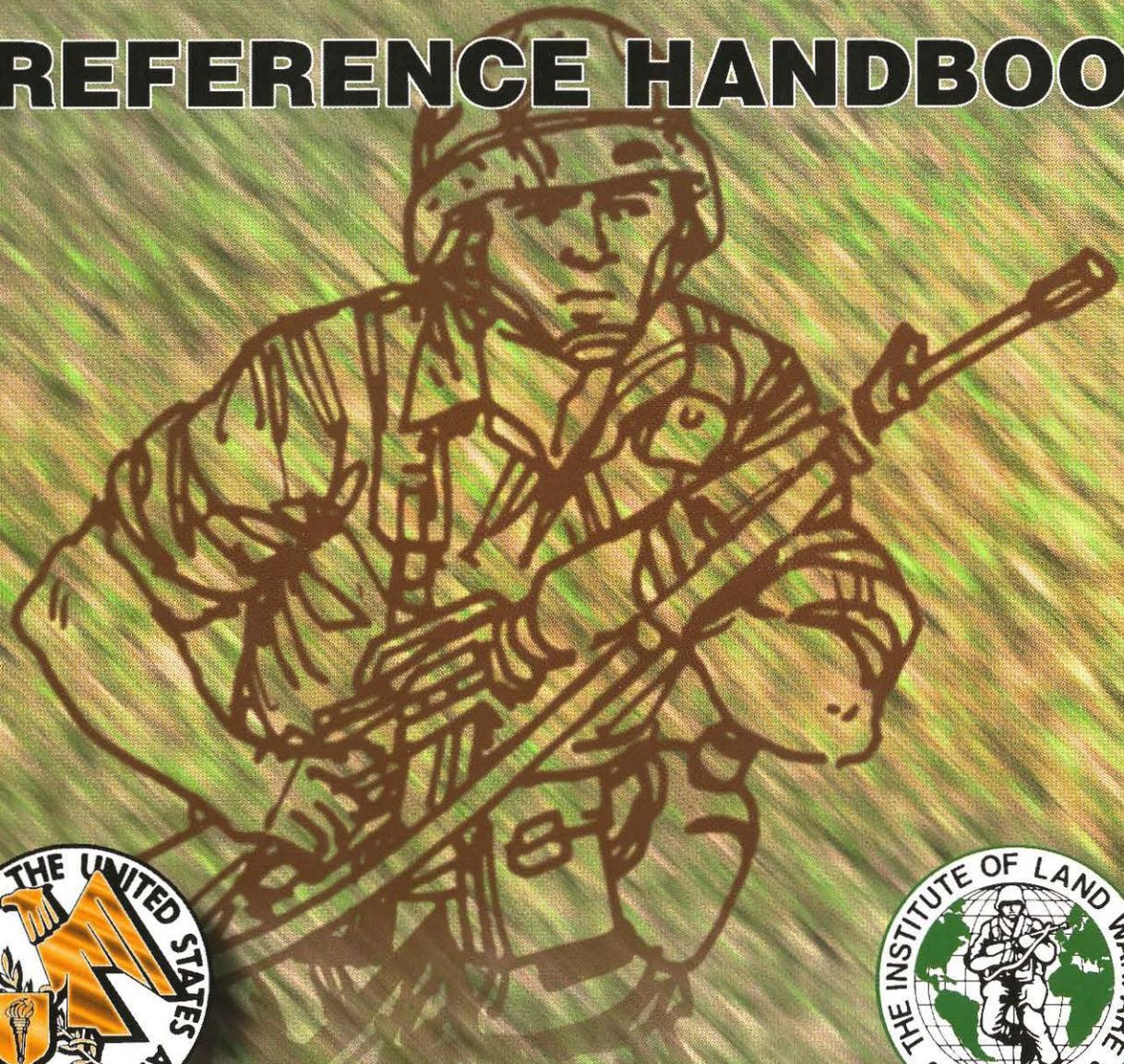


PROFILE of the ARMY

A REFERENCE HANDBOOK





Association of the United States Army

Profile of the Army

A Reference Handbook

June 1994

Institute of Land Warfare



**COMPILED BY THE STAFF OF THE
AUSA INSTITUTE OF LAND WARFARE**

June 1994

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ASSOCIATION OF THE UNITED STATES ARMY

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PROFILE OF THE ARMY

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FOREWORD

Profile of the Army is published by the Association of the United States Army's Institute of Land Warfare to provide basic information about the United States Army. It contains general information on the Army's organization, functions, weapon systems, missions and budget.

To show how the Army fits into the National Security structure of the United States, the *Profile* also discusses the organization of the Department of Defense, the Joint Chiefs of Staff, and the National Command Structure.

The appendices include descriptions of Army rank and branch insignia, a list of Army installations in each state, demographic information about the Army, and descriptions of selected Army weapon systems.

The United States Army faces many challenges and demands in the post-Cold War world. It must continue to provide a credible deterrent force to our potential enemies, maintain a forward presence in areas of critical importance to the United States, provide forces for peacekeeping and humanitarian operations, and retain a capability to expand in a national emergency.

The Institute of Land Warfare welcomes your comments and suggestions concerning *Profile of the Army*.

A handwritten signature in black ink, appearing to read "Jack N. Merritt". The signature is written in a cursive style with a long horizontal stroke at the end.

JACK N. MERRITT
General, USA Retired
President

SECTION I

INTRODUCTION

THE ARMY AND THE CONSTITUTION

The Constitution of the United States designates specific responsibilities to the President and Congress concerning the armed forces.

Article I, Section 8

“The Congress shall have the power to ... provide for the common defense; to declare war ... to raise and support armies ... to make rules for the government and regulation of the land and naval forces.”

Article II, Section 2

“The President shall be the Commander-in-chief of the Army and Navy of the United States; and of the militia of the several states, when called into the actual service of the United States.”

THE UNITED STATES ARMY

The Army has served the nation for 219 years. The Army is the oldest of the armed forces and is, in fact, older than the United States. On June 14, 1775, the Second Continental Congress authorized the enlistment of ten companies of riflemen in Maryland, Pennsylvania and Virginia. The Continental Congress also set pay scales and adopted articles of war to govern the new Continental Army. On June 15, George Washington was appointed commander in chief. General Washington formally took command of the Continental Army on July 3, 1775, when he joined the forces at Long Island, New York.

Since those early beginnings, the Army has often been called upon to protect the nation's interests – in the War of 1812 ... the Mexican War ... the Civil War ... the Indian Wars ... the Spanish-American War ... the Mexican Punitive Expedition ... World War I ... World War II ... the Korean War ... the Vietnam War ... Grenada ... Panama ... the Gulf War ... and most recently as part of the United Nations operation in Somalia.

