



**Association of
The United States Army**

ARMY BUDGET

FISCAL YEAR 1993

AN ANALYSIS

May 1992



ARMY BUDGET FISCAL YEAR 1993

AN ANALYSIS

TABLE OF CONTENTS

INTRODUCTION.....	v
PART I - THE DEPARTMENT OF DEFENSE BUDGET.....	1
The Federal Budget.....	1
Background on the Defense Budget.....	1
Budget Trends.....	3
How the DoD Budget is Allocated.....	5
Other Factors Affecting the DoD Budget.....	5
The Base Force Plan.....	7
Nuclear Policy and Strategic Force Cuts.....	9
Strategic Defense Initiative and Ballistic Missile Defense.....	10
Other Program Changes.....	11
Personnel.....	14
Military Construction and Family Housing.....	16
Mobility Requirements.....	17
Issues in Congress.....	18
FY 1993 Budget—What Next?.....	20
PART II - THE ARMY BUDGET.....	23
The Army Plan.....	25
Structure.....	26
Personnel.....	29
Training and Readiness.....	31
Research Development and Acquisition.....	33
Procurement.....	33
Aircraft.....	35
Missiles.....	36
Weapons and Tracked Combat Vehicles (WTCV).....	39
Ammunition.....	41
Other Procurement Army (OPA).....	42
Research and Development.....	44
Military Construction and Family Housing.....	47
Other Budget Considerations.....	49
Depot Maintenance.....	49
Facilities Maintenance and Repair.....	50
Environmental Funding.....	50
Reserve Components Summary.....	51
Army Budget Assessment.....	54
APPENDIX I - Budget Language.....	I-1
APPENDIX II -	
A. Appropriation Summary.....	II-1
B. O&M Summary.....	II-2
C. Procurement Summary.....	II-5
D. RDT&E Summary.....	II-9

THE ARMY BUDGET FOR FISCAL YEAR 1993

INTRODUCTION

While the FY 1993 budget represents a milestone on the path to a smaller, post-Cold War defense force, the first two years of that transition (fiscal years 1991 and 1992) were overshadowed and to some degree distorted by the demise of the Soviet Union and the Persian Gulf War.

As a result, the FY 1993 budget cycle becomes the breathing space for recalibrating thinking about the real long-term security needs of our nation. It also requires us to reaffirm concepts on the kind of defense the United States must possess and how much the nation is prepared to fund. While this budget is derived from the Secretary of Defense's Base Force Plan, big issues still on the table involve structure, sizing, future systems, time-phasing and, last but not least, future funding levels. These are of such importance and magnitude that full debate and resolution are not possible during this budget cycle and, therefore, will continue into ensuing budget debates.

One of the most profound policy decisions having a direct bearing on the defense program was the President's announced plan for major reductions to America's nuclear weapons and a modified nuclear strategy. The changes, announced last September and during the state of the union message in January, affect the overall U.S. strategic structure and shift the strategic focus to conventional military forces.

The fact that we are in an election year has a direct bearing on what Congress will do with the defense budget this year. In the current environment, economic issues dominate the agenda and there is little public interest in such long-term matters as the national security outlook five to ten years hence. In fact, the initial congressional efforts to significantly cut this year's defense budget have generally abated as the impacts of such cuts were recognized in the districts.

This paper provides an analysis of the Army's amended FY 1993 budget in the context of the overall DoD budget. It discusses the status of actions; identifies the issues and debates in Congress; and sizes up the shortfalls. It also acknowledges that FY 1993 is in a "holding pattern", and that many of the big decisions will be put off until later.

Next year will be an important time for reaffirming or redefining the guideposts for the future. Serious thinking, rational analysis and reasoned debate will be called for. These cannot be snapshot decisions of the moment.

In the meantime, as the world continues to foment, those who insist on a precise description of future threats or suggest that they can make predictions five or ten years out, are only playing a guessing game. Few would have perceived the events of the past three years, and suggestions that the United States can now plan on a period of relative world stability are totally unrealistic.

While there are heavy pressures to reduce defense spending more rapidly, the great danger lies in doing so too fast and making irreversible cuts that could result in a security force which is not equal to our needs.



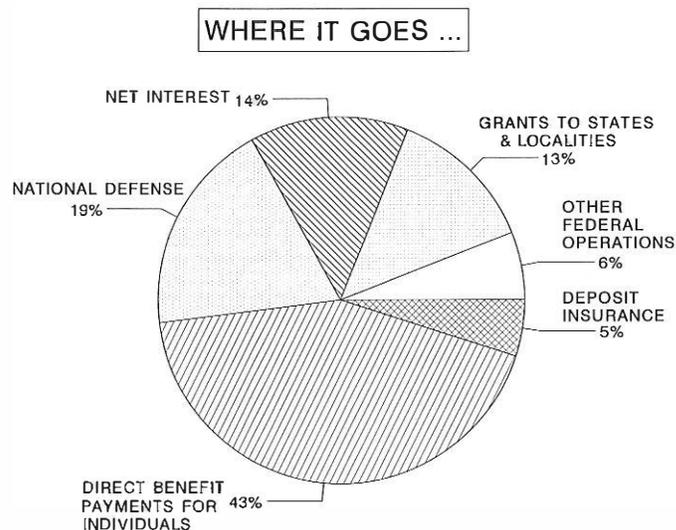
Jack N. Merritt
General, USA Ret.
President, AUSA

PART I

THE DEPARTMENT OF DEFENSE BUDGET

THE FEDERAL BUDGET

Allocation of the FY 1993 \$1.52 trillion federal budget, as submitted by the President, is shown on the following chart.



Of this total about 18.8 percent is defined as national defense. The Department of Defense portion, which excludes Department of Energy nuclear programs and some military related costs of other agencies, is approximately 18 percent.

BACKGROUND ON THE DEFENSE BUDGET

The budget agreement between the President and Congress, documented by the 1990 Budget Reconciliation Act and the 1990 Budget Enforcement Act, set defense budget caps from FY 1991 through 1993, with a projected defense funding level through 1995. These acts superseded the old Gramm-Rudman-Hollings criteria.

The agreement established a decreasing funding curve for defense averaging about three percent a year through FY 1995. This was the basis for the FY 1991 defense budget enacted by Congress and the two-year FY 1992/1993 budget submitted in February 1991. The FY 1992 budget was enacted and FY 1993 (as amended) is now before Congress.

Major costs that occurred as the result of Operation Desert Shield/Desert Storm were covered by supplemental appropriations and funding through the Defense Cooperation Account built from foreign contributions. Theoretically, therefore, FY 1991 and 1992 defense budgets, as appropriated and executed, were independent of Desert Shield/Desert Storm.

There was an interesting provision in the October 1990 budget agreement that surfaced as an issue for FY 1993. The agreement not only provided for a defense spending cap each year, but it precluded any defense funding from being diverted to other discretionary purposes through 1993.

There were advocates in Congress who proposed breaking the barrier in FY 1993 thus permitting the shifting of defense funds, but this would require a change in the statute and the votes are not there to pull it off. Defense budgets for FY 1994 and beyond do not have this protection, so next year's debate will be wide open.

Back to FY 1993. Although formally submitted with the FY 1992 budget last year, it has been amended and revised downward significantly. Also modified was the DoD six-year program for FY 1992 through FY 1997. Using the FY 1992 defense budget and last year's six-year defense plan as a baseline, the President's current proposal would cut an additional \$7.5 billion from FY 1993 and \$50.4 billion from the program through FY 1997.* While this would increase defense reductions from an average of minus three percent a year to about minus four percent annually through FY 1997, there is pressure to dig deeper and go faster. How much and how fast have become major issues.

* NOTE: The apparent dollar cut from the six-year defense plan was \$63.8 billion. However, \$13.4 billion are required adjustments for changes in the rate of inflation. The \$50.4 figure represents actual reductions in defense programs.

<u>National Defense and Department of Defense (DOD) Budget Numbers</u>		
<u>National Defense/DoD</u>		
(Current \$ Billions)		
<u>Budget Authority</u>	<u>FY 92</u>	<u>FY 93</u>
DoD	270.9	267.6
DoE & Others	<u>12.9</u>	<u>13.3</u>
Total National Defense	283.8	280.9
 <u>Outlays</u>		
DoD	282.6	272.8
DoE & Others	<u>12.6</u>	<u>13.1</u>
Total National Defense	295.2	285.9
Note: Excludes costs of Desert Shield/Desert Storm		

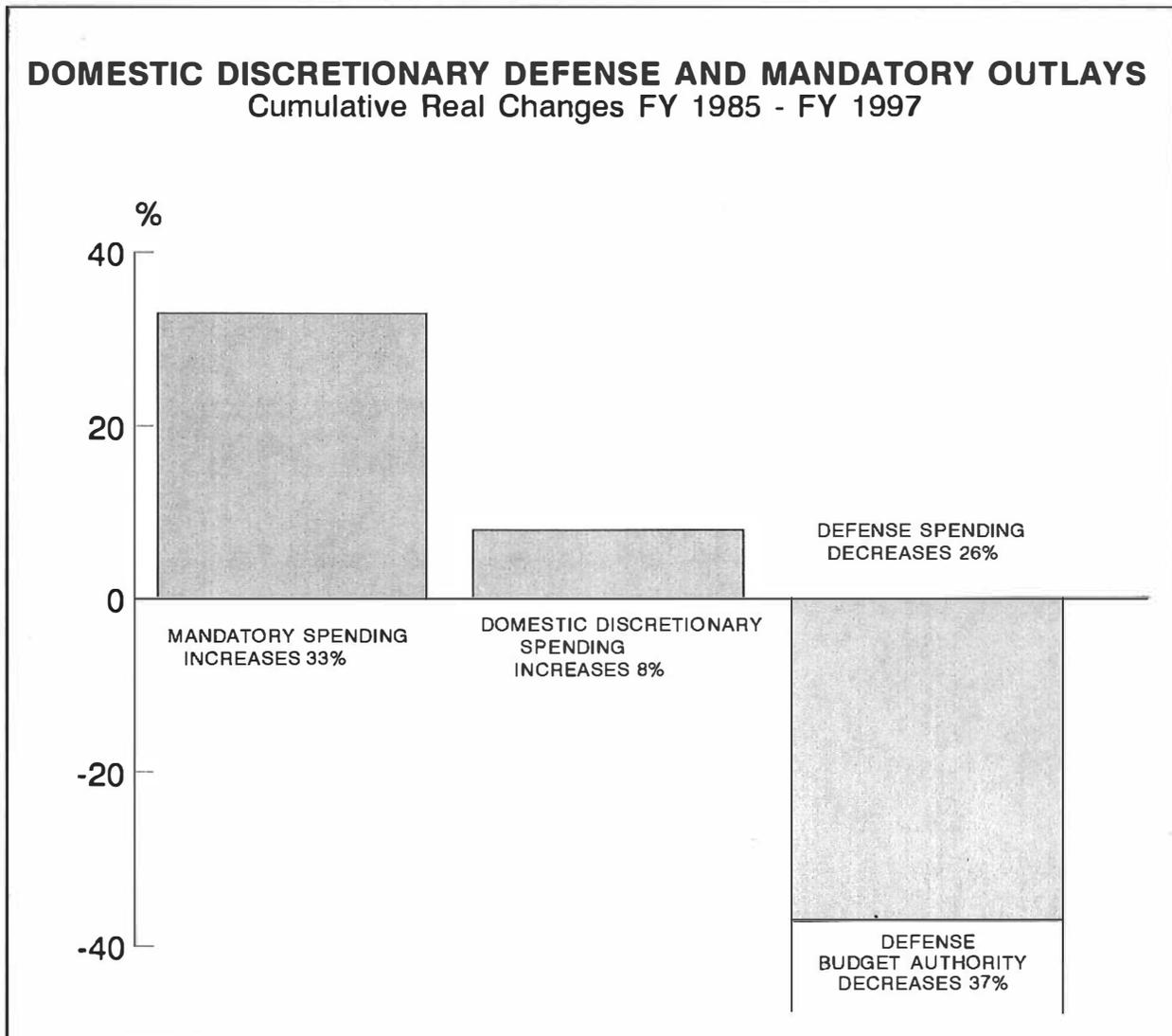
There are several things the reader should recognize from the above, as these numbers are frequently confused when not properly identified. There are two different defense budgets often cited: (1) National Defense (the larger number) which covers all defense related items, and (2) the Department of Defense (DoD) budget which is the part coming from the Pentagon under the direction of the Secretary of Defense. Also, the reader must differentiate between budget authority and outlays. Budget authority is what is appropriated by Congress in a particular year. Outlays are what are actually paid or estimated to be paid in a particular year and include payments for both current and past obligations. Expanded definitions are included in Appendix I.

The rest of this paper addresses the DoD budget. Dollar amounts will be stated in actual (or current) terms, unless specifically identified as being adjusted for inflation (often referred to as real terms).

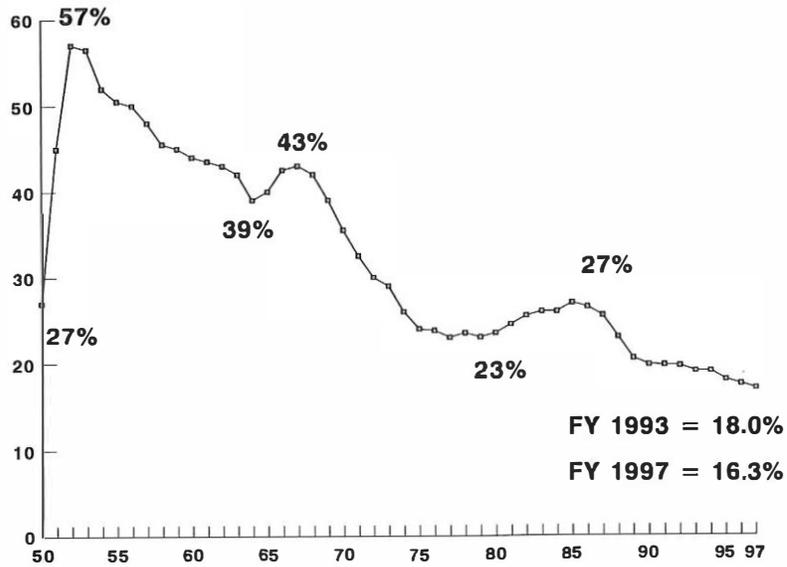
BUDGET TRENDS

The DoD budget has steadily gone down in real (inflation adjusted) terms since FY 1985. With a planned decrease in the DoD budget of about four percent a year from FY 1993 on, by FY 1997 the cumulative decline in real terms since FY 1985 would total about 37 percent. The real decrease for FY 1993 alone, without further cuts, would be minus seven percent.

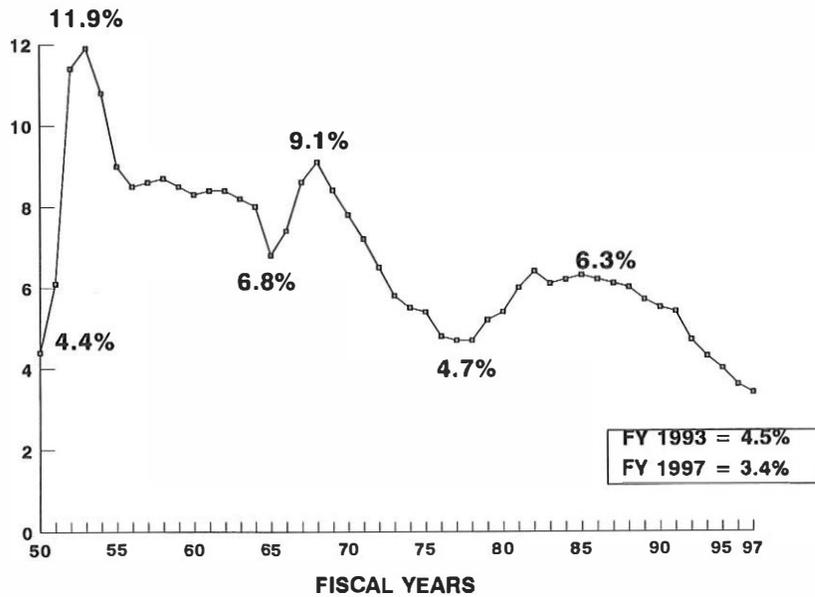
The following charts represent changing relationships of defense spending with respect to federal spending, projected through FY 1997, as well as the defense share of the GNP.



Defense as a Share of Federal Outlays



Defense Outlays as a Share of GNP



HOW THE DOD BUDGET IS ALLOCATED

This is portrayed in two ways: (1) by budget title and (2) by service component.

	DOD BUDGET AUTHORITY BY TITLE		
	(\$ Billions)		
	FISCAL YEARS		
	<u>1991</u>	<u>1992</u>	<u>1993</u>
Military Personnel	78.4	74.3	77.1
O&M	85.3	86.4	84.5
Procurement	66.5	58.5	54.4
RDT&E	36.1	36.9	38.8
Military Construction	5.2	4.9	6.2
Family Housing	3.3	3.6	4.0
Revolving Funds Transfer	—	—	2.0
All Other	<u>1.2</u>	<u>2.3</u>	<u>0.6</u>
Grand Total	276.0	270.9	267.6

	DOD BUDGET AUTHORITY BY SERVICE		
	(\$ Billions)		
	FISCAL YEARS		
	<u>1991</u>	<u>1992</u>	<u>1993</u>
Army	72.5	67.0	63.3
Navy	94.9	84.8	84.6
Air Force	83.6	80.2	83.9
Defense Agencies	20.6	21.2	21.3
Defense-wide	4.4	17.7	14.6
Defense Medical Program	—	<u>(9.1)</u>	<u>(9.5)</u>
Grand Total	276.0	270.9	267.6

NOTE: Defense medical program is included in Defense-wide

OTHER FACTORS AFFECTING THE DOD BUDGET

Desert Shield/Desert Storm. The budget does not include U.S. costs for Desert Shield/Desert Storm. As directed in the 1990 Budget Enforcement Act, U.S. spending was to be treated as emergency funding and not subject to the budget ceilings.

Contributions by U.S. allies, handled through the Defense Cooperation Account, have amounted to about \$47 billion in cash so far (with some payments still being received) and \$5.6 billion

of in-kind assistance. The Defense Cooperation Account, plus supplemental appropriations for FY 1991 and FY 1992, will cover these costs. The Cooperation Account is tapped first and the net costs to the U.S. for the war are now estimated to be about \$7.4 billion.

Budget Recisions. The FY 1993 budget includes recisions of \$7.7 billion for programs appropriated by Congress in FY 1992 and prior years. These recisions must be approved by Congress before they can be applied to other programs or to meet the budget ceiling. The first increment of \$2.1 billion was submitted to Congress in early March 1992 to cover a supplemental request to the 1992 budget for environmental restoration costs.

The rest of the recisions (\$5.6 billion) have been figured into the President's reduction proposal of \$50.4 billion through FY 1997. These are programs which the Secretary of Defense says are no longer needed. They include a number of programs for which funding was added by Congress in previous appropriation bills.

These recision requests will not be well received in Congress, particularly for those items added to the budget by Congress (such as F-14 aircraft modifications, C-130H aircraft and upgrading of M1 tanks to M1A2 configuration) or that have major regional economic impact (like Seawolf submarines). Approval of recisions is by no means assured. But a turndown by Congress will force some very tough choices on how to fund the defense program within the established ceilings.

Appropriation Transfers in the DoD Budget

The Secretary of Defense has directed some changes in the DoD accounting structure which causes certain programs to be included under different accounts than in the past. While this does not affect total funding, it does distort year-to-year comparability and it may alter management responsibilities and change oversight responsibilities of some committees and subcommittees in Congress. Some of the major transfers are discussed below.

Investment-type construction and minor repairs, previously included in O&M accounts, have been shifted to military construction accounts. This moves \$1.7 billion to military construction for FY 1993 and makes an anemic construction account look much healthier.

Another major adjustment moved all medical funding from the service budgets to DoD and placed it under the control of the Assistant Secretary of Defense for Health Affairs. This involves a total shift of about \$9 billion for FY 1993. While total medical requirements involve about \$15.3 billion in DoD FY 1993 funding, \$9.3 billion of this comprises the new Defense Health Program appropriation.

On a much smaller scale, all operating funds for Special Operations Forces are now included in a separate major force program identified as MFP-11 and are not included in service budgets.

Another change, just being implemented, is the Defense Business Operations Fund. Starting October 1, 1991, selected DoD component industrial funds, stock funds and other commercial-type activities were consolidated into the Business Operations Fund. In turn, funding is provided to users — the operating forces — to pay for needed services and support at a price which covers all the true costs of providing that service or support. About \$77 billion is now identified in the fund. The impact of this will become increasingly apparent in operating budgets in future years.

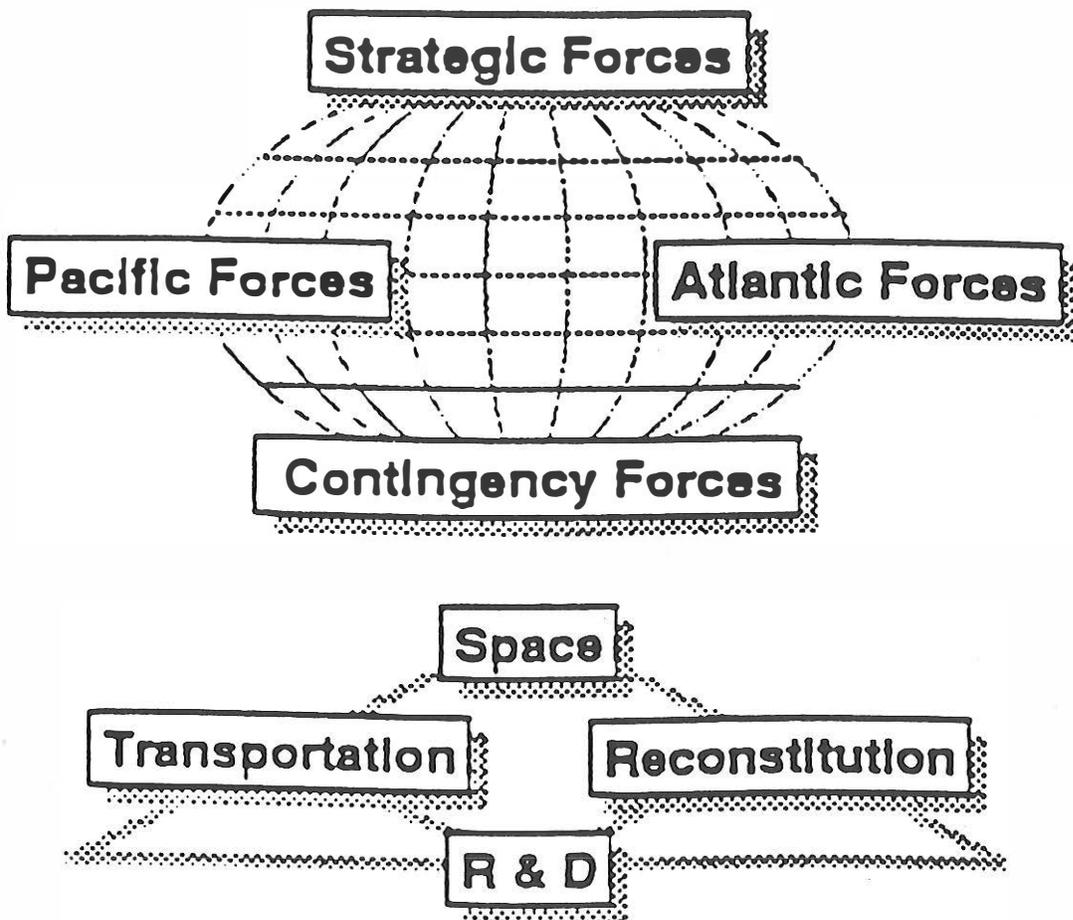
THE BASE FORCE PLAN

Current defense planning is based on a regional defense strategy. The foundations for this, as outlined in National Military Strategy of the United States, January 1992, are covered under four elements:

- Strategic Deterrence and Defense
- Forward Presence
- Crisis Response
- Reconstitution

In addition, eight principles expounded are: readiness, collective security, arms control, maritime and aerospace superiority, strategic agility, technological superiority and decisive force. The proposed Base Force Plan supports this strategy and is the framework for the 1995 end-state force.

