18				1,611	9,487
Lowry AFB, CO	115			47		175	220	22	711	576		1,866
Malher AFB, CA	57			28	2,883	1,462	95			1,169	22	5,716
Moffett NAS, CA	130		1,140							7		1,577
Myrtle Beach AFB, SC					1,244		15			1,559	926	3,744
Norton AFB, CA	112		33	4	1,267	24	10	39	641			2,130
Pease AFB, NH	230	1,095			2,305			27	600			4,257
Philadelphia NS/NH/NSY, PA	550		1			30		6		13	902	1,502
Presidio of San Francisco, CA			1,180									1,480
Puget Sound NS, WA		4	10	18		82	21	16				151
Richards-Gebaur ARS, MO	214				202					12		428
Rickenbacker AGB, OH	300				1,635						80	2,015
Sacramento AD, CA	79			29			4		373			485
Tustin MCAS, CA	10			54		103	219			875	359	1,620
Warminster NAWC, PA	100										740	840
Williams AFB, AZ					3,262		642			138		4,042
Woodbridge ARF, VA		580										580
Wurtsmith AFB, MI			2	7	1,600	15	10	5		489	1,413	3,541
Total acreage	26,205	80,400	4,848	466	27,138	7,298	2,215	390	18,373	6,602	17,285	191,220
Percent of total	13.70	42.05	2.54	0.24	14.19	3.82	1.16	0.20	9.61	3.45	9.04	100.00

Legend

FWS/BLM Fish and Wildlife Service/Bureau of Land Management
 Econ dev transfer Economic development transfer

WIN TWO MRCs?-ONE MRC (LET ALONE TWO) ALREADY SHOWS RED LIGHTS FOR MUNITIONS

Colors indicate months needed to reach requirement:

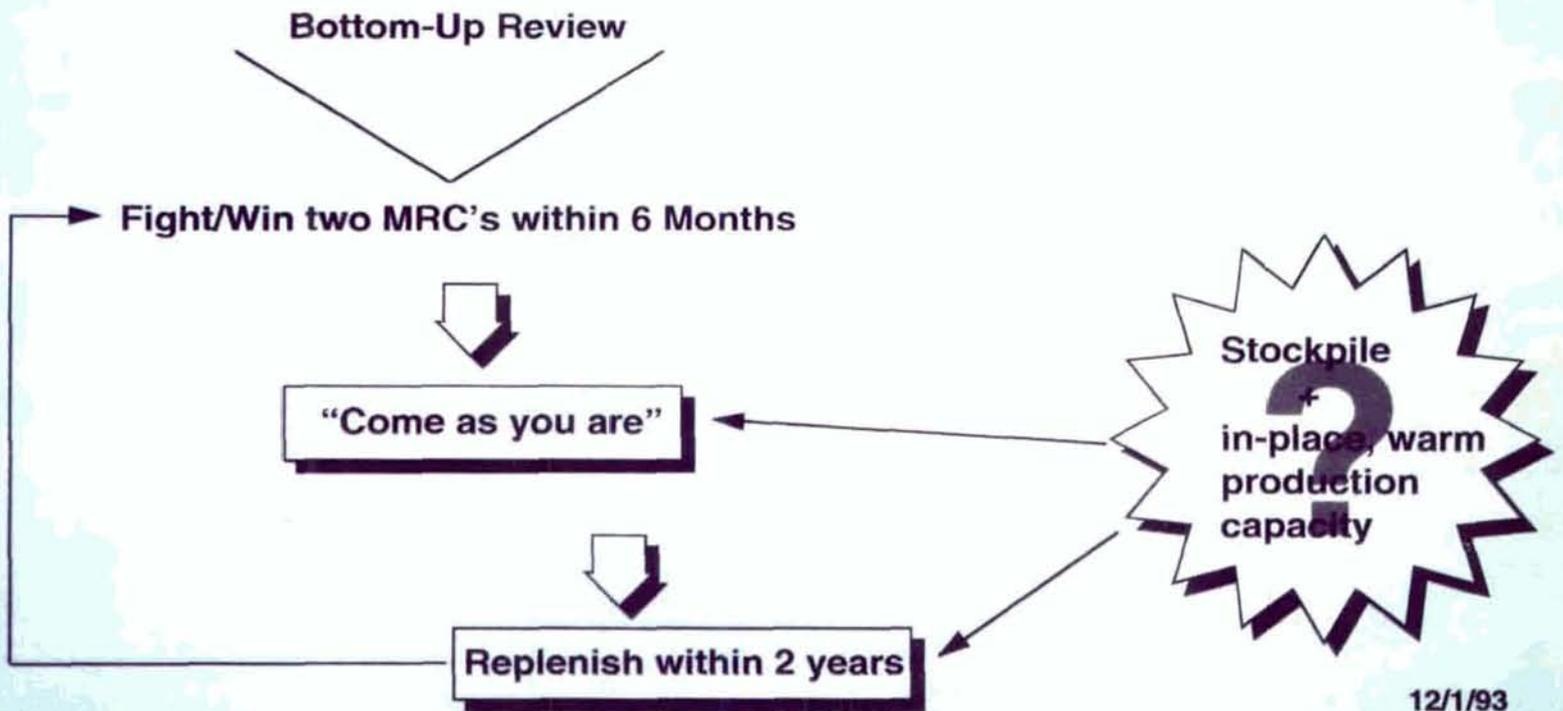
Green = Less than 6
 Yellow = 6-12
 Red = More than 12

Ammo Type	Desert Storm Performance	AMC Rating 1992	Impact of FY94 Budget*
Small Cal.	Green	Green	Green
20 mm	Green	Green	Yellow
25 mm	Yellow	Yellow	Red
50 cal	Green	Yellow	Red
30 mm	Yellow	Red	Red
40 mm	Green	Yellow	Red
Fuzes	Yellow	Yellow	Red
Mortars	Green	Yellow	Yellow
Tank	Green	Yellow	Yellow
Artillery	Green	Yellow	Red
Explosives	Green	Yellow	Red
Propellant	Green	Yellow	Red
Demo/Detonators	Green	Red	Red
Bombs	Green	Green	Green
GM W/H	Green	Green	Green
Mines	Yellow	Yellow	Red
Ship Ammo	Green	Green	Yellow
Rockets	Green	Green	Red

Assumes no change in stockpile status
 Source: Strategic Assessment Center, SAIC

12/1/93

CAN THE MUNITIONS BASE SUPPORT THESE OBJECTIVES?

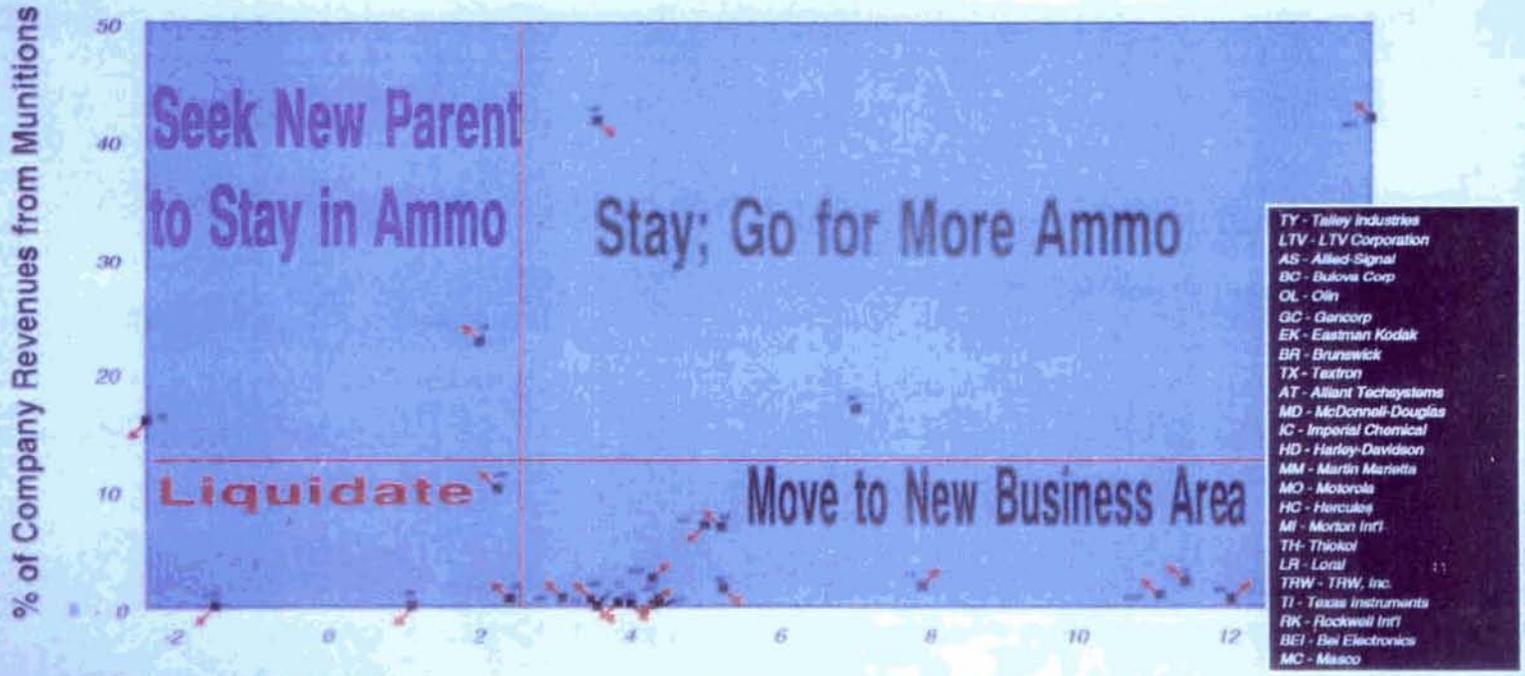


12/1/93

INDUSTRY CAN NO LONGER SUBSIDIZE ITS FAILING MUNITIONS BUSINESSES

MIBTF

Financial Indicators for Munitions Companies (1991)



Data from D&B and SEC On-Line
 Source: Strategic Assessment Center, SAIC

Z-Factor

12/1/93

DOD's goal for the 1995 round was to reduce the overall DOD domestic base structure by at least 15 percent of DOD-wide plant replacement value--an amount at least equal to the three prior BRAC rounds. Recently, the Secretary said that he expects that the 1995 round reduction will be smaller than the 1993 round. This suggests that the current round may not meet DOD's stated goal. Our review of the 1995 round will address DOD's reasoning for the degree to which excess infrastructure was retained.

If further BRAC rounds are needed, the recent history of base closures suggests that some form of authorizing legislation may be needed to overcome problems which inhibited base closures in the past. However, I am not suggesting such legislation at this point, because we have not completed our review of the current BRAC round. In addition, we plan to complete a more detailed assessment of lessons learned from these rounds to determine what worked, what did not work as well and what might be done differently to facilitate any additional reductions.

Regarding changes to prior BRAC decisions, the history of recent BRAC rounds suggests that some mechanism will be needed to authorize changes to 1995 BRAC decisions. I am not recommending a specific approach at this time. However, we would be glad to provide some alternatives for your consideration at a later date.

- - - - -

Mr. Chairman, this concludes my prepared remarks. I would be happy to respond to any questions from you or Members of the Subcommittee.

OVERVIEW OF BRAC 1995

The following is an overview of BRAC 1995 outlining DOD's selection criteria, key steps in DOD components' decision-making, and key dates pertaining to the BRAC process.

DOD SELECTION CRITERIA**Military Value** (receives priority consideration)

1. The current and future mission requirements and the impact on operational readiness of DOD's Total Force.
2. The availability and condition of land, facilities, and associated air space at both the existing and potential receiving locations.
3. The ability to accommodate contingency, mobilization, and future total force requirements at both the existing and potential receiving locations.
4. The cost and manpower implications.

Return On Investment

5. The extent and timing of potential cost and savings, including the number of years, beginning with the date of completion of the closure or realignment, for the savings to exceed the costs.

Community Impacts

6. The economic impact on communities.
7. The ability of both the existing and potential receiving communities' infrastructure to support forces, missions, and personnel.
8. The environmental impact.

KEY STEPS TAKEN BY DOD COMPONENTS IN IDENTIFYING BRAC CANDIDATES

- Categorizing activities.
- Collecting data needed to identify excess capacity and establish military values at individual locations.

- Identifying realignment and closure candidates and analyzing alternatives/scenarios.
- Performing analyses to gauge potential costs and savings from realignment and closure alternatives/scenarios.
- Determining economic, community, and environmental impacts.
- Recommending candidates for realignment and closure.

KEY DATES

The 1995 BRAC process is governed by certain key dates. No later than:

- March 1, 1995: The Secretary of Defense reports his recommendations for realignments and closures to the Defense Base Realignment and Closure Commission. This point marks the first public release of proposed realignments and closures and public availability of DOD BRAC documents.
- **April 15, 1995:** GAO provides Congress and the Base Closure Commission with "a report containing a detailed analysis of the Secretary's recommendations and selection process."
- July 1, 1995: The Base Closure Commission reports to the President on its recommendations for realignments and closures.
- July 15, 1995: The President transmits to the Commission and Congress a report containing his approval or disapproval of the Commission's recommendations.
- August 15, 1995: Should the President disapprove any of the Commission's recommendations, the Commission must transmit a revised list to the President.
- September, 1995: Congress has 45 days in which to enact a joint resolution should it desire to disapprove the entire package of realignment and closure recommendations.