Since the end of World War II, the Army has been a forward deployed force, focused primarily on the defense of Western Europe. However, America's Army of the future is a force projection Army, capable of rapidly deploying a variety of forces to all corners of the globe. It is a Total Army, consisting of National Guard, Reserve and Regular forces, as well as civilian employees.

Victory in the Cold War was achieved because for 45 years many thousands of American soldiers, sailors, airmen and marines stood shoulder-to-shoulder with their compatriots from other free-world armies on the ram-

parts of freedom. Over three million U.S. soldiers have served in Europe since the end of World War II, visible symbols of the American people's determination to defend freedom. These four decades of vigilance led to the fall of the Berlin Wall, the collapse of the Warsaw Pact, and victory in the Cold War.

America's Army of the 1990s and the 21st century will be significantly different from the Cold War Army. It will be a smaller, contingency oriented, power projection Army. It must be organized, trained and equipped to provide forces for employment by joint commanders in support of our national objectives and interests.

Combat operations will almost always be joint operations with the other services and may be part of multinational operations. The Army may also be called upon to operate in either combat or noncombat operations under the auspices of the United Nations.

The fundamental mission of the Army remains the same: to deter war and, failing that, to fight and win wars quickly and with minimum casualties.

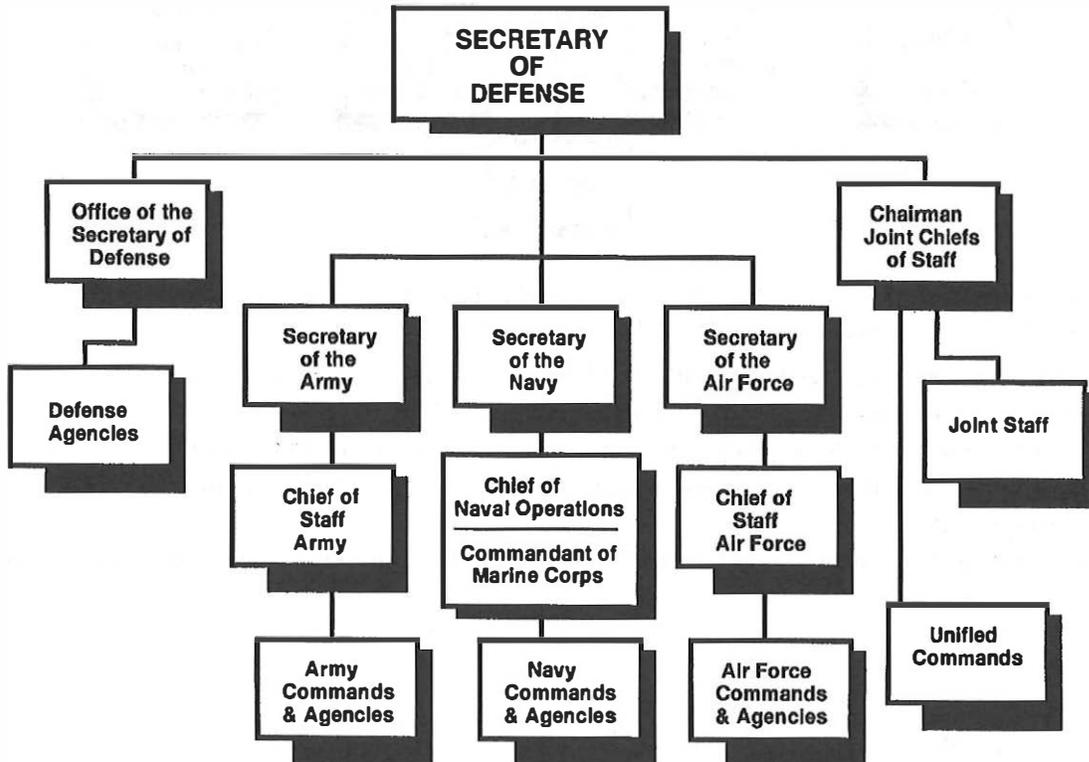
SECTION II

NATIONAL SECURITY STRUCTURE

THE DEPARTMENT OF DEFENSE

The Department of Defense was established as an executive department of the United States by the National Security Act of 1947 (50 U.S.C. 401).

The major elements within the Department of Defense are: the Office of the Secretary of Defense, the Joint Chiefs of Staff, the three military departments, the unified and specified commands and such other agencies as the Secretary establishes to meet specific requirements.

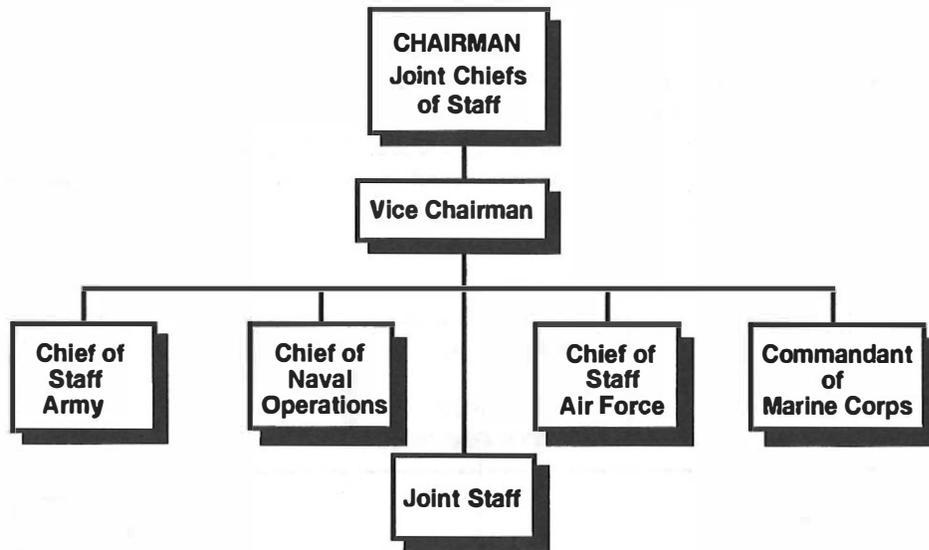


THE SECRETARY OF DEFENSE

“The Secretary of Defense is the principal assistant to the President in all matters relating to the Department of Defense, and, subject to the direction of the President and the provisions of the statute ... has direction, authority, and control over the Department of Defense.” (Section 113, Title 10 U.S.C.)

THE JOINT CHIEFS OF STAFF

The Joint Chiefs of Staff (JCS) consist of the Chairman (who outranks all other officers of the armed forces while holding office); the Vice Chairman; the Chief of Staff of the Army; the Chief of Naval Operations; the Chief of Staff of the Air Force; and the Commandant of the Marine Corps. The Chairman is appointed by the President, with the advice and consent of the Senate, for a term of two years. He may be reappointed for two additional terms. By law, the Chairman of the Joint Chiefs of Staff is the principal military advisor to the President, the National Security Council, and the Secretary of Defense. The Vice Chairman is appointed under the same conditions as the Chairman. He acts for the Chairman in his absence. The Chairman and Vice Chairman may not be members of the same service.