The Base Force consists of four force packages (Strategic Forces, Atlantic Forces, Pacific Forces, and Contingency Forces) and four supporting capabilities (transportation, space, reconstitution, and R&D).



The major force composition for this Base Force Plan, identified by service, is shown on the next chart. This compares the Base Force 1995 projection with the actual 1991 status.

FORCE COMPOSITION

		<u>FY 91</u>	<u>Base Force</u>
STRATEGIC	Bombers	B-52 + B-1	B-52H + B-1 + B-2
	Missiles	1,000	550
	SSBNs	34	18
ARMY	Active	16 Divisions	12 Divisions
	Reserve	10 Divisions	6 Divisions
	Cadre		2 Divisions
NAVY	Ships	530 (15 CVBGs)	450 (12 CVBGs)
	Active	13 Air Wings	11 Air Wings
	Reserve	2 Air Wings	2 Air Wings
USMC	Active	3 MEFs	3 MEFs
	Reserve	1 Division/Wing	1 Division/Wing
AIR FORCE	Active	22 FWE	15 FWE
	Reserve	12 FWE	11 FWE

CVBG: Carrier Battle Group
 MEF: Marine Expeditionary Force
 FWE: Fighter Wing Equivalent

Inherent in this are significant reductions, the most visible of which are manpower reductions and force deactivations.

Personnel changes relating to the Base Force Plan are:

MANPOWER (End Strength In Thousands)

<u>ACTIVE MILITARY</u>	<u>FY 1987</u>	87-95 <u>DELTA</u>	<u>FY 1995</u>	<u>FY 1997</u>
Army	781	-245	536	536
Navy	587	-78	509	501
Marine Corps	199	-29	170	159
Air Force	<u>607</u>	<u>-178</u>	<u>429</u>	<u>430</u>
Total Active	2,174	-530	1,644	1,626
<u>SELECTED RESERVES</u>	1,151	-229	922	920
<u>CIVILIANS</u>	1,133	-221	912	904

In the forces category, over 450 battalion or squadron-sized units will be deactivated and 186 ships decommissioned.

In the materiel category, programs will be reduced about \$400 billion, over 100 programs cancelled, and over 2000 tanks and 4400 aircraft retired.

More than 600 military installations and sites world-wide are closing or being realigned. Of these, over 100 installations in the U.S. are included.

NUCLEAR POLICY AND STRATEGIC FORCE CUTS

The end of the Cold War has had a profound impact on the strategic military outlook and on the whole structure of the strategic forces. The focus is shifting from the strategic nuclear to conventional forces in the future.

Nuclear Initiatives

In a very condensed fashion, the sum total of the nuclear initiatives (including the Strategic Arms Reductions Talks (START), the President's September 1991 declaration and his 1992 state of the union message), adds up to the following:

- About 50 percent reduction in U.S. strategic nuclear warheads. This would cut strategic nuclear warheads to less than 5,000, as compared with the present level of 11,000.
- Curtailment of strategic force modernization. Cancellation of ICBM mobility programs and the SRAM II missile; also, termination of the B-2 bomber (after 20), the advanced cruise missile, the small ICBM and the W-88 warhead.
- Retirement of the MX Peacekeeper and reduction of Minuteman II warheads from three to one.
- Conversion of strategic bombers to a conventional role.

The following chart shows the approximate strategic nuclear warhead count projected under the new initiatives, as compared with 1990.

STRATEGIC NUCLEAR WARHEADS			
	1990	START	NEW INITIATIVE
Bombers	4,500	4,600	1,900
ICBMs	2,500	1,400	500
SLBMs	<u>6,000</u>	<u>3,500</u>	<u>2,300</u>
Total	13,000	9,500	4,700

Tactical nuclear warheads are also being reduced significantly, from about 8,000 in September 1990 to 1,600 under the new initiatives. Thus, the total number of U.S. nuclear warheads (strategic and tactical) would be reduced from about 21,000 as of September 1990 to about 6,300 under the latest initiative.

Strategic Force Cuts

The DoD program for FY 92-97 incorporates the reductions called for by the START agreement as well as the additional initiatives proposed by the President in September and in his state of the union message.

In September, the President directed cancellation of the rail-garrison basing mode for the Peacekeeper ICBM as well as the SRAM-II short range attack missile and the mobile version of the small ICBM. Under his most recent proposals, the U.S. would eliminate Peacekeeper missiles, reduce by a third the number of warheads on its ballistic missile submarines and shift strategic bombers to primarily conventional roles. These actions are contingent on appropriate responses by Russia and other CIS republics to reduce strategic nuclear weapons.

Inherent in all this are significant program reductions including elimination of all ground launched tactical nuclear weapons. To consolidate and simplify strategic command and control, the President directed the formation of a new unified command, the U.S. Strategic Command (STRATCOM). It will incorporate all strategic nuclear forces previously under control of the Air Force and Navy.

Strategic defense remains a high priority in the defense budget with a FY 1993 request of \$5.4 billion for Strategic Defense Initiative Programs. This will be discussed in the next section.

STRATEGIC DEFENSE INITIATIVE AND BALLISTIC MISSILE DEFENSE

With the changes in strategic nuclear policies, ballistic missile defensive has grown in both emphasis and priority. The request for \$5.4 billion in FY 1993 (the largest RDT&E item in the DoD budget) is an increase of \$1.2 billion over the FY 1992 appropriation.

The program comes under the DoD Strategic Defense Initiative Office (SDIO). The funding stream in the budget appears as follows:

	SDI and TMD (\$ Billions)		
	<u>FY91</u>	<u>FY92</u>	<u>FY93</u>
Strategic Defense Initiative (SDI)	2.70	3.29	4.36
Tactical Missile Defense (TMD)	<u>.18</u>	<u>.86</u>	<u>1.06</u>
Total	2.88	4.15	5.42

Last year the President directed that the SDI program be refocused to provide protection to the United States, its forward deployed forces and allies, against limited ballistic missile strikes, whatever their source. Global Protection Against Limited Strikes (GPALS) is the concept that integrates tactical, theater and strategic defenses. SDI and TMD programs have been integrated in support of the GPALS concept. The integrated components are:

- Theater ballistic missile defense and associated space-based sensors to protect U.S. forces deployed abroad as well as friends and allies;

- Ground-based defense and associated space sensors to protect the United States against long range ballistic missiles; and
- Weapon systems based in space to intercept ballistic missiles with ranges greater than several hundred miles.

High priority is being given to theater missile defenses. Also, in the 1992 authorization bill, Congress specified the deployment of a treaty-compliant anti-ballistic missile site by FY 1996. This date is probably not achievable, but it shows the emphasis being given to the program. Full GPALS coverage of the United States, including Alaska and Hawaii, would require a total of at least six sites.

To counter the threat of tactical ballistic missiles, the TMD programs are consolidated within the Strategic Defense Initiative Office. The major programs included under TMD are the Extended Range Interceptor (ERINT), Patriot Missile Systems, Theater High-Altitude Area Defense System (THAAD), Arrow Continuation Experiment (ACES), and Ground Based Radar.

After several years of being a prime congressional target and the source of trade-off funds, SDI, especially the ground based defense, is now firmly established. There are skeptics, however, on the space based sensors and space based interceptors and the very size of the FY 1993 request again makes SDI an attractive target. Look for Congress to go after some of the funds designated for space based research to apply to other defense programs. Doing this, however, would virtually assure more slippage in GPALS deployment dates.

OTHER PROGRAM CHANGES

While DoD RDT&E funding levels remain healthy for FY 1993, procurement funding has been seriously curtailed as reflected in the following comparative figures (stated in constant FY 1993 dollars):

	Budget Authority (constant FY 1993 \$ in billions)			
	FY90	FY91	FY92	FY93
DoD Procurement	89.7	76.5	62.5	54.4
DoD RDT&E	40.3	38.6	38.2	38.8

RDT&E is one of the few appropriations showing some real growth (plus 1.5 percent) for FY 1993. The total is bolstered by the large amount for SDI. Added emphasis on advanced technology research has increased this portion to about 31 percent of the RDT&E budget.

The procurement funding reflects what is happening as the result of the tight budget squeeze over the past few years, and we can expect to see this trend continue in the future.

The cuts are being managed through a variety of approaches. These include outright terminations, recisions of previously approved programs and the impact of DoD's new approach to acquisition. A comprehensive listing of all the programs affected is well beyond the scope of this paper, but a listing of some key systems in these categories is provided.

Terminations

In the past two years, the Secretary of Defense has terminated over 100 weapons programs. Some of the major terminations are shown on the next chart.

MAJOR PROGRAM TERMINATIONS IN FY 1991-1992 BUDGETS	
•	Apache Attack Helicopter
•	M-1 Tank
•	TRIDENT Submarine
•	F-14D Fighter Aircraft
•	F-15 Fighter Aircraft
•	F-16 Fighter Aircraft
•	Naval Advanced Tactical Fighter
•	A-12 Aircraft and Air Force Advanced Tactical Aircraft
•	PEACEKEEPER Missiles

New terminations identified in FY 1993 with estimated savings through the end of the FYDP (FY 1997) are shown here:

PROGRAM TERMINATIONS IN FY 1993 BUDGET (\$ in Millions)			
	Reduction to FY 1992 Budget Level		
	FY 1993	FY 1993-1997	
•	TOW Sight Improvement Program	-58	-255
•	LAMP-H Landing Craft	-11	-98
•	High Speed Anti-radiation Missile (HARM)	-71	-511
•	Supersonic Low Altitude Target	-279	-302
•	Closed Cycle Advanced Capability (ADCAP) Propulsion System	-35	-127
•	SQY-1 Anti Submarine Warfare (ASW) Combat System	-211	-893
•	MK-50 Torpedo, Vertical Launched ASROC	-37	-91
•	SH-2 Service Life Extension Program	-73	-147
•	ARS Class Salvage Ship	-	-334
•	E-C Early Warning Aircraft	-444	-444
•	Landing Dock Ship (LSD-41) (Amphibious Ship)	-251	-251
•	* Peacekeeper ICBM Rail Garrison Mode	-100	-202
•	* Short Range Attack Missile (SRAM II) (Strategic Missile)	-259	-1,218
•	Short Range Attack Missile - Tactical (SRAM-T)	-107	-441
•	* Mobile Small ICBM Launcher	-291	-672
•	Space Based Wide Area Surveillance	-29	-195
•	KC-135 Aircraft Re-engining	-92	-1,128
	Total	-2,348	-7,309
*	President's Nuclear Initiative, September 27, 1991		

Recisions

As stated earlier, the Secretary of Defense is requesting \$7.7 billion in recisions on previously approved programs, some of which had been inserted or added back by Congress. Since recisions must be Congressionally approved, the outcome is by no means certain. A selected sample of major recision items includes:

- F-14 Upgrade Program
- AH-58D (Army Helicopter Improvement Program)
- Conversion of M1 Tanks to M1A2 Tanks
- Procurement of 60 new M1A2 Tanks
- Procurement of Standoff and Attack Missiles
- C-130H Aircraft
- C-23 Aircraft
- Small Intercontinental Ballistic Missile
- SSN-21 Seawolf Submarine

As noted, regional economic and constituent interests run high on this list.

New Acquisition Approach

The concept is for fewer systems while maintaining a strong research and development program. Emphasis will be placed on upgrading existing weapons, where feasible, and placing greater emphasis on technology demonstrations and prototype evaluations. Incorporation of advanced technologies in existing systems will be done only if the technology is proven, there is real need for improved performance, and the program improvement is cost effective.

Future decisions to go to production will be made only after thorough evaluation and testing and with the absolute verification of the need for such new weapon systems. The impact of this will be to reduce or slow down the number of systems for future production and fielding. This will reduce total acquisition costs. Some major examples of systems placed in this category for the FY 1993 budget, along with the estimated cost impact through FY 1997, are listed on the following chart.

IMPACT OF NEW ACQUISITION APPROACH (\$ in Billions)			
	Prior Years	FY93	Cumulative Through 1997
B-2 Bomber/Stealth Technology		-0.6	-14.5
SSN-21 Seawolf Submarine/Submarine Technology	-3.4	-2.5	-17.5
RAH-66 Comanche Helicopter/ Light Helicopter Prototype		-0.1	-3.4
Small Intercontinental Ballistic Missile (SICBM)/Improved Guidance	-0.2	-0.6	-1.0
Air Defense Anti-Tank System (ADATS)/ Anti-Aircraft Seekers		-0.2	-1.7
Air Launched Cruise Missile (ACM)/ Cruise Missile Targeting		-0.4	-1.3
FDS Sensor/Mobile Sonar		—	-0.7
Advanced Air-to-Air Missile (AAAM)/Air-to-Air Seeker		-0.1	-0.6
Block III Tank, Armored Systems Modernization	—	-0.4	
Line-of-Sight Anti-Tank Missile		—	-0.9
TOTAL ADJUSTMENTS	-3.6	-4.9	-41.6

Systems in the Budget. To illustrate that all is not in the negative column, selected key systems being supported in the budget are listed on this chart:

MAJOR SYSTEMS IN THE FY 1993 BUDGET (\$ Billions)		<u>FY 1993</u>
• Strategic Defense Initiative (SDI) (DoD Program)		5.4
• Advanced Tactical Fighter (F-22) (AF Program)		2.2
• DDG-51 Guided Missile Destroyer (Navy Program)		3.6
• C-17 Airlifter Aircraft (AF Program)		3.1
• MILSTAR Satellite (EHF satellite with mission control and communications terminals) (DoD Program)		1.5
• UH-60 Black Hawk Helicopter (Army Program)		0.4
• B-2 Bomber (AF Program)		4.0
• F/A 18 Tactical Aircraft (Navy Program)		3.0
• Trident II Submarine Launched Ballistic Missile (Navy Program)		1.1
• Joint Surveillance Target Attack Radar System (Joint STARS) (E-8B) Aircraft (AF Program)		0.7
• RAH-66 Comanche Helicopter (Army Program)		0.4

Several of the big systems merit special comment. The largest program on the list, SDI, was covered in an earlier section.

B-2. The B-2 will be capped at 20 aircraft. Congress has so far appropriated money for 16, so the request is for the additional four. The B-2 is expected to remain as part of core defense capabilities and will retain its potential as a strategic bomber as well as focusing on its conventional role.

Seawolf Submarine. The budget proposes to terminate the Seawolf submarine after building only the first one in the program. With the collapse of the Soviet Union, the United States no longer needs to proceed with this new class of submarine. The existing SSN-688 submarine is still very capable and DoD will consider a lower cost submarine design.

Comanche. Production on this new Army light helicopter program will be deferred. Development will continue, however, to include the building and testing of three prototypes. Attention will be devoted to developing avionics, upgrading the engine and incorporating the Longbow fire control radar system. In the meantime, combat and reconnaissance helicopter support will come from the existing Apache helicopter fleet and OH-58D reconnaissance and light attack helicopters.

PERSONNEL

Aggregate strength figures to match the Base Force Plan were summarized earlier. The following table shows a more detailed display, by service and component, starting with FY 1987 and projected through FY 1997. The 1993 column is applicable to the FY 1993 budget.

FY 1993 AMENDED BUDGET END STRENGTH
(in thousands)

<p style="text-align: center;">———— ACTUAL ————</p>	FISCAL YEARS							
	<u>1987</u>	<u>1989</u>	<u>1991^{1/}</u>	<u>1992</u>	<u>1993</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
<u>ARMY</u>								
Active	781	770	725	641	599	536	536	536
Reserve ^{2/}	766	776	741	733	641	567	567	567
Civilian ^{3/}	418	403	365	331	309	299	296	295
<u>NAVY</u>								
Active	587	593	571	551	536	509	503	501
Reserve ^{2/}	148	152	150	143	126	118	118	118
Civilian ^{3/}	332	332	310	295	268	246	245	247
<u>USMC</u>								
Active	200	197	195	188	182	170	165	159
Reserve ^{2/}	42	44	44	42	39	35	35	35
Civilian ^{3/}	22	22	19	16	16	15	15	15
<u>USAF</u>								
Active	607	571	511	485	450	429	437	430
Reserve ^{2/}	195	199	202	201	201	201	200	200
Civilian ^{3/}	264	261	233	218	214	203	203	203
Def. Ag/Act ^{4/}	98	99	117	140	151	148	147	146
<u>DoD</u>								
Active	2,174	2,130	2,002	1,865	1,767	1,644	1,640	1,626
Reserve ^{2/}	1,151	1,171	1,138	1,120	1,007	922	921	920
Civilian ^{3/}	1,133	1,117	1,045	1,001	958	912	906	904

NOTE: Details may not sum to totals due to rounding.

1/ FY 91 active military end strength includes those reserves (17,059) still on active duty as of September 30, 1991 in support of Operation Desert Storm/Shield; reserve numbers are offset correspondingly.

2/ Reserve includes Active Guard/Reserve and Selected Reserves.

3/ Includes direct and indirect hire civilians.

4/ Includes civilian end strength for all Defense Agencies and Activities. The 31,000 end strength increase between FY 1991 and FY 1995 is caused primarily by the consolidation and shifting of contract auditing, supply depots and inventory control points from the Services to the Defense Logistics Agency, the creation of the Defense Commissary Agency and the Defense Finance and Accounting Service, and an increase in the On-Site Inspection Agency civilian end strength.

Active component strength was slightly less than two million at the beginning of FY 1992. This will be reduced by 120,000 in FY 1992 and by 99,000 in FY 1993. By FY 1997, it is expected to decrease to 1,626,000, or a total reduction of 25 percent from the FY 1987 peak.

For the Selected Reserves, the budget provides for a cut of 35,000 in FY 1992 and another 113,000 in FY 1993. By 1997, the end strength is projected to decrease to about 920,000 which is 21 percent below its high in FY 1989.

The budget calls for reducing DoD civilian employees by 44,000 positions in FY 1992 and an additional 43,000 in FY 1993, resulting in an employment level of about 958,000. By FY 1997, civilian employment is expected to decrease further to 904,000 or 19 percent below December 1989 when hiring restrictions were imposed.

A number of tools are being used to cut the active forces while reducing to a minimum the need for involuntary separations. This effort has been greatly assisted by the statutory authorizations for the Voluntary Separation Incentive (VSI) and the Special Separation Benefit (SSB) provided for by the 1992 Defense Authorization Act. Initial offers of VSI and SSB are being made by all services to over 230,000 eligible members. Early retirement authorities to include the expanded use of selective early retirement boards are also being used. Despite the above, some limited involuntary separations will still be necessary, particularly for officers in certain over-populated year groups.

Efforts are being made to minimize the involuntary separation of civilian employees. A hiring freeze was imposed in FY 1989 and, with some modifications and exceptions, has been in effect since that time. Also, there are restrictions on hiring outside of DoD along with voluntary attrition and an internal Priority Placement Plan (PPP). Under PPP, when a registrant qualifies for a particular vacancy, he or she is offered the position. If accepted, relocation expenses are paid. If a valid offer is declined, however, the registrant is dropped from the PPP rolls.

MILITARY CONSTRUCTION AND FAMILY HOUSING

Both the military construction and the family housing programs are included in the military construction appropriation and, therefore, are covered here under a single heading. The family housing portion, however, is about three-quarters operations costs.

The total DoD request for FY 1993 is \$10.2 billion in budget authority. Of this, \$6.1 billion is for military construction and about \$4 billion for family housing. Of the latter, about \$820 million is for family housing construction, \$3 billion for family housing operations and about \$140 million for homeowners assistance.

Military construction is a far leaner program than it appears. It is pumped up with a transfer of \$1.8 billion in FY 1993 for major repairs and minor construction, both formerly carried under operations and maintenance accounts. Also, almost \$2.4 billion is included in FY 1993 for base realignment costs. Only \$1.3 billion is identified for major construction projects and the defense-wide construction moratorium still requires an OSD release for new projects. This figure is small compared with \$3.1 billion in FY 1992 (considered a tight year) and \$5.4 billion back in FY 1989.

Base closures are and will continue to be a major drag on the defense budget. Revenues from sales will be considerably less than anticipated because of directives to transfer land at little or no cost to the recipients. Without these revenues, additional appropriated funds must be requested.

Congress has expressed frustration with the OSD construction moratorium and the Defense Department's unwillingness to proceed with new projects until future base structure needs are firmly determined. This is unlikely to change, however, until a firmer picture on future base needs emerges.

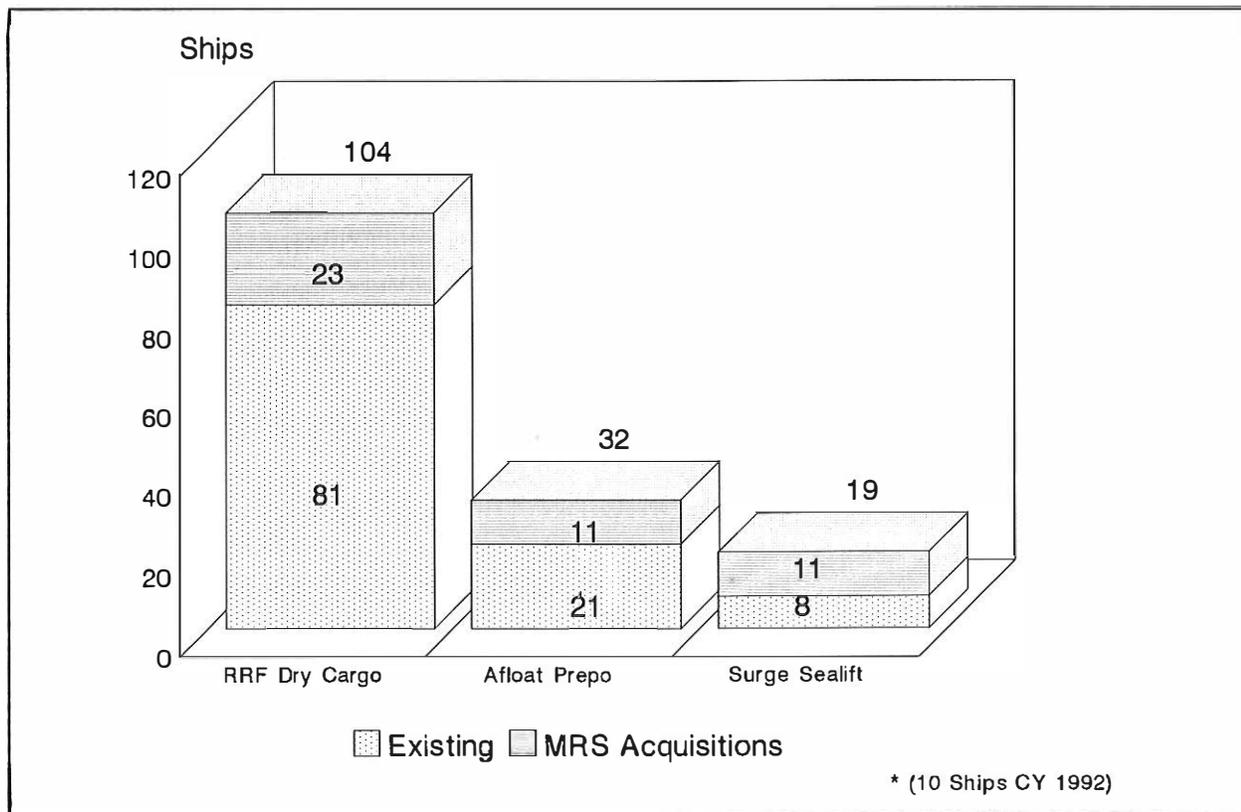
MOBILITY REQUIREMENTS

The new National Security Strategy of the United States visualizes a largely CONUS based force. The capability, therefore, of being able to move contingency forces anywhere in the world on short notice and then being able to support them adequately is critically important. It is heavily dependent on strategic lift and other measures to enhance strategic mobility.