OFFICE OF THE SECRETARY OF DEFENSEBASE REALIGNMENT AND CLOSURE DEFINITIONS

The following definitions were provided by the Office of the Secretary of Defense (OSD) to the Department of Defense (DOD) components for use in the 1995 base closure and realignment process. The definitions remain unchanged from the 1993 process.

CLOSE

All missions of the base will cease or be relocated. All personnel (military, civilian, and contractor) will either be eliminated or relocated. The entire base will be excessed and the property disposed. Note: A caretaker workforce is possible to bridge between closure (missions ceasing or relocating) and property disposal which are separate actions under Public Law 101-510.

CLOSE, EXCEPT

The vast majority of the missions will cease or be relocated. Over 95 percent of the military, civilian, and contractor personnel will either be eliminated or relocated. All but a small portion of the base will be excessed and the property disposed. The small portion retained will often be facilities in an enclave for use by the reserve component. Generally, active component management of the base will cease. Outlying, unmanned ranges or training areas retained for reserve component use do not count against the "small portion retained."

REALIGN

Some missions of the base will cease or be relocated, but others will remain. The active component will still be host of the remaining portion of the base. Only a portion of the base will be excessed and the property disposed, with realignment (missions ceasing or relocating) and property disposal being separate actions under Public Law 101-510. In cases where the base is both gaining and losing missions, the base is being realigned if it will experience a net reduction of DOD civilian personnel. In such situations, it is possible that no property will be excessed.

RELOCATE

The term used to describe the movement of missions, units, or activities from a closing or realigning base to another base. Units do not realign from a closing or a realigning base to another base, they relocate.

RECEIVING BASE

A base that receives missions, units or activities relocating from a closing or realigning base. In cases where the base is both gaining and losing missions, the base is a receiving base if it will experience a net increase of DOD civilian personnel.

MOTHBALL, LAYAWAY

Terms used when retention of facilities and real estate at a closing or realigning base are necessary to meet the mobilization or contingency needs of DOD. Bases or portions of bases "mothballed" will not be excessed and disposed. It is possible they could be leased for interim economic uses.

INACTIVATE, DISESTABLISH

Terms used to describe planned actions that directly affect missions, units, or activities. Fighter wings are inactivated, bases are closed.

THE MUNITIONS INDUSTRIAL BASE TASK FORCE

MIBTF

ET
IT TECHSYSTEMS
C

A

ZIMMERMANN

LES

ON

N MARIETTA

I & HANGER

NAL MANUFACTURING CO.

S INDUSTRIES

Y INDUSTRIES

ON DEFENSE SYSTEMS

DL

TEC

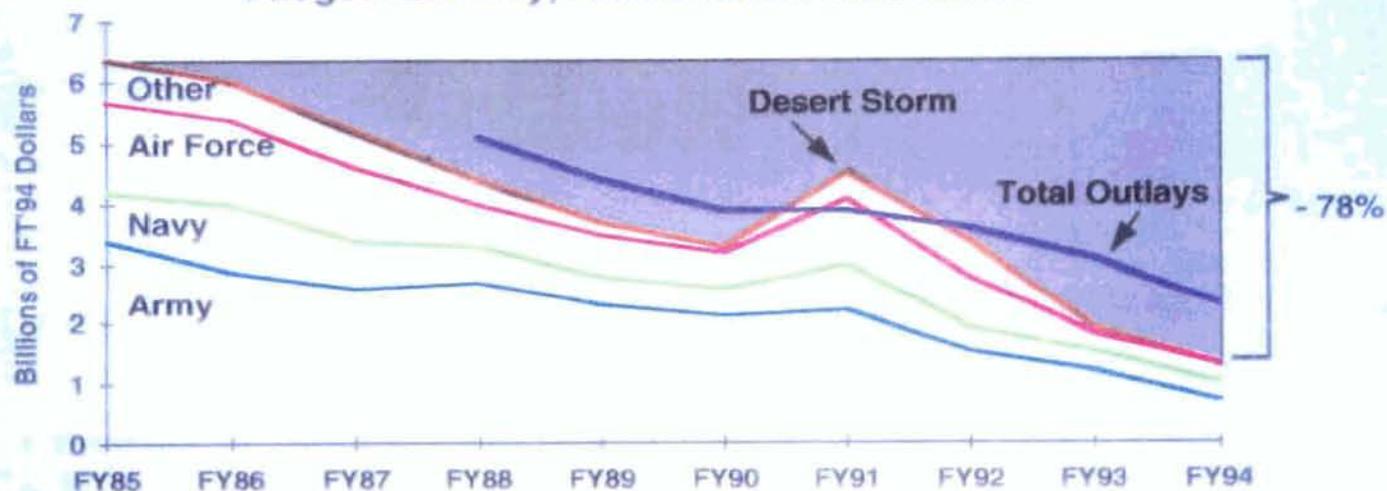
**Adequate funding and
policies to sustain a
responsive, capable
U.S. munitions
industrial base to
develop, produce, and
support superior
munitions for the U.S.
and its allies.**

12/1/93

PRECIPITOUS MUNITIONS FUNDING DECLINE

MIBTF

Budget Authority, Ammunition Procurement



● Real Change, FY 85-94

- Total DOD: - 34%
- Total Procurement - 64%
- Ammo Procurement - 78%

12/1/93

Document Separator

**Report
on the
Bottom-Up Review**

October 1993

SECTION VII: DEFENSE FOUNDATIONS

INFRASTRUCTURE

Infrastructure is the foundation upon which our military strength is built. It includes all DoD activities other than those directly associated with operational forces, intelligence, strategic defense, and applied research and development.

For example, in FY 1994, infrastructure activities will account for \$160 billion in appropriated and revolving funds, or approximately 59 percent of DoD total obligational authority.

Infrastructure activities fall into seven broad categories:

- **Central Logistics** — includes depot maintenance, supply operations, and transportation. This is the largest functional area.
- **Central Medical** — includes all DoD medical activities except those directly associated with the readiness mission. CHAMPUS and the military medical treatment facilities make up most of this category.
- **Central Personnel** — includes all permanent change-of-station costs, recruiting and advertising

expenditures, dependent support programs, various public relations functions, and assorted other personnel activities.

- **Central Training** — includes only formal training activities, not the larger costs of unit training and exercises.
- **Science and Technology (S&T), DoD Labs, and Acquisition Management** — includes primarily S&T funding and oversight of DoD labs.
- **Installation Support** — includes costs driven by the number and size of DoD installations.
- **Force Management** — includes management headquarters, some defense agencies, and some aspects of command, control, communications, and intelligence (C3I).

As indicated in Figure 13, logistics represents the largest share of infrastructure expenditures, claiming 40 percent of the total, followed by installation support, with a 17 percent share.

Infrastructure Categories (As percentage of \$160 billion in FY 1994 budget)

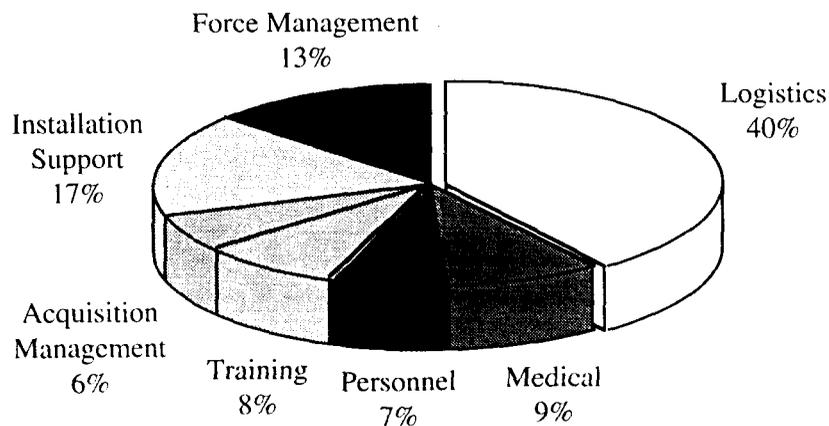


Figure 13

Infrastructure costs fall into two categories: those that are sensitive to changes in the overall force structure and those that are not affected when the size of the force is reduced. Our objective in the Bottom-Up Review was to identify potential savings and to launch a longer-term process of reducing and streamlining DoD's infrastructure without harming readiness.

Approximately 40 percent of infrastructure costs are tied directly to force structure. Examples include training, supply, and transportation costs. We will, of course, realize savings in these areas as our forces are reduced. Further opportunities for savings can be derived from supporting our operational forces more efficiently.

A detailed analysis of cost savings that could be realized as a result of force downsizing alone was conducted as part of the Bottom-Up Review. Since decisions on the final force structure were not available at the time the analysis was performed, a notional force was used. The analysis suggested that DoD should see direct infrastructure savings of between \$10 billion and \$11 billion resulting directly from the force draw-down.

The Bottom-Up Review also examined ways to obtain substantial savings in areas of infrastructure where costs have traditionally been seen as relatively fixed. Savings in these areas will require changing the basic ways in which DoD does business. For example, about 50 percent of infrastructure costs are a product of policy decisions or statutory requirements and can be reduced only through changes in public law or DoD directives. These include elements of funding for military installations, family housing, military base operations, depot maintenance, and schools for DoD dependents, both in the United States and abroad.

One such area of potential savings is the realignment and closure of additional U.S. military bases and facilities. This is accomplished through the BRAC process. Implementation of BRAC-93 decisions is expected to result in a savings of about \$4 billion.

Another 10 percent of infrastructure costs are attributable to public law and policy decisions but are virtually impossible to reduce. Cutting expenditures

here would require extremely difficult and, in some cases, undesirable changes, such as Congressional action to rescind or rewrite U.S. environmental laws. Included in this category are most environmental restoration efforts (which involve myriad legal, regulatory, and policy constraints), various legal entitlements of current and former service members, and the obligation to provide medical benefits to dependents of active-duty personnel.

There are three general methods of reducing variable infrastructure costs. These include increased use of privatization for business operations, additional consolidations and expanded use of executive agents, and better business practices and incentives. There have been many attempts to reduce costs in these areas before, and such efforts must be encouraged and expanded. The potential for savings, however, differs significantly across functional categories.

Privatization of DoD operations can, in selected cases, provide cost savings. Transferring operations to the private sector could yield savings in such areas as maintenance, base operations, and concession functions. There are significant economies of scale that can be realized from consolidating certain functions, such as accounting services, and appointing executive agents for training and depot maintenance. Employing better business practices over a range of DoD activities will enable us to reduce infrastructure costs without cutting outputs.

The Bottom-Up Review has provided a detailed framework of options for reducing infrastructure costs. Just by reducing force size, savings of around \$10 billion to \$11 billion will be realized in the 40 percent of infrastructure costs that are directly tied to our operational force structure. Another \$4 billion in savings will be achieved with the implementation of BRAC-93 decisions. Further cost savings will come from changes in policy directives and, in some cases, public law, as we make adjustments with an eye toward privatization, consolidation of functions, and better business practices. We will pursue the maximum savings possible in each infrastructure category, while maintaining an adequate level and quality of infrastructure to support our forces.

Document Separator

VELOCITY MANAGEMENT

THE
APPROACH
TO RE-ENGINEERING
THE ARMY'S LOGISTICS
PROCESS



VELOCITY MANAGEMENT

DEFINITION...

VELOCITY MANAGEMENT IS
A CONCEPT THAT ADVOCATES
IMPROVED FLOW OF MATERIAL
AND INFORMATION THROUGH THE
LOGISTICS PROCESS.

RAND CORPORATION



VELOCITY MANAGEMENT

AIMS AT...

→ ATTACKING THE LOGISTICS
PROCESS AND IMPROVES BOTH
THE FLOW OF INFORMATION AND
THE MOVEMENT OF MATERIEL.