The Chairman of the Joint Chiefs of Staff, subject to the authority and direction of the President and the Secretary of Defense, is assigned (among others) the functions of:

- providing for strategic direction of the armed forces and preparing strategic plans;
- performing net assessments of the capabilities of the armed forces;
- advising on priorities of requirements, program recommendations and budget proposals;
- developing doctrine for joint employment and formulating policies for coordinating military education and training;
- advising and assisting the President and the Secretary of Defense on the establishment of combatant commands.

UNIFIED AND SPECIFIED COMMANDS

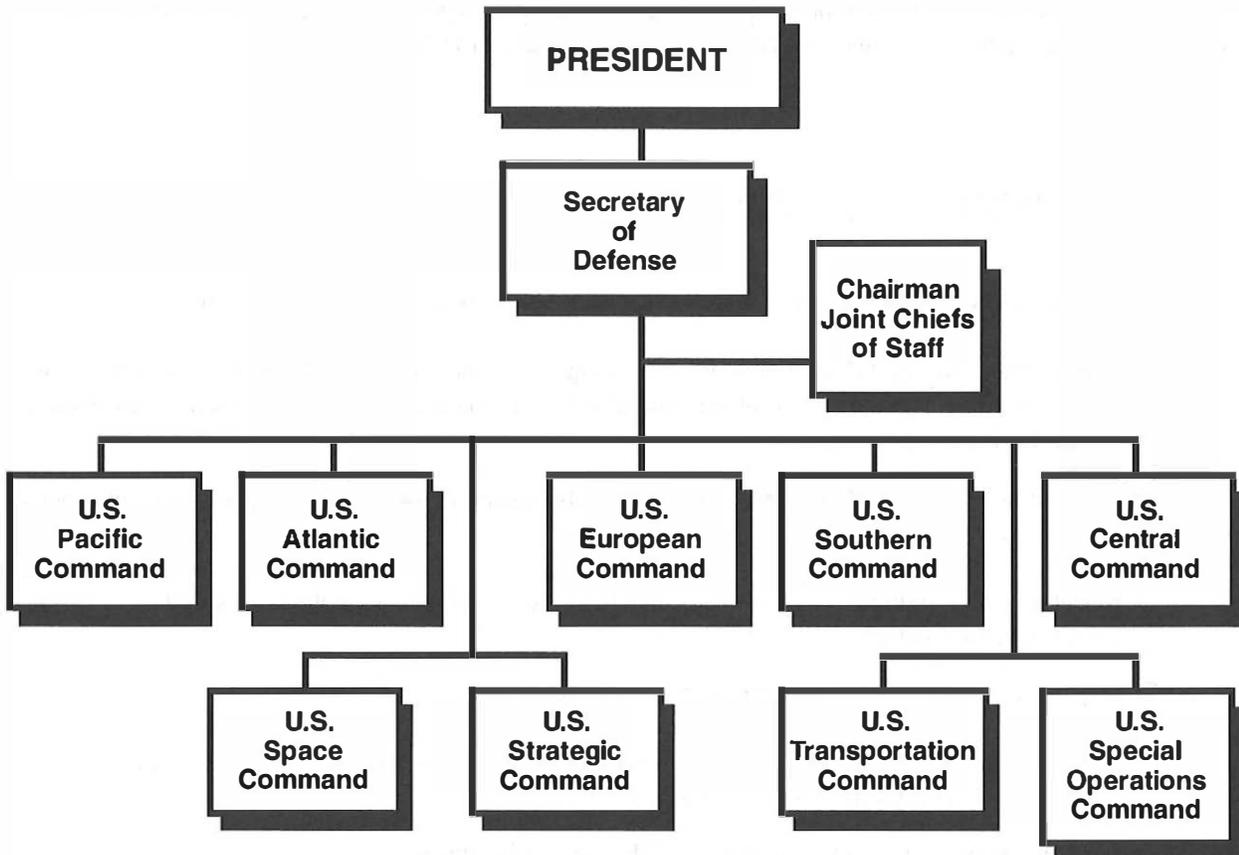
The armed forces of the United States are organized for the performance of military missions into combatant commands made up of forces from the various military departments under the operational command of unified or specified commanders.

A unified command is a command assigned a broad continuing mission under a single commander and composed of significant components of two or more services. A specified command is normally composed of one service. Unified and specified commanders have full operational control of all forces assigned.

Unified and specified commands provide for the integrated effectiveness of U.S. military forces in combat operations and for the projection of U.S. military power in support of U.S. national policies. They are established by the President through the Secretary of Defense with the advice and assistance of the Chairman, Joint Chiefs of Staff.

NATIONAL COMMAND STRUCTURE

The commanders of unified and specified commands are responsible to the President and the Secretary of Defense. Hence, the chain of command runs from the President to the Secretary of Defense to these commanders. The Chairman, Joint Chiefs of Staff may issue orders to these commanders by authority and direction of the Secretary of Defense.



The role of the Chairman of the Joint Chiefs of Staff in the chain of command from the National Command Authorities to the commanders of the combatant commands involves the following:

- communications between the National Command Authorities and the combatant commanders. With this communications responsibility come the myriad duties associated with assisting the President and Secretary of Defense in the direction and control of the combatant commanders: strategic direction, strategic planning, contingency planning and preparedness.
- oversight of the activities of combatant commands in matters dealing with the statutory responsibility of the Secretary of Defense. This includes recommending changes in assignment of functions, roles and missions to achieve maximum effectiveness of the armed forces.
- serving as the spokesman for the combatant commanders, to include providing summaries and analyses of military requirements, programs and budgets.

THE MILITARY DEPARTMENTS

The military departments (Army, Navy and Air Force) were retained by law after the establishment of the Department of Defense. Each military department operates under its civilian Secretary who, in turn, is responsible to the Secretary of Defense.

Once the force structures of the various unified and specified commands has been determined, each military department is responsible for furnishing its allotted portion, and remains responsible for the administration and logistics of these forces. The responsibility for support of forces assigned to combatant commands is vested in one or more of the military departments, as directed by the Secretary of Defense.

FUNCTIONS OF THE MILITARY DEPARTMENTS

The major functions of the military departments, under their respective Secretaries, are to:

- prepare forces and establish reserves of manpower, equipment and supplies for the effective prosecution of war and military operations short of war, and plan for the expansion of peacetime components to meet the needs of war;
- maintain in readiness mobile reserve forces, properly organized, trained and equipped for employment in emergency;
- recruit, organize, train and equip interoperable forces for assignment to unified and specified combatant commands;
- prepare and submit budgets for their respective departments;
- develop, garrison, supply, equip and maintain bases and other installations, furnishing administrative and logistic support for all forces and bases; and
- assist one another in the accomplishment of their respective functions.