This necessary strategic agility is provided by the so-called mobility triad: airlift, sealift and prepositioning. In that context, the lessons of Desert Shield and Desert Storm were very clear. The United States needs to improve all three legs of the triad, especially fast sealift, if the contingency forces are to perform their missions as intended.

Based on this recognized need, Congress directed DoD to conduct a detailed study of requirements. This was completed in January when the Mobility Requirements Study was provided to Congress. That report had a direct bearing on FY 1993 budget proposals and the amended FY 92-97 defense program. The recommendations included: (1) sealift enhancements to include an improved Ready Reserve Fleet (RRF) and additional ship acquisitions; improving CONUS infrastructure to facilitate movement from bases to and through ports; and continuation of the C-17 airlift program.

If fully implemented, the plan would increase dry cargo ships from 81 to 104, afloat prepositioning ships from 21 to 32, and the surge sealift capability from eight to 11 ships. The estimated cost of the total enhanced sealift program is about \$13.3 billion.



Funding to date includes \$1.9 billion appropriated prior to this budget and a FY 1993 addition of \$1 billion. Together, these are identified as the National Defense Sealift Fund. Also, \$3.3 billion had been included in the DoD program for the years between fiscal years 1993 and 1997. This may well be revised in the upcoming FY 1994-1999 FYDP to be formulated later this year.

ISSUES IN CONGRESS

Issues discussed here reflect an intriguing overlapping of interests and concerns. In the first place, changed world events have driven reassessment of national security policies and needs. On the other hand, there is deep concern with respect to the economy and the growing federal debt. The pressures are strong and building to cut defense expenditures. Add to this the fact that this is an election year with the public far more focused on the economy and on regional and local concerns than on national security issues.

Here are some of the outstanding defense issues:

How Much To Cut Defense. (1) in FY 1993 and, (2) through 1997? The initial debate began with the President's amended proposal to cut \$7.5 billion from the FY 1993 submission of last year and \$50.4 billion from the projected defense budget through FY 1997. The debate has waged, often with some rancor, on how much more can or should be cut. The differences between the House and Senate are reflected in the respective budget resolutions for FY 1993, with the House doubling the President's cut (at -\$15 billion) and the Senate staying very close to the President's proposal. This provides the joint conference range where the results could end up fairly close to the President's top-line figure.

Beyond FY 1993 is another story. Several proposed cuts (through FY 1997) go considerably deeper than the latest administration projection — as much as \$50 to \$100 billion more over the period. That debate will be revived following the November election, the results of which could have a lot to do with the ultimate answer.

The Base Force. The military forces reflected in the budget conform to the Base Force Plan. That plan, however, has been much criticized in Congress and has never been fully accepted on Capitol Hill as the legitimate base for structure, force mix, or military strength. The lack of consensus on this vital aspect has spawned many unsettling arguments about what should be the end-state force. Several tentative counter suggestions have surfaced within Congress, the most significant of which has been the Aspin proposals. (Reference: Rep. Les Aspin, Chairman House Armed Services Committee, An Approach to Sizing American Conventional Forces for the Post-Soviet Era, and Four Illustrative Options, both February 1992). Some expression of the sense of Congress may develop during the FY 1993 budget process, but it is certain that this issue will spill over to next year.

Strength of the Reserve Components (RC). The Base Force Plan would reduce both active and RC strength significantly through FY 1995, with the selected RC going down from a total DoD level of 1,040,000 in FY 1991 to 912,000 by FY 1995. Many in Congress have a different concept of how this should work and oppose any deep cuts in RC strength levels. Congressional action froze the strength levels of the Guard and Reserve for FY 1991 and permitted only modest cuts last year. But with the new budget reflecting cuts on the order of 113,000 for FY 1993 alone, this looms as a major issue again. Compounding the problem is the March 1992 publication of the DoD plan to cut some 830 National Guard and Reserve Forces units. There will undoubtedly be some compromises for FY 1993.

The Threat. How much defense is enough? There is a wide diversity of opinion about how to approach the threat issue and, in turn, how to match defense needs against projected threat scenarios. One school of thought is based on the unpredictable nature of world events. This means designing the force without a precise threat mix but with sufficient capability and flexibility to be able to react to a variety of contingencies and protect U. S. world-wide interests. The other side insists on a clear definition of discrete threats with forces matched to those threats in a precise way. This is a much cleaner process, but it can be quite deceptive as history has shown (example: Korea 1950). The realistic approach, of course, is something in between. The Aspin model, based on type contingencies is one approach receiving serious attention. While a major congressional discussion topic at this time, it is far too big and too important to be decided during this session, and the debate will necessarily continue. The real question for now is how much security insurance is the nation willing to buy?

Overseas Stationing. The size of the forces to be left in Europe is a topic of intense congressional scrutiny. Under the Base Force Plan, the Secretary of Defense expects to keep a residual U.S. force of about 165,000 in Europe, of which the Army would have a corps headquarters and two combat divisions. There is growing pressure in Congress to reduce this significantly.

Industrial Base Policy. With major reductions in defense acquisition, both current and future, there is much concern in Congress about the health of the defense industrial base. A lot of this is driven by the potential economic impact (jobs and regional economics). There is also serious concern over the ability of U.S. industry to meet our future defense needs on a timely basis. If the base is seriously degraded in certain critical areas, especially for products that are defense unique (such as main battle tanks, combatant ships, etc.), would our ability to sustain committed forces be in jeopardy? The newly stated DoD approach to defense acquisition has been criticized as lacking a coherent industrial base policy that would provide the needed support. Expect some congressional language concerning the industrial base and use of the industrial base argument to protect or sustain certain acquisition programs.

DoD Recisions. DoD has identified some \$7.7 billion of previously approved programs for recision. Recision requests have been forwarded to Congress in increments. Each line-item must be approved by Congress. This, by its very nature, generates congressional heartburn, particularly in those cases where constituent economic interests are at stake. (Examples: F-14 upgrade program, new M1A2 tanks, C130H aircraft, and Seawolf submarines.) Certain items on the list were added to FY 91 and FY 92 appropriations by Congress, without a DoD request. Reaction to the recision requests has been generally negative, but if they are not accepted, alternative cuts will have to be found to stay under agreed fiscal ceilings, and this could be very damaging to the defense budget.

Strategic Defense Initiative (SDI). While this has been a favorite whipping boy for Congress in the past, it has achieved legitimacy with the new priority for a ground-based missile defense and the added emphasis on theater missile defense. Nevertheless, the space-based portion is still being challenged. SDI represents a large program in terms of dollars, and it will still be looked at as a possible bill payer for other programs that are more highly favored by Congress.

Other Specific Systems at Issue:

• B-2 Bomber. Sixteen have been appropriated by Congress, with a hold on the last one. The DoD budget proposes to go to 20 and stop there. It is, however, an issue of considerable interest and will be looked at for possible trade-off funding.

• Seawolf Submarines. The President's budget provides for only one Seawolf submarine and the Secretary of Defense has submitted a recision request for any beyond that. Many in Congress, however, have indicated their intent to support two submarines and perhaps a third. This represents big money at \$2 billion a copy. Trade-off funding on the order of \$2 billion, therefore, would be required to continue development of the second submarine.

• M1A2 Tanks. Funds were previously added by Congress for production of an additional 60 M1A2 tanks and the upgrade of M1 tanks. Both of these items are now on the DoD recision list. This is not only a congressional issue, but has also become part of the industrial base argument, in that approval of the recisions will almost certainly result in closing the only remaining U.S. tank production line.

• F-22 (Advanced Tactical Fighter). The next generation fighter is an issue simply because it is new and a very expensive future program. There is little chance it will be knocked out, but it will be challenged on the basis of need and affordability.

• V-22 Osprey. This tilt-rotor, vertical take-off and landing aircraft remains a top burner issue in Congress. There is no funding in the FY 1993 budget, as submitted, and the Secretary of Defense has declined to spend the \$790 million previously appropriated by Congress on the basis that the overall program is not affordable. Congress will not accept a recision and intends to force the issue, so it has now become a legal question. Indications are that even more funds may be appropriated without a DoD request in the FY 1993 budget.

FY 1993 BUDGET—WHAT'S NEXT?

Although the final shape of the DoD FY 1993 budget is still uncertain in many respects, there are enough indicators to permit some predictions at this time.

It now seems certain that the budget summit agreement will hold through FY 1993 and there will be no shifting of funds from defense to domestic accounts. Also, early efforts to cut FY 1993 significantly below the President's amended level seem to have cooled.

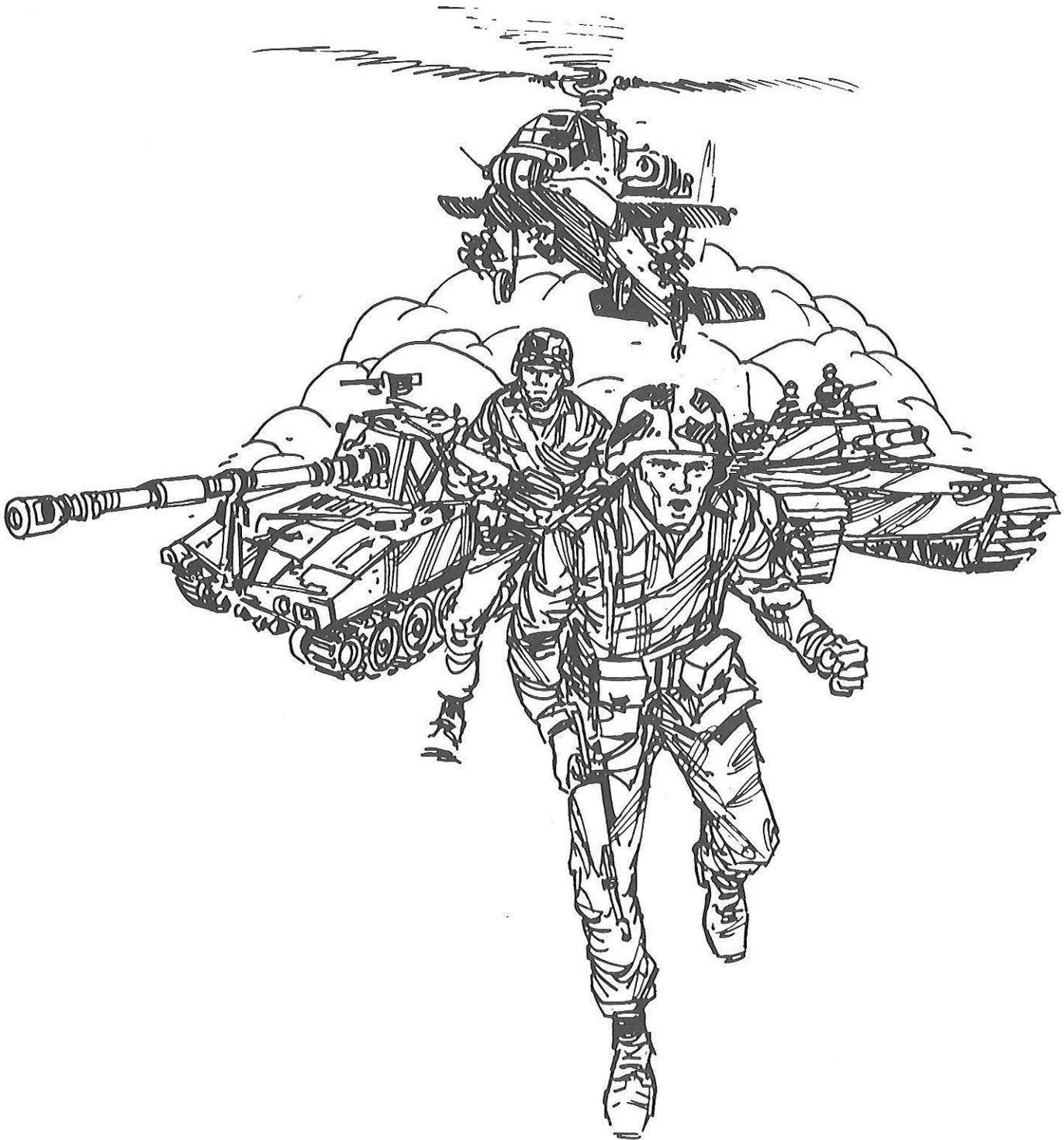
It's an election year. Defense spending, however, is by no means a partisan issue. There are many in Congress with various degrees of regional and home-front interests related to defense activities or projects who would prefer to avoid rattling the cage on defense issues until after the election.

It's also a good bet that there will not be a DoD appropriations bill until after the election, so expect DoD to be operating on a continuing resolution come October. Even when the FY93 budget is completed, the dollar level will probably be fairly close to the President's budget level. There will of course be the usual line item changes. In addition, there will be big disagreements on some of items submitted by the Secretary of Defense for recision. Congress will deny some and make substitutes. Compromise will emerge on the reserves strength issue, but this will require offsets to pay the costs of any additional RC strength that is retained in the FY 1993 budget.

While economic considerations will be the drivers, some picture should emerge on how Congress views the future defense in terms of force structure, personnel strength and dollar levels.

FY 1994 will emerge as the year of the big defense debate. What actually happens in FY 1994 and beyond depends a lot on the outcome of the election as well as the state of the economy. In any event, come FY 1994, defense is no longer protected by the budget summit barrier and there will be those who want to divert defense funds for all kinds of preferred programs.

By the end of this year, there will be a new future years defense program (FYDP) covering the period FY 1994-1999. This will be the DoD model virtually through the decade unless cuts are greatly increased. Any changes made by Congress to the FY 1993 budget will have a direct impact on the next FYDP.



PART II

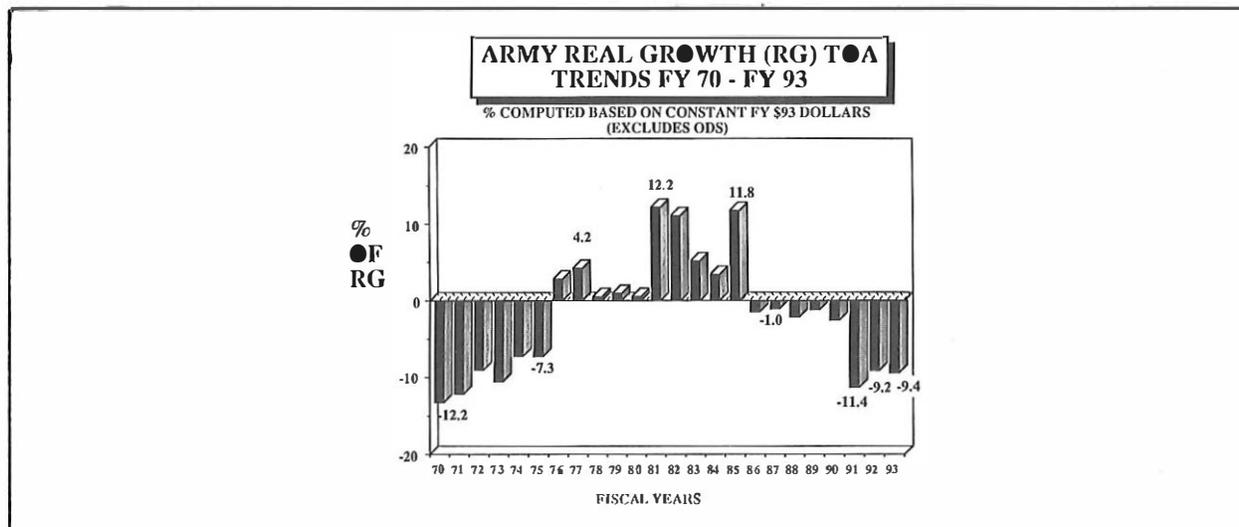
THE ARMY BUDGET

The Army portion of the DoD FY 1993 budget is 23.4 percent, down from about 26.7 percent in the short span of two years. This is explained primarily by force reductions and the transfer of certain funds, such as medical, to defense accounts.

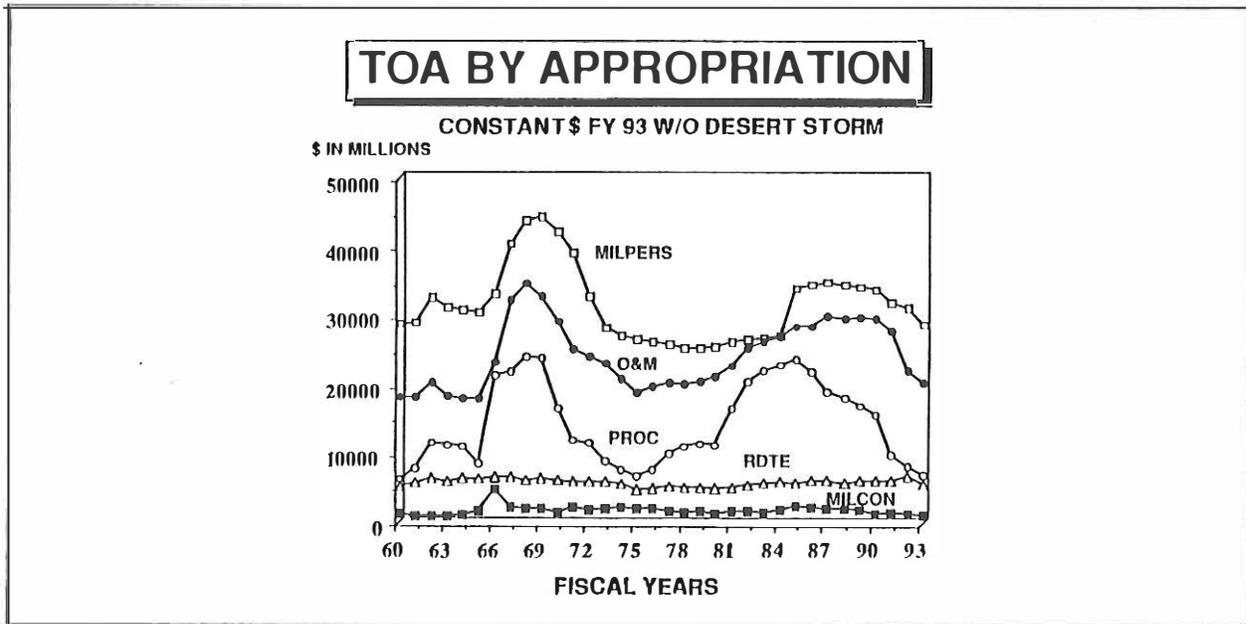
Army aggregate budget numbers are shown in the following chart in both current and constant dollar terms. They are also displayed under the headings of (1) Total Obligational Authority (TOA), which is the value of the direct program to the Army; (2) Budget Authority (BA), which is the way the defense budget is appropriated by Congress; and (3) Outlays, which are actual payments made or anticipated to be made during the year. The differences are explained in Appendix I. Since the Army actually manages by TOA, the figures in the rest of Part II will use TOA. As indicated in the chart, the differences in Army TOA and BA are very slight. The constant dollar portion uses numbers adjusted for inflation, reflecting the budget's real buying power.

ARMY BUDGET SUMMARY			
(\$ in Billions)			
	FISCAL YEARS		
<u>CURRENT DOLLARS</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>
Total Obligational Authority (TOA)	92.4	72.1	63.3
Budget Authority (BA)	91.8	71.2	63.3
Outlays	90.4	78.4	68.6
<u>CONSTANT FY 93 DOLLARS</u>			
Total Obligational Authority (TOA)	98.7	74.9	63.3
Budget Authority (BA)	98.2	74.0	63.3
Outlays	96.6	81.5	68.6

Defense budget watchers are well aware of the downward spiral in defense spending since FY 1985. The Army experience is reflected on the next chart with each entry reflecting the percent of change in real terms from the preceding year. The downward trend is expected to continue through FY 1997.



Army trends by appropriation title (from 1960 on) are illustrated below. These are in constant dollars for real comparisons over time.



Breakout of the Army Budget

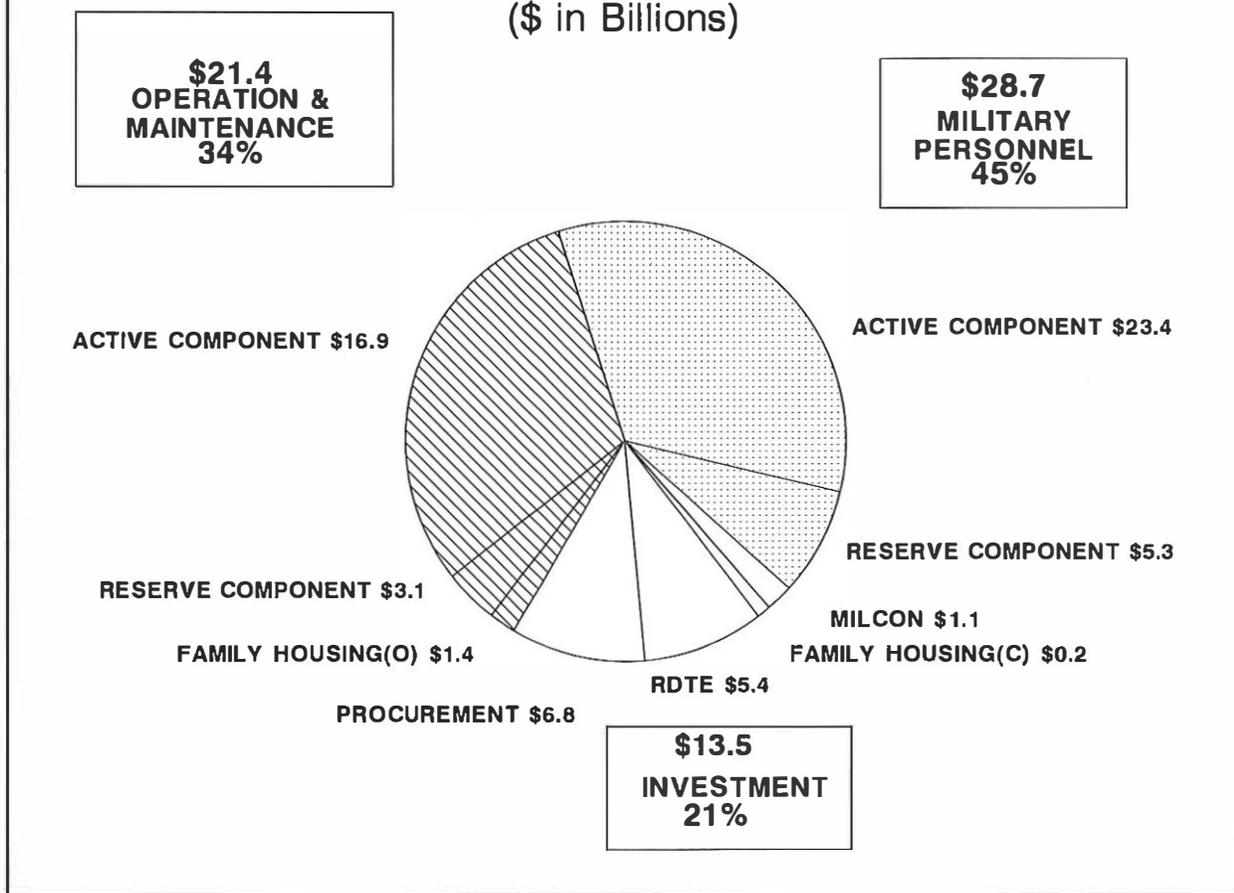
The allocation of the Army budget into component elements is shown in two ways: (1) The Army budget summary by title, comparing fiscal years 1992 and 1993; and (2) funding profiles for the same fiscal years showing the break-out of funds to military personnel, operations and maintenance and investment accounts.