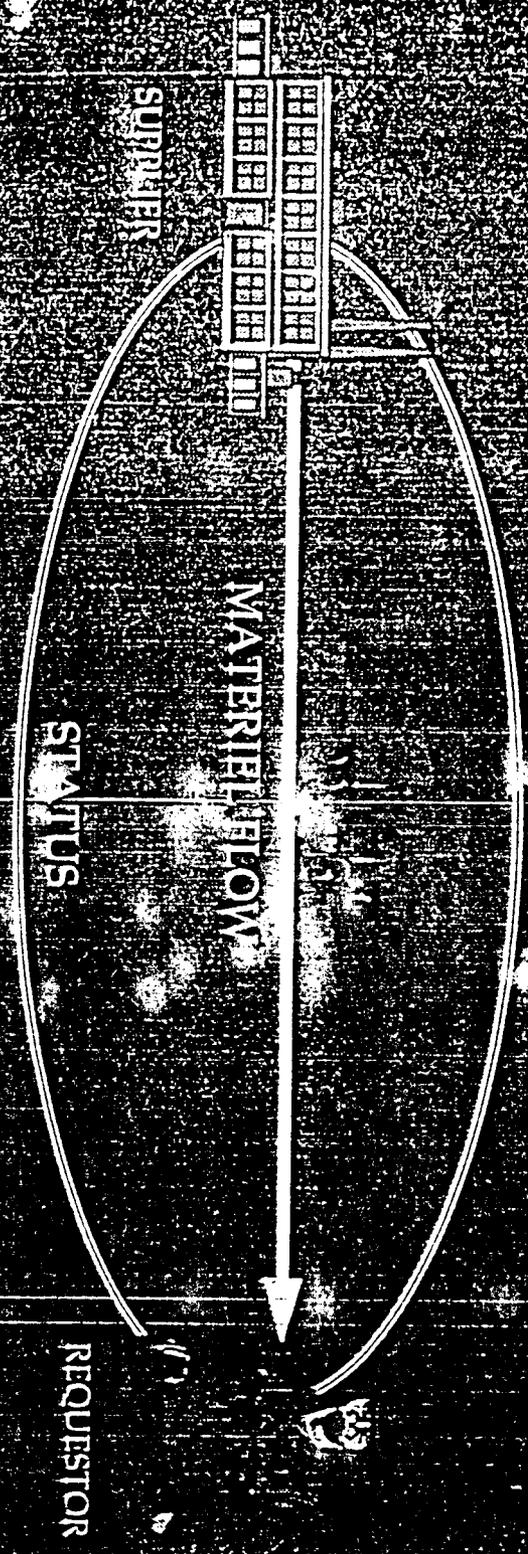
VELOCITY MANAGEMENT IS...

CONSTITUTE
A FACILITY FOR
MANAGE INVENTORY

MANAGEMENT
OF THE
MATERIALS

MANAGEMENT
OF THE
MATERIALS

IMPLEMENTING
THE TOP 2510'S
PROGRAMS





VELOCITY MANAGEMENT

PILOT IMPLEMENTATION PROGRAM

WHICH PROCESSES...

- ORDERING
- REPAIRING
- SHIPPING
- FINANCIAL PROCESS

WHICH INSTALLATIONS...

- FL RILEY
- FL HOOD
- CORPUS CHRISTI
- MARTIN MARIETTA
- ANNISTON

FORCE

VELOCITY MANAGEMENT

PROTOTYPING IMPLEMENTATION PROGRAM

MAJOR SYSTEMS

MAJOR COMBAT SYSTEMS

OTHER SELECTED SYSTEMS

APACHE

TADS/ANVS

F1EM/TTT

UH-60

T-700 ENGINE

SINCGARS

MIAI

POWERPACK

AV1EB

AFRECONROL

MIFB

MERS

CEV

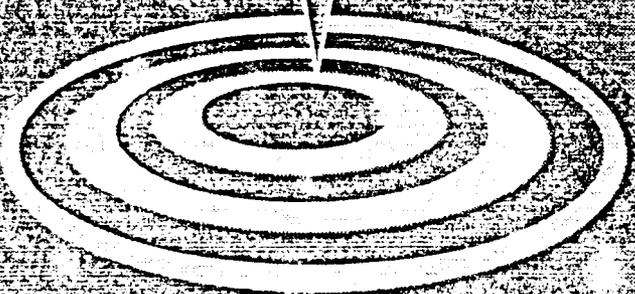
MD ACB

FORCE

(XXII)

VELOCITY MANAGEMENT

METHODOLOGY



PHASE I

KICK-OFF SEMINAR
UNDERSTAND TOPIC OF VMI
CHANGE AGENTS IDENTIFIED

PHASE II

SELF ASSESSMENT
PROCESS SYSTEMS CHANGES IDENTIFIED

PHASE III

CAS CONDUCT
PROCESS ANALYSIS
CAS GO TO IT TOOD TO WALK THROUGH THE PROCESS

PHASE IV

CONDUCT CAS SEMINAR TO PRESENT RECOMMENDATIONS
BEGIN SHORT TERM PROCESS CHANGES

PHASE V

BEGIN LONG TERM PROCESS CHANGES
SCHOOL HOUSE BEGINS TEACHING PROCESS

PH OF IMPLEMENTATION PROGRAM AT FORT HOOD

FORGE

VELOCITY MANAGEMENT

BUSINESS PRACTICES

CUSTOMER FOCUS

VELOCITY MANAGEMENT
BATTLEFIELD DISTRIBUTION

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February 23, 1995

MEMORANDUM FOR: Service Team Leaders
A F

FROM: Dave Henry, R&A, Economist

Subject: Installations in Economic Data Base

The economic data base has records fro 1,083 military installations: 144 for Air Force, 195 for Army, 8 for DFAS, 1 for DIS, 59 for DISA, 64 for DLA, and 612 for Navy. Attached is information on those installations by service.

Any questions, please drop by or call me at Commerce at 202-482-2566.

Bob/one could
you sort
by Base
So we can
COMPARE with
our list

A handwritten signature, possibly "F", written in black ink at the bottom right of the page.

Installation:	Primary Function:	City:	Zip Code:	Region of Influence:
KELLY AFB	DEPOT	SAN ANTONIO	78241	San Antonio, TX MSA
ELLSWORTH AFB	GENERAL	BOX ELDER	57706	*Meade & Pennington Counties, SD
CHANUTE AFB	GENERAL	RANTOUL	61868	Champaign-Urbana, IL MSA
EIELSON AFB	GENERAL	NORTH POLE	99702	Fairbanks North Star Borough, AK
EGLIN AFB	RESEARCHDEVELOPMENT	VALPARISO	32542	Fort Walton Beach, FL MSA
EDWARDS AFB	RESEARCHDEVELOPMENT	ROSAMOND	93523	Bakersfield, CA MSA
DYESS AFB	GENERAL	ABILENE	79607	Abilene, TX MSA
IRA EAKER (BLYTHEVILLE) AFB	GENERAL	BLYTHEVILLE	72317	Mississippi County, AR
DUKE FIELD	GENERAL	CRESTVIEW	32536	Fort Walton Beach, FL MSA
DOVER AFB	GENERAL	DOVER	19902	Dover, DE MSA
K. I. SAWYER AFB	GENERAL	GWINN	49843	Marquette County, MI
KEESLER AFB	GENERAL	BILOXI	39534	*Hancock & Harrison Counties, MS
ELMENDORF AFB	GENERAL	ANCHORAGE	99506	Anchorage, AK MSA
KIRTLAND AFB	RESEARCHDEVELOPMENT	ALBUQUERQUE	87117	*Bernalillo County, NM
DAVIS-MONTHAN AFB	GENERAL	TUCSON	85707	Tucson, AZ MSA
LACKLAND AFB	GENERAL	SAN ANTONIO	78236	San Antonio, TX MSA
LAMBERT ST LOUIS IAP AGS	GENERAL	ST ANN	63145	St. Louis, MO-IL MSA
LANGLEY AFB	GENERAL	HAMPTON	23665	Norfolk-Virginia Beach-Newport News, VA-NC MSA
LAUGHLIN AFB	GENERAL	DEL RIO	78843	Val Verde County, TX
COLUMBUS AFB	GENERAL	COLUMBUS	39701	*Lowndes & Monroe Counties, MS
CHEYENNE MOUNTAIN COMPLEX	GENERAL	COLORADO SPGS	80914	Colorado Springs, CO MSA
LINCOLN MUNICIPAL AIRPORT AGS	GENERAL	LINCOLN	68502	Lincoln, NE MSA
LITTLE ROCK AFB	GENERAL	JACKSONVILLE	72099	Little Rock-North Little Rock, AR MSA
CHARLESTON AFB	GENERAL	CHARLESTON	29404	Charleston-North Charleston, SC MSA
DOBBINS ARB	GENERAL	MARIETTA	30060	Atlanta, GA MSA
GRIFFISS AFB	GENERAL	ROME	13441	Utica-Rome, NY MSA
FRANCIS E. WARREN AFB	GENERAL	CHEYENNE	82005	Cheyenne, WY MSA
FRESNO AIR TERMINAL AGS	GENERAL	FRESNO	93727	*Fresno County, CA
GEN BILLY MITCHELL FIELD AGS	GENERAL	MILWAUKEE	53207	Milwaukee-Waukesha, WI PMSA
GENTILE AFS	GENERAL	DAYTON	45444	Dayton-Springfield, OH MSA
GEORGE AFB	GENERAL	ADELANTO	92394	Riverside-San Bernardino, CA PMSA
GILA BEND AFB	GENERAL		85337	Phoenix-Mesa, AZ MSA
GOODFELLOW AFB	GENERAL	SAN ANGELO	76908	San Angelo, TX MSA
GRAND FORKS AFB	GENERAL	EMERADO	58205	*Grand Forks County, ND
GREAT FALLS IAP AGS	GENERAL	GREAT FALLS	59405	Great Falls, MT MSA
ELLINGTON FIELD AGS	GENERAL	HOUSTON	77209	Houston, TX PMSA
GREATER ROCKFORD AIRPORT (OR OTHER LOCATION)	GENERAL	ROCKFORD		*Boone & Winnebago Counties, IL
ENGLAND AFB	GENERAL	ALEXANDRIA	71311	Alexandria, LA MSA
GRISSOM AFB	GENERAL	BUNKER HILL	46971	*Cass, Howard & Miami Counties, IN
MAXWELL AFB & GUNTER AFB	GENERAL	MONTGOMERY	36112	Montgomery, AL MSA
HANCOCK FIELD AGS	GENERAL	SYRACUSE	13225	*Madison, Onondaga, & Oswego Counties, NY
HANSCOM AFB	RESEARCHDEVELOPMENT	BEDFORD	1731	*Essex, Middlesex, Suffolk, Plymouth, Norfolk Counties, MA
HICKAM AFB	GENERAL	HONOLULU(APOSF)	96853	Honolulu, HI MSA
HILL AFB	DEPOT	CLEARFIELD	84056	Salt Lake City-Ogden, UT MSA
HOLLOMAN AFB	GENERAL	ALAMOGORDO	88330	Otero County, NM
HOMESTEAD ARS	GENERAL	HOMESTEAD	33039	Miami, FL PMSA
FALCON AFB	GENERAL	ELLICOTT CITY 2	80912	Colorado Springs, CO MSA
HURLBURT FIELD	GENERAL	MARY ESTHER	32544	Fort Walton Beach, FL MSA

Installation:	Primary Function:	City:	Zip Code:	Region of Influence:
FAIRCHILD AFB	GENERAL	AIRWAY HEIGHTS	99011	Spokane, WA MSA
GREATER PITTSBURGH IAP AGS	GENERAL	CORAOPOLIS	15231	*Allegheny, Fayette, Washington, & Westmoreland Counties,
BARKSDALE AFB	GENERAL	BOSSIER CITY	71110	*Bossier & Caddo Parishes, LA
MARTIN STATE AGS	GENERAL	MIDDLE RIVER	22120	Baltimore, MD PMSA
MATHER AFB	GENERAL	RANCHO CORDOVA	95655	Sacramento, CA PMSA
CANNON AFB	GENERAL	CLOVIS	88103	*Curry & Roosevelt Counties, NM
BEALE AFB	GENERAL	MARYSVILLE	95903	Yuba City, CA MSA
CAPE CANAVERAL AFS	GENERAL	PORT CANAVERAL	32925	Melbourne-Titusville-Palm Bay, FL MSA
CASTLE AFB	GENERAL	MERCED	95342	Merced, CA MSA
MCCHORD AFB	GENERAL	TACOMA	98438	Tacoma, WA MSA
ANDREWS AFB	GENERAL	CAMP SPRINGS	20331	Washington, DC-MD-VA-WV PMSA
BUCKLEY AGB	GENERAL	AURORA	80011	Denver, CO PMSA
BROOKS AFB	RESEARCHDEVELOPMENT	SAN ANTONIO	78234	San Antonio, TX MSA
BOLLING AFB	GENERAL	WASHINGTON	20332	Washington, DC-MD-VA-WV PMSA
BOISE AIR TERMINAL AGS	GENERAL	BOISE	83701	*Ada County, ID
BIRMINGHAM MAP AGS	GENERAL	BIRMINGHAM	35217	Birmingham, AL MSA
BERGSTROM AFB	GENERAL	AUSTIN	78743	Austin-San Marcos, TX MSA
ARNOLD AFB	RESEARCHDEVELOPMENT	MANCHESTER	37389	Coffee County, TN
LUKE AFB	GENERAL	LITCHFIELD PARK	85309	Phoenix-Mesa, AZ MSA
MCCONNELL AFB	GENERAL	WICHITA	67221	Wichita, KS MSA
MCENTIRE AGB	GENERAL	EASTOVER	29044	Columbia, SC MSA
ALTUS AFB	GENERAL	ALTUS	73523	Jackson County, OK
MARCH AFB	GENERAL	SUNNYMEAD	92518	Riverside-San Bernardino, CA PMSA
MALMSTROM AFB	GENERAL	GREAT FALLS	59403	Great Falls, MT MSA
MCGUIRE AFB	GENERAL	WRIGHTSTOWN	8641	Philadelphia, PA-NJ PMSA
LORING AFB	GENERAL	LIMESTONE	4751	Aroostook County, ME
LOS ANGELES AFB	RESEARCHDEVELOPMENT	EL SEGUNDO	90009	Los Angeles-Long Beach, CA PMSA
MACDILL AFB	GENERAL	TAMPA	33608	Tampa-St. Petersburg-Clearwater, FL MSA
CARSWELL AFB	GENERAL	FORT WORTH	76127	Fort Worth-Arlington, TX PMSA
MCCLELLAN AFB	DEPOT	SACRAMENTO	95652	Sacramento, CA PMSA
LOWRY AFB	GENERAL	DENVER	80230	Denver, CO PMSA
MINNEAPOLIS/ST PAUL IAP ARS	GENERAL	MINNEAPOLIS	55417	Minneapolis-St. Paul, MN-WI MSA
NELLIS AFB	GENERAL	LAS VEGAS	89191	*Clark County, NV
MYRTLE BEACH AFB	GENERAL	MYRTLE BEACH	29579	Myrtle Beach, SC MSA
MOUNTAIN HOME AFB	GENERAL	MOUNTAIN HOME	83648	Elmore County, ID
NORTON AFB	GENERAL	SAN BERNARDINO	92409	Riverside-San Bernardino, CA PMSA
MOODY AFB	GENERAL	VALDOSTA	31699	Lowndes County, GA
MINOT AFB	GENERAL	MINOT	58705	Ward County, ND
NIAGARA FALLS IAP ARS	GENERAL	NIAGARA FALLS	14304	*Niagara County, NY
NEWARK AFB	GENERAL	HEATH	43057	Columbus, OH MSA
TUCSON IAP AGS	GENERAL	TUCSON	85706	Tucson, AZ MSA
RICKENBACKER AGB	GENERAL	LOCKBOURNE	43217	Columbus, OH MSA
ROBINS AFB	DEPOT	WARNER ROBINS	31098	Macon, GA MSA
SALT LAKE CITY IAP AGS	GENERAL	SALT LAKE CITY	84116	Salt Lake City-Ogden, UT MSA
SCOTT AFB	GENERAL	BELLEVILLE	62225	St. Louis, MO-IL MSA
SELFRIDGE AGB	GENERAL	MOUNT CLEMENS	48045	Detroit, MI PMSA
SEYMOUR JOHNSON AFB	GENERAL	GOLDSBORO	27531	Goldsboro, NC MSA
SHAW AFB	GENERAL	SUMTER	29152	Sumter, SC MSA