SECTION III

THE DEPARTMENT OF THE ARMY



PURPOSE AND COMPOSITION OF THE ARMY

“It is the intent of Congress to provide an Army that is capable, in conjunction with the other armed forces, of

- preserving the peace and security, and providing for the defense of the United States, the Territories, Commonwealths, and possessions, and any areas occupied by the United States;
- supporting the national policies;
- implementing the national objectives; and
- overcoming any nations responsible for aggressive acts that imperil the peace and security of the United States.

“In general, the Army, within the Department of the Army, includes land combat and service forces and such aviation and water transport as may be organic therein. It shall be organized, trained and equipped primarily for prompt and sustained combat incident to operations on land. It is responsible for the preparation of land forces necessary for the effective prosecution of war, except as otherwise assigned and, in accordance with integrated mobilization plans, for the expansion of the peacetime components of the Army to meet the needs of war.

“The Army consists of

- the Regular Army, the Army National Guard of the United States, the Army National Guard, while in the service of the United States, and the Army Reserve; and
- all persons appointed or enlisted in, or conscripted into, the Army without component.” (Section 3062, Title 10 U.S.C.)

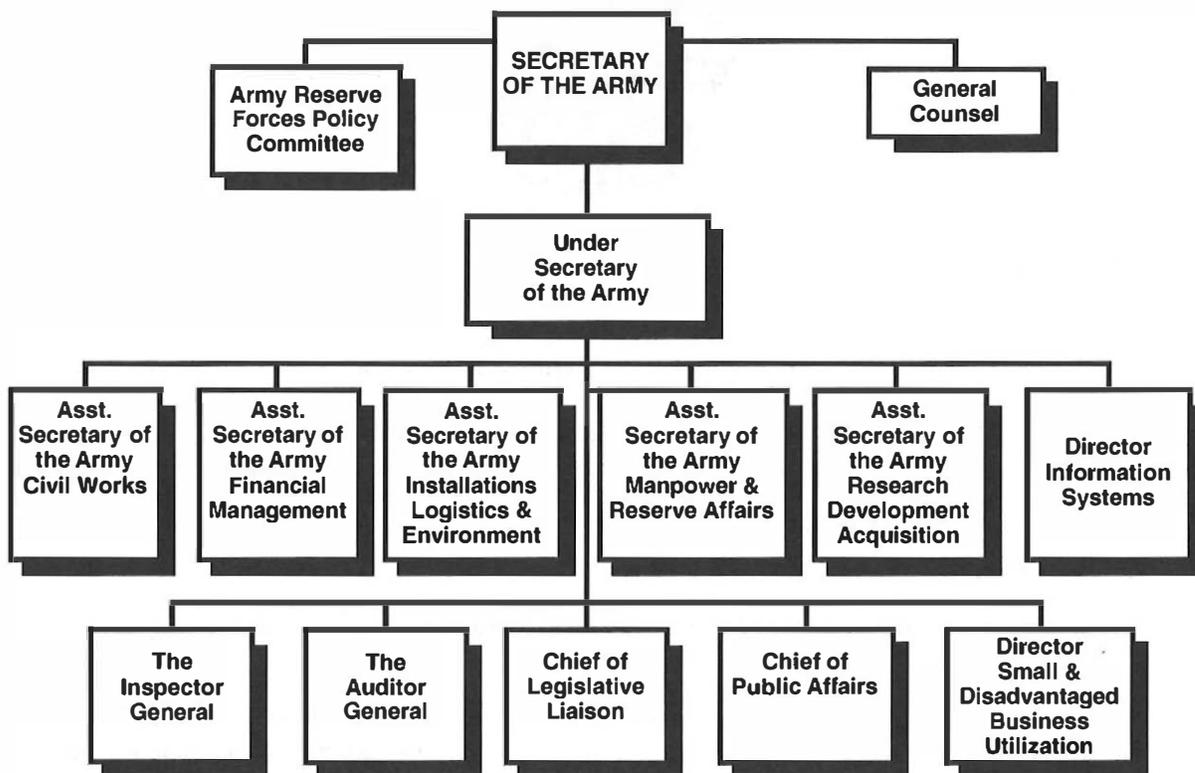
THE SECRETARY OF THE ARMY

“The Department of the Army is separately organized under the Secretary of the Army. It operates under the authority, direction, and control of the Secretary of Defense. The Secretary of the Army is the head of the Department of the Army.” (Sections 3011 and 3013, Title 10 U.S.C.)

The Secretary of the Army is responsible for and has the necessary authority to conduct all affairs of the Department of the Army, including recruiting, organizing, supplying, equipping, training and mobilizing.

THE ARMY SECRETARIAT

Certain functions are assigned exclusively to the Office of the Secretary of the Army, which has "sole responsibility within the Office of the Secretary and the Army Staff." The Army Secretariat is organized to carry out these functions and is structured as follows:

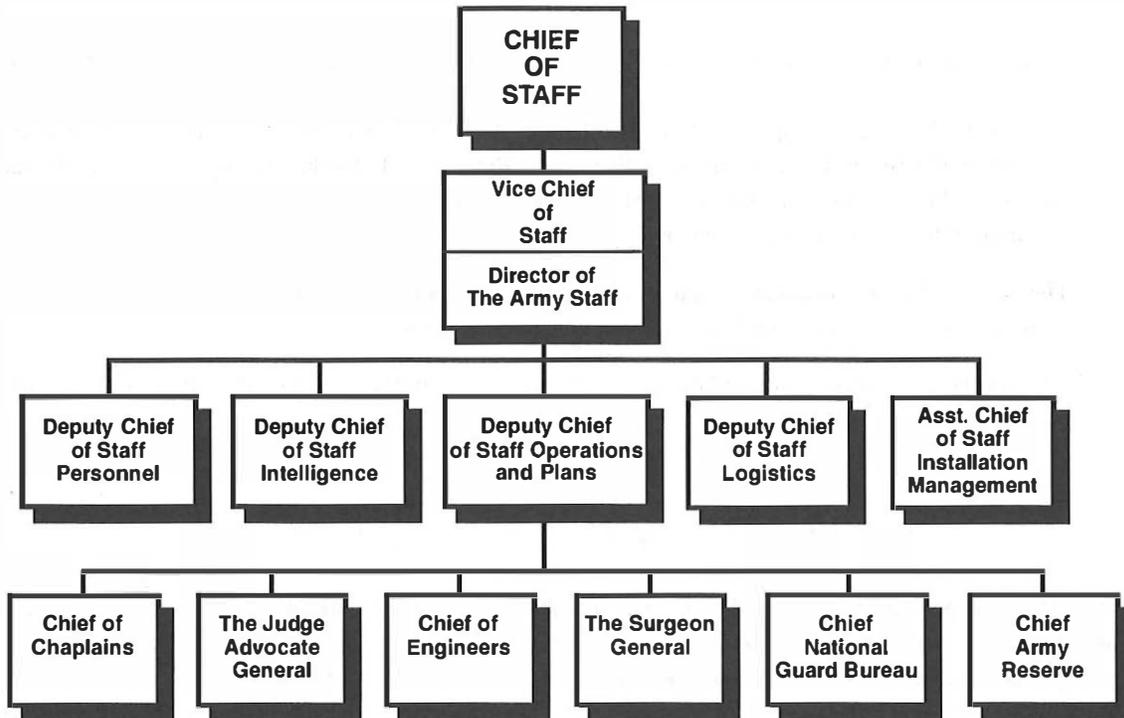


THE ARMY STAFF

The Army Staff is headed by the Chief of Staff of the Army, who is appointed by the President for a period of four years. In time of war or other national emergency, he may be reappointed for an additional four years. Subject to the authority, direction, and control of the Secretary of the Army, the Chief of Staff shall:

- transmit and provide advice on the plans and recommendations of the Army Staff to the Secretary;
- act as the agent of the Secretary in the execution of approved plans and recommendations;
- exercise supervision over members and organizations of the Army as directed by the Secretary; and
- perform the duties prescribed as a member of the Joint Chiefs of Staff.

The Army staff is organized as follows:



THE TOTAL ARMY

The Army is an integrated, cohesive organization of the active component (Regular Army), reserve components (Army National Guard and Army Reserve) and civilian employees of the Army.

- The Regular Army provides the forces to support forward presence and provides forces for rapid deployments worldwide.
- The Army National Guard and Army Reserve provide trained units and individuals for active duty in time of war or other emergency.

Missions are being transferred from the Regular Army to the Army National Guard and Army Reserve, resulting in a more closely integrated Army. This increasing reliance on the Army National Guard and Army Reserve for early-deploying combat and support forces means that a presidential decision to federalize selected Army National Guard units and call Army Reserve units to active duty must be made early in the crisis development stage.

A significant part of the Army's support structure resides in the reserve components. In fact, the Army Reserve provides most of the critical combat service support units for its contingency force package. All of the Army's heavy helicopter units, chemical brigades, water supply battalions and rail battalions are in the Army National Guard or Army Reserve. Thirty-six of thirty-seven civil affairs units are in the Army Reserve; more than three-fourths of the Army's hospital units, medical groups, chemical battalions and petroleum support battalions are in the reserve components.

The activation of Army National Guard and Army Reserve units during the Gulf War is an excellent example of the importance of the reserve components to the Total Army. Approximately 650 Army Reserve and 400 Army National Guard units and elements were activated for Operations Desert Shield and Desert Storm.

RESERVE CATEGORIES

There are three Reserve categories — the Ready Reserve, the Standby Reserve and the Retired Reserve.

- The Ready Reserve is comprised of the members of Army National Guard and Army Reserve units, Individual Mobilization Augmentees, Active Guard/Reservists, Individual Ready Reservists, and members of the Inactive Army National Guard. The total strength of the Ready Reserve in September 1993 was approximately 1.13 million personnel.
- The Standby Reserve consists of individuals who have completed their active duty and reserve training requirements, or who are unable to maintain membership in units.
- The Retired Reserve is composed of individuals who have completed 20 years of qualifying service for retirement.

ARMY ORGANIZATION

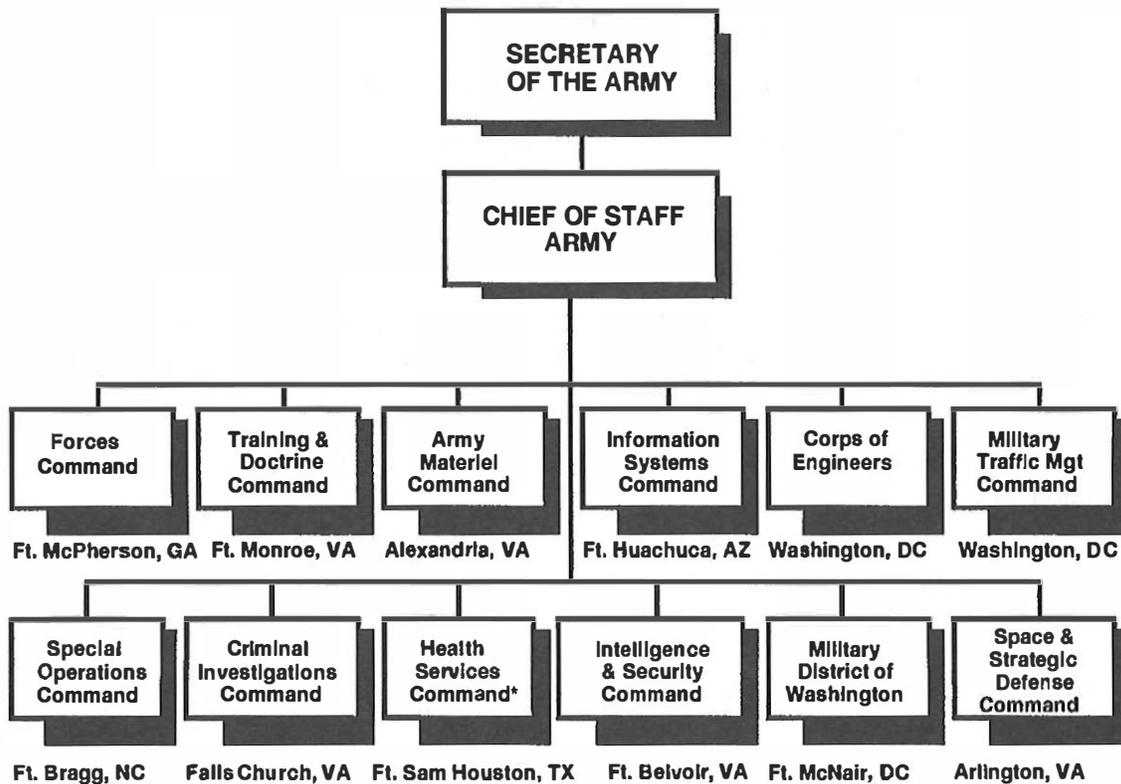
The Army is generally organized into combat, combat support and combat service support units. The combat units of the Army include the 20 active and reserve component divisions, special operations units and various types of separate combat and combat support units assigned to echelons above division. Additional combat service support units provide logistical, communications, medical, transportation, supply, maintenance and other types of support essential to the conduct of combat operations.

In addition to combat, support and service units, there is a supporting structure that performs a wide range of Army activities. This supporting structure, manned by both military and civilian personnel, provides the following functional services for the Army:

- command and control;
- training and military education;
- medical, transportation, supply and maintenance;
- recruiting;
- research and development; and
- engineering and base support.