Army TOA Summary By appropriation (\$ Billion)		
<u>Appropriation</u>	<u>FY 92</u>	<u>FY 93</u>
Military Personnel	29.8	28.7
Operations & Maintenance	21.1	20.0
Procurement	7.6	6.8
Research, Development, Testing and Evaluation	6.4	5.4
Military Construction	1.2	1.1
Family Housing	<u>1.6</u>	<u>1.6</u>
Desert Storm	67.7 <u>+4.4</u>	63.6*
Grand Total	72.1	

* Note: Approximately \$4.1 billion, primarily medical, was transferred to DoD accounts in The FY 93 budget request.

Military and civilian pay raises were included in the FY 1992 budget at 4.2 percent and the FY 1993 budget at 3.7 percent. For purchases (excluding fuel), estimated inflation rates of 3.1 percent for FY 1992 and 3.3 percent for FY 1993 were used.

FUNDING PROFILE OF THE ARMY FY 1993 (TOA - 63.6) (\$ in Billions)



There has been a radical change in the Army mix of funding for military personnel, O&M and investment over the past decade. While the portion allocated to military personnel has gone up (from a little over 30 percent in 1985 to 45 percent in FY 1993), the share allocated to investment has been reduced (from the high 30s to 21 percent in FY 1993). Interestingly, O&M seems to stay in about the 32 to 35 percent range. The message is clear, investment, particularly procurement, has taken a disproportionate cut.

THE ARMY PLAN

The Army Plan is based on defense guidance within the framework of the Base Force Plan. This means a basic Army force structure that has already been reduced from 28 divisions to the 24 division force of today (14 active and 10 National Guard). The Army will be reduced to 22 divisions by the end of FY 1993 and further to an end state of 18 divisions (12 active and six National Guard), plus two cadre divisions, by the end of FY 1995.

Accompanying these structure changes will be major Army personnel strength reductions. Active military strength, once at 780,000, will be down to about 600,000 by the end of FY 1993 and level off around 536,000 (or slightly less) by FY 1995. Reserve Component strength (ARNG and USAR), now about 750,000, is expected to stabilize at about 567,000 by FY 1995. Army civilian employee strength will also drop from slightly over 400,000 in 1989 to roughly 300,000 by 1995.

Accompanying these changes will be a significant withdrawal of forces from Europe and some consolidation of the forces in the United States. The projected Army force in Europe of one corps headquarters and two heavy combat divisions will have a military strength of about 92,000. This level should be reached by the end of FY 1993.

As a primarily U.S.-based force, the Army will move toward a capability of being able to deploy three divisions in 30 days and five divisions in 75 days. This requirement places added emphasis on the strategic mobility of forces and requires the availability of adequate airlift and sealift.

To achieve the above, the ramp would look like this (active component (AC) and reserve component (RC) strength in thousands):

FY 91		FY 93		FY 95	
725	AC	599	AC	536	AC
741	RC	641	RC	567	RC
5	Corps	4	Corps	4	Corps
16	AC Div	14	AC Div	12	AC Div
10	RC Div	8	RC Div	6	RC Div
				2	Cadre Div

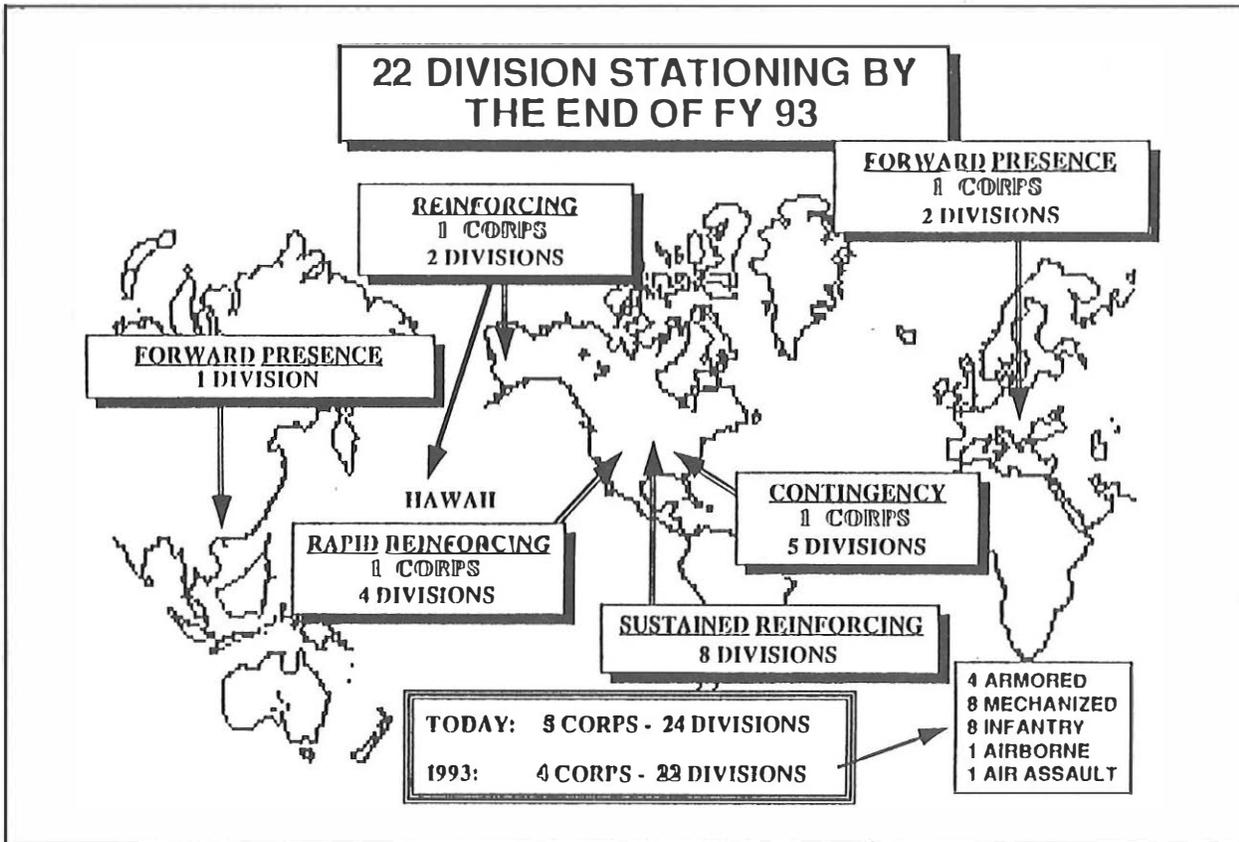
Using the Base Force structure, Army combat forces would be allocated as follows:

- CONUS Based Forces (Contingency):
5 AC Divisions (2 Light, 1 Air Assault, 2 Heavy)
- CONUS Based Forces (Reinforcement):
3 AC Divisions (Heavy)
6 RC Divisions (5 Heavy, 1 Light)
2 Cadre Divisions
- Atlantic Forces
Europe: 2 AC Divisions (Heavy)
- Pacific Forces:
2 AC Divisions (1 Light, 1 Heavy)

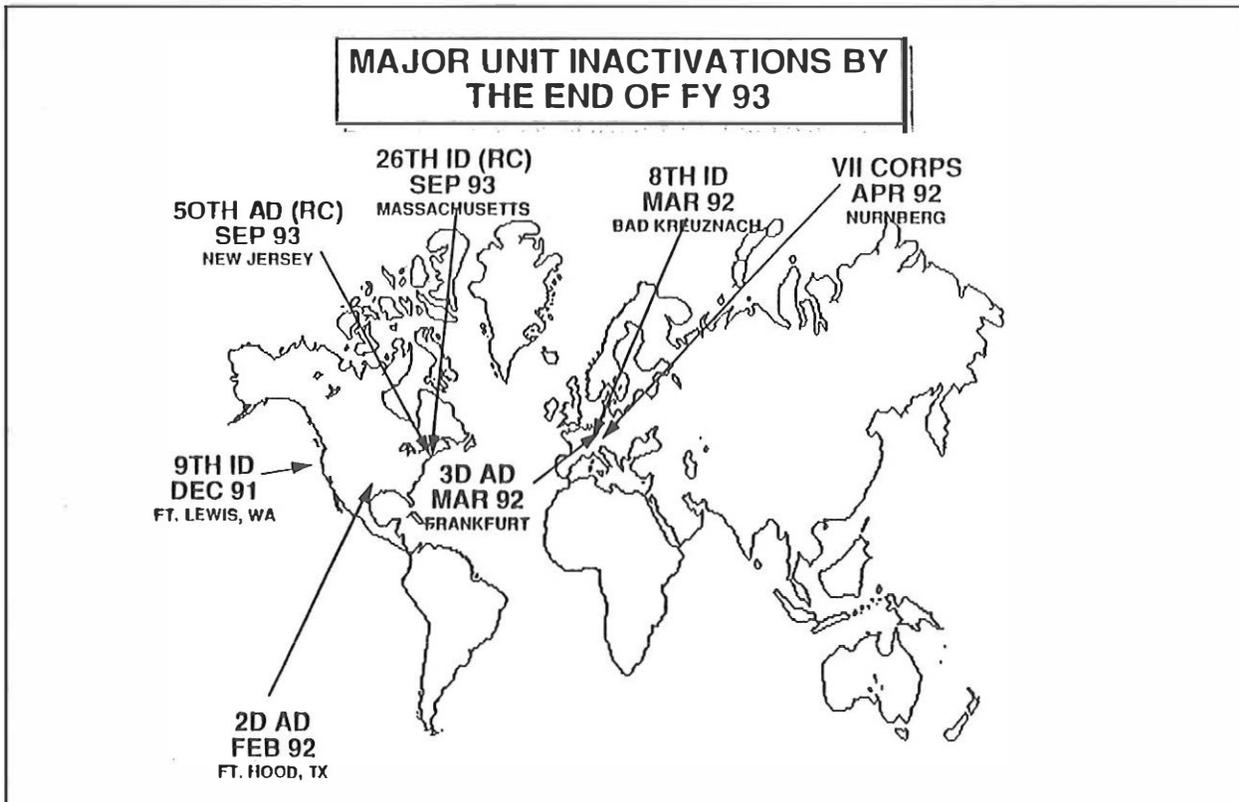
STRUCTURE

The Army structure consists of a mix of heavy, light and special operations forces along with their supporting elements and base activities. The Total Army includes the active component, the reserve components and civilian employees.

The current plan, as noted in the previous section, will draw the Army down to four Corps and 18 fully-structured divisions (of which six will be National Guard divisions), plus two Cadre divisions, by FY 1995. In line with this, the configuration of division stationing as of the end of FY 1993 is shown on the next chart. This is the force basis for the FY 1993 Army budget.

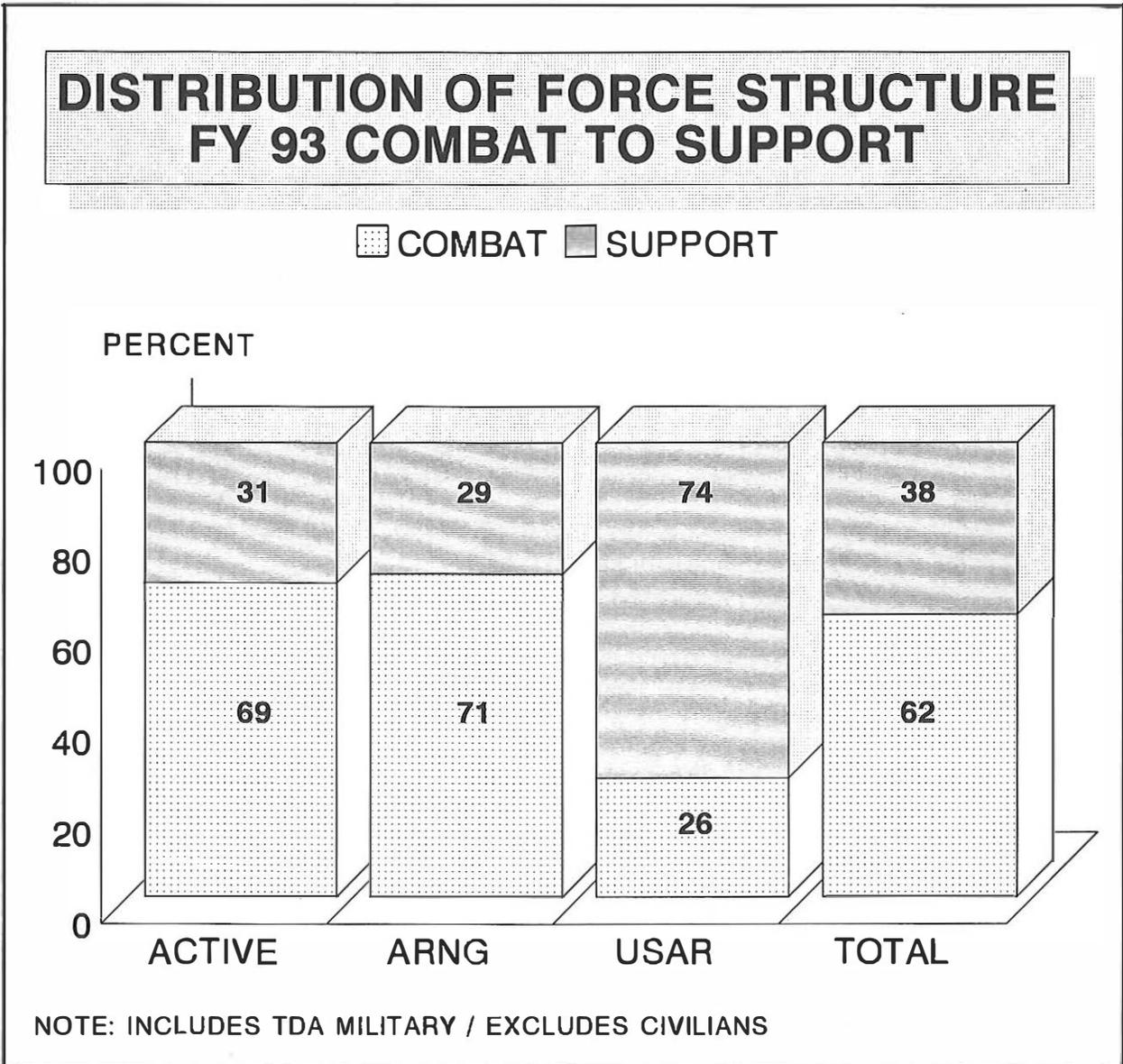


The Army will continue to have a forward presence in Korea and to maintain a Corps with two heavy divisions in Europe. The withdrawal of Army forces from Europe has been accelerated to achieve the planned Army strength of 92,000 by the end of FY 1993. Major inactivations (by division) to achieve the FY 1993 status are shown on the next chart.



It is important to note that the Army is no longer nuclear. It will no longer possess or employ tactical nuclear weapons.

The RC forces (ARNG and USAR) are vital parts of the total Army mix. Today the ARNG and USAR together make up slightly more than half of total Army military strength. The distribution of the force by component as displayed on the next chart is significant. The portion marked "combat" includes both combat and combat support units. The ARNG is clearly combat heavy while the USAR provides a large part of the service support forces. Any comprehensive operations plan will involve integrated segments of all components.



In addition to the uniformed soldiers, about 20 percent of the Total Army force is comprised of civilian employees who perform major roles in the management and support structure of the Army. These employees are also affected in a major way with downsizing, restructuring and base closures.

One important part of the Army's combat force mix that is not represented in the combat division layout is the Army's special operations forces (SOF). These number about 15,000 active, 14,000 USAR and 2,900 ARNG. A brief explanation of this unique portion of the Army's combat structure is included here.

ARMY SPECIAL OPERATIONS FORCES

The Army Special Operations Command is located at Fort Bragg, North Carolina. It comes under the control of the CINC of the U.S. Special Operations Command, a unified command with headquarters at MacDill Air Force Base, Florida.

Special operations units are highly trained to perform unique missions. They played significant roles in both Operation Just Cause in Panama and Desert Storm in the Persian Gulf.

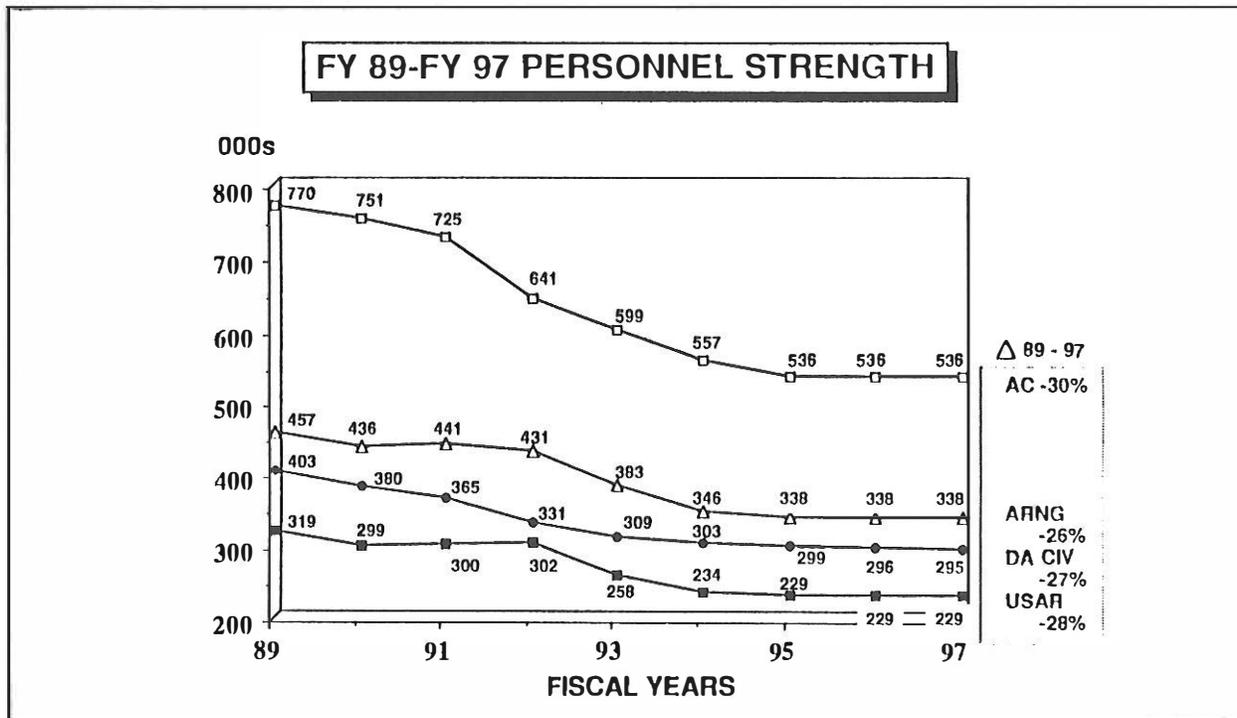
The Army SOF consists of both Active and RC forces. The major force elements are:

- A Ranger Regiment (elite light infantry)
- A Special Operations Aviation Regiment
- A Special Forces Command with nine special forces groups of which two are USAR and two ARNG; a signal battalion; a support battalion and two chemical detachments.
- A Civil Affairs and Psychological Operations Command which includes seven civil affairs groups, all but one of which is in the USAR; a separate civil affairs battalion; plus three civil affairs commands and two civil affairs brigades, all in the USAR.
- The Special Warfare Center and School

Budgeting and funding for special operations forces are unique in that operating funds are not contained in the Army budget. Funds are provided through DoD and the CINC of the Special Operations Command under a separate major force program identified as MFP-11, and are, therefore, independent of service cuts. Nonoperational requirements, including base operations, are still provided by Army funding.

PERSONNEL

The following personnel strength ramps for all elements of the Army, military and civilian, tell a major story about the personnel aspects of the draw-down and consolidation. From 1989 to 1997 the Army will have lost about 550,000 people in all categories. In addition, other non-appropriated fund employees and contractor personnel are similarly affected.



In the new budget, military pay costs are down slightly because of reduced strength, but the savings lag behind actual strength decreases because of the additional transition costs involved for such things as PCS moves, separation pay, VSI/SSB and accrued leave payments. Bigger savings will come later. With a reduced overall budget, the military pay portion actually increases as a percent of the total Army budget (up to 45 percent in FY 1993). When civilian pay is added, Army direct personnel costs comprise almost 60 percent of the total budget.

Reducing Army strength in a planned way, while maintaining both balance and quality, is a major management challenge. Some of the available tools being used for the active force include:

- Reducing input by cutting accessions to a minimum level that maintains long-term sustainment of the force.
- Normal attrition. Administrative action and tightened reenlistment standards.
- Voluntary separation. The Voluntary Early Transition Program, Voluntary Separation Incentive (VSI) and Special Separation Benefits (SSB).
- Maximum retirement for those eligible, either voluntarily or by action of a Selective Early Retirement Board (SERB).
- Reduction in Force (RIF). The last resort. RIF will be required for certain categories of officers, but may be avoided for enlisted personnel depending on the number who volunteer for separation and the total number that must eventually be cut. The application of these reduction strategies varies by category (officer, warrant officer, and enlisted). Civilian employees come under an altogether different set of rules.

The Military Personnel Appropriation for FY 1992 included expanded severance pay for enlisted personnel and the elimination of the severance pay cap for officers. It also extended unemployment compensation, as required by P.L. 102-64, and provided for all SSB payments and for annual VSI payments until January 1993.

The budget is based on the requirement to reduce the officer corps (including warrant officers) from 103,000 in FY 91 to 79,000 in FY 95. For enlisted personnel, the requirement is to reduce from 603,000 in FY 91 to 452,000 in FY 95. Army civilian employee strength will be reduced from about 365,500 in FY 1991 to about 303,00 in FY 1995. Of these 62,000 spaces, about 17,000 are being assigned elsewhere in the Department of Defense.

So far this year, a Selective Early Retirement Board (SERB) for officers and one for senior non-commissioned officers have met and reported results. Also, a reduction in force (RIF) board is being held for majors. The voluntary separation programs are open for applications and by mid-April, 21,500 Army officers and enlisted personnel had applied to leave active duty with a VSI or an SSB.

While the active force reduction is following a set plan and is well underway, the ARNG and USAR are also scheduled for reduction as reflected in the personnel chart at the beginning of the section. This is not backed up, however, by a plan for separation incentives or bonuses. RC cuts have become a major congressional issue, so they must be considered up in the air at present.