Installation:	Primary Function:	City:	Zip Code:	Region of Influence:
SHEPPARD AFB	GENERAL	WICHITA FALLS	76311	Wichita Falls, TX MSA
SPRINGFIELD BECKLEY MAP AGS	GENERAL	SPRINGFIELD	45502	Dayton-Springfield, OH MSA
STEWART IAP AGS	GENERAL	NEW WINDSOR	12550	*Orange County, NY
RICHARDS-GEBAUR ARS	GENERAL	BELTON	64147	Kansas City, MO-KS MSA
TRAVIS AFB	GENERAL	FAIRFIELD	94535	Vallejo-Fairfield-Napa, CA PMSA
ANDERSON AFB	GENERAL	AGANA		Agana, Guam
TYNDALL AFB	GENERAL	PANAMA CITY	32403	Panama City, FL MSA
US AIR FORCE ACADEMY	GENERAL	COLORADO SPGS	80840	Colorado Springs, CO MSA
VANCE AFB	GENERAL	ENID	73705	Enid, OK MSA
VANDENBERG AFB	GENERAL	LOMPOC	93437	Santa Barbara-Santa Maria-Lompoc, CA MSA
WESTOVER ARB	GENERAL	CHICOPEE	1022	Springfield, MA MSA
WHEELER AFB	GENERAL	WAHIAWA (APOSF)	96854	Honolulu, HI MSA
WHITEMAN AFB	GENERAL	KNOB NOSTER	65305	*Johnson & Pettis Counties, MO
WILLIAMS AFB	GENERAL	CHANDLER	85240	Phoenix-Mesa, AZ MSA
WILLOW GROVE ARS	GENERAL	HATBORO	19090	Philadelphia, PA-NJ PMSA
WRIGHT-PATTERSON AFB	RESEARCHDEVELOPMENT	FAIRBORN	45433	Dayton-Springfield, OH MSA
WURTSMITH AFB	GENERAL	OSCODA	48753	Iosco County, MI
YOUNGSTOWN MAP ARS	GENERAL	VIENNA		*Mahoning & Trumbull Counties, OH
TINKER AFB	DEPOT	MIDWEST CITY	73145	Oklahoma City, OK MSA
PATRICK AFB	GENERAL	COCOA BEACH	32925	Melbourne-Titusville-Palm Bay, FL MSA
PORTLAND IAP AGS	GENERAL	PORTLAND	97218	*Clackamas, Multnomah, Washington, & Yamhill Counties, OR
POPE AFB	GENERAL	FAYETTEVILLE	28308	Fayetteville, NC MSA
GRIFFISS RESERVE AFB	GENERAL	ROME	13441	Utica-Rome, NY MSA
ROME LABS	RESEARCHDEVELOPMENT	ROME	13441	Utica-Rome, NY MSA
PLATTSBURGH AFB	GENERAL	PLATTSBURGH	12903	Clinton County, NY
PEASE AFB	GENERAL	NEWINGTON	3801	*Rockingham County NH, & York County ME
PETERSON AFB	GENERAL	COLORADO SPGS	80914	Colorado Springs, CO MSA
RANDOLPH AFB	GENERAL	UNIVERSAL CITY	78150	San Antonio, TX MSA
OTIS AGB	GENERAL	FALMOUTH	2542	Barnstable-Yarmouth, MA NECMA
ONIZUKA AFB	GENERAL	SUNNYVALE	94088	San Jose, CA PMSA
OGDEN AIR LOGISTICS CENTER	DEPOT	OGDEN		Salt Lake City-Ogden, UT MSA
OFFUTT AFB	GENERAL	BELLEVUE	68113	Omaha, NE-IA MSA
REESE AFB	GENERAL	LUBBOCK	79489	Lubbock, TX MSA
O'HARE IAP ARS	GENERAL	CHICAGO	60666	*Cook, DuPage, & McHenry Counties, IL
BUFFALO-REDCAP	RESEARCHDEVELOPMENT	BUFFALO		*Erie County, NY
GREAT FALLS AGS	GENERAL	GREAT FALLS		Great Falls, MT MSA
NORTH HIGHLANDS AGS	GENERAL	NORTH HIGHLANDS		Sacramento, CA PMSA
ONTARIO AGS	GENERAL	ONTARIO		Riverside-San Bernardino, CA PMSA
ROSLYN AGS	GENERAL	ROSLYN		Nassau-Suffolk, NY PMSA
SUFFOLK COUNTY AGS	GENERAL	SUFFOLK COUNTY		Nassau-Suffolk, NY PMSA
ARPC	GENERAL	DENVER	80230	Denver, CO PMSA
BATTLE CREEK FED CT	GENERAL	BATTLE CREEK		*Calhoun County, MI
GREATER PITTSBURGH RESERVE BASE	GENERAL	PITTSBURGH		*Allegheny, Fayette, Washington, & Westmoreland Counties,
MOFFETT FIELD AGS	GENERAL	SUNNYVALE		San Jose, CA PMSA
PLANT 4	RESEARCHDEVELOPMENT	FORT WORTH	76127	Fort Worth-Arlington, TX PMSA
ARMSTRONG LAB - MESA	RESEARCHDEVELOPMENT	CHANDLER	85240	Phoenix-Mesa, AZ MSA
UTAH TEST AND TRAINING RANGE	RESEARCHDEVELOPMENT	DUGWAY	84022	Tooele County, UT
KLAMATH, OREGON AIR GUARD STATE	GENERAL	KLAMATH FALLS		Klamath County, OR

UIC	MAJOR COMMAND	INSTALLATION NAME	STATE
	AETC	ALTUS AFB	OK
	PAF	ANDERSEN AFB	GU
	AMC	ANDREWS AFB	MD
	AFMC	ARNOLD AS	TN
	ACC	BARKSDALE AFB	LA
	ACC	BEALE AFB	CA
	AFRES	BERGSTROM ARS	TX
	AFDW	BOLLING AFB	DC
	AFMC	BROOKS AFB	TX
	NGB	BUCKLEY AGB	CO
	ACC	CANNON AFB	NM
	AFRES	CARSWELL ARB	TX
	AFBCA	CASTLE AFB	CA
	AFBCA	CHANUTE AFB	IL
	AMC	CHARLESTON AFB	SC
	AETC	COLUMBUS AFB	MS
	ACC	DAVIS MONTHAN AFB	AZ
	AFRES	DOBBINS ARB	GA
	AMC	DOVER AFB	DE
	ACC	DYESS AFB	TX
	AFMC	EDWARDS AFB	CA
	AFMC	EGLIN AFB	FL
	PAF	EIELSON AFB	AK
	ACC	ELLSWORTH AFB	SD
	PAF	ELMENDORF AFB	AK
	AFBCA	ENGLAND AFB	LA
	AMC	FAIRCHILD AFB	WA
	AFSPC	FALCON AFB	CO
	AFSPC	FRANCIS E. WARREN AFB	WY
	AFBCA	GEORGE AFB	CA
	AETC	GOODFELLOW AFB	TX
	AMC	GRAND FORKS AFB	ND
	ACC	GRIFFISS AFB	NY
	AFRES	GRISSOM AFB	IN
	AETC	GUNTER AFB	AL
	AFMC	HANSCOM AFB	MA
	PAF	HICKAM AFB	HI
	AFMC	HILL AFB	UT
	ACC	HOLLOMAN AFB	NM
	AFRES	HOMESTEAD AFB	FL
	AFSOC	HURLBURT FIELD	FL
	AFBCA	IRA EAKER (BLYTHEVILLE) AFB	AR
	ACC	K. I. SAWYER AFB	MI
	AETC	KEESLER AFB	MS
	AFMC	KELLY AFB	TX
	AFMC	KIRTLAND AFB	NM
	AETC	LACKLAND AFB	TX
	ACC	LANGLEY AFB	VA
	AETC	LAUGHLIN AFB	TX
	ACC	LITTLE ROCK AFB	AR
	ACC	LORING AFB	ME
	AFMC	LOS ANGELES AFB	CA
	AETC	LOWRY AFB	CO
	AETC	LUKE AFB	AZ
	ACC	MACDILL AFB	FL
	AMC	MALMSTROM AFB	MT
	AFRES	MARCH AFB	CA
	AFBCA	MATHER AFB	CA
	AETC	MAXWELL AFB	AL
	AMC	MCCHORD AFB	WA

UIC	MAJOR COMMAND	INSTALLATION NAME	STATE
	AFMC	McCLELLAN AFB	CA
	AMC	MCCONNELL AFB	KS
	NGB	MCENTIRE AGS	SC
	AMC	MCGUIRE AFB	NJ
	ACC	MINOT AFB	ND
	ACC	MOODY AFB	GA
	ACC	MOUNTAIN HOME AFB	ID
	AFBCA	MYRTLE BEACH AFB	SC
	ACC	NELLIS AFB	NV
	AFMC	NEWARK AFB	OH
	AFBCA	NORTON AFB	CA
	AFRES	O'HARE IAPT ARS	IL
	ACC	OFFUTT AFB	NE
	AFSPC	ONIZUKA AS	CA
	NGB	OTIS AGB	MA
	AFSPC	PATRICK AFB	FL
	AFBCA	PEASE AFB	NH
	AFSPC	PETERSON AFB	CO
	AMC	PLATTSBURGH AFB	NY
	ACC	POPE AFB	NC
	AETC	RANDOLPH AFB	TX
	AETC	REESE AFB	TX
	NGB	RICKENBACKER AGB	OH
	AFMC	ROBINS AFB	GA
	AMC	SCOTT AFB	IL
	NGB	SELFRIDGE AGB	MI
	ACC	SEYMOUR JOHNSON AFB	NC
	ACC	SHAW AFB	SC
	AETC	SHEPPARD AFB	TX
	AFMC	TINKER AFB	OK
	AMC	TRAVIS AFB	CA
	AETC	TYNDALL AFB	FL
	USAFA	US AIR FORCE ACADEMY	CO
	AETC	VANCE AFB	OK
	AFSPC	VANDENBERG AFB	CA
	AFRES	WESTOVER ARB	MA
	ACC	WHITEMAN AFB	MO
	AFBCA	WILLIAMS AFB	AZ
	AFMC	WRIGHT-PATTERSON AFB	OH
	AFBCA	WURTSMITH AFB	MI

Document Separator

CROSS SERVICE TEAM - ROUTING SLIP

DAY: **DATE:** **TIME:** **ORIGINATED BY:**

	FYI OR FILE	ACTION REQUIRED	APPROVE/ INITIAL	DATE
JIM OWSLEY - TEAM LEADER	↓			
ANN REESE - DoD ANALYST			AR	
MARK PETERSON - SENIOR ANALYST				
GLENN KNOEPFLE - GAO ANALYST				
LES FARRINGTON - GAO ANALYST				mea JEP
DICK HELMER - GAO ANALYST				PKA
JOE VARALLO - ANALYST ASSOCIATE				

COMMENTS:

Questions that Frank prepared
for 1 March hearing w Sec Def
and CJCS.