ARMY MAJOR COMMANDS IN THE UNITED STATES

Command of Army elements in the United States is exercised by the Secretary of the Army through the Army Chief of Staff, through the commanders of 12 major Army commands.



* Becomes U.S. Army Medical Command - October 1994

ARMY MAJOR COMMANDS OVERSEAS

Army overseas commands consist primarily of major forces assigned as the ground force components of United States unified commands. As such, the Army components are under the operational control of the commanders in chief of the unified commands, who in turn report to the Secretary of Defense.

The four major Army overseas commands and the unified commands to which they are assigned are:

- United States Army, Europe — U.S. European Command
- United States Army, Pacific — U.S. Pacific Command
- Eighth United States Army — U.S. Forces Korea*
- United States Army South — U.S. Southern Command
- *subordinate unified command of U.S. Pacific Command*

Additionally, Army personnel are presently serving in other overseas locations: United Nations Command, 18 NATO commands, Security Assistance organizations in 57 foreign nations, 86 defense attache offices, and various other offices stemming from treaties and executive agreements with individual nations.

SPECIAL OPERATIONS FORCES

U.S. Army special operations forces (SOF) are an integral part of the Army's wide range of capabilities. They provide versatile military capabilities that are not only essential in the unconventional or terrorist arenas, but also effective in performing special missions across a wide range of other conflict situations.

Special operations functions include:

- unconventional warfare
- counterterrorism
- foreign internal defense
- psychological operations
- direct action
- civil affairs
- special reconnaissance

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

The Army Special Operations Command consists of both active and reserve component forces. The major force elements are:

- Ranger Regiment;
- Special Operations Aviation Regiment;
- Special Forces Command with seven Special Forces Groups, of which two are in the Army National Guard;
- Civil Affairs and Psychological Operations Command that includes one active duty civil affairs battalion and three civil affairs commands, nine civil affairs brigades and twenty-four civil affairs battalions in the Army Reserve;
- the Special Warfare Center and School.

Budgeting and funding for special operations forces is unique in that operating funds are not contained in the Army budget. Funds are provided through the Department of Defense and the commander in chief of the Special Operations Command under a separate major force program and are, therefore, independent of service cuts. Other requirements, including base operations, are still covered in the Army budget.

ARMY DIVISIONS

The division is the Army's largest tactical organization that trains and fights as a combined arms team. It is a self-sustaining force capable of independent operations. The division is composed of varying numbers and types of combat, combat support and combat service support units. The mix and types of combat units determine whether a division is armored, mechanized, infantry, light infantry, airborne or air assault.

The Total Army today consists of twenty divisions. In the active Army there are twelve divisions: two forward deployed in Europe, one in Korea, one in Hawaii, and eight in the Continental United States. The remaining eight are Army National Guard divisions. For current locations see insert following page 16.

SECTION IV

ARMY MISSIONS AND FUNCTIONS

MISSIONS

The Army has three major missions to perform:

- Deterrence
- Power Projection
- Operations Other Than War

In order to accomplish these missions, the Army must have the forces to maintain a forward presence in critical areas and to provide rapid response or reinforcement when necessary. Additionally, the Army must have the capability to rapidly expand the force in times of national emergency.

MAJOR FUNCTIONS

The Army provides land forces necessary for the effective and sustained prosecution of war and operations other than war.

Some of the major functions of the Army are to:

- organize, train and equip forces for the conduct of prompt and sustained combat operations on land, to defeat enemy land forces and to seize, occupy, and defend land areas;
- provide forces for appropriate air and missile defense and space operations;
- develop airborne doctrine, procedures and equipment that are common to the Army and Marine Corps;
- provide Army forces for joint amphibious, airborne and space operations;
- provide forces for special operations; and
- provide forces for humanitarian assistance and disaster relief at home and abroad.

PERSONNEL

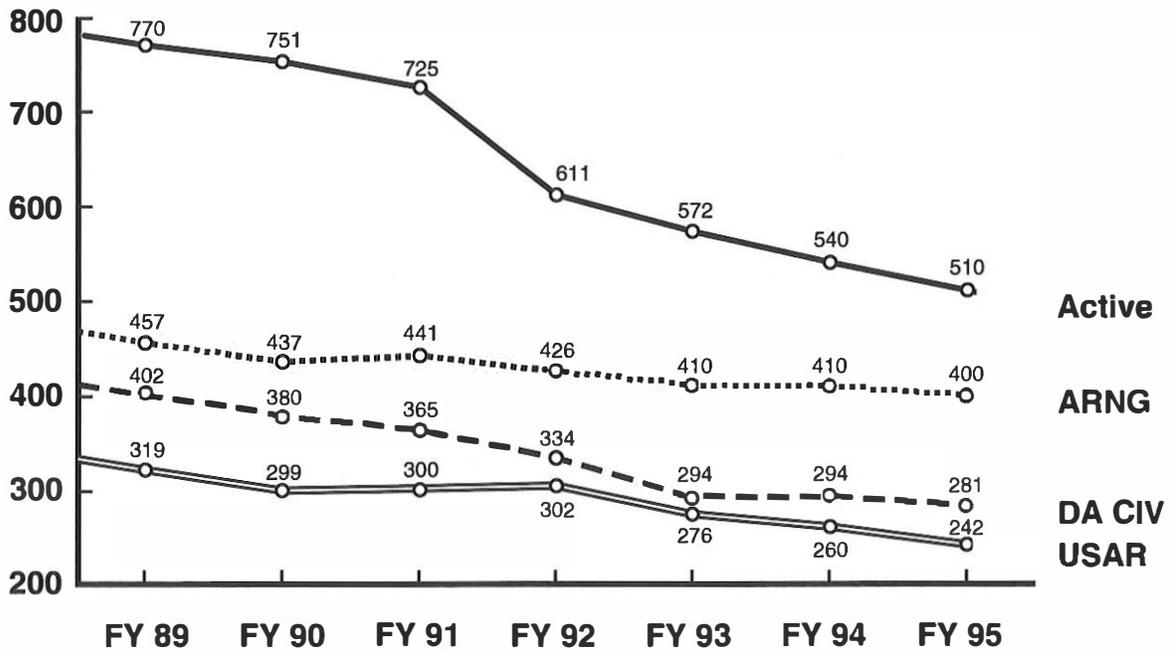
The Army must continue to recruit quality soldiers to maintain a well-trained and ready force. Quality personnel are essential to the high technology skills needed by modern forces and they are the nucleus for selecting and developing future Army leaders.

The goals that have been set for recruiting quality enlisted personnel require that no less than 95 percent of new soldiers must be high school graduates. Currently, the Army is meeting or exceeding this goal; however, achieving this in the future may be more difficult.