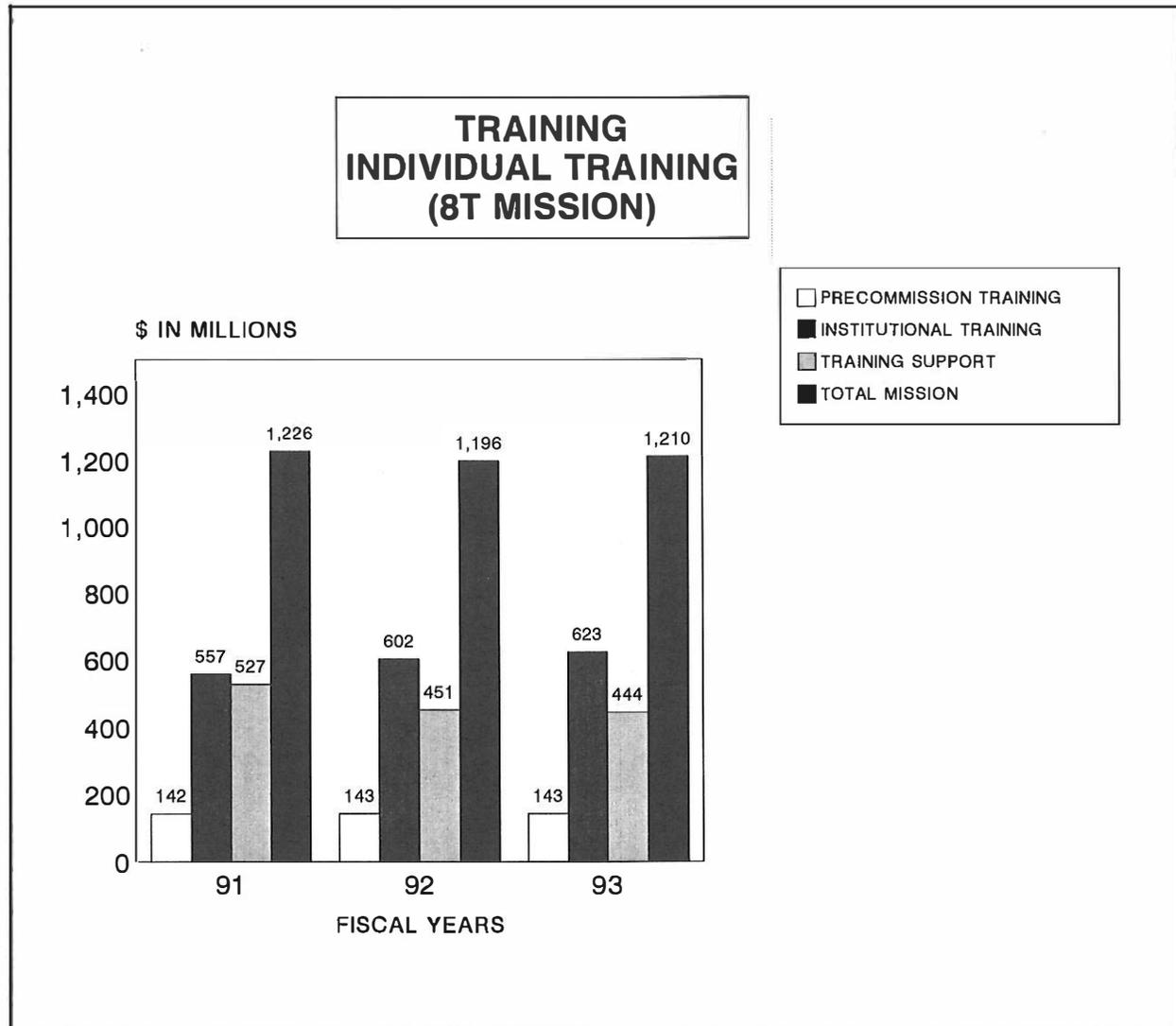
Despite strength cuts, recruiting will be continued, although on a reduced scale. New accessions will enter the Army each year to meet the future needs of the post-1995 Army. Because of fewer numbers, standards will remain very high, but bonuses will still be paid for certain critical skills.

As a final note, a 3.7 percent pay increase is included in the FY 1993 budget for both military and civilian personnel.

TRAINING AND READINESS

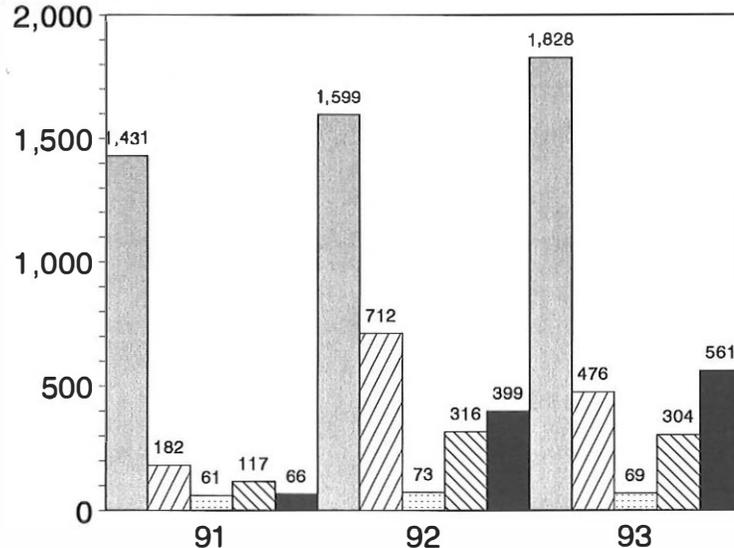
Training is being funded in the Army's FY 1993 budget to support the same operating tempo (OPTEMPO) and training readiness as for the past two years. Training readiness remains a top priority.

The Army training program incorporates all aspects of individual training, unit training and leadership development. Funding for Army training is budgeted largely in the operation and maintenance appropriation — in Program 8T (training) for individual and institutional training and Program 2 (General Purpose Forces) for unit and force training. Funding in these categories for fiscal years 1990 through 1993 is shown on the next two charts:



OPERATIONS TRAINING PROGRAM 2 (MISSION)

\$ IN MILLIONS



* GROUND OPTEMPO

** POMCUS (PREPOSITIONING OF MATERIAL CONFIGURED UNIT SETS)

Operating tempo or OPTEMPO is budgeted to maintain designated training readiness at 800 miles annually for ground vehicles and 14.5 hours per month for unit aircraft. The ARNG/USAR OPTEMPO is funded at 288/200 miles respectively for ground vehicles and 9/8.1 hours per month respectively for aircraft.

The Army Combat Training Center Master Plan supports an aggressive program at the various combat training centers for FY 1993 to include: 33 battalion rotations through the National Training Center at Fort Irwin California, 25 battalion rotations through the Combat Maneuver Training Center at Hohenfels Germany, 16 battalion rotations through the Joint Readiness Training Center at Fort Chaffee, Arkansas, and 12 divisions and one corps through the Battle Command Training Program at Fort Leavenworth, Kansas.

Funds are included in the budget to support a series of exercises. Some of the major JCS-designated exercises include: REFORGER in NATO, TEAM-SPIRIT in the Republic of Korea, BRIGHT-STAR in Egypt and several other Southwest Asian countries, KEEN EDGE in Japan, and FUERTES CAMINOS in the SOUTHCOM area of operations. RC units participate in these exercises.

Special effort is continuing to develop better training devices, simulators and battlefield simulations. Some outstanding examples are (1) the Unit Conduct of Fire Trainer to let crews practice both Abrams tank and Bradley firing at a small fraction of the cost of live firing, and (2) the Army Family of Simulations (Corps Battle Simulations, Brigade/Battalion Battle Simulation, and JANUS — a company/team battle simulation).

RESEARCH, DEVELOPMENT AND ACQUISITION (RDA)

Army RDA incorporates the resources of Army procurement and as well as research, development, testing and evaluation (RDT&E) involved in the development and acquisition of weapons and equipment. With the budget drawdown, RDA funding has been curtailed significantly. Not only has it dropped appreciably in recent years (by more than one-half in real terms since FY 1987), but, the ratio of R&D to procurement, normally expected in the 1-to-2.5 range, is now about 1-to-1.3 and approaching 1-to-1. Army procurement is literally drying up.

The new DoD approach to acquisition, combined with curtailed funding, has caused a number of program adjustments for the Army. For example, the RAH-66 Comanche light helicopter program will be deferred and will concentrate on building prototypes. Likewise, the Armored Systems Modernization (ASM) plan will be radically altered. The Block III Tank, the Combat Mobility Vehicle and the Future Infantry Fighting Vehicle have been deferred indefinitely. The Line of Sight Anti-tank System will not be procured, but will continue in development as a prototype program. The restructured ASM program provides for the development of the Advanced Field Artillery System and the Future Armored Resupply Vehicle-Ammunition.

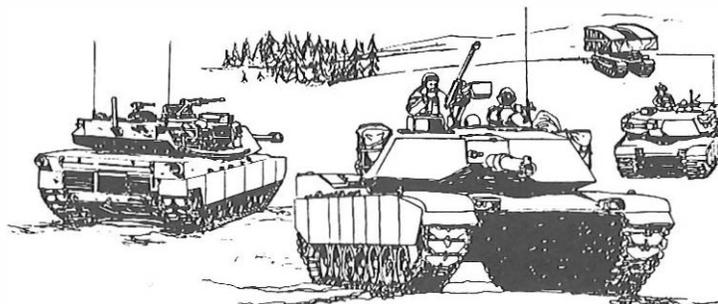
PROCUREMENT

Procurement funding is included under five separate appropriations: aircraft, missiles, weapons and tracked combat vehicles, ammunition, and other procurement. The funding profile since FY 1988 and the funding breakout by separate appropriation titles for fiscal years 1991 through 1993 are shown in the next two charts. The numbers are in current dollars, so when converted for inflation the drop is even more apparent. The procurement budget has been reduced from more than \$14 billion to less than \$7 billion in the last two years.

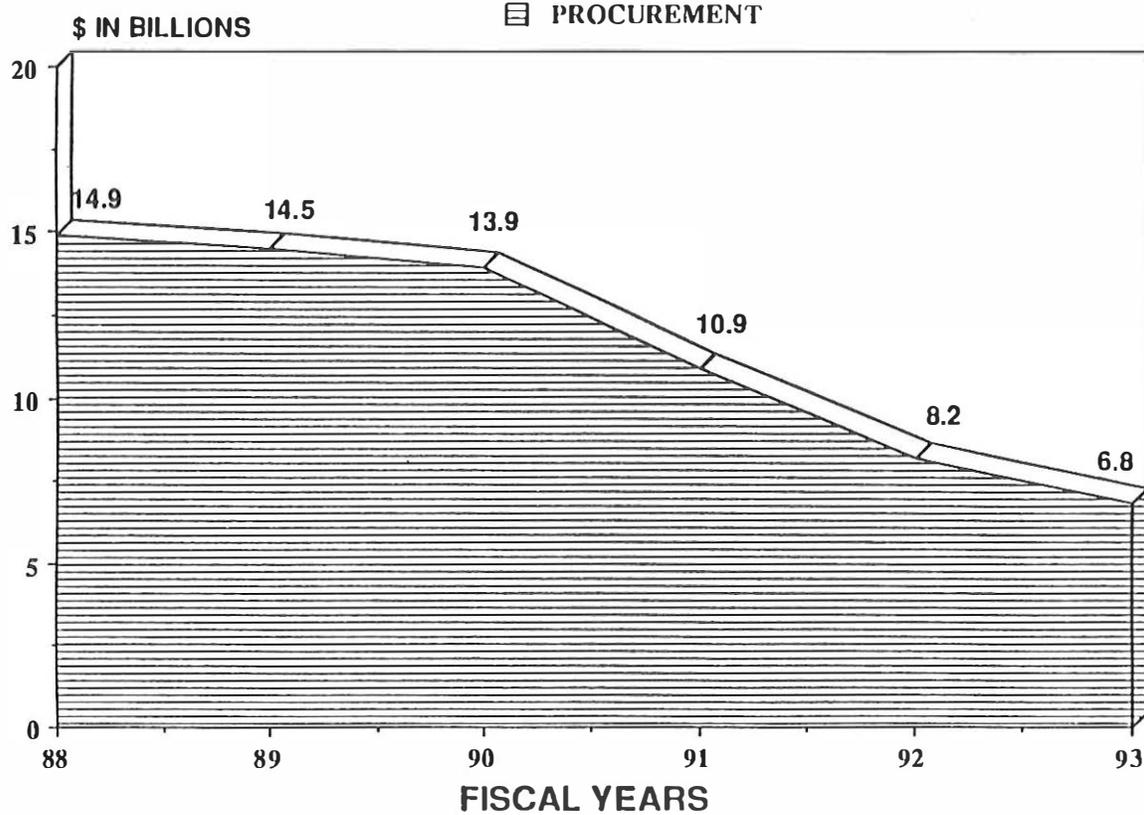
Only one Army procurement program, the UH-60 Black Hawk helicopter (at \$407 million for FY 1993) would make the DoD's top-20 list. The Army has one other item in FY 1993 which tops \$300 million — the family of heavy tactical vehicles (\$316 million); and four more top \$200 million — Army Tactical Missile System, HMMWV, Family of Medium Tactical Vehicles and SINCGARS Family of Radios). It's interesting to note the increasing percentage of procurement dollars going into vehicles and the "other procurement" category during this lean period.

On the next two charts, each of the five procurement appropriations is summarized showing the funding profile and a brief description of highlighted items (e.g. at least \$100 million budget, a new start, or other special interest).

A more detailed listing of procurement line items is found at Appendix II.



PROCUREMENT



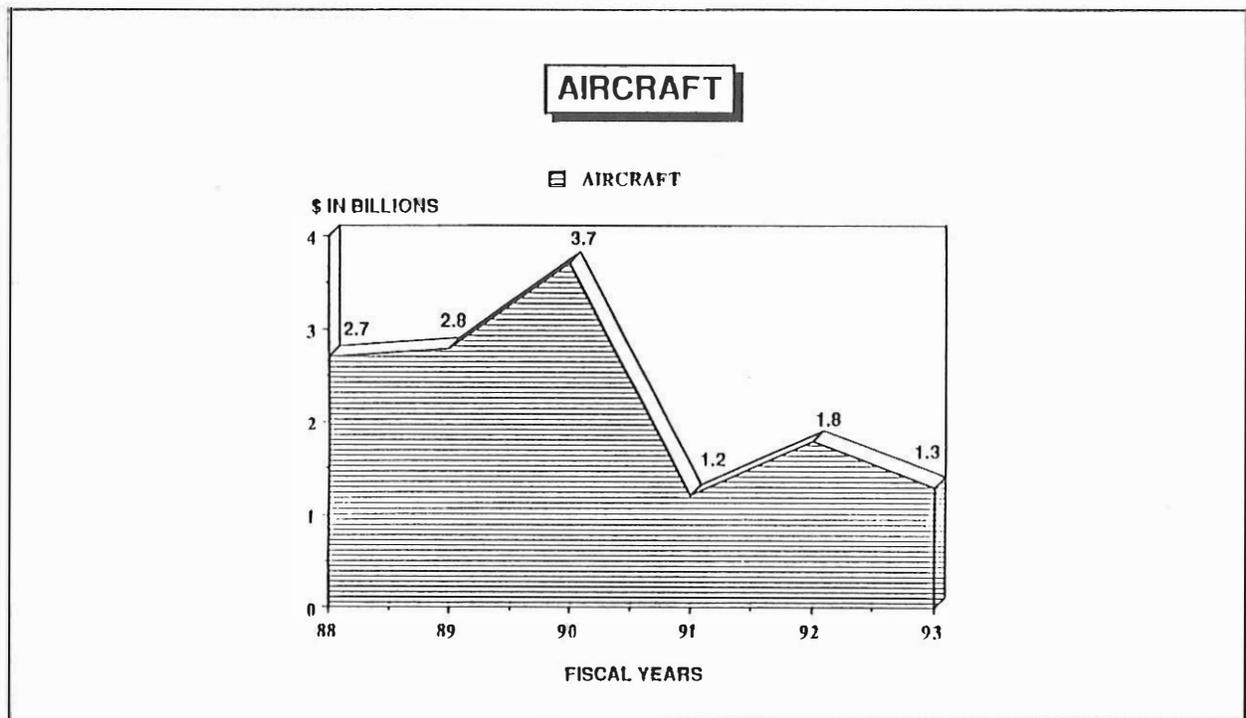
PROCUREMENT (\$ in Millions)

APPROPRIATION	FISCAL YEARS		
	<u>1991</u>	<u>1992</u>	<u>1993</u>
Aircraft	\$1,247.6	\$1,829.2	\$1,291.3
Missiles	2,972.9	1,106.3	982.3
Weapons & Tracked Combat Vehicles	1,941.2	774.9	623.4
Ammunition	2,046.8	1,368.1	823.6
Other Procurement	<u>2,652.0</u>	<u>3,141.0</u>	<u>3,093.5</u>
Total	\$10,860.5	\$8,219.5	\$6,814.1

Aircraft

The aircraft appropriation includes the acquisition of aircraft, aircraft modifications, spares, repair parts, support equipment and facilities. The Army FY 1993 budget request is for \$1.29 billion of which \$435.5 million is to be available for Army National Guard and Army Reserve.

The aircraft appropriation provides for procurement of UH-60 Black Hawk helicopters and a new training helicopter for pilot training. It also procures the RC-12 Guardrail Common Sensor for communications intercept and direction finding. The CH-47D Chinook and the AH-64 Apache helicopters are continued. Comanche helicopter production, however has been postponed.



Selected Items, Aircraft (\$ Millions):

Item	FY92 Qty/\$	FY93 Qty/\$
• Guardrail, Common Sensor	6/195.8	5/111.9

This is a corps-level communications/electronic aircraft for gathering intelligence.

Item	FY92 Qty/\$	FY93 Qty/\$
• AH-64 Attack Helicopter (Apache)	—/206.9	—/147.8

The Apache is the Army's primary anti-armor attack helicopter capable of operating at night and under adverse weather conditions. Target acquisition is provided by an advanced target acquisition sight and night navigation by the pilot night vision sensor. New production of the AH-64

itself has been terminated. Funds in the budget are associated with supporting production deliveries for already procured aircraft as well as costs for total package fielding, new equipment training and a combat mission simulator. A modernization program for the AH-64 is being considered.

Item	FY92 Qty/\$	FY93 Qty/\$
• UH-60 Black Hawk	60/507.5	60/406.9

The Black Hawk is the Army's primary tactical lift and utility helicopter with over 1,100 aircraft already procured through 1991. Procurement in this budget is to upgrade Army National Guard equipment.

Item	FY92 Qty/\$	FY93 Qty/\$
• New Training Helicopter (NTH)	37/23.5	70/44.9

This is a new item. It will be procured by purchasing a commercial helicopter to be used in primary, instrument, and navigation training for entry level rotary wing aviators.

Item	FY92 Qty/\$	FY93 Qty/\$
• CH-47 Cargo Helicopter (Mods)	—/283.9	—/15.0

Requests are for the modernization which upgrades CH-47 A and C models to a much improved D configuration. The CH-47 is the Army's only medium lift helicopter. The modernization program for 472 aircraft will be completed with the FY 1990-1992 multi-year contract. FY 1993 funds are for safety modification applications and sustainment of the CH-47 aircraft.

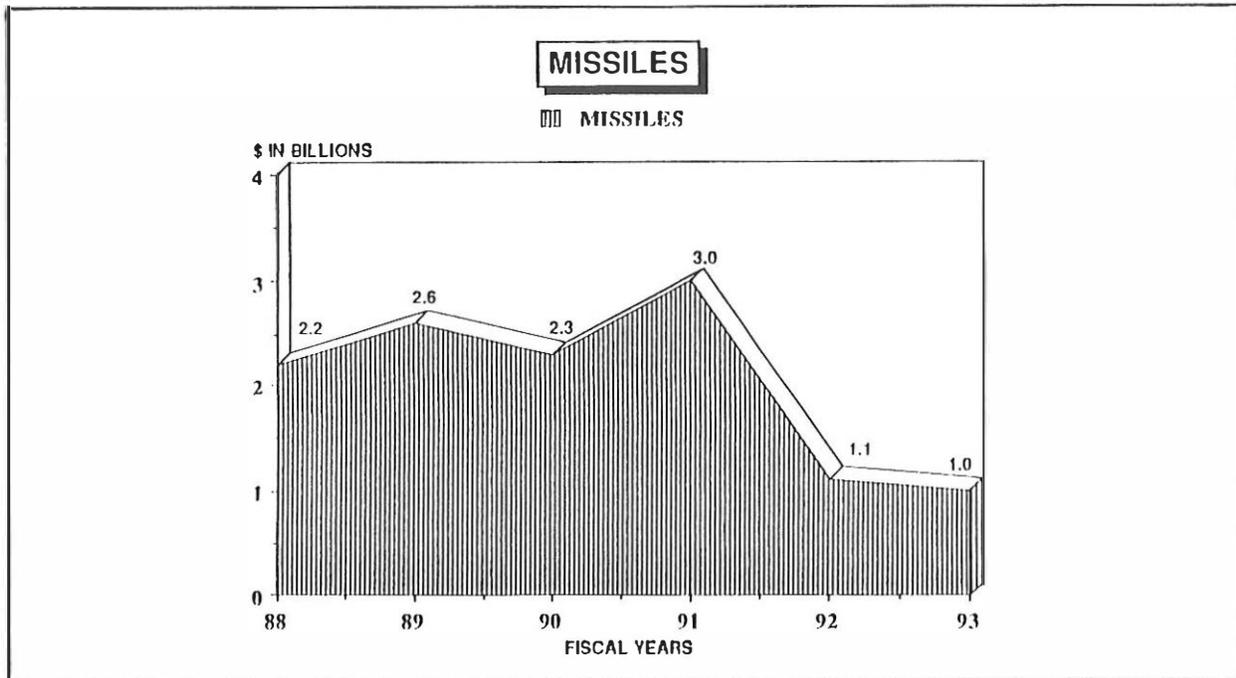
Item	FY92 Qty/\$	FY93 Qty/\$
• OH-58D (Kiowa Warrior) (Mods)	8/228.8	—/96.2

The OH-58D Kiowa Warrior is the Army's current scout helicopter. Funds are for retrofit to arm the OH-58D with air-to-air STINGER and air-to-ground weapons. The FY 1993 funding request will provide for the retrofit of 38 OH-58D helicopters.

Missiles

The missile appropriation includes the acquisition of missiles, missile modifications, spares, repair parts, support equipment and facilities. The FY 1993 budget request is for \$982 million, down sharply from \$2.97 billion in FY 1991 when the Patriot alone consumed \$1 billion of the procurement budget.

Decisions made in conjunction with the formulation of the FY 1993 budget include a start for JAVELIN, the Army's advanced anti-tank weapon system, to replace the DRAGON. Production of LOSAT (line-of-sight anti-tank) weapon was deferred but will remain in RDT&E status and the Air Defense Anti-tank System was terminated. Continued procurement is planned for MLRS launchers, the Avenger air defense system, missiles for the Hellfire Optimized Missile System, the TOW-2B missile system, and the Army Tactical Missile System.



Selected Items, Missiles (\$ Millions):

Item	FY92	FY93
	Qty/\$	Qty/\$
Patriot Missile System	97/156.1	—/25.2

The Patriot is the premier long range, high to medium altitude air defense system to counter aircraft and tactical ballistic missile threats to ground forces and high value assets. The PAC-2, a new version of Patriot, was first used operationally in the Persian Gulf war. Procurement of missiles was essentially completed with the FY 91 budget (1,100 missiles at \$1.003 billion). FY 1993 funding is to cover the fielding of new equipment, training and engineering support. New developments for the Patriot in the anti-missile role are being funded through the Strategic Defense Initiative (SDI).

Item	FY92	FY93
	Qty/\$	Qty/\$
• Pedestal Mounted STINGER (Avenger)	144/183.6	144/148.2

Avenger, the Army's newest air defense system, counters hostile low flying aircraft in division and corps rear areas. Essentially it integrates STINGER missiles on the HMMWV providing a highly mobile surface-to-air missile system.

Item	FY92 Qty/\$	FY93 Qty/\$
• Laser HELLFIRE System	112/19.7	2,158/103.4

This air-to-ground, anti-armor missile system is designed to defeat individual hardpoint targets. It will be employed from the AH-64 attack helicopter or from specially-configured UH-60 helicopters. The newest version is identified as the Hellfire Optimized Missile System with quantity procurement in FY 1993.

Item	FY92 Qty/\$	FY93 Qty/\$
• TOW-2 Missile System	10,000/210.4	9,440/183.1

TOW-2 is a heavy, anti-tank/assault (wire guided) missile system mounted on a variety of platforms including the Bradley Fighting Vehicle, the HMMWV and the Cobra helicopter. Funding is for the latest TOW-2B missile.