Provide ~~3~~ comments to Franks (if you have them)

GENERAL BACKGROUND

1. Secretary Perry, in January 1994, you put out guidance to the military services that stated: "For BRAC 95, the goal is to further reduce the overall DoD domestic base structure by a minimum of 15 percent of DoD-wide plant replacement value"-- a level of reductions that would be approximately equal to the 1988, 1991, and 1993 rounds combined.

In December, you stated in an interview concerning the 1995 BRAC process that: "We don't have goals as to what the size should be. ...But I think it's reasonable to expect that the 1995 round is going to be approximately comparable in size to the last one."

In January, you noted in a speech to the US Conference of Mayors that your BRAC 95 round of base closings "will not be as large as the last one, not because we don't need to close more bases from the point of view of saving infrastructure, but simply because in the previous three BRACs we have closed all of the bases that were relatively easy to close."

Mr. Secretary, can you tell us what caused you to alter your original guidance to the Services regarding the closure of 15% of the plant replacement value and how you determined the size of the BRAC list you are presenting to the Commission this morning?

2. General Shalikashvili, in your view when the 1995 BRAC proposal is combined with the closures and realignments of previous rounds, is there an appropriate balance between the general drawdown of forces and base infrastructure?

3. Secretary Perry, the FY 96 Defense budget proposal includes civilian personnel reductions totaling 38,300 in 1996 and 137,500 through 2001 in accordance with your expressed desire to expand the civilian drawdown to match the percentage of active duty reductions.

Mr. Secretary, how have these proposed civilian personnel reductions affected the number and specific type of installations on the closure and realignment list?

EXCESS CAPACITY

1. Secretary Perry, you were quoted in the press last month as saying that even after this year's BRAC process is finished, the nation will have more bases than it needs to support the scaled-down military of tomorrow.

If the Commission, the President, and the Congress endorsed the list of closures and realignments that you are presenting today, would there still be excess capacity in the Defense Department's basing structure?

Would the Services still have more bases than needed in the future to support the force levels in your force structure plan?

2. General Shalikashvili, recognizing that our national military strategy remains in a state of transition, are you satisfied that sufficient capacity has been retained to support the potential need for a more robust force structure in the future?

3. Secretary Perry, to your knowledge, were any installations removed from the recommendation by either your office or the Service secretaries for other than military value reasons?

Were any removed or changed for economic impact or environmental reasons?

4. Secretary Perry, did the Services provide your staff with their approaches for determining excess capacity, and if so, were these approaches adequately documented and reasonable in your opinion?

5. Secretary Perry, in 1993 the Commission realigned a part of the Defense Information Services Agency (DISA) into 16 information processing megacenters. At that time, everyone involved, including DISA, realized that there would be excess capacity within the megacenters. We have heard that DISA actually needs

only 5 megacenters. To realign, DISA the Commission would have to change the 1993 recommendation.

What would your views be regarding such a realignment?

6. Secretary Perry, DFAS is currently slated to consolidate its 300+ offices at the 5 centers it currently operates (Denver, Columbus, Kansas City, Indianapolis, Cleveland). It also has plans to add 21 new sites, many of which will be on installations slated to close as a result of previous BRAC rounds.

Please explain why DoD plans to place most of the 21 new DFAS offices on bases which are slated to close rather than on bases remaining open which have existing excess capacity?

7. Secretary Perry, about one-third of the 21 new DFAS sites have yet to open. There is a MILCON requirement for nearly \$200 million to make improvements to many the sites, particularly among those not yet open.

In light of the ongoing consolidation efforts taking part in other parts of DoD, would it be worthwhile to consider further reductions in the number of DFAS sites.

COST TO CLOSE

1. Secretary Perry, the proposed FY96 budget you presented to Congress last month represents a reduction of almost \$6 billion, or 5.3 percent in real terms, from the FY95 level, and it includes \$785 million to begin implementing the 1995 closures in FY96.

Was the size of the 1995 BRAC list that you are presenting today limited by your ability to budget adequate up-front closing costs to carry out these closures beginning in FY96?

2. Secretary Perry, the FYDP proposed by the Administration last month relies on savings from 95 BRAC closures and realignments to round out the defense budget beginning in the late 1990s. How significant would the budget shortfall be if these savings are not realized?

3. Secretary Perry, there are reports that the cost to close bases and the time required to recover those costs from previous rounds are significantly greater than anticipated.

If this is correct, what steps have you directed to ensure that cost estimates are realistic for the 1995 round?

4. Secretary Perry, your report to us uses the results of COBRA analyses to project the anticipated costs and savings that will result from implementing your recommendations.

Recognizing that the figures used in the COBRA analyses are not budget quality, how accurate do you believe the projections are?

How closely have the figures in the COBRA analyses prepared in 1991 and 1993 compared to the actual costs for closures?

ECONOMIC ISSUES

1. Secretary Perry, was any installation removed from or added to a service list primarily because of economic impact, including cumulative economic impact, on a community?
2. Secretary Perry, in calculating cumulative economic impact, how did DoD differentiate between economic impacts caused by previously announced force structure changes and those that were due to BRAC decisions?
3. Secretary Perry, for BRAC 93 OSD established cumulative economic impact thresholds that resulted in the removal of at least one installation from the Service recommendations. Were any similar cumulative economic thresholds set for the 1995 round?
4. Secretary Perry, was DoD reluctant to close major industrial, laboratory, or test & evaluation installations because of economic impact?

Was any decision taken to downsize, rather than close, as a result of economic impact considerations?

JOINT CROSS-SERVICE ISSUES

1. Secretary Perry, please describe for us the process and methodology used in reaching Joint Cross-Service closure or realignment recommendations.
2. General Shalikashvili, in May 1994 the Vice Chairman of the Joint Chiefs, Admiral Owens, recommended to the Deputy Secretary of Defense that several additional functional areas be studied within the BRAC process for potential Cross-Service opportunities. These areas included training, intelligence, facility management, reserve centers, and legal support.

Are you satisfied that the BRAC process adequately addressed these concerns?

3. Secretary Perry, how much of an impact did the work of the Joint Cross-Service groups that you set up last year have on the final recommendations that you are presenting here this morning?

4. Secretary Perry, in May 1994 Admiral Owens recommended to the Deputy Secretary of Defense that the Services be required to incorporate the recommendations of the Joint Cross-Service Teams into their base closure recommendations. The Deputy Secretary elected not to require this of the Services.

Mr. Secretary, why wasn't the JCS recommendation accepted?

5. General Shalikashvili, did the Joint Chiefs, the CINCs and the Joint Staff have any role in developing or critiquing the work of the Joint Cross-Service groups?
6. Secretary Perry, in June of 1993 the Secretary of Defense and the Chairman of the Joint Chiefs of Staff asked the Commission not to address fixed wing

aviation depots separately from other interservicing issues. They asked instead for the opportunity to come forward with comprehensive interservicing recommendations in 1995.

Are you satisfied, Mr. Secretary, that your recommendations in the area of fixed wing aviation depots represent a comprehensive approach to the problems of interservicing and excess capacity in this area?

7. Secretary Perry, the Air Force has had five major aviation depots since the Vietnam Era. In the 1993 round, the Air Force recommended the closure of one of these five depots, but that depot was removed from the list by OSD. This year with the same selection criteria and a smaller force structure plan there is once again no Air Force depot on the list.

Why did you determine that the Air Force continues to need five major depots?

8. Secretary Perry, in 1993 both the General Accounting Office and the Commission were critical of the Defense Department for not making more progress in consolidating common functions across the Services. Your January 1994 guidance to the Services stated: "It is the DoD policy to make maximum use of common support assets. DoD components should, throughout the BRAC 95 analysis process, look for cross-service or intra-service opportunities to share assets and look for opportunities to rely on a single Military Department for support."

Mr. Secretary, in your view, do the recommendations you are presenting today represent a significant step forward in terms of consolidating common functions--such as depot maintenance, research labs, and test and evaluation facilities--across the Services?

9. Secretary Perry, what steps were taken to ensure that "apple to apple" cost comparisons were provided by the Services when evaluating Cross-Service closure or realignment recommendations?

10. Secretary Perry, are you satisfied that your interservicing recommendations to the Commission remove most or all of the excess capacity in each of the five Cross-Service study areas?

If there are areas where this is not the case, please explain why not.

11. Secretary Perry, are there any Cross-Service areas where you specifically need the Commission's assistance in eliminating the "too tough" excess capacity?

FORCE STRUCTURE

1. General Shalikashvili, would you review for this Commission the force structure that was used in developing this year's base closure and realignment recommendations?
2. Secretary Perry, what consideration, if any, was given for preferentially consolidating and realigning smaller bases or functions to those larger bases which were essentially exempt from closing because of their strategic location?
3. General Shalikashvili, are there any functional areas with excess capacity that you recommended not be considered by OSD or the services because changes in the basing structure might preclude future force structure or roles and missions changes? Are there any areas that the Commission should avoid?
4. General Shalikashvili, are you and the CINCs satisfied that the basing infrastructure that remains provides sufficient mobility and deployment capabilities to support a two Major Regional Conflict scenario with the force structure that has been programmed in the FY96 budget proposal?
5. General Shalikashvili, will the basing infrastructure that is being proposed today be sufficient to support any probable restationing of forward deployed forces, in terms of available land, usable facilities, and necessary training facilities and ranges?
6. General Shalikashvili, has a region by region force projection analysis, such as an analysis of our ability to respond to contingencies in the Caribbean, revealed any significant loss of responsiveness as a result of the 95 BRAC proposal?
7. General Shalikashvili, on July 8, 1994 Deputy Secretary Duetch issued instructions to the Secretary of the Air Force and to you regarding the operation of

the runway at MacDill AFB. In those instructions, the Secretary directed the Air Force to continue operating the runway until September 30, 1995 and for you to prepare a report stating once and for all the operational requirements of the Central Command and the Special Operations Command for an operating runway at MacDill AFB.

General, would you please tell us the results of your report to Mr. Duetch to include whether the Joint commands actually require an operational runway at MacDill AFB for their direct mission support, and whether you believe it imperative that the runway be operated by the Air Force as opposed to the Department of Commerce as recommended by the 1993 Commission.

General, are you comfortable that the Air Force plans for operation of the MacDill AFB airfield will satisfy your requirements once and for all?

8. Secretary Perry, during the 1993 Commission proceedings, testimony was received from former Ambassador Rowny, among others, that the ICBM field at Grand Forks AFB must be retained because of its proximity to the sole Anti-Ballistic Missile site in the United States. That testimony, and correspondence to the Commission since, indicated that any dismantling or change in operational status of Grand Forks AFB or its missile field would jeopardize, not only the ABM Treaty itself, but also any ongoing negotiations in this matter.

Mr. Secretary, please comment on the concerns we have heard regarding Grand Forks AFB, and advise us of any Department of Defense or Department of State concerns which would preclude the closing or realigning of Grand Forks AFB.

Mr. Secretary, in a similar regard please comment on the relationship of the existence of Peacekeeper missiles at Francis E. Warren AFB, Wyoming and any actions taken by the 1995 Commission. In other words Mr. Secretary, does the current stance that the Peacekeeper will be retained until 2003 preclude the closure or realignment of Francis E. Warren AFB?

GUIDANCE TO THE SERVICES

2. Secretary Perry, in January you directed the Services that any changes to the recommendations of past Commissions must be necessitated by force structure, organization, or mission changes or by significant changes in cost calculations.

Were any other criteria used by the Services or OSD to justify proposing changes to the recommendations of past Commissions?

3. Secretary Perry, does the documentation for such changes support clear consideration of the force structure and final selection criteria?

4. Secretary Perry, what instructions, if any, did DoD provide regarding efforts by each of the Services to identify potential uses that they might have for installations proposed for closing by the other Services?

MEDICAL ISSUES

1. Secretary Perry, military medical facilities play an important role in terms of both readiness for war and in supporting the force during peacetime. For families of military members, retirees and their families, and survivors, the local military hospital is often of particular importance. Military medical assets are also important from a Department budget point of view, in their ability to reduce CHAMPUS costs. However, the fate of military hospitals is often tied to larger closure and realignment decisions about the installations on which they are located.

Mr. Secretary, what guidance did the Department provide to the Services and to the Joint Cross-Service groups to ensure that decisions that impact military hospitals and military beneficiaries are made in consideration of those impacts?

2. Secretary Perry, in 1993 the Commission made specific recommendations to the Department regarding improvements in health care operations and increased cost effectiveness.

Mr. Secretary, did you direct your Assistant Secretary for Health Affairs to examine the consolidation of resources across military departments?

What was the outcome of that examination?

How is that examination reflected in the Departments new list of recommended closures and realignments?