A key factor in maintaining a high quality force is attracting qualified and motivated young officers. The Army primarily acquires officers from three sources — the United States Military Academy (USMA), the Reserve Officers Training Corps (ROTC) and Officer Candidate School (OCS). The major source of officers is the senior ROTC program, which is operated by U.S. Army ROTC Cadet Command with programs at 330 colleges and universities in the United States. In 1993, 3,000 ROTC graduates, 1,019 USMA graduates and 253 OCS graduates received commissions in the active Army. An additional 1,500 ROTC graduates were commissioned and assigned to the reserve components.

The chart below reflects the extent of Army Personnel cutbacks in the last several years.

ARMY PERSONNEL STRENGTH
(1989 THRU 1995 - IN THOUSANDS)



TRAINING

A quality force requires quality training at every level. The Training and Doctrine Command (TRADOC) is responsible for the operation of the extensive Army school system that provides military specialty training and professional military education. Army Reserve schools make up a major part of this system as they provide training for Reservists and Guardsmen who are unable to attend active Army schools. In addition, the Army National Guard runs OCS and other skill training courses. Generally, Army training can be categorized as follows:

☐ Institutional Training

- Initial Entry Training (Basic Combat Training for all soldiers, followed by Advanced Individual Training in a unit or at an Army branch school);
- Noncommissioned Officer (NCO) Education System (includes the Primary Leadership Development Course, the Basic Course, the Advanced NCO Course and the Sergeants Major Academy);
- Officer Training consisting of the Basic and Advanced Courses at an Army branch school followed by mid-level schooling at the Command and General Staff College or the Armed Forces Staff College; and senior-level schooling at the Army War College or National Defense University.

☐ Unit Tactical Training

Unit tactical training is designed to prepare units for a variety of operational missions. Although most of this training is conducted at home installations, the Army operates combat training centers that provide realistic training in a combat-like environment. The three combat training centers – the National Training Center at Fort Irwin, CA; the Joint Readiness Training Center at Fort Polk, LA; and the Combat Maneuver Training Center at Hohenfels, Germany – offer the opportunity to apply unit mission skills against a well-trained opposing force.

MODERNIZATION

One of the key factors in the swift defeat of Iraqi forces during the Gulf War was the technological superiority and exceptional performance of the Army's weapon systems. During the past ten years, the Army has fielded many major new systems, to include:

M1 Abrams Tank	UH-60 Black Hawk Helicopter
Stinger Air Defense Missile	Air-to-Ground Missile System
Bradley Fighting Vehicle	OH-58D Kiowa Warrior Scout Helicopter
AH-64 Apache Attack Helicopter	Patriot Air Defense Missile System
Multiple Launch Rocket System	Avenger Air Defense System

The Army's procurement budget for equipment has dropped from \$14.8 billion in FY 1988 to \$6.8 billion in FY 1994 and is projected to decline to \$6.1 billion in FY 1995. As a result, more than 60 major Army modernization projects have been either cancelled or stretched out. The Army may be hard pressed, in light of its declining procurement resources, to maintain the technological superiority it needs to win future battles with minimum casualties.

DEPLOYMENT AND SUSTAINMENT

For the Army to fulfill its role in the national security strategy, it must be able to move forces to where they are needed, when they are needed, and it must have the means to sustain and support those forces for as long as they are deployed. The key factors in deploying and sustaining Army ground forces are:

- a ready, well-trained force;
- available reserve component forces and a capable civilian workforce;
- sufficient air and sealift;
- war reserve stocks;
- prepositioned materiel afloat; and
- an adequate industrial base capability.

The Army must have adequate airlift and sealift to provide the strategic mobility it needs to meet force projection requirements. The Army's goal is to be able to put the lead brigade of a contingency force on the ground in an operational area in four days; a division in 12 days; two armored or mechanized divisions in 30 days; and a five-division corps within 75 days.

LOGISTICS

Logistics encompasses the materiel and services needed to sustain the conduct of military operations. Materiel includes organizational items (i.e., unit equipment, ammunition, spare parts, fuel and lubricants) and individual items, such as food, water, clothing and personal equipment. Services include maintenance and repair of equipment, transportation of people and supplies, medical treatment and evacuation, construction, and provision of individual services such as mail delivery and sanitation facilities.

The Army Materiel Command (AMC) is responsible for the operation of the logistical structure that supports the operational forces of the Army. The structure consists of arsenals, laboratories, supply and maintenance depots and ammunition plants that:

- provide supply, maintenance, transportation and services during peacetime operations and expanded support during emergencies or wartime; and
- support continued research and development to modernize the Army and to develop and acquire the weapons and equipment necessary to maintain operational capability.