Item	FY92 Qty/\$	FY93 Qty/\$
• MLRS Launcher	44/133.6	44/197.3

The MLRS Rocket System (MLRS) provides a tremendous capability to attack deep targets and has a proven track record in Desert Storm. In addition to its present rockets, loaded in disposable pods, the MLRS serves as the launch platform for the Army Tactical Missile System (ATACMS). The budget provides for procurement of additional launchers to continue equipping the force, but no new procurement of rockets at this time because of funding limitations.

Item	FY92 Qty/\$	FY93 Qty/\$
• Army Tactical Missile System	300/170.9	340/188.2

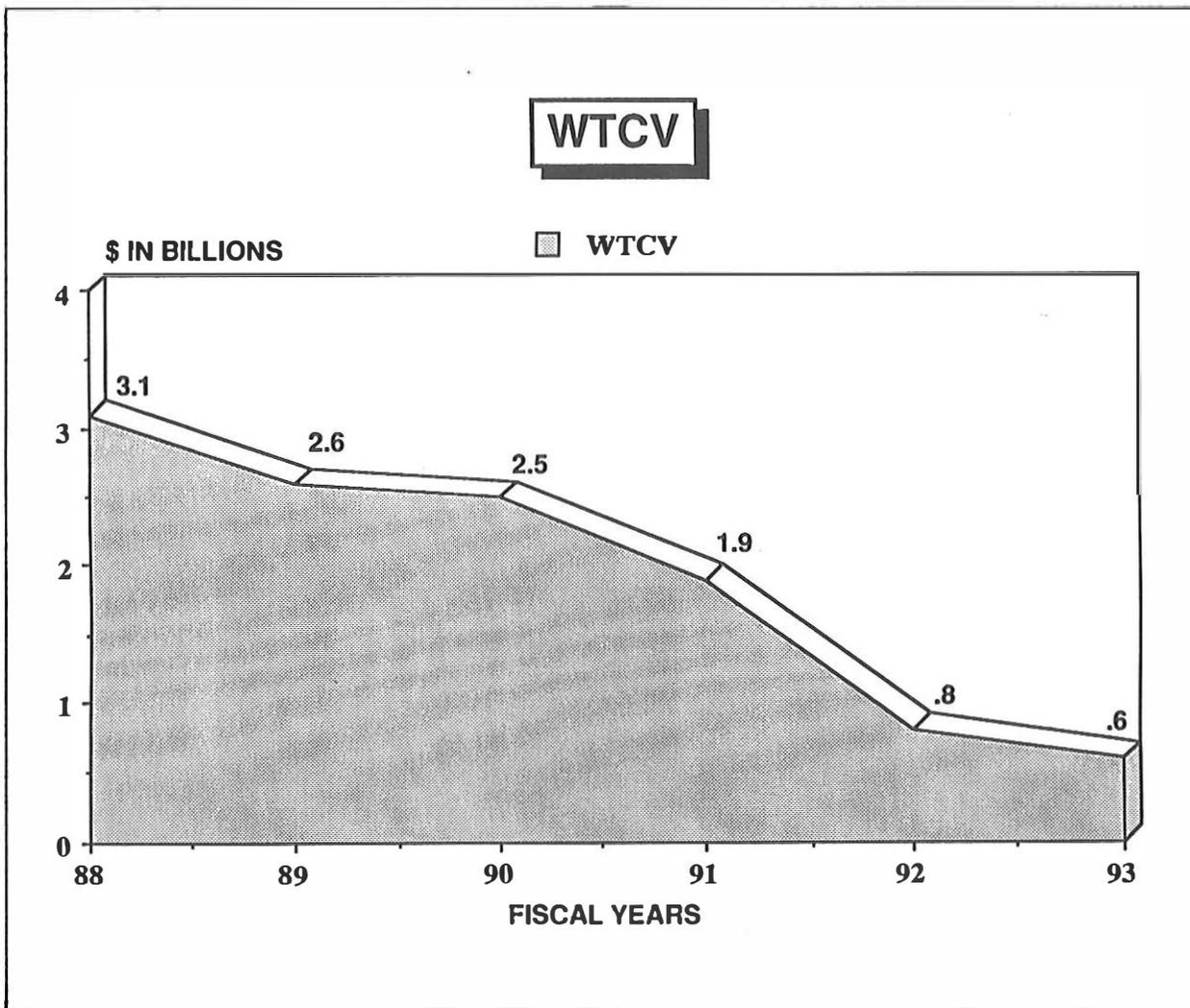
ATACMS is a new conventional ballistic system designed to attack second echelon targets of importance beyond current artillery ranges. The missile is launched by the MLRS. It's initial use in Desert Storm was highly successful and it will be the Army's best deep-strike artillery system well into the next century. Budget figures include funding for advance procurement.

Item	FY92 Qty/\$	FY93 Qty/\$
• JAVELIN Advanced Anti-tank Weapon System-Medium (AAWS-M)		—/18.3

Although there is only a small amount of funding in the FY 1993 budget for JAVELIN advanced procurement, this marks a new start for a much needed Army weapon system. It will replace the DRAGON as the infantry medium anti-tank weapon. The FY 1993 budget also contains \$91.4 million for RDT&E.

Weapons and Tracked Combat Vehicles (WTCV)

The WTCV appropriation has two components: (1) tracked combat vehicles and (2) weapons and other combat vehicles. The FY 1993 budget request is for \$623 million, most of which supports procurement activities for the Abrams tank, the Bradley Fighting Vehicle and the Paladin (155mm medium Howitzer modification). This, despite the fact that new production has been terminated for both the Abrams and the Bradley. Also contained in this budget is the first procurement funding for the Armored Gun System. Funding is included in FY 1993 for the 105mm Light Howitzer and the 120mm mortar, with some limited funding for squad and individual weapons.



Selected Items, Weapons and Tracked Vehicles (\$ Millions):

Item	FY92 Qty/\$	FY93 Qty/\$
• Bradley Fighting Vehicle (Procurement)	—/108.6	—/103.9
• Bradley Fighting Vehicle Series (Modification)	—/109.7	—/34.5

This is the Army's infantry and cavalry fighting vehicle. The final production contract for 600 Bradleys was signed in 1991 and no new U.S. procurement is planned in the future. FY 1993 will be the 13th year of production with over 6,700 vehicles procured through FY 1991.

Funds shown for both FY 1992 and 1993 reflect annualized support costs for production delivery and fielding schedules. Funds are included for the Bradley modernization program to continue with high survivability improvements on older models. Modification funds also support armor tile procurement.

Item	FY92 Qty/\$	FY93 Qty/\$
• M1 Abrams	18/106.6	—/32.4
• M1 Abrams Tank (Modification)	—/79.3	—/25.2

Abrams is the Army's primary combat weapons system and the world's premier main battle tank. In its 13th year of production, approximately 7,300 tanks have been delivered to the Army to date. Fiscal year 1991 was the last contract for U.S. procurement with final new tank delivery in mid-1993. Funding in the 1993 budget represents annualized support costs. In addition, funds are included in the budget for the application of modification kits to older model tanks.

Although Congress appropriated \$225 million in FY 1992 for the remanufacture of M1 tanks to the M1A2 configuration as well as \$196 million in FY 1991 and 1992 to procure 60 more new M1A2 tanks, these have not been included in the budget. Instead, Secretary of Defense has determined that this is not needed and has requested rescission of the funding. This means the M1A2 inventory would consist of only the 62 prototype tanks authorized in the 1991 Army budget. Since the remanufacture of M1 tanks to M1A2 was directed by Congress and has an industrial base impact, it will continue to be an issue between Congress and the Defense Department.

Item	FY92 Qty/\$	FY93 Qty/\$
• Armored Gun Systems (AGS)		—/4.7

This is initial procurement funding for the Armored Gun System (AGS). Funding is also included under the RDT&E appropriation. The request in FY 1993 is for special tooling needed at

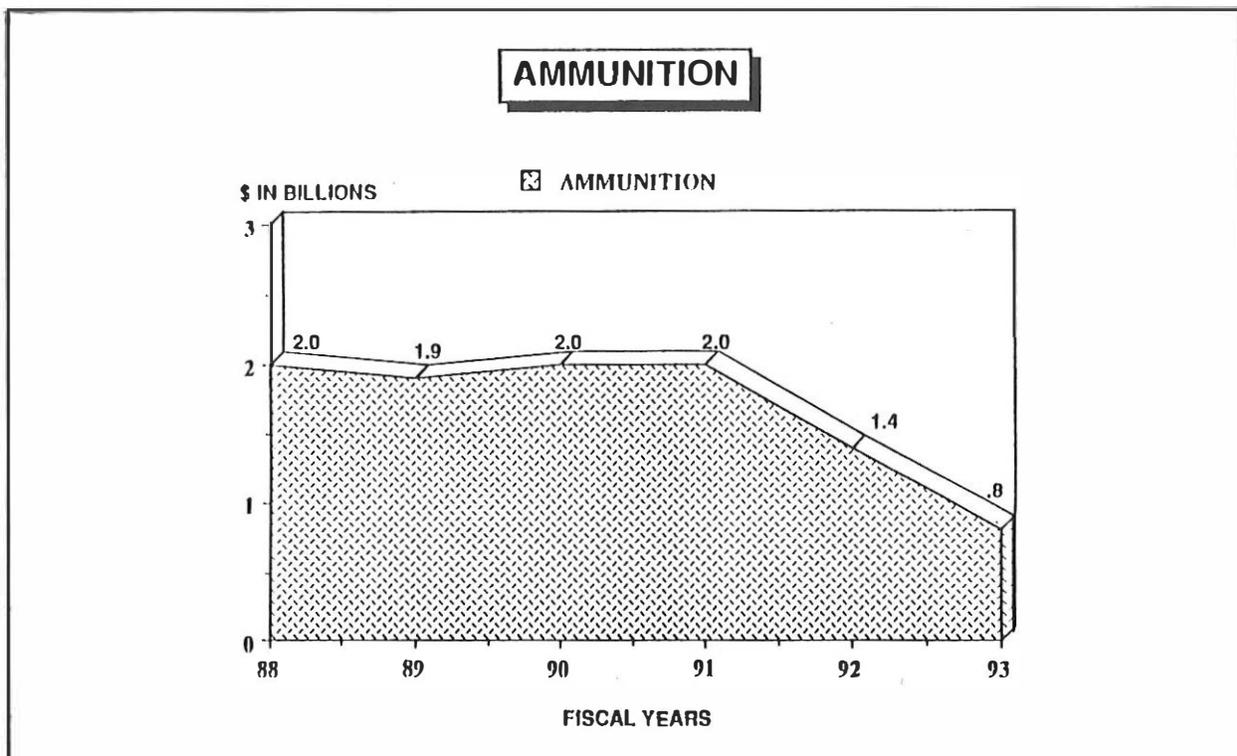
Watervleit Arsenal for gun production. The AGS will replace the aging Sheridans for support of light forces and will be capable of deployment on existing airlift. It will be a modified non-developmental item procurement which will integrate proven off-the-shelf subsystems.

Item	FY92 Qty/\$	FY93 Qty/\$
• M109A6 155mm Howitzer Improvement Program (Paladin) (Mod)	—/126.1	—/125.4

The M109A6 Paladin is a much improved version of the current M109-series of 155mm howitzer. The Paladin has increased range (up to 30 kilometers when rocket assisted), on-board automatic ballistic computation, on-board navigation system, built-in test equipment, and survivability enhancements. Through FY 1992, 144 are being procured. The FY 1993 budget provides funding for an additional 60 Paladins.

Ammunition

This appropriation includes funding for ammunition end items and for production base support. The FY 1993 budget request is for \$824 million of which \$63 million is to be available for the Army National Guard and the Army Reserve. About \$630 million of this is for the procurement of ammunition itself while the rest is for ammunition production base support. This funding is well below that of past years which had a peak of nearly \$2.6 billion in FY 1985. Nearly 40 percent of the ammunition is for training support, but that amount falls short of annual needs, requiring a drawdown in reserve stocks. With the reduction in ammunition procurement, the Army has a plan to reduce by seven the number of active government-owned, contractor-operated ammunition plants.



Selected Items, Ammunition (\$ Millions):

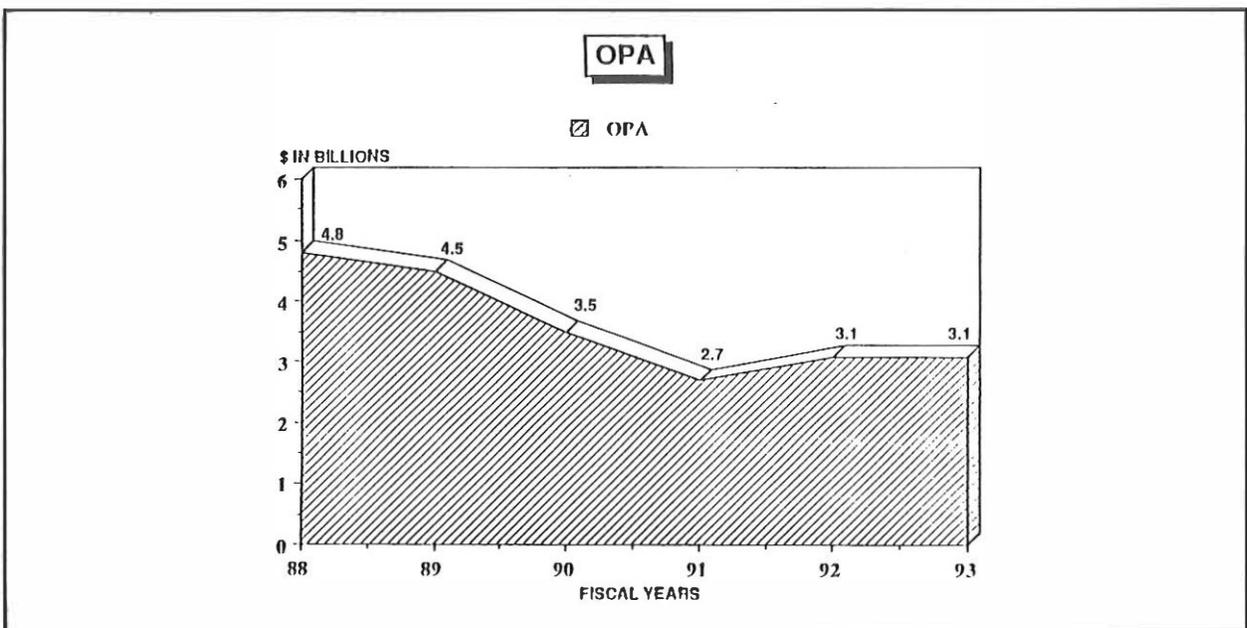
Item	FY92 \$	FY93 \$
• Tank Ammunition	418.6	191.7
• Artillery Ammunition	364.2	259.9

The appropriation requests for fiscal years 1992 and 1993 are dominated by the procurement of tank and artillery ammunition. Only the newest and most effective ammunition is being procured, so the stockpile, in effect, is being upgraded.

Other Procurement Army (OPA)

This is the largest of the Army procurement appropriations and includes three major elements: (1) tactical and support vehicles, (2) communications and electronic equipment and (3) other support equipment. The FY 1993 budget request is for \$3.1 billion of which \$556 million is to be available to the Army National Guard and the Army Reserve.

Included is funding for improved tactical transportation with the Family of Medium Tactical Vehicles, the Family of Heavy Tactical Vehicles and the High Mobility Multipurpose Wheeled Vehicle. Interestingly, each of these three programs falls into the top five procurement items in the Army's FY 1993 budget. Some other significant items contained in this appropriation are: The Army's portion of the Defense Satellite Communications System; SINCGARS radios; the Army Data Distribution System; the All Source Analysis System; the Army's portion of Joint STARS; night vision equipment; automated data processing equipment including RCAS for the Reserve Components; chemical defensive equipment; generators and associated equipment; and a variety of training devices. Some \$113 million is allocated to the training equipment program in FY 1993 for continued procurement of state-of-the-art training devices and simulators.



Selected Items, Other Procurement Army (\$ Millions):

Item	FY92 Qty/\$	FY93 Qty/\$
• SINCGARS Radio	/287.6	/223.2

The Single Channel Ground and Airborne Radio System (SINCGARS) is the Army's new combat net radio providing voice and data communications for tactical command and control. It has frequency hopping and jam resistant capabilities.

Item	FY92 Qty/\$	FY93 Qty/\$
• High Mobility Multipurpose Wheeled Vehicle (HMMWV)	7,446/286.9	6,437/229.5

The HMMWV is the standard Army light vehicle (1 1/2 ton payload) using a common chassis with six body configurations (utility, ambulance, squad carrier, shelter carrier, and TOW and STINGER weapons carriers).

Item	FY92 Qty/\$	FY93 Qty/\$
• Family Medium Tactical Vehicles (FMTV)	1,197/171.6	2,384/291.1

The FMTV is a new family of vehicles to replace the current aging fleet of 2 1/2 ton and the older portions of the five-ton fleet of tactical trucks. These are the workhorses performing a range of tactical, logistical and support functions. The program started in FY 1991 and is in full swing for FYs 1992 and 1993. The FMTV will accommodate a variety of mission-oriented body configurations and kit applications to satisfy Army ground transportation needs.

Item	FY92 Qty/\$	FY93 Qty/\$
• Family of Heavy Tactical Vehicles (FHTV)	281/99.7	961/315.7

FHTV represents a family of tactical trucks to meet heavy transportation needs. The FY 1993 budget supports the fourth year of a five year contract for the Palletized Loading System. This consists of a 16.5 ton truck with an integral self load-unload capability and a 16.5 ton companion trailer. It's ability to rapidly load and unload large tonnages (especially ammunition) with less material handling equipment greatly increases resupply capability with fewer personnel.

Other important members of the heavy fleet are the Heavy Expanded Mobility Tactical Truck which includes cargo vehicles, fuel tankers and heavy wreckers, and the new Heavy Equipment Transporter capable of transporting the M1 Abrams tank.

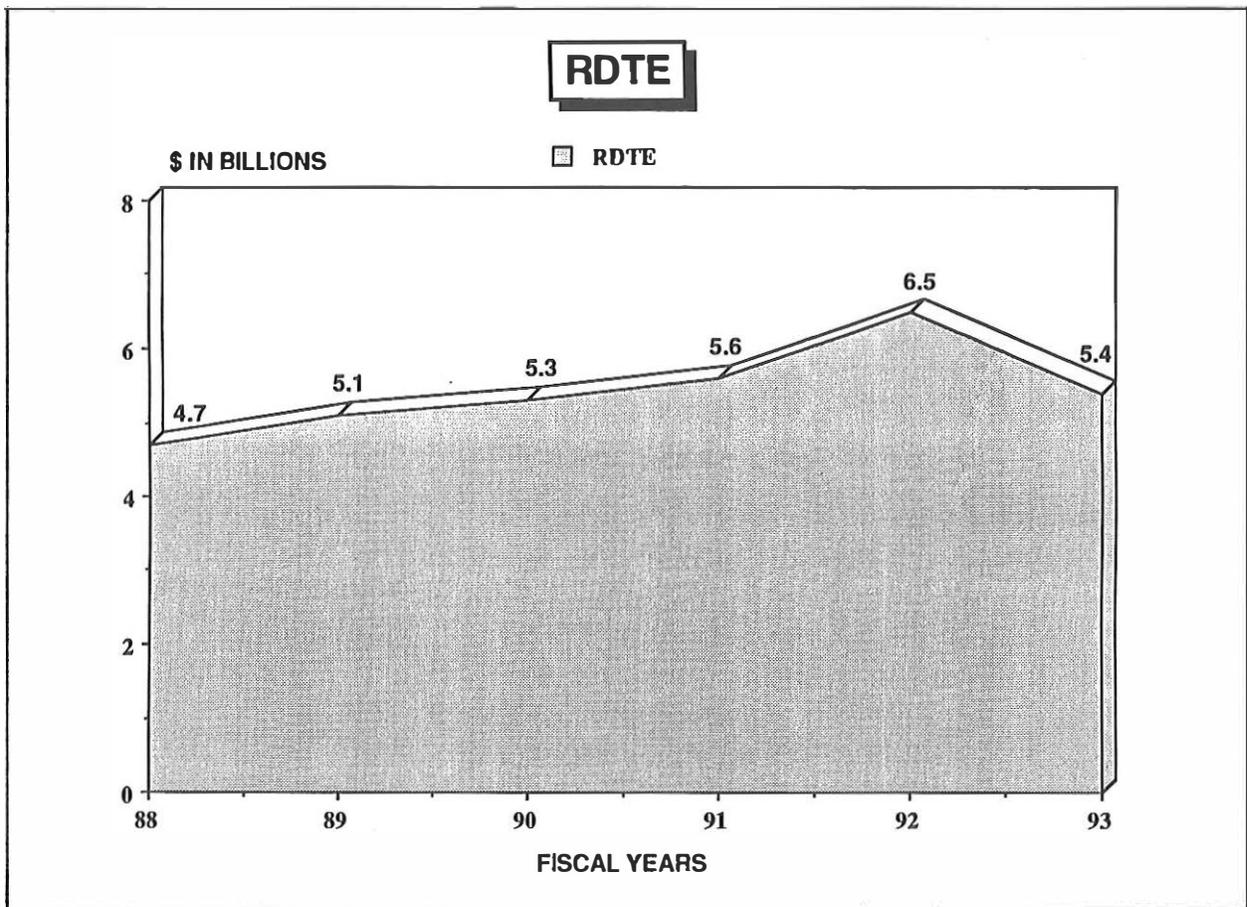
Item	FY92 Qty/\$	FY93 Qty/\$
• Reserve Component Automation System (RCAS)	/153.7	/152.2

RCAS is a state-of-the-art automated information system to support the reserve components. The RCAS network is designed for the management of day-to-day operations and for mobilization planning to facilitate the ability to mobilize rapidly and effectively. A major contract was recently awarded for RCAS.

RESEARCH AND DEVELOPMENT

The Army RDT&E budget request for FY 1993 is \$5.4 billion, down from the \$6.5 billion level of FY 1992. It represents about 8.5 percent of the Army budget and 14 percent of DoD R&D funding for FY 1993.

The following charts show the Army RDT&E funding profile since FY 1988 and RDT&E totals by budget activity for FY 1992 and 1993.



RDT&E ARMY TOTALS BY BUDGET ACTIVITY
(\$ Millions)

	<u>FY 1992</u>	<u>FY 1993</u>
Technology Base	854.3	753.3
Advanced Technology Development	411.7	431.7
Strategic Programs	73.2	43.8
Tactical Programs	3,613.7	2,748.1
Intelligence and Communications	143.9	176.8
Defense-wide Mission Support	1,356.5	1,260.8
Total	6,453.3	5,414.5

The technology base (basic research and exploratory development) request is 14 percent of the RDT&E budget — a level which has remained roughly constant for the past few years.

Advanced Technology, about eight percent of the RDT&E budget, covers a variety of programs, the major ones being aviation advanced technology, missile and rocket technology, land mine warfare, night vision, and air defense precision strike technical demonstration.

The Army has little under Strategic Programs, the major unclassified item being Anti-Satellite Weapons (ASAT).

The largest portion (51 percent) of the Army's RDT&E FY 1993 funding is for Tactical Programs where the major items are the Comanche Light Armed Scout Helicopter, Armored Systems Modernization, Brilliant Anti-Armor Submunition, Sense and Destroy Armament System, All Source Analysis System, JAVELIN Anti Armor Weapon System, LONGBOW, Line of Site Anti-tank System, and Advanced Field Artillery Tactical Data System.

The only major item under the Intelligence and Communications category is the SATCOM ground environment.

Over 20 percent of the Army's R&D dollars are allocated to the category of Defense Mission Support, which is essentially base support for R&D activities and facilities. This includes the operation of Kwajalein and other test ranges.

Medical RDT&E is no longer in the Army budget, having been shifted to the OSD medical account.