3. Secretary Perry, in developing the current list, did you direct the Services to consider closing military hospitals that are not cost effective, given their patient load and the cost and availability of medical care in their communities?

4. Secretary Perry, did you direct the Services to move medical assets, including moving them across Service lines, in order to increase the capability and usage of military medical facilities?

5. Secretary Perry, during the development of the current list, did you direct the Services to review their policy of closing military hospitals when bases served by those hospitals are closed?

What was the result of that review?

Have you ensured that the most cost effective means of delivering care to all beneficiaries are maintained, irrespective of other base closure actions?

ENVIRONMENTAL IMPACT/RESTORATION ISSUES

1. Secretary Perry, according to your policy guidance, “environmental restoration costs at closing bases are not to be considered in cost of closure calculations.” Your policy further states that “unique contamination problems requiring environmental restoration will be considered as a potential limitation on near-term community reuse.”

Were any installations not recommended for closure or realignment to the Commission due to unique contamination problems? If so, please elaborate.

2. Secretary Perry, how many installations recommended for closure in this or prior rounds are expected to have substantial portions of land placed into caretaker status due to unique contamination problems?

3. Secretary Perry, did the overall cost of environmental restoration at closure bases, which is a budget factor in closing bases even though it is not a decision factor, limit the size of the list presented to the Commission?

4. Secretary Perry, were any installations eliminated from closure consideration because of the high cost of environmental cleanup?

5. Secretary Perry, in the 1993 round, at least one community pointed out that due to expected technological advances in environmental restoration, there can be significant differences in the cost of cleaning up an installation in use as opposed to one directed for closure. Specifically, McClellan AFB 1993 certified data showed the expected cleanup costs as a closure would be between three and ten billion dollars compared to one billion dollars if cleaned up in a routine schedule.

Mr. Secretary, do you believe the difference between the routine and BRAC related cleanup costs, if factual, should be considered in cost of closure calculations?

6. Secretary Perry, could you describe any efforts by the Defense Department or EPA to establish variable levels of environmental cleanup that are tied to specific plans for reuse?

PREVIOUS AND FUTURE BASE CLOSURES AND REALIGNMENTS

1. Secretary Perry, in October 1994 Business Executives for National Security (BENS) issued a report, "Uncovering the Shell Game," which criticized the Department's record in actually closing military facilities. "60 Minutes" featured the report later in the year. The essence of the report and the "60 Minutes" characterization was that "of the 67 bases the President, Congress and the Pentagon have agreed to shut down thus far, over one-third never closed or have quietly reopened under a new name or function." Our own analysis of that report is that of the 26 bases noted in the report as being "reopened," 14 were operating reasonably close to the recommendations of the Commission, in that those facilities were shown to retain some remaining cantonment areas.

As you know, Mr. Secretary, we plan on offering recommendations to the President concerning reuse and future closure actions. Reports such as the BENS report detract from general support for the closure process.

Mr. Secretary, please comment on the validity of the BENS report to include not only the proper characterization and execution of the Commission recommendations, but also the establishment of Defense Finance and Accounting Service Centers at previously closed or realigned military installations.

2. Secretary Perry, as you know this is the final round of expedited base closures and realignments authorized under the Defense Base Closure and Realignment Act of 1990.

Once this round is completed, the Defense Department will go back to operating under the section of Title 10, United States Code, that required DoD to conduct extensive budgetary, strategic, economic, and environmental studies of a potential closure affecting more than 300 civilians, or a realignment affecting more than 50 percent of an installation's civilian workforce, before proposing such a closure or realignment.

I think we can all agree that it is almost impossible to close or realign a military base under this authority.

This commission plans to make recommendations on a process for closing or realigning military bases in the future, after this 1995 round is completed.

Mr. Secretary, do you have any suggestions in this area for us to consider?

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JOINT CROSS-SERVICE GROUPS

Mr. Perry, I understand that the Department's Joint Cross-Service Groups' alternatives to the Service Secretaries were neither sound nor objective because the groups contained officers who protected their Service's parochial interests. For example, the groups responsible to your office for determining alternatives for closing and relining Research, Development, Test, and Evaluation facilities reported to the Service Secretaries vice your office and used different standards to determine requirements and capacities; even though some of the facilities perform all of the functions. While both groups based their evaluations on functions, the research and development laboratory facilities group used direct labor hours vice the test and evaluation facilities group which used test hours. Moreover, the teams contained service members closely associated with the RDT&E facilities and they unduly influenced the outcome of their evaluations to protect the status quo. As a result, your recommendations to the Commission this morning do not contain those necessary to achieve your minimum goal of a 15 percent reduction in the overall DoD-wide plant based on replacement value. Therefore, the excess facilities, related equipment and capacity costing billions of dollars annually will remain even if all of your recommendations are fully implemented.

Why didn't your office provide the oversight necessary to ensure that the Joint Cross-Service Groups provided sound and objective alternatives to the Service Secretaries?

Why didn't you require the Services to make the recommendation to you to achieve your 15 percent minimum reduction goal in excess plant?

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SHRINKING INDUSTRIAL BASE

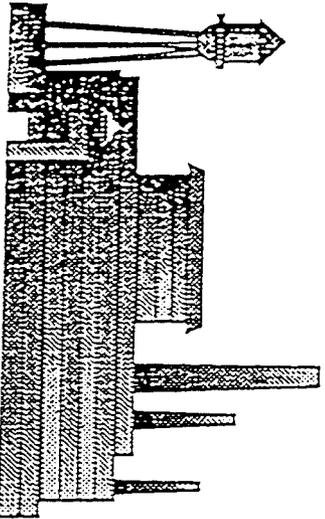


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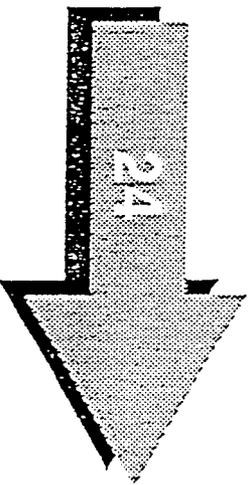
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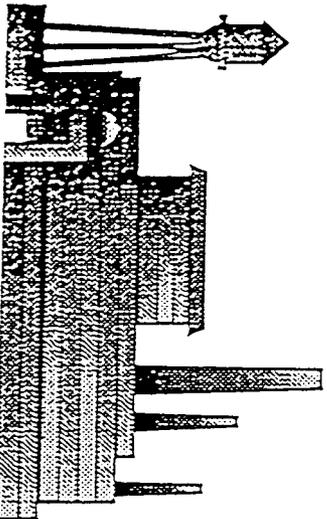
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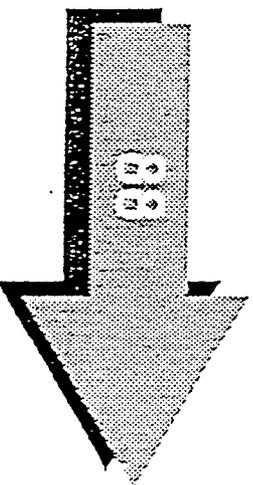
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52

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One Hundred Third Congress
of the
United States of America

AT THE SECOND SESSION

*Begun and held at the City of Washington on Tuesday,
the twenty-fifth day of January, one thousand nine hundred and ninety-four*

An Act

To revise and improve the process for disposing of buildings and property at military installations under the base closure laws.

*Be it enacted by the Senate and House of Representatives of
the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE.

This Act may cited as the "Base Closure Community Redevelopment and Homeless Assistance Act of 1994".

SEC. 2. DISPOSAL OF BUILDINGS AND PROPERTY AT MILITARY INSTALLATIONS APPROVED FOR CLOSURE.

(a) **IN GENERAL.**—Section 2905(b) of the Defense Base Closure and Realignment Act of 1990 (part A of title XXIX of Public Law 101-510; 10 U.S.C. 2687 note) is amended—

- (1) by redesignating paragraph (7) as paragraph (8); and
- (2) by inserting after paragraph (6) the following new paragraph (7):

"(7)(A) Determinations of the use to assist the homeless of buildings and property located at installations approved for closure under this part after the date of the enactment of this paragraph shall be determined under this paragraph rather than paragraph (6).

"(B)(i) Not later than the date on which the Secretary of Defense completes the final determinations referred to in paragraph (5) relating to the use or transferability of any portion of an installation covered by this paragraph, the Secretary shall—

"(I) identify the buildings and property at the installation for which the Department of Defense has a use, for which another department or agency of the Federal Government has identified a use, or of which another department or agency will accept a transfer;

"(II) take such actions as are necessary to identify any building or property at the installation not identified under subclause (I) that is excess property or surplus property;

"(III) submit to the Secretary of Housing and Urban Development and to the redevelopment authority for the installation (or the chief executive officer of the State in which the installation is located if there is no redevelopment authority for the installation at the completion of the determination described in the stem of this sentence) information on any building or property that is identified under subclause (II); and

"(IV) publish in the Federal Register and in a newspaper of general circulation in the communities in the vicinity of

the installation information on the buildings and property identified under subclause (II).

"(ii) Upon the recognition of a redevelopment authority for an installation covered by this paragraph, the Secretary of Defense shall publish in the Federal Register and in a newspaper of general circulation in the communities in the vicinity of the installation information on the redevelopment authority.

"(C)(i) State and local governments, representatives of the homeless, and other interested parties located in the communities in the vicinity of an installation covered by this paragraph shall submit to the redevelopment authority for the installation a notice of the interest, if any, of such governments, representatives, and parties in the buildings or property, or any portion thereof, at the installation that are identified under subparagraph (B)(i)(II). A notice of interest under this clause shall describe the need of the government, representative, or party concerned for the buildings or property covered by the notice.

"(ii) The redevelopment authority for an installation shall assist the governments, representatives, and parties referred to in clause (i) in evaluating buildings and property at the installation for purposes of this subparagraph.

"(iii) In providing assistance under clause (ii), a redevelopment authority shall—

"(I) consult with representatives of the homeless in the communities in the vicinity of the installation concerned; and

"(II) undertake outreach efforts to provide information on the buildings and property to representatives of the homeless, and to other persons or entities interested in assisting the homeless, in such communities.

"(iv) It is the sense of Congress that redevelopment authorities should begin to conduct outreach efforts under clause (iii)(II) with respect to an installation as soon as is practicable after the date of approval of closure of the installation.

"(D)(i) State and local governments, representatives of the homeless, and other interested parties shall submit a notice of interest to a redevelopment authority under subparagraph (C) not later than the date specified for such notice by the redevelopment authority.

"(ii) The date specified under clause (i) shall be—

"(I) in the case of an installation for which a redevelopment authority has been recognized as of the date of the completion of the determinations referred to in paragraph (5), not earlier than 3 months and not later than 6 months after that date; and

"(II) in the case of an installation for which a redevelopment authority is not recognized as of such date, not earlier than 3 months and not later than 6 months after the date of the recognition of a redevelopment authority for the installation.

"(iii) Upon specifying a date for an installation under this subparagraph, the redevelopment authority for the installation shall—

"(I) publish the date specified in a newspaper of general circulation in the communities in the vicinity of the installation concerned; and

"(II) notify the Secretary of Defense of the date.

"(E)(i) In submitting to a redevelopment authority under subparagraph (C) a notice of interest in the use of buildings or

property at an installation to assist the homeless, a representative of the homeless shall submit the following:

"(I) A description of the homeless assistance program that the representative proposes to carry out at the installation.

"(II) An assessment of the need for the program.

"(III) A description of the extent to which the program is or will be coordinated with other homeless assistance programs in the communities in the vicinity of the installation.

"(IV) A description of the buildings and property at the installation that are necessary in order to carry out the program.

"(V) A description of the financial plan, the organization, and the organizational capacity of the representative to carry out the program.

"(VI) An assessment of the time required in order to commence carrying out the program.

"(ii) A redevelopment authority may not release to the public any information submitted to the redevelopment authority under clause (i)(V) without the consent of the representative of the homeless concerned unless such release is authorized under Federal law and under the law of the State and communities in which the installation concerned is located.

"(F)(i) The redevelopment authority for each installation covered by this paragraph shall prepare a redevelopment plan for the installation. The redevelopment authority shall, in preparing the plan, consider the interests in the use to assist the homeless of the buildings and property at the installation that are expressed in the notices submitted to the redevelopment authority under subparagraph (C).

"(ii)(I) In connection with a redevelopment plan for an installation, a redevelopment authority and representatives of the homeless shall prepare legally binding agreements that provide for the use to assist the homeless of buildings and property, resources, and assistance on or off the installation. The implementation of such agreements shall be contingent upon the approval of the redevelopment plan by the Secretary of Housing and Urban Development under subparagraph (H) or (J).

"(II) Agreements under this clause shall provide for the reversion to the redevelopment authority concerned, or to such other entity or entities as the agreements shall provide, of buildings and property that are made available under this paragraph for use to assist the homeless in the event that such buildings and property cease being used for that purpose.

"(iii) A redevelopment authority shall provide opportunity for public comment on a redevelopment plan before submission of the plan to the Secretary of Defense and the Secretary of Housing and Urban Development under subparagraph (G).