Line items carried last year in the RDT&E active list which have since been terminated include the TOW sight improvement program, chemical munitions, and LAMP-H (heavy lift amphibian lighter). FY 1993 new starts under Tactical Programs include advanced development of the Future Armored Resupply Vehicle-Ammo, which is part of the Armored Systems Modernization program, and a ground combat identification program for non-cooperative target recognition.

Although funding is provided through the Strategic Defense Initiative Office in DoD, the Army's Strategic Defense Command is deeply involved in the ballistic missile ground defense portion of GPALS as well as in the development of theater missile defense. Some of the important

developmental programs relating to tactical/theater missile defense managed by the Army are outlined in Part I under SDI.

For FY 1992, the Army Strategic Defense Command expects funding at about \$1.9 billion for its portion of these programs. FY 1993 should be a continuation at about this same level or more.

Some of the highlighted items in the Army's FY 1993 RDT&E budget are as follows:

- Armored Systems Modernization (ASM). Funding: \$299.8 million in FY 92 and \$367.8 million in FY 93. ASM is a program for the next generation of close combat armored vehicles. The program as outlined last year has been restructured significantly. The Block III tank, the Combat Mobility Vehicle and the Future Infantry Vehicle have been deferred indefinitely. The Line-of-Sight Anti-tank (LOSAT) weapon system will not go into production as previously planned and will continue in development as a prototype program. The restructured program now gives priority to the Advanced Field Artillery System and the Future Armored Resupply Vehicle-Ammunition.
- Light Armed Scout Helicopter (Comanche). Funding: \$538.8 million in FY 92 and \$443.0 million in FY 93. The RAH-66 Comanche helicopter is intended to be the Army's next generation of rotorcraft to be used for scout and attack missions. With no decision for production, the Comanche program now provides for continued development and the building of three prototypes; developing avionics; upgrading the T-800 engine; and incorporating the Longbow system.
- Javelin (AAWS-M). Funding: \$119.8 million in FY 92 and \$91.4 million in FY 93. The JAVELIN will provide dismounted infantry a man-portable anti-tank weapon system capable of defeating armor. It will be designed to allow operations at night and during adverse weather conditions. It uses a fire-and-forget technology and will replace the DRAGON as the infantry anti-tank weapon.
- Air Defense Command & Control-Engineering Development. Funding: \$31.8 million in FY 92 and \$40.5 million in FY 93. The Air Defense command and control system will integrate ground and aerial sensors, identification devices and communication equipment. It will acquire, correlate and disseminate a composite air picture.
- Sense and Destroy Armament Missile - Engineering Development (SADARM). Funding: \$150 million in FY92 and \$63 million in FY 93. The SADARM is a 155mm artillery projectile which operates in a fire-and-forget mode. As a sensing munition, it is designed to detect and destroy lightly armored vehicles, primarily self-propelled artillery. It may also be delivered by MLRS.
- Joint Surveillance Target Attack Radar System (Joint STARS). Funding: \$68.6 million in FY 92 and \$31.2 million in FY 93. Joint STARS is a battle management, intelligence production, and target attack control system. It detects, tracks, classifies and assists in attacking targets (moving or fixed) on the battlefield. The Army is responsible for ground station modules while the Air Force is responsible for the platform, radar and data link. It enables the commander to see and attack targets more than 100 kilometers deep. Situational information can be transmitted through the Army's All Source Analysis System and target information through the Army's TACFIRE/AFATDS. Joint STARS proved very effective during Desert Storm.

- LONGBOW - Engineering Development. Funding: \$232.2 million in FY 92 and \$281.8 million in FY93. LONGBOW consists of a mast-mounted fire control radar integrated into the AH-64 helicopter airframe, and a radio frequency autonomous seeker in a Hellfire missile.
- Advanced Field Artillery Tactical Data System (AFATDS). Funding: \$48.1 million in FY 92 and \$41.6 million in FY 93. AFATDS will provide automation of all fire support assets for fire planning and combat operations to include movement control, target analysis, and the fire support itself.
- Line-of-sight Antitank (LOSAT). Funding: \$43 million in FY 92 and \$122.8 million in FY 93. LOSAT is a kinetic energy missile weapon mounted on a Bradley Fighting Vehicle chassis. It is intended to replace the TOW. A decision was made to delay procurement and the system will remain in R&D under the strategy of producing limited prototypes. This decision was based on funding limitations rather than technical problems.
- SATCOM Ground Environment. Funding: \$113.4 million in FY 92 and \$137 million in FY 93. This is a Defense Satellite Communications System, in which Army has development responsibility for the ground environment including terminals. This system, when complete, will provide worldwide coverage.

MILITARY CONSTRUCTION AND FAMILY HOUSING

These two Army appropriations are packaged together in a single congressional military construction bill. They are two distinct entities, however, and two-thirds of the family housing budget actually goes for operating costs rather than construction.

Army Military Construction (MCA). The Army's military construction budget request for FY 1993 is \$1 billion of which \$106 million is for environmental, health and safety purposes; \$145 million for chemical demilitarization; only \$68 million for quality of life and mission related projects; but \$600 million for minor construction and major repair. The last item was carried in the operations and maintenance budget until this year. The decision for this change was to have all investment type products identified with the military construction accounts in FY 1993. Major new construction was drastically curtailed by the OSD construction pause in effect for FY 1993, so the transfer gives a distorted picture.

Military construction by region is shown on the next chart.



**MILITARY CONSTRUCTION, ARMY
REGION/PROGRAM
(\$ in Millions)**

<u>REGION/PROGRAM</u>	<u>FISCAL YEARS</u>		
	<u>1991</u>	<u>1992</u>	<u>1993</u>
United States	684	701	229
(Chemical Demilitarization)	(76)	(132)	(120)
Europe	8	0	12
Korea/Japan	1	0	0
Foreign Currency (All Overseas)	48	0	0
Kwajalein	0	47	53
Saudi Arabia	28	0	0
Planning & Design	97	113	112
Minor Construction (\$300k-\$1.5M)	9	11	4
Minor Construction (\$15-\$300k)	0	0	61
Major Repair Construction	<u>0</u>	<u>0</u>	<u>539</u>
Total	875	872	1,010

Note: There is very little out-of-country new construction in the Army budget except for Kwajalein and limited major new construction in the U.S. This is essentially devoted to environmental, health and safety items. Without the transfers from the O&M account, MILCON in FY 1993 is much reduced from previous years.

Construction funding associated with base closures is handled through Base Closure accounts retained at the OSD level, and are not part of the MCA appropriation. These funds are released for the year of execution.

Army Family Housing. The FY 1993 family housing budget request of \$1.56 billion remains at about the same level as in recent years. Of this, \$176 million is for construction, with the bulk (\$1 billion) for operations and maintenance, and \$358 million for 17,600 family housing lease

**ARMY FAMILY HOUSING
(\$ in Millions)**

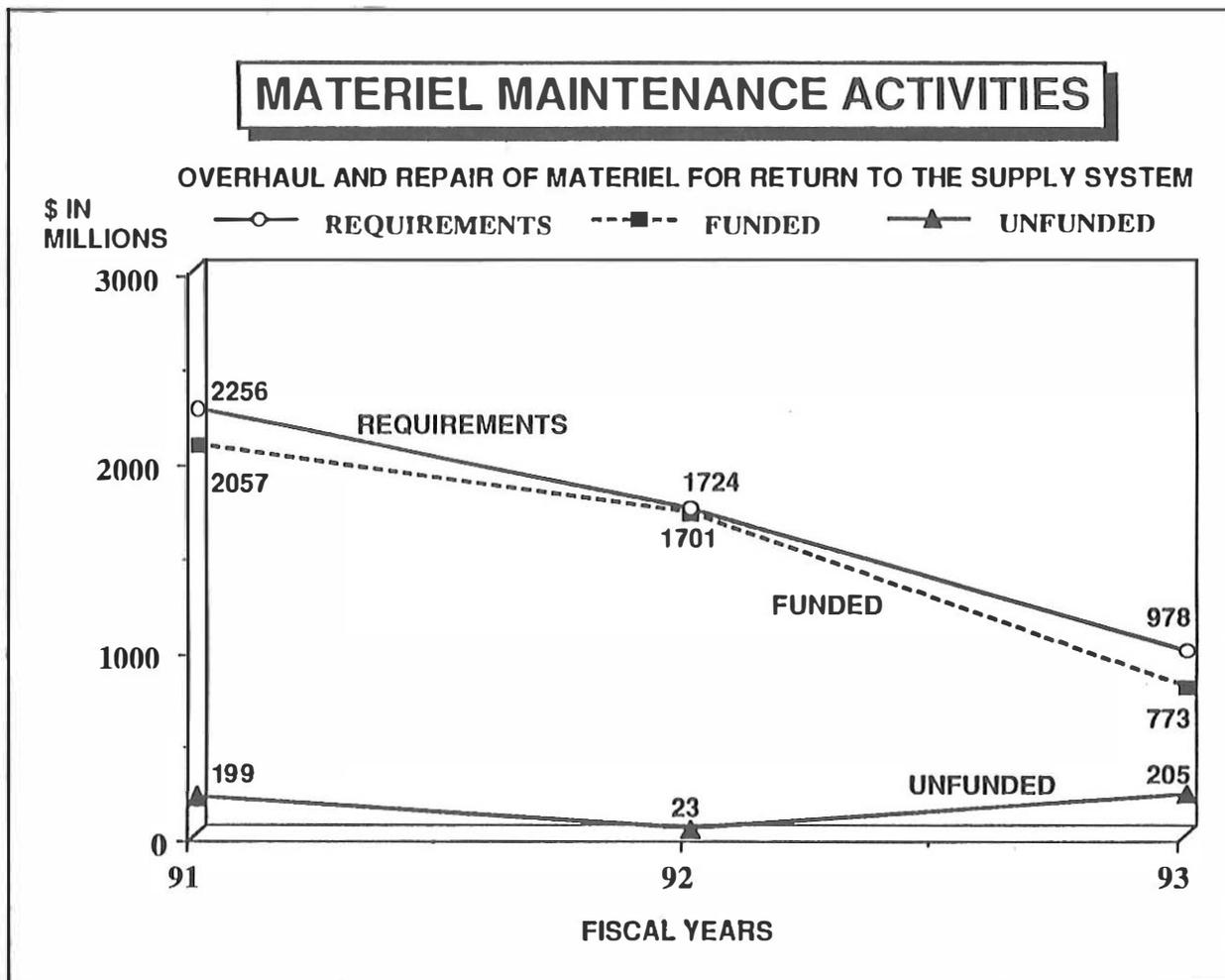
	<u>FISCAL YEARS</u>		
	<u>1991</u>	<u>1992</u>	<u>1993</u>
New Construction	32	87	23
Improvement	33	75	144
Planning & Design	3	5	9
Foreign Currency Acct Expenditures	<u>18</u>	<u>0</u>	<u>0</u>
Subtotal AFH Construction	86	167	176
Operations	216	242	212
Utilities	303	320	314
Maintenance	<u>427</u>	<u>467</u>	<u>496</u>
Subtotal Operation & Maintenance	991	1,029	1,022
Leasing	326	361	358
Foreign Currency Acct Expenditures	<u>128</u>	<u>0</u>	<u>0</u>
Subtotal AFH O&M	1,445	1,390	1,380
Total AFH	1,531	1,557	1,556

The only new housing construction is for 200 new units in Hawaii. There is an aggressive reconstitution program, however, to rehabilitate and modernize existing housing units.

OTHER BUDGET CONSIDERATIONS

Depot Maintenance

The depot maintenance program finances the overhaul and depot level repair of major end items; the maintenance of embedded software; and the calibration of test, measurement and diagnostic equipment. The maintenance funding profile for overhaul of materiel to be returned to the supply system is shown on the next chart.



The high dollar amount in FY 1991 is explained by the fact that funding for secondary level item repairs was transferred to the stock fund at the end of FY 1991. This amounts to over \$700 million per year. Both FY 1991 and FY 1992 benefit from Desert Storm funding. Funding for Desert Storm, however, has not been authorized beyond FY 1992. Therefore, \$734 million in FY 1992 does not carry forward to FY 1993.

The depot maintenance program for FY 1993 is funded at an estimated 79 percent of requirements. It is generally in line with the downsizing of the Army and includes a manageable shortfall of about \$200 million in FY 1993. There is a strong probability that there will be some delayed maintenance problems from the Gulf War. If so, more funds will be needed.

Facilities Maintenance and Repair

The next chart shows funds in all Army appropriations which are used for facilities maintenance and repair including family housing. For comparability purposes, the funds for minor construction and major repair (which were shifted from the OMA appropriation to MCA in FY 1993) are included.

FACILITIES MAINTENANCE AND REPAIR (\$ in Millions)			
<u>APPROPRIATION</u>	FISCAL YEARS		
	<u>1991</u>	<u>1992</u>	<u>1993</u>
Military Construction, Army	0	0	539
Operation and Maintenance, Army	1,440	1,242	748
Operation and Maintenance, Army Reserve	43	39	25
Military Construction, Army Reserve	0	0	23
Operation and Maintenance, Army National Guard	66	65	49
Military Construction, Army National Guard	0	0	29
Research, Development, Test & Evaluation	65	76	64
Army Industrial Fund Total	<u>110</u>	<u>121</u>	<u>112</u>
	1,724	1,543	1,589
Backlog of Maint & Repair:	(2,918)	(4,012)	(5,181)
Army Family Housing (M&R)	473	467	496
Deferred Maintenance & Repair	(561)	(749)	(815)
NOTE: Reflects the major repair/minor construction transfer from O&M and RDTE to Army MILCON construction accounts (MCA, MCAR, MCNG).			

The backlog of maintenance and repair (BMAR) includes all facilities, except family housing. This backlog is building up significantly with over \$5 billion estimated by FY 1993. The family housing deferred maintenance and repair (DMAR), while of considerably lesser magnitude, is also cause for concern.

Environmental Funding

Environmental costs are now major items in the budget. Army funding is reflected in two parts: (1) compliance funding which is included throughout the Army's budget, and (2) funds provided from the Defense Environmental Rehabilitation Account (DERA) for environmental rehabilitation and cleanup. Together, the Army's piece of this amounts to a very significant \$1.15 billion in FY 1992 and \$1.12 billion in FY 1993. FY 1992 funding includes a supplemental request of \$116 million, now before Congress, which is needed to meet current compliance requirements. The Army is serious about its environmental obligations. The requirements are large and we can expect to see increasing demands in the future.

RESERVE COMPONENTS SUMMARY

Previous discussions of the Army budget have incorporated data relating to the Total Army, active as well as the ARNG and the USAR. This section is provided, however, to focus on the reserve components which represent slightly more than 50 percent of the Total Army strength.

U.S. Army National Guard (ARNG)

The ARNG budget includes three separate appropriations: 1) National Guard personnel (to include retired pay accrual); 2) operations and maintenance, and 3) military construction

ARMY NATIONAL GUARD (\$ in Millions)		
<u>APPROPRIATIONS</u>	FISCAL YEARS	
	<u>1992</u>	<u>1993</u>
National Guard Personnel	3,337	3,167
Operation and Maintenance	2,212	2,134
Military Construction	<u>215</u>	<u>47</u>
Total	5,764	5,348

It should be noted that these are appropriations identified specifically for the Army National Guard and do not represent total ARNG costs such as those for equipment and support covered in other Army appropriations. Also, the National Guard is funded in part by the individual states for certain state functions.

Projected force structure and end strengths are shown on the next chart.

ARMY NATIONAL GUARD HIGHLIGHTS		
	FISCAL YEARS	
	<u>1992</u>	<u>1993</u>
FORCE STRUCTURE:		
Divisions	10	8
Separate Brigades	13	11
Maneuver Battalions	156	131
Roundout Units (Brigades)	7	7
MANNING		
Military End Strength	431,200	383,100
Full Time Support		
Civ/Mil Techs	28,381	25,581
Active Guard/Reserve (AGR)	24,611	22,637

The program would cut ARNG strength to 383,100 by the end of FY 1993, some 48,100 below the congressionally authorized end strength for FY 1992. In addition, two National Guard divisions are scheduled for deactivation through consolidations during FY 1993. Also, a list of unit reductions throughout the U.S. was recently announced for FY 1992 and FY 1993. These reductions are controversial and, as was the case last year, strength cuts as proposed may not be accepted by Congress.

U.S. Army Reserve (USAR)

Similar to the ARNG, the USAR has three appropriations in the DoD budget. The USAR is totally funded from federal funds, but some costs for equipment, training, and support are provided from other Army appropriations.

ARMY RESERVE (\$ in Millions)		
<u>APPROPRIATIONS</u>	FISCAL YEARS	
	<u>1992</u>	<u>1993</u>
Reserve Personnel, Army	2,379	2,143
Operation and Maintenance	1,021	990
Military Construction	<u>108</u>	<u>32</u>
TOTAL	3,508	3,165

Force structure and personnel strength data for the USAR are shown on the following chart.

ARMY RESERVE HIGHLIGHTS		
FORCE STRUCTURE: (% OF TOTAL FORCE) (AUTHORIZATIONS)		
Combat	8%	
Combat Support	36%	
Special Operations Forces	56%	
Combat Services Support	38%	
MANNING	FISCAL YEARS	
	<u>1992</u>	<u>1993</u>
Soldiers		
Paid Drill/Individual Trng	275,202	234,307
Active Guard/Reserve	12,838	12,152
Individual Mobilization		
Augmentee Pay Group B	13,800	11,041
Individual Ready Reserve	433,170	458,368
Civilian Technicians	8,112	6,178

Strength is expected to go down by over 40,800, to about 234,300, by the end of FY 1993 and further to 229,000 by FY 1995. Also, the Secretary of Defense recently identified 830 ARNG and USAR units for inactivation or reduction in FY 1992 and FY 1993. As with the ARNG, Army Reserve strength has become a congressional issue.

The Individual Ready Reserve (IRR) pool, which can be called in an emergency, is growing from about 295,000 in FY 1989 to an estimated 458,000 by FY 1993. This increase was caused by the statutory extension of service obligations from six to eight years starting in FY 1991. This trend will continue for a while but will then drop off when the impact of reduced accessions is felt. Over 17,000 IRR members were activated to support Desert Shield/Desert Storm.

Of special interest is the U.S. Army Reserve Command which is now operational and subordinate to Forces Command. By 1 October 1992 it will assume responsibility for all Army Reserve units in the United States, with the exception of Reserve Special Forces.

Reserve Components - Assessment and Issues

Personnel funding in the budget matches strength assumptions. The strength cuts, however, are controversial and are being challenged. If Congress does not approve the proposals in the FY 1992 and FY 1993 budgets, there will be serious budget shortfalls, not only in the RC military pay appropriations, but in the associated O&M appropriations as well.

The full time manning target of 14 percent is not being met by either the ARNG or the USAR, especially the Army Reserve. This is of concern if we expect more effective training and improved readiness on the part of RC units.

Military construction funds are at an all time low, reflecting the Secretary of Defense's construction moratorium and the uncertainty concerning RC structure and strength projections.

Reserve component equipment modernization is another important budget issue. The downsizing of the active force will permit the shifting of a significant amount of first-line equipment to the ARNG and the USAR, greatly increasing the modernization pace of high priority units. Equipment brought back from the Persian Gulf will require overhaul and maintenance which will delay its issue to units. The same is true of equipment being returned from Europe. RC units deployed to the Persian Gulf with their organic equipment will also have major overhaul and maintenance requirements.

In the FY 1992 Appropriations Act, Congress provided a dedicated procurement appropriation for National Guard and Reserve equipment which included \$90 million for the Army Reserve and \$193 million for the Army National Guard.

In addition, the FY 1993 Army budget justification for the UH-60 Black Hawk procurement is based on National Guard requirements. Of the Army's total FY 1993 procurement request, approximately \$1 billion is specified to be made available to the ARNG and the USAR.

The Reserve Component Automation System (RCAS) is the major automation program in the Army procurement budget. RCAS is being designed to support the RC by providing a network for managing day-to-day operations as well as facilitating mobilization.

Uncertainty remains the biggest overall problem for the RC. The final size and configuration are still to be resolved. And, until that is settled, planning and budgeting are tentative.

ARMY BUDGET ASSESSMENT

The Army structure as depicted in the FY 1993 budget is Base Force driven. At the same time, it is under a series of rigid fiscal constraints. Within these guidelines, there is little flexibility and virtually no reprogramming potential.

Personnel funding is generally adequate for the projected strength in the budget. It could be in trouble, however, if the reductions do not take place as planned. This looms as a large problem with respect to Reserve Component strength, where it seems probable the full cuts will not be approved by Congress. That was indeed the case in the FY 1992 budget.

A related consideration, however, is that personnel reductions cannot be accelerated significantly with the idea of saving money the first year. This has long been recognized with civilian employees under civil service procedures. It is now, with the exception of new accessions and retirees, also the case with active force personnel. Under current procedures and entitlements, there is a substantial up-front cost that goes with both voluntary and involuntary separations. Such items as separation pay, SSB or first year VSI, additional costs for moving (with family) to home destinations, and payment for accrued leave must all be considered. Also, DoD must budget for initial unemployment insurance, which is reimbursable to Department of Labor. Since pay savings in the first year will not average more than half a man-year because of execution time lag, any additional separations that are not retirement eligible will most likely cost more than they save for the first year. While military pay may seem attractive to budget cutters, particularly with its high first year outlay content of higher than 90 percent, it won't work as an offset in the budget now under consideration.

This year, O&M funds are especially tight. They start out in a severely strained position and cannot be used to offset military personnel costs without doing serious damage to readiness. In fact, any increase in military personnel costs — like retaining more RC personnel than budgeted — will automatically carry with it certain additional O&M requirements. The budget, as submitted, has some inherent deficiencies, particularly in maintenance backlog, but also in base operations in general. The temptation in congressional committees will be to grab O&M funding because it has a high (about 80 percent) first-year outlay savings, but this would be a grave mistake. There is no slack to be absorbed so readiness would have to suffer. Shades of the mid-to-late 1970s! Post-Desert Storm materiel maintenance could be more extensive than anticipated and could extend well into FY 1993 requiring much greater effort than is now planned. The prediction is that O&M will be in trouble before the year is ended and may itself require bailing out.

Nor would further cuts to the Army acquisition account help to solve any military personnel and O&M funding problems. In the first place, procurement has a much slower outlay impact the first year, and outlays are an essential control under the rules of the budget agreement. In the second place, there are really no big-ticket items like B-2 bombers and Seawolf submarines in the Army budget — multi-billion dollar programs that could be used as bill payers. More importantly, Army acquisition is already terribly underfunded. It has been cut to the bone to fit within the restricted funding limits of the proposed budget.

The Army procurement budget (at \$6.5 billion) is the lowest in years, and downstream projections are no better, meaning that future modernization prospects are not bright. Big questions for the Army are how to upgrade and how to get the next generation of equipment into the hands of troops. It is an affordability issue with no pat answers because the funds simply aren't there.

While the research and development program appears to be one of the more stable parts of the Army budget, even here, danger signals are flashing. The only two big R&D programs — the Comanche helicopter and Armor Systems Modernization (ASM) — are in potential trouble. The Comanche has already been slipped and is proceeding as a prototype program. ASM has been totally restructured with only the advanced field artillery vehicle and its accompanying ammunition resupply vehicle on a positive course. And even these face a potentially serious affordability challenge. Without these two important R&D programs, there is little in the budget for the next generation of Army systems.

Military construction is on a so-called "MILCON pause", with almost nothing in the FY 1993 budget that is discretionary. The program is far from meeting the very modest goal of a 50-plus year revitalization cycle. Recent construction budgets place the Army on a 100-year cycle which is totally inadequate for the long term. (Note: Revitalization cycle is determined by the percentage of plant replacement value invested each year—if one percent of value, it would translate to a 100-year cycle; if two percent, it means a 50-year cycle).

Family housing, on the other hand, is a fairly healthy appropriation, holding its own in a decreasing budget. One concern is the increasing trend in deferred maintenance, estimated to be about \$850 million by the end of FY 1993. Also, it would require approximately \$210 million more in FY 93 to get on a desired 35-year life cycle.

In the case of both the USAR and the ARNG, the military personnel and O&M budgets will be way off the mark if strengths are not reduced as projected—and such a result is likely. Also, the goal of 14 percent full-time support has not been funded and military construction funding for the RC is at an absolute minimum.

With the general cutback in defense procurement, the industrial base may be in jeopardy in a number of areas. A clear example for the Army is the ability to design and manufacture heavy tracked combat vehicles. If no funding is provided to produce new M1A2 tanks or to upgrade M1 tanks, the only tank line in the U.S. would shut down and it would be a matter of years to get it back in to production again. Rotary wing aircraft could be headed in this direction in the future, as the Comanche is by no means assured of progressing to production and commercial business alone will not sustain a base for medium-to-heavy helicopters. Ammunition surge capacity will also present a problem in the future. There is a clear need for policies and actions to ensure a capability for the production of military unique items in each sector of the defense industrial base.

The capability of the Army to perform its future missions as a strategic projection force is heavily dependent on strategic deployability and the availability of adequate airlift and sealift. While airlift and sealift are not in the Army budget, the Army strongly supports the recommendations of the Mobility Requirements Study as submitted to Congress by the Secretary of Defense. The Army also supports the continued procurement of C-17 aircraft and funding for proposed additional sealift capability.

The Army budget of \$63.7 billion is excessively tight. It provides no flexibility. This means that the downsizing must be carried out on schedule in terms of both personnel and force structure. There

is no merit in waiting because the dollars are already gone. At the same time, it is dangerous to play around with substantive changes in the budget review process. The big or easy items to cut have long gone. Most desired changes are additive — such as inserting new items, turning down proposed recisions, denying strength cuts, and postponing realignments — but the rules do not permit adding to defense dollar totals. It is so tight that any substantive changes will cause all sorts of collateral damage to the rest of the budget. They should not be made lightly or for parochial reasons.

A word of caution—dollar cuts for support activities translate into civilian employee cuts. While the dollars for the pay of civilian employees are reduced generally in line with the projected drawdown, this is the very same civilian force needed for the maintenance backlog; also to help support and manage the transition and the realignments. It would be easy to get the “cart before the horse” and save on civilian costs before the job is done.

Throughout this discussion we have avoided the arguments on force size and mix as issues by themselves. The Base Force Plan has been used as the base-line for this budget. Force size and mix are vital issues demanding thoughtful and far-sighted analysis, but major changes on short notice are not possible without fracturing the rest of the budget. Additional cuts would save virtually nothing in the initial year, and probably cost more because of personnel transition and separation costs. AUSA believes, however, that 12 active divisions and an active strength of 500,000 to 535,000 are the absolute minimum that should be approved. AUSA also concurs that a larger Reserve Component force than planned is desirable, but the Army’s proposed austere budget cannot be used as the bill-payer to provide this without breaking the force.



APPENDIX I

Budget Language

The National Defense Budget, which carries the Federal Account Number 050 as a designator, includes not only the Department of Defense (military) budget, but also funding for defense-related activities of the Department of Energy (atomic energy) and miscellaneous military activities of other federal agencies.

The Department of Defense (DoD) Budget, which carries the Federal Account Number 051, includes funding for DoD itself. It is the budget which comes under the jurisdiction of the Secretary of Defense and is frequently referred to as the Pentagon Budget. The DoD budget accounts for over 95 percent of the National Defense function in FY 1993.

Budget Authority (BA). BA is the authority to enter into obligations which will result in the payment of government funds. Budget authority is normally provided in the form of appropriations. The defense budget as presented to Congress is expressed in terms of budget authority.

Total Obligational Authority (TOA). TOA is a DoD term which includes the total value of the direct program regardless of the method of financing. As a practical matter, TOA totals in the aggregate do not differ significantly from BA. TOA is used generally in managing the service budgets, as it is the most accurate reflection of program value. The differences are attributed principally to offsetting receipts, such as recoveries from foreign military sales, and financing adjustments. Rescission and reappropriation of prior year appropriations and transfers to subsequent year programs are all examples of financing adjustments reflected in BA but not in TOA. Revolving fund transfers and foreign currency transfers are financing adjustments which appear in TOA but not in BA.

Outlays. Outlays are the measure of government spending. They are the payments actually made for goods and services and interest payments during a particular year. These payments (outlays) lag obligations because of the sequential cycle of congressional appropriations, contracting, placing orders, receiving goods or services and (finally) making payments. Thus, in DoD for FY 1992, approximately 37 percent of the outlays pertains to prior year appropriations.

Receipts. Collections from taxes or other payments to the federal government.

Deficit. The amount by which outlays exceed receipts in any particular year. The reverse of this is called surplus.

Current or "Then Year Dollars." These are the dollar figures in the budget (or in the accounting records) actually associated with the stated date (past, present or projected). Figures for prior years and the present year are those actually recorded (not adjusted for inflation), but figures projected for future years contain estimated inflationary increases expected to occur in the program.

Constant Dollars. These are dollars expressed in terms which have been adjusted for inflation relative to some reference or base year. Thus, all figures have the same relative value for making comparisons. This is sometimes referred to as real dollars or dollars in real terms. It must, however, always relate to a base year, such as FY 1993 dollars.

APPENDIX II

FY 1992-1993 Army Budget Summary (TOA - \$ in Millions)

APPROPRIATION	FISCAL YEARS		
	1991	1992	1993
MILITARY PERSONNEL, ARMY	\$27,535	\$24,861	\$23,373
OPERATION & MAINTENANCE, ARMY*	36,519	20,872	16,905
PROCUREMENT	10,861	8,219	6,814
Aircraft	(1,248)	(1,829)	(1,291)
Missiles	(2,973)	(1,106)	(982)
WTCV	(1,941)	(775)	(623)
Ammunition	(2,047)	(1,368)	(824)
Other	(2,652)	(3,141)	(3,094)
RESEARCH, DEVELOPMENT, TEST AND EVALUATION	5,573	6,453	5,414
MILITARY CONSTRUCTION, ARMY	875	872	1,010
ARMY FAMILY HOUSING	1,531	1,557	1,556
Operations	(1,445)	(1,390)	(1,380)
Construction	(86)	(167)	(176)
RESERVE COMPONENTS	8,794	9,271	8,513
National Guard Personnel, Army	(3,266)	(3,337)	(3,167)
Operation & Maintenance, ARNG	(2,015)	(2,212)	(2,134)
Military Construction, ARNG	(313)	(215)	(47)
Reserve Personnel, Army	(2,179)	(2,379)	(2,143)
Operation & Maintenance, AR	(942)	(1,021)	(990)
Military Construction, AR	(77)	(108)	(32)
ASF/AIF	668	0	0
TOTAL	\$92,359	\$72,110	\$63,587
OPERATION DESERT STORM	(19,303)	(4,277)	(0)

*Includes National Board for Promotion of Rifle Practice

**Operation and Maintenance, Army
Budget Estimates (\$ in Thousands)**

BUDGET ACTIVITY/PROGRAM	FY 1991	FY 1992	FY 1993
P2 - GENERAL PURPOSE FORCES			
Combat Development Activities	\$ 283,001	\$ 279,902	\$ 251,806
Currency Fluctuation Account	475,380	0	0
JCS Exercise	61,538	72,811	69,260
Land Forces	11,204,938	6,023,367	4,390,268
Unified Commands	90,095	37,039	32,307
Defense Communications System Support	95,752	65,268	90,029
BASOPS(-): Land Forces	3,151,463	2,183,774	2,061,645
P2M Environment	186,145	220,120	191,560
RPM: Land Forces	1,177,853	915,352	518,562
Total General Purpose Forces	16,726,165	9,797,633	7,605,437

**P3 - COMMUNICATIONS, INTELLIGENCE
AND OTHER ACTIVITIES**

Intelligence*	361,536	385,047	415,225
Defense Communications System Support	241,738	231,226	225,468
Nondefense Communications Support	391,609	369,497	307,890
Strategic Command and Control	62,950	69,562	68,357
Information Services	454,132	521,823	504,766
Base Operations - Communications	57,810	53,196	23,787
P3C Environment	6,793	5,216	2,085
Communication Security	20,247	21,766	18,468
RPM: Communication	14,265	9,411	5,107
Total Communications, Intelligence and Other Activities	1,611,080	1,666,744	1,571,153

*Includes strategic intelligence; security investigation; and treaty verification

P7 - CENTRAL SUPPLY AND MAINTENANCE

Nondefense Communication System Support	34,750	32,544	45,679
Maintenance Support Activities	673,923	0	0
Depot Maintenance	2,056,650	1,700,731	772,692
Central Supply Activities	611,838	768,259	673,098
Environmental Restoration	411,339	0	0
Logistics Support Activities	768,286	583,332	537,439

BUDGET ACTIVITY/PROGRAM	FY 1991	FY1992	FY1993
Real Estate	0	117,507	111,591
Resale Commissaries*/TISA	2,449,021	33,134	33,301
Single Manager Conventional Ammo	0	307,776	305,755
Transportation	2,738,246	889,000	662,747
BASOPS(-): Supply Activities	469,875	276,321	243,532
P7S Environment	32,530	112,429	56,872
RPM: Supply Activities	79,758	43,927	61,157
Industrial Fund/Stock Fund Support	0	0	0
Total Central Supply and Maintenance	10,326,216	4,864,960	3,503,863

*Resale commissaries transferred to Defense Comunnissary Agency in FY92

**P8 - TRAINING, MEDICAL AND OTHER
GENERAL PERSONNEL ACTIVITIES***

Flight Training	185,552	230,875	266,167
Officer Acquisition	41,128	42,088	45,549
One Station Training	25,544	16,281	15,425
Professional Education	95,348	95,751	56,564
Recruit Training	9,643	5,890	5,250
Senior ROTC	100,991	100,857	97,493
Specialized Training	240,912	253,250	208,049
Training Support	526,999	451,541	443,583
Acquisition Training	0	0	72,414
Recruiting and Examining	253,474	252,442	250,374
Armed Forces Radio and TV Service	16,705	18,523	18,397
Army Continuing Education System	101,050	102,688	98,289
Civilian Training, Education & Development	105,808	108,156	110,231
Family Support	0	146,580	144,691
Junior ROTC	31,190	32,331	33,324
Other Personnel Activities	92,368	224,277	210,347
Veterans' Education Assistance Program	80,668	64,215	35,632
Audio Visual Support	7,022	0	0
Care in Nondefense Facilities	1,309,190	0	0
Care in Regional Defense Facilities	463,159	0	0
Command Health Care	12,982	0	0
Dental Care Activities	90,051	0	0
Education and Training	76,018	0	0
Examining Activities	32,817	0	0
Other Medical Activities	401,944	0	0
Station Hospitals and Clinics	762,242	0	0
BASOPS(-): Health Services Comunand	74,280	0	0
BASOPS(-): Recruiting and Examination	128,607	136,158	138,170
BASOPS(-): Training and Education	1,020,723	859,685	856,201

BUDGET ACTIVITY/PROGRAM	FY 1991	FY1992	FY1993
P8M Environment	5,546	0	0
P8T Environment	60,120	66,446	36,659
RPM: Health Services Command	36,886	0	0
RPM: Training and Education	290,884	273,756	163,209
Total Training, Medical and Other General Personnel Activities	6,679,851	3,481,790	3,306,018

*Figures adjusted according to O & M Justification, Book Volume I-B

**P9 - ADMINISTRATION AND ASSOCIATED
ACTIVITIES**

Nondefense Communication System Support	25,003	21,253	22,000
Department Headquarters	130,685	119,152	121,540
Public Affairs	10,440	10,963	11,476
Criminal Investigation Activities	33,526	24,758	24,355
Service-wide Support	633,444	546,888	392,568
 BASOPS(-): Leases	 83,956	 75,006	 111,382
Total Administration and Associated Activities	917,054	798,020	683,321

P10 - SUPPORT TO OTHER NATIONS

International Military HQs and Agencies	242,572	244,771	216,420
Miscellaneous Support to Other Nations	16,115	17,932	18,888
Total Support to Other Nations	258,687	262,703	235,308

TOTAL OPERATION AND MAINTENANCE, ARMY	\$36,519,053	\$20,871,850	\$16,905,100
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Procurement Budget Summary Data
(\$ in Millions)

	FISCAL YEAR					
	1991		1992		1993	
	QTY	AMT	QTY	AMT	QTY	AMT
AIRCRAFT PROCUREMENT, ARMY						
Aircraft						
AH-64 Attack Helicopter (Apache)		\$ 88.4	4	\$206.9		\$147.8
Guardrail Common Sensor	3	78.0	6	195.8	5	111.9
UH-60 Helicopter (Black Hawk) (MYP)	48	152.4	60	507.5	60	406.9
New Training Helicopter			37	23.5	70	44.9
Modifications						
CH-47 Cargo Helicopter (MYP)		300.1		283.9		15.0
Armed OH-58D (Kiowa Warrior)		28.4		228.8		96.2
AH-64		43.7		82.8		49.1
UH-60		131.8		34.8		12.7
Guardrail		41.0		26.0		93.0
Aircraft Survivability Equipment		21.5		19.0		7.1
Spare and Repair Parts		9.9				101.0
Support Equipment and Facilities						
Aircraft Survivability Equipment		105.9		49.1		75.2
Avionics Support Equipment		44.2		27.1		33.7
Common Ground Equipment		66.8		47.5		43.1
Industrial Facilities		25.8		27.7		15.0
Other		109.7		68.8		38.7
Total		1,247.6		1,829.2		1,291.3

MISSILE PROCUREMENT, ARMY

Missiles						
Patriot (MYP)	1,183	1,002.8	97	156.0		25.2
Stinger (MYP)	6,922	252.2		38.2		9.5
Avenger	88	91.9	144	130.9	144	103.3
Avenger (Adv Proc)		25.7		52.7		44.9
Hellfire	5,511	192.6	112	19.7	2,158	103.4
TOW 2	14,784	267.0	10,000	210.4	9,440	183.1
MLRS Rockets (MYP)	56,286	424.7	3,714	61.7		2.2
MLRS Rockets (Adv Proc)		13.6				
MLRS Launchers	66	129.6	44	133.6	44	197.3
MLRS Launchers (Adv Proc)		45.9		3.0		
ATACMS	373	221.4	300	146.9	340	163.2
ATACMS (Adv Proc)		15.5		24.0		25.0
Javelin (Adv Proc)						18.3
Modifications						
Patriot		142.8		35.5		10.0
Hawk		54.2		10.0		1.5
TOW		31.3		8.3		5.0
MLRS		17.5		36.9		12.2
Other Mods		12.8		15.5		4.3

PROCUREMENT Cont...

	FISCAL YEAR					
	1991		1992		1993	
	QTY	AMT	QTY	AMT	QTY	AMT
Spares and Repair Parts		1.9				42.1
Support Equipment and Facilities						
Air Defense Targets		12.5		11.2		11.2
Production Base Support		8.3		1.0		10.2
Other		8.8		10.8		10.5
Total		2,972.9		1,106.3		982.3

WEAPONS AND TRACKED COMBAT VEHICLES PROCUREMENT, ARMY

Tracked Combat Vehicles						
Bradley Fighting Vehicle (MYP)	600	667.3		108.6		103.9
M1 Abrams Tank Series (MYP)	240	696.4	18	106.6		32.4
M1 Abrams Training Devices		15.0		8.0		1.0
Armored Gun System (AGS)						4.7
Weapons and Other Combat Vehicles						
Howitzer, Lt Towed, 105mm, M119	42	26.8	86	36.4	87	47.8
Machine Gun, 5.56mm (SAW)	5,930	11.4	2,316	5.8	4,416	9.8
Grenade Launcher, Auto 40mm	820	12.3				
Launcher, Smoke Grenade	2,763	1.7	1,637	1.1		
Mortar, 120mm	196	12.3	433	27.2	242	17.5
M16 Rifle	33,160	14.2	53,575	24.1		
5.56 Carbine XM4			10,000	5.0	18,930	9.7
Personal Defense Weapon				.6		.8
PDW 9mm Sub Compact			4,080	1.9		
Veh Rapid Fire Wpn - Bushmaster	130	8.9				
Modifications						
Carrier, Mod				5.7		5.7
BFVS Series Mod		88.2		109.7		34.5
Howitzer, Med SP FT 155mm M109 Mod		179.3		126.1		125.4
Howitzer, Med SP FT 155mm M109A5				22.1		23.1
FAASV PIP to Fleet						25.8
M1 Abrams Tank Mod		110.2		79.3		25.2
Mods Less Than \$2.0M		5.6		1.6		2.9
SAW Mods				2.4		3.1
M16 Mods		7.4		4.6		9.3
Support Equipment and Facilities						
Spares and Support Equipment						52.6
Production Base Support		64.4		86.7		72.3
Industrial Preparedness		6.4		7.2		6.9
Other		13.4		4.2		8.9
Total		1,941.2		774.9		623.4

PROCUREMENT Cont...

	FISCAL YEAR		
	1991	1992	1993
AMMUNITION PROCUREMENT, ARMY			
Small/Medium Cal Ammunition	375.4	149.0	85.7
Mortar Ammunition	87.1	73.4	16.4
Tank Ammunition	698.7	418.6	191.7
Artillery Ammunition	263.9	364.2	259.9
Artillery Fuzes	61.4	22.0	0.0
Mines	93.4	8.2	3.0
Rockets	87.8	41.1	10.0
Other Ammo & Miscellaneous	146.4	87.8	63.1
Production Base Support	232.7	203.8	193.8
Total	2,046.8	1,368.1	823.6

1991		1992		1993	
QTY	AMT	QTY	AMT	QTY	AMT

OTHER PROCUREMENT, ARMY

Tactical and Support Vehicles

High Mobility Multipurpose						
Wheeled Vehicle (HMMWV)*	7,875	243.4	7,446	286.9	6,437	229.5
Family of Medium Tactical Vehicles*	277	66.3	1,197	171.6	2,384	291.1
Family of Heavy Tactical Vehicles*	423	131.3	281	99.7	961	315.7
Passenger Carrying Vehicles			138	3.6	38	2.1
General Purpose Vehicles				4.8		6.0
Special Purpose Vehicles		7.5		4.9		5.7
Other Tactical Vehicles and Programs		235.8		267.5		32.0

Communications and Electronics Equipment

Satellite Communications		66.6		109.0		201.7
Combat Communications		383.0		471.7		362.4
(SINCGARS)		(262.9)		(287.6)		(223.2)
Information Security		30.9		40.0		38.5
Sustaining Base Communications		70.7		82.9		126.1
Intelligence Programs		120.9		119.1		169.6
Electronic Warfare/Surveillance		114.6		169.7		152.9
Tactical Command & Elec Prog		45.9		76.0		90.1
ADPE		58.7		285.3		300.0
(RCAS)				(153.7)		(152.2)
Other Communications & Elec Prog		249.9		178.7		244.2
(TMDE)		(60.4)		(88.5)		(75.7)
(Special Programs)		(68.1)		(14.7)		(47.8)

Other Support Equipment

Chemical Defensive Equipment		111.7		155.2		75.7
(NBC Reconnaissance Veh)	(15)	(45.0)	(25)	(50.0)		
Bridging Equipment		0.6				
Engineer Equip (Nonconstruction)		20.8		33.2		22.3
Combat Service Support Equipment		31.7		87.8		61.3
Petroleum Equipment		58.0		28.3		12.5
Water Equipment		31.6		33.1		17.0

PROCUREMENT Cont...

	FISCAL YEAR					
	1991		1992		1993	
	QTY	AMT	QTY	AMT	QTY	AMT
Medical Equipment		155.2		109.1		24.8
Maintenance Equipment		7.7		10.9		7.9
Construction Equipment		3.6		6.0		8.8
Rail Float Containerization Equipment		6.1		8.2		12.9
Generators		36.7		45.8		45.4
Materiel Handling Equipment		24.2		7.8		13.4
Nonsystem Training Devices		99.5		84.9		90.7
In/Depot Maintenance Equipment		46.2				
Other Support Equipment		193.0		159.3		133.3
Total		2,652.0		3,141.0		3,093.5
*Multi-year procurement						
TOTAL PROCUREMENT ALL APPROPRIATIONS (\$ MILLIONS)		\$10,860.5		\$8,219.5		\$6,814.1

**Research, Development, Test and Evaluation,
Army Budget Summary Data* (\$ in Millions)**

	FISCAL YEAR		
	1991	1992	1993
TECHNOLOGY BASE			
Basic Research	\$ 180.6	\$ 190.8	\$ 177.2
Exploratory Development	639.7	663.5	576.1
Subtotal	(820.3)	(854.3)	(753.3)
ADVANCED TECHNOLOGY DEVELOPMENT			
Logistics Adv Technology	8.6	10.5	11.3
Medical Adv Technology	47.3	55.5	0.0
Aviation Adv Technology	37.9	33.3	38.5
Weapons & Munitions Adv Dev	54.4	61.8	49.1
Cbt Veh & Auto Adv Technology	144.0	26.6	44.8
Human Fact/Pers/Trng Adv Tech	19.1	15.7	16.9
Msl/Rocket Adv Tech	11.2	19.5	21.2
Landmine Warfare Adv Dev	12.6	27.8	19.1
Night Vision Adv Development	23.0	22.6	28.4
Military HIV Research	44.0	27.8	0.0
Air Defense/Precision			
Strike Technology Demo	0.0	0.0	50.0
Other	107.5	110.6	152.4
Subtotal	(509.6)	(411.7)	(431.7)
STRATEGIC PROGRAMS	(159.1)	(73.2)	(43.8)
TACTICAL PROGRAMS			
Comanche	333.7	538.8	443.0
Air Defense C21-Eng Dev	55.8	31.8	40.5
Chem Bio Def Equip-Eng Dev	63.9	48.5	41.5
SADARM - Engr Development	107.9	150.0	63.0
ADDS - Army Data Dis System	15.6	22.5	13.4
Armored Systems Mod - AD	0.0	299.8	367.3
Adv Field Art TactData System	40.1	48.1	41.6
Cbt Veh Improvement Program	117.0	29.7	22.6
Missile/Air Defense PIP	54.0	57.9	56.3
Surf to Surf Msl Rkt System	41.7	46.5	0.0
BAT	26.8	115.7	121.5
Javelin (AAWS-M)	75.8	119.8	91.4
FAAD System	94.8	107.3	0.0
Longbow	197.0	232.2	281.8
Other	1,440.9	1,765.1	1,164.9
Subtotal	(2,665.0)	(3,613.7)	(2,748.1)
INTELLIGENCE AND COMMUNICATIONS			
SATCOM Ground Environment	26.9	113.4	137.0
Other	59.8	30.6	39.8
Subtotal	(86.6)	(144.0)	(176.8)

RDT&E* Cont...

	FISCAL YEAR		
	1991	1992	1993
DEFENSE MISSION SUPPORT			
Army Kwajalein Atoll	175.7	180.7	184.4
Army Test Ranges & Facilities	187.2	175.7	160.2
Army Tech Test Inst & Targets	74.1	88.8	76.5
Support of Operations Testing	58.5	66.5	60.4
Program-wide Activities	89.1	95.9	86.4
Maintenance & Repair - RPM	0.0	75.9	63.8
Minor Construction - RPM	0.0	4.0	3.9
Base Operations - RDT&E	208.0	312.1	308.6
Industrial Preparedness	30.8	12.0	19.7
Other	509.3	344.9	297.0
Subtotal	(1,332.7)	(1,356.5)	(1,260.9)
Total	\$ 5,573.3	\$ 6,453.3	\$ 5,414.5

*Selected Items By RDTE Budget Activity

NUMBERS MAY NOT ADD DUE TO ROUNDING

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