"(iv) A redevelopment authority shall complete preparation of a redevelopment plan for an installation and submit the plan under subparagraph (G) not later than 9 months after the date specified by the redevelopment authority for the installation under subparagraph (D).

"(G)(i) Upon completion of a redevelopment plan under subparagraph (F), a redevelopment authority shall submit an application containing the plan to the Secretary of Defense and to the Secretary of Housing and Urban Development.

"(ii) A redevelopment authority shall include in an application under clause (i) the following:

"(I) A copy of the redevelopment plan, including a summary of any public comments on the plan received by the redevelopment authority under subparagraph (F)(iii).

"(II) A copy of each notice of interest of use of buildings and property to assist the homeless that was submitted to the redevelopment authority under subparagraph (C), together with a description of the manner, if any, in which the plan addresses the interest expressed in each such notice and, if the plan does not address such an interest, an explanation why the plan does not address the interest.

"(III) A summary of the outreach undertaken by the redevelopment authority under subparagraph (C)(iii)(II) in preparing the plan.

"(IV) A statement identifying the representatives of the homeless and the homeless assistance planning boards, if any, with which the redevelopment authority consulted in preparing the plan, and the results of such consultations.

"(V) An assessment of the manner in which the redevelopment plan balances the expressed needs of the homeless and the need of the communities in the vicinity of the installation for economic redevelopment and other development.

"(VI) Copies of the agreements that the redevelopment authority proposes to enter into under subparagraph (F)(ii).

"(H)(i) Not later than 60 days after receiving a redevelopment plan under subparagraph (G), the Secretary of Housing and Urban Development shall complete a review of the plan. The purpose of the review is to determine whether the plan, with respect to the expressed interest and requests of representatives of the homeless—

"(I) takes into consideration the size and nature of the homeless population in the communities in the vicinity of the installation, the availability of existing services in such communities to meet the needs of the homeless in such communities, and the suitability of the buildings and property covered by the plan for the use and needs of the homeless in such communities;

"(II) takes into consideration any economic impact of the homeless assistance under the plan on the communities in the vicinity of the installation;

"(III) balances in an appropriate manner the needs of the communities in the vicinity of the installation for economic redevelopment and other development with the needs of the homeless in such communities;

"(IV) was developed in consultation with representatives of the homeless and the homeless assistance planning boards, if any, in the communities in the vicinity of the installation; and

"(V) specifies the manner in which buildings and property, resources, and assistance on or off the installation will be made available for homeless assistance purposes.

"(ii) It is the sense of Congress that the Secretary of Housing and Urban Development shall, in completing the review of a plan under this subparagraph, take into consideration and be receptive to the predominant views on the plan of the communities in the vicinity of the installation covered by the plan.

"(iii) The Secretary of Housing and Urban Development may engage in negotiations and consultations with a redevelopment authority before or during the course of a review under clause (i) with a view toward resolving any preliminary determination of the Secretary that a redevelopment plan does not meet a requirement set forth in that clause. The redevelopment authority may modify the redevelopment plan as a result of such negotiations and consultations.

"(iv) Upon completion of a review of a redevelopment plan under clause (i), the Secretary of Housing and Urban Development shall notify the Secretary of Defense and the redevelopment authority concerned of the determination of the Secretary of Housing and Urban Development under that clause.

"(v) If the Secretary of Housing and Urban Development determines as a result of such a review that a redevelopment plan does not meet the requirements set forth in clause (i), a notice under clause (iv) shall include—

"(I) an explanation of that determination; and

"(II) a statement of the actions that the redevelopment authority must undertake in order to address that determination.

"(I)(i) Upon receipt of a notice under subparagraph (H)(iv) of a determination that a redevelopment plan does not meet a requirement set forth in subparagraph (H)(i), a redevelopment authority shall have the opportunity to—

"(I) revise the plan in order to address the determination; and

"(II) submit the revised plan to the Secretary of Housing and Urban Development.

"(ii) A redevelopment authority shall submit a revised plan under this subparagraph to the Secretary of Housing and Urban Development, if at all, not later than 90 days after the date on which the redevelopment authority receives the notice referred to in clause (i).

"(J)(i) Not later than 30 days after receiving a revised redevelopment plan under subparagraph (I), the Secretary of Housing and Urban Development shall review the revised plan and determine if the plan meets the requirements set forth in subparagraph (H)(i).

"(ii) The Secretary of Housing and Urban Development shall notify the Secretary of Defense and the redevelopment authority concerned of the determination of the Secretary of Housing and Urban Development under this subparagraph.

"(K) Upon receipt of a notice under subparagraph (H)(vi) or (J)(ii) of the determination of the Secretary of Housing and Urban Development that a redevelopment plan for an installation meets the requirements set forth in subparagraph (H)(i), the Secretary of Defense shall dispose of the buildings and property located at the installation that are identified in the plan as available for use to assist the homeless in accordance with the provisions of the plan. The Secretary of Defense may dispose of such buildings or property directly to the representatives of the homeless concerned or to the redevelopment authority concerned. The Secretary of Defense shall dispose of the buildings and property under this subparagraph without consideration.

"(L)(i) If the Secretary of Housing and Urban Development determines under subparagraph (J) that a revised redevelopment plan for an installation does not meet the requirements set forth

in subparagraph (H)(i), or if no revised plan is so submitted, that Secretary shall—

“(I) review the original redevelopment plan submitted to that Secretary under subparagraph (G), including the notice or notices of representatives of the homeless referred to in clause (ii)(II) of that subparagraph;

“(II) consult with the representatives referred to in subclause (I), if any, for purposes of evaluating the continuing interest of such representatives in the use of buildings or property at the installation to assist the homeless;

“(III) request that each such representative submit to that Secretary the items described in clause (ii); and

“(IV) based on the actions of that Secretary under subclauses (I) and (II), and on any information obtained by that Secretary as a result of such actions, indicate to the Secretary of Defense the buildings and property at the installation that meet the requirements set forth in subparagraph (H)(i).

“(ii) The Secretary of Housing and Urban Development may request under clause (i)(III) that a representative of the homeless submit to that Secretary the following:

“(I) A description of the program of such representative to assist the homeless.

“(II) A description of the manner in which the buildings and property that the representative proposes to use for such purpose will assist the homeless.

“(III) Such information as that Secretary requires in order to determine the financial capacity of the representative to carry out the program and to ensure that the program will be carried out in compliance with Federal environmental law and Federal law against discrimination.

“(IV) A certification that police services, fire protection services, and water and sewer services available in the communities in the vicinity of the installation concerned are adequate for the program.

“(iii) The Secretary of Housing and Urban Development shall indicate to the Secretary of Defense and to the redevelopment authority concerned the buildings and property at an installation under clause (i)(IV) to be disposed of not later than 90 days after the date of a receipt of a revised plan for the installation under subparagraph (J).

“(iv) The Secretary of Defense shall dispose of the buildings and property at an installation referred to in clause (iii) to entities indicated by the Secretary of Housing and Urban Development or by transfer to the redevelopment authority concerned for transfer to such entities. Such disposal shall be in accordance with the indications of the Secretary of Housing and Urban Development under clause (i)(IV). Such disposal shall be without consideration.

“(M)(i) In the event of the disposal of buildings and property of an installation pursuant to subparagraph (K), the redevelopment authority for the installation shall be responsible for the implementation of and compliance with agreements under the redevelopment plan described in that subparagraph for the installation.

“(ii) If a building or property reverts to a redevelopment authority under such an agreement, the redevelopment authority shall take appropriate actions to secure, to the maximum extent prac-

licable, the utilization of the building or property by other homeless representatives to assist the homeless. A redevelopment authority may not be required to utilize the building or property to assist the homeless.

“(N) The Secretary of Defense may postpone or extend any deadline provided for under this paragraph in the case of an installation covered by this paragraph for such period as the Secretary considers appropriate if the Secretary determines that such postponement is in the interests of the communities affected by the closure of the installation. The Secretary shall make such determinations in consultation with the redevelopment authority concerned and, in the case of deadlines provided for under this paragraph with respect to the Secretary of Housing and Urban Development, in consultation with the Secretary of Housing and Urban Development.”

Postponement of deadlines.

“(O) For purposes of this paragraph, the term ‘communities in the vicinity of the installation’, in the case of an installation, means the communities that constitute the political jurisdictions (other than the State in which the installation is located) that comprise the redevelopment authority for the installation.”

(b) DEFINITION.—Section 2910 of such Act is amended by adding at the end the following:

“(10) The term ‘representative of the homeless’ has the meaning given such term in section 501(h)(4) of the Stewart B. McKinney Homeless Assistance Act (42 U.S.C. 11411(h)(4)).”

(c) CONFORMING AMENDMENT TO 1990 BASE CLOSURE ACT.—Section 2905(b)(6)(A) of such Act is amended by adding at the end the following: “For procedures relating to the use to assist the homeless of buildings and property at installations closed under this part after the date of the enactment of this sentence, see paragraph (7).”

(d) CONFORMING AMENDMENT TO MCKINNEY ACT.—Section 501 of the Stewart B. McKinney Homeless Assistance Act (42 U.S.C. 11411) is amended—

(1) by redesignating subsection (h) as subsection (i); and

(2) by inserting after subsection (g) the following new subsection (h):

“(h) APPLICABILITY TO PROPERTY UNDER BASE CLOSURE PROCESS.—(1) The provisions of this section shall not apply to buildings and property at military installations that are approved for closure under the Defense Base Closure and Realignment Act of 1990 (part A of title XXIX of Public Law 101-510; 10 U.S.C. 2687 note) after the date of the enactment of this subsection.

“(2) For provisions relating to the use to assist the homeless of buildings and property located at certain military installations approved for closure under such Act, or under title II of the Defense Authorization Amendments and Base Closure and Realignment Act (Public Law 100-526; 10 U.S.C. 2687 note), before such date, see section 2(e) of Base Closure Community Redevelopment and Homeless Assistance Act of 1994.”

(e) APPLICABILITY TO INSTALLATIONS APPROVED FOR CLOSURE BEFORE ENACTMENT OF ACT.—(1)(A) Notwithstanding any provision of the 1988 base closure Act or the 1990 base closure Act, as such provision was in effect on the day before the date of the enactment of this Act, and subject to subparagraphs (B) and (C), the use to assist the homeless of building and property at military installations approved for closure under the 1988 base closure Act

or the 1990 base closure Act, as the case may be, before such date shall be determined in accordance with the provisions of paragraph (7) of section 2905(b) of the 1990 base closure Act, as amended by subsection (a), in lieu of the provisions of the 1988 base closure Act or the 1990 base closure Act that would otherwise apply to the installations.

(B)(i) The provisions of such paragraph (7) shall apply to an installation referred to in subparagraph (A) only if the redevelopment authority for the installation submits a request to the Secretary of Defense not later than 60 days after the date of the enactment of this Act.

to day window to opt in under new process.

(ii) In the case of an installation for which no redevelopment authority exists on the date of the enactment of this Act, the chief executive officer of the State in which the installation is located shall submit the request referred to in clause (i) and act as the redevelopment authority for the installation.

(C) The provisions of such paragraph (7) shall not apply to any buildings or property at an installation referred to in subparagraph (A) for which the redevelopment authority submits a request referred to in subparagraph (B) within the time specified in such subparagraph (B) if the buildings or property, as the case may be, have been transferred or leased for use to assist the homeless under the 1988 base closure Act or the 1990 base closure Act, as the case may be, before the date of the enactment of this Act.

(2) For purposes of the application of such paragraph (7) to the buildings and property at an installation, the date on which the Secretary receives a request with respect to the installation under paragraph (1) shall be treated as the date on which the Secretary of Defense completes the final determination referred to in subparagraph (B) of such paragraph (7).

(3) Upon receipt under paragraph (1)(B) of a timely request with respect to an installation, the Secretary of Defense shall publish in the Federal Register and in a newspaper of general circulation in the communities in the vicinity of the installation information describing the redevelopment authority for the installation.

(4)(A) The Secretary of Housing and Urban Development and the Secretary of Health and Human Services shall not, during the 60-day period beginning on the date of the enactment of this Act, carry out with respect to any military installation approved for closure under the 1988 base closure Act or the 1990 base closure Act before such date any action required of such Secretaries under the 1988 base closure Act or the 1990 base closure Act, as the case may be, or under section 501 of the Stewart B. McKinney Homeless Assistance Act (42 U.S.C. 11411).

(B)(i) Upon receipt under paragraph (1)(A) of a timely request with respect to an installation, the Secretary of Defense shall notify the Secretary of Housing and Urban Development and the Secretary of Health and Human Services that the disposal of buildings and property at the installation shall be determined under such paragraph (7) in accordance with this subsection.

(ii) Upon receipt of a notice with respect to an installation under this subparagraph, the requirements, if any, of the Secretary of Housing and Urban Development and the Secretary of Health and Human Services with respect to the installation under the provisions of law referred to in subparagraph (A) shall terminate.

(iii) Upon receipt of a notice with respect to an installation under this subparagraph, the Secretary of Health and Human Services shall notify each representative of the homeless that submitted to that Secretary an application to use buildings or property at the installation to assist the homeless under the 1988 base closure Act or the 1990 base closure Act, as the case may be, that the use of buildings and property at the installation to assist the homeless shall be determined under such paragraph (7) in accordance with this subsection.

(5)(A) In preparing a redevelopment plan for buildings and property at an installation covered by such paragraph (7) by reason of this subsection, the redevelopment authority concerned shall—

(A) consider and address specifically any applications for use of such buildings and property to assist the homeless that were received by the Secretary of Health and Human Services under the 1988 base closure Act or the 1990 base closure Act, as the case may be, before the date of the enactment of this Act and are pending with that Secretary on that date; and

(B) in the case of any application by representatives of the homeless that was approved by the Secretary of Health and Human Services before the date of enactment of this Act, ensure that the plan adequately addresses the needs of the homeless identified in the application by providing such representatives of the homeless with—

(i) properties, on or off the installation, that are substantially equivalent to the properties covered by the application;

(ii) sufficient funding to secure such substantially equivalent properties;

(iii) services and activities that meet the needs identified in the application; or

(iv) a combination of the properties, funding, and services and activities described in clause (i), (ii), and (iii).

(6) In the case of an installation to which the provisions of such paragraph (7) apply by reason of this subsection, the date specified by the redevelopment authority for the installation under subparagraph (D) of such paragraph (7) shall be not less than 1 month and not more than 6 months after the date of the submittal of the request with respect to the installation under paragraph (1)(B).

(7) For purposes of this subsection:

(A) The term "1988 base closure Act" means title II of the Defense Authorization Amendments and Base Closure and Realignment Act (Public Law 100-526; 10 U.S.C. 2687 note).

(B) The term "1990 base closure Act" means the Defense Base Closure and Realignment Act of 1990 (part A of title XXIX of Public Law 101-510; 10 U.S.C. 2687 note).

(f) CLARIFYING AMENDMENTS TO BASE CLOSURE ACTS.—(1) Section 204(b)(6)(F)(i) of the Defense Authorization Amendments and Base Closure Act and Realignment Act (Public Law 100-526; 10 U.S.C. 2687 note) is amended by inserting "and buildings and property referred to in subparagraph (B)(ii) which have not been identified as suitable for use to assist the homeless under subparagraph (C)," after "subparagraph (D)."

(2) Section 2905(b)(6)(F)(i) of the Defense Base Closure and Realignment Act of 1990 (part A of title XXIX of Public Law

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101-510; 10 U.S.C. 2687 note) is amended by inserting "and buildings and property referred to in subparagraph (B)(ii) which have not been identified as suitable for use to assist the homeless under subparagraph (C)," after "subparagraph (D),".

Speaker of the House of Representatives.

*Vice President of the United States and
President of the Senate.*

Cirillo/dac/personal/AFT jobs

DRAFT AIR FORCE TEAM ASSIGNMENTS

February 21, 1995

Description: The intent of this chart is to display the Air Force Team members specific and general assignments. The chart shows the Primary and Secondary Base Categories, Primary and Secondary Specialties, Multi-Team Coordinating areas, and Current Work Task. Obviously there will be flexibility in assignments as well as shifts at certain stages in the process to include presentation of the DoD Report and Adds Hearing. fc

NAME/TASK	Primary Category	Secondary Category	Primary Specialty	Secondary Specialty	Multi-Team Coordination	Current Work Task (CWT)	CWT Suspense
CIRILLO	Exclusions		Environmental	Data Base			
ACKERMAN	Redirects		Data Base	GIS	I-Team	1 Mar SECDEF Qs Read Bk/Files	17F/23F 22 Feb
BEYER	Small A/C	UPT	Capacity Analysis		N-Team	Obtain Data List (AF)	3 March
CANTWELL	Large A/C (B)	Missiles	COBRA	Capacity Analysis	I-Team	R&M Commission	27 Feb
DICAMILLO	Large A/C (A,T)	Air Reserve Comp	Infrastructure	Reserve Forces	A-Team	Base Fact Sheets (AF) AF Hear Qs	22 Feb 24F/2M
HALL	Air Reserve Comp.	Labs/T&E	Economic		X-Team	AF Hear Qs	24F/2M
OLSON	Missiles	Depots	Strat Planning	"Dean"	X-Team	1 Mar SECDEF Qs	17F/23F
PROSS	Undergraduate P T	Small A/C	Linear Progmg	Economics	N-Team	GTBM Hear Qs	15F/22F

Air Force Team
 Just a first cut
 Comments/interests welcome
 Frank

CROSS SERVICE TEAM ASSIGNMENTS

February 22, 1995

NAME/TASK	Primary Category	Secondary Category	Primary Specialty	Secondary Specialty	Multi-Team Coordination	Current Work Task (CWT)	CWT Suspense
DWSLEY							
FARRINGTON							
REESE							
HELMER							
KEARNS							
KNOEPFLE							
VARALLO							

Document Separator

March 21 1995

To: Commissioners
David Lyles
Charlie Smith
Madeline Creedon
~~CeCe Carman~~
Ben Borden *Ben B.*
R&A Team Leads *Redd AF, BROWN HSBW SA*

From: *Deirdre Nurre*
Deirdre Nurre, Interagency Environmental Analyst

Through: Bob Cook, Interagency Team Leader *Cook 3/21*

RE: Air Quality Issues Affecting BRAC 95 Recommendations

Attached is a draft point paper on air quality issues which may assist Commission members and staff in considering the air quality consequences of proposed BRAC actions. Please note that the paper is in draft and is distributed for the use of Commission members and staff only.

If you need additional information regarding air quality issues, please contact me at extension 164.

Attachment

DRAFT

CLEAN AIR AND THE 1995 BRAC: CONCEPTS AND ISSUES

INTRODUCTION

Closure, realignment, and redirect actions which the Department of Defense proposes for the 1995 BRAC will affect the air quality of several local communities. The Clean Air Act's 1990 Amendments produced new air regulations and concepts, and BRAC actions must comply with these regulations.

Air quality concerns will be most significant for bases located in non-attainment areas which will receive activities as a result of major redirects or realignments. Many such bases will have to perform a conformity determination, and may need to obtain emissions reductions credits in order to demonstrate conformity with the Clean Air Act. This memo defines these and other key air terms and issues, and may assist Commission members and staff in considering the air quality consequences of proposed BRAC actions.

POTENTIAL IMPACT ON BRAC

- Significant time and expense needed to quantify and estimate emissions and write conformity determination.
- A base's draft conformity determination could be challenged by the community or the local air district. If a conformity determination is litigated, reassignment and move schedules could be delayed.
- It may not be possible to make a conformity determination for various reasons (air credits might not be available to obtain, it may not be possible to modify the SIP, etc.) If a conformity determination cannot be attained, the military redirect cannot proceed unless the redirect is downsized or the action is legislatively excluded.
- Potential competition between military and community over air credits in areas where one BRAC installation closes and another one receives activities.

AIR QUALITY TERMS

Attainment area: A geographic area in which levels of a criteria air pollutant meet the health-based primary standard (national ambient air quality standard, or NAAQS) for the pollutant. An area may have an acceptable level for one criteria air pollutant, but may have unacceptable levels for others. Thus, an area could be both attainment and nonattainment at the same time. Attainment areas are defined using the NAAQS set by EPA.

Non-Attainment area: A geographic area in which levels of a criteria air pollutant does not meet the health-based primary standard.

Maintenance area: An area formerly in nonattainment which has met attainment standards, but which needs to maintain these standards for an established number of years to be reclassified as an attainment area.

Criteria Air Pollutants: Common air pollutants (such as carbon monoxide, ozone) regulated by EPA on the basis of criteria (information on health and/or environmental effects of pollution).

State Implementation Plan (SIP): Each state submits to EPA a plan (SIP) designed to attain and maintain national air quality standards according to an established schedule. A SIP consists of a detailed description of the programs a state will use to carry out its responsibilities under the Clean Air Act and a demonstration (using air quality modeling) that the SIP will provide for attainment of the National Ambient Air Quality Standards by the Clean Air Act attainment date.

Conformity: The Clean Air Act prohibits a federal agency from supporting an action unless the responsible federal agency determines that the action conforms to the applicable air quality implementation plan for the area. Examples of actions supported by the federal government might include airport expansion activities, federal construction projects, and review and approval of dredging permits. Conformity to an applicable SIP means that the federal actions:

- will not cause or contribute to new violations of any federal ambient air quality standards;
- will not increase the frequency or severity of any existing violations of federal ambient air quality standards; and
- will not delay the timely attainment of federal ambient air quality standards.

A conformity determination is required when the total of direct and indirect emissions caused by a federal action for any given year of a project in a nonattainment or maintenance area exceed specified low-level annual thresholds for the criteria pollutants.

Offset: A method used in the Clean Air Act to give companies which own or operate major sources in non-attainment areas flexibility in meeting overall pollution reduction requirements when changing production processes. If the owner or operator of the source wishes to increase release of a criteria air pollutant, an offset (a reduction of a somewhat greater amount of the same pollutant) must be obtained either at the same plant or by purchasing offsets from another company in the same nonattainment area..

Emission Reduction Credit (ERC): A type of offset which enables the military (or other federal agency) to quantify the direct and indirect emissions associated with the proposed federal action as a means of making a conformity determination. Local districts can establish banking programs as part of their State Implementation Plans to store qualified emission reduction credits (ERCs) for later use in offset trades. These reductions must be real, permanent, quantifiable, surplus, and enforceable in order to be banked. Air districts can credit only those reduction that go beyond reductions already required in a rule or regulation. Banking programs usually require

that the source apply for the emission reduction credit within a certain time from the date of curtailment or shutdown.

QUESTIONS AND ANSWERS FOR BASES RECEIVING ACTIVITIES IN BRAC 95:

A receiving base is in a non-attainment area and the military needs to demonstrate that new activities can conform to the SIP. How can conformity be demonstrated?

The military can show conformity one of five ways:

1) the total of indirect and direct emissions of the action have specifically been identified in the applicable SIP.

2) Complete emission offsets for certain specified pollutants are obtained for all direct and indirect emissions associated with the proposed military redirect.

3) The action meets the areawide or local modeling criteria set forth in the rule for certain pollutants, and modeling demonstrates that the action will not cause additional violations of air quality standards.

4) Where there is no post-1990 EPA-approved SIP for a particular area, the determination is made that the action will not cause a net increase in total emissions compared the appropriate baseline year.

5) The State agrees to revise its SIP to accommodate the action's emissions. The State can agree only if it demonstrates that all other SIP requirements are being implemented, it determines that the military redirect has pursued all reasonable mitigation measures, and the military has completed all the air quality analysis needed for a conformity determination. Thereafter, the State is held accountable to rewrite its SIP for federal approval.

Is a conformity determination required to be made for a closing base?

A closure decision does not require conformity analysis. Disposal of property on a closing base could require it, however, because the military and reuse groups may each seek offsets or air credits which the closure would make available for new uses.

How can a receiving base obtain offsets or emission reduction credits in order to make a conformity determination?

The military has various options for obtaining offsets:

1) Gain offsets from within the base by reducing other emission-generating functions;
2) Obtain offsets or credits from a BRAC 95 closing or realigning base in the same air district;

3) Obtain offsets or credits from prior BRAC realignment or closure in the same air district if it can be determined that these credits are still available;

4) Obtain credits from a market for emissions credits, if such a market exists in the air district.

Bear in mind that the receiving base may be openly competing with reuse or community interests for offsets or credits in options 2 and 3.

Air Issues Impacting Closing, Realigning, and Receiving Bases:

Monetary Constraints: If air credits or planning offsets are not available for installations which will receive activities, the military may need to purchase ERCs in the open market. These credits may not be readily available and may be extremely expensive. Application fees are also part of the transaction costs. The process of applying for air credits can be costly in quantifying emissions, paying application fees, and performing conformity analysis. Prior DoD experience indicates that the cost for a major redirect or realignment ranges from \$60,000 to \$100,000. Although air credits or offsets from a closing base in a nonattainment areas are valuable, a base commander may be reluctant to spend money from the base's own BRAC cleanup funds to secure air credits which will benefit new activities in the community or other military bases in the area, but won't benefit the base itself.

Time Constraints: Completing a conformity determination and the environmental impact statement often required when a base receives new military activities can require a year or more. The determination must be complete before the new military activities commence.

Quantifying Emissions: Emissions can be difficult to quantify. A base may not have maintained the necessary data that could be used to quantify emissions. Operations may have slowed down from previous levels so that it is difficult to accurately measure true emission levels, further constraining closing bases from applying for emissions. Air districts may have short timelines for applying for credits (for example, 90 days is the limit in California's South Coast district).

Competing demands for credits or planning offsets: Military installations that are remaining open or expanding in their local air basin may need credits or planning offsets for conformity determinations or for new source permits. The military may seek to apply credits or offsets from closing or realigning installations in the same air district to the receiving base, thereby demonstrating conformity for their expanding mission. Meanwhile, reuse groups for the closing installation may be interested in obtaining air credits or planning offsets to win approval from other federal agencies (e.g., the Federal Aviation Administration) for proposed projects, or as a means of attracting business and revitalizing economic activity at closing bases.

Document Separator