ARMY COMBAT



25th INFANTRY

● SCHOFIELD BARRACKS



3rd INFANTRY



1st ARMORED

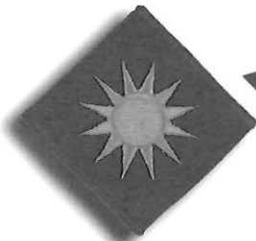
● WÜRZBURG, GERMANY

● ANSBACH, GERMANY



4th INFANTRY

● LOS ALAMITOS



*** 40th INFANTRY**

● TONGDUCHON, KOREA



2nd INFANTRY



1st INFANTRY



*** 35th INFANTRY**



1st CAVALRY



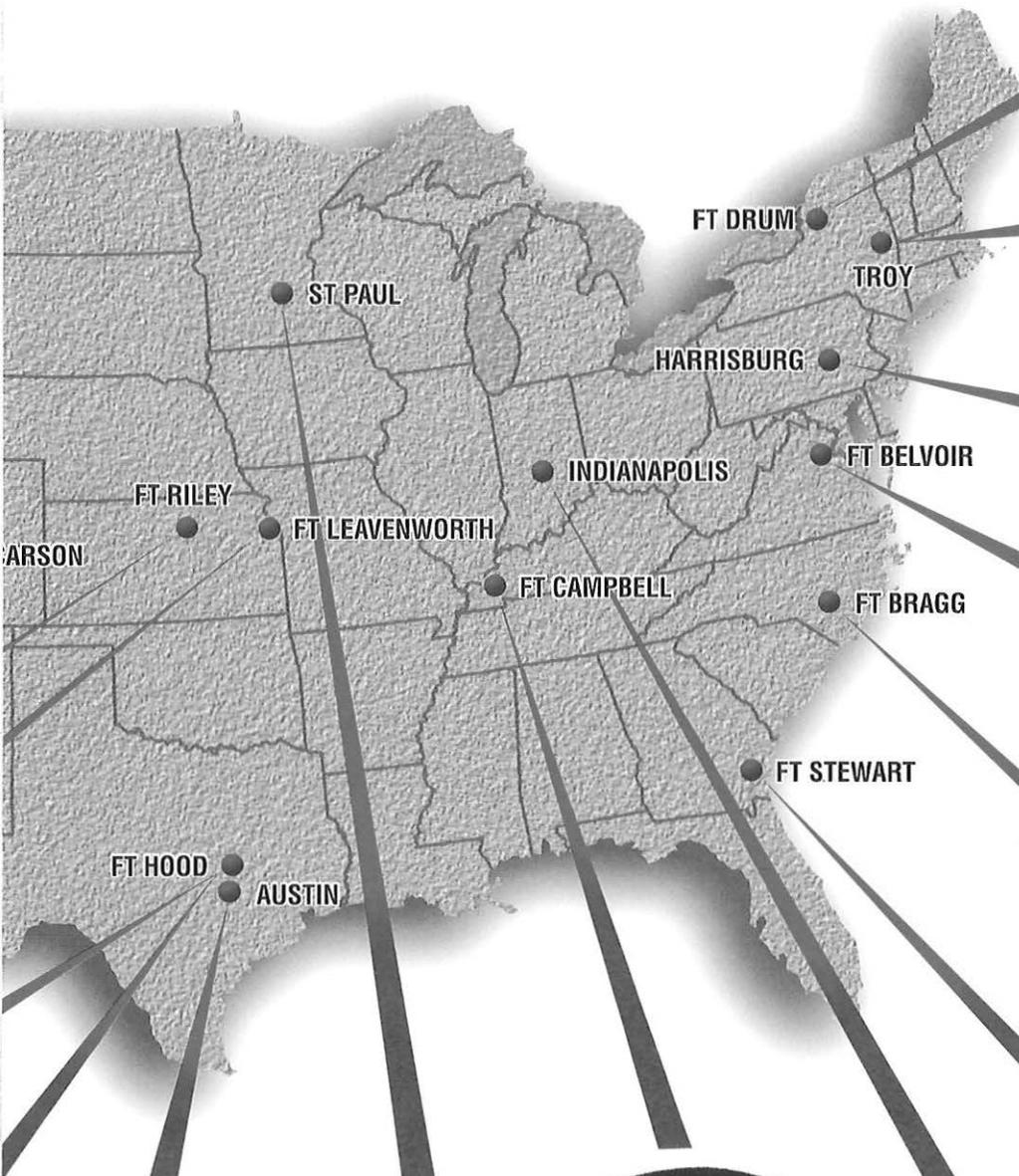
2nd ARMORED

NOTE: DIVISION HEADQUARTERS

*** ARMY NATIONAL CENTER**

ASSOCIATION OF THE UNITED STATES ARMY, INSTITUTE OF LAND WARFARE

AT DIVISIONS



10th MOUNTAIN



*** 42nd INFANTRY**



*** 28th INFANTRY**



*** 29th INFANTRY**



82nd AIRBORNE



*** 49th ARMORED**



*** 34th INFANTRY**



101st AIRBORNE



*** 38th INFANTRY**



24th INFANTRY

**RTERS LOCATIONS
GUARD**

FARE, 2425 WILSON BOULEVARD, ARLINGTON, VIRGINIA 22201

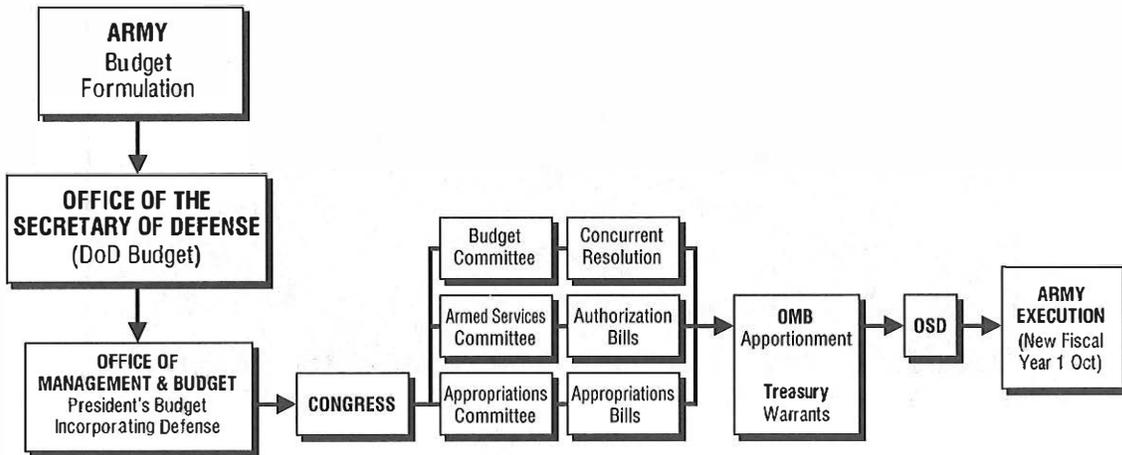
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SECTION V

THE ARMY BUDGET

THE BUDGET PROCESS

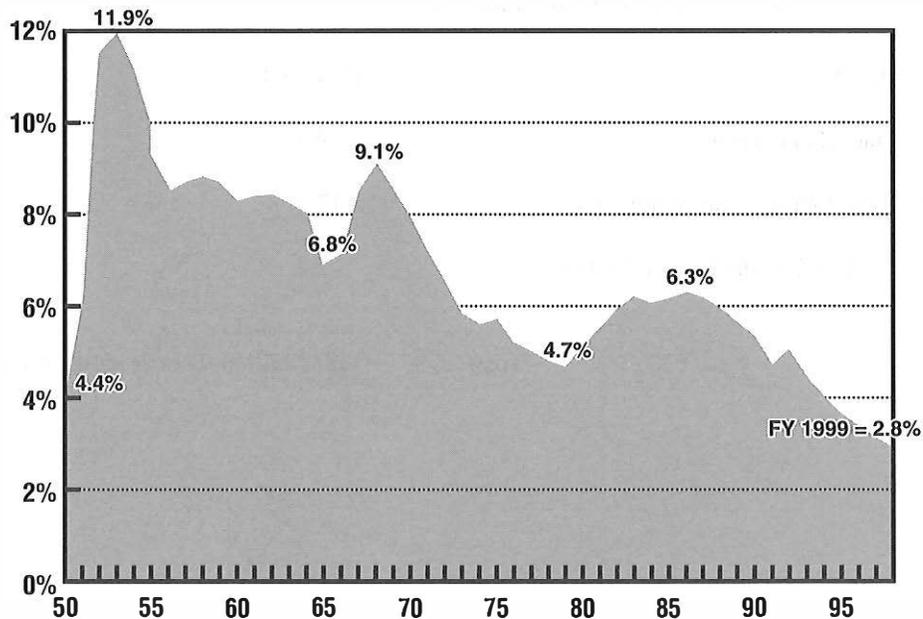
The size of the Army, what the Army does and what the Army buys depends on authorization and funding which comes from Congress. A schematic of the Executive and congressional budget process is shown below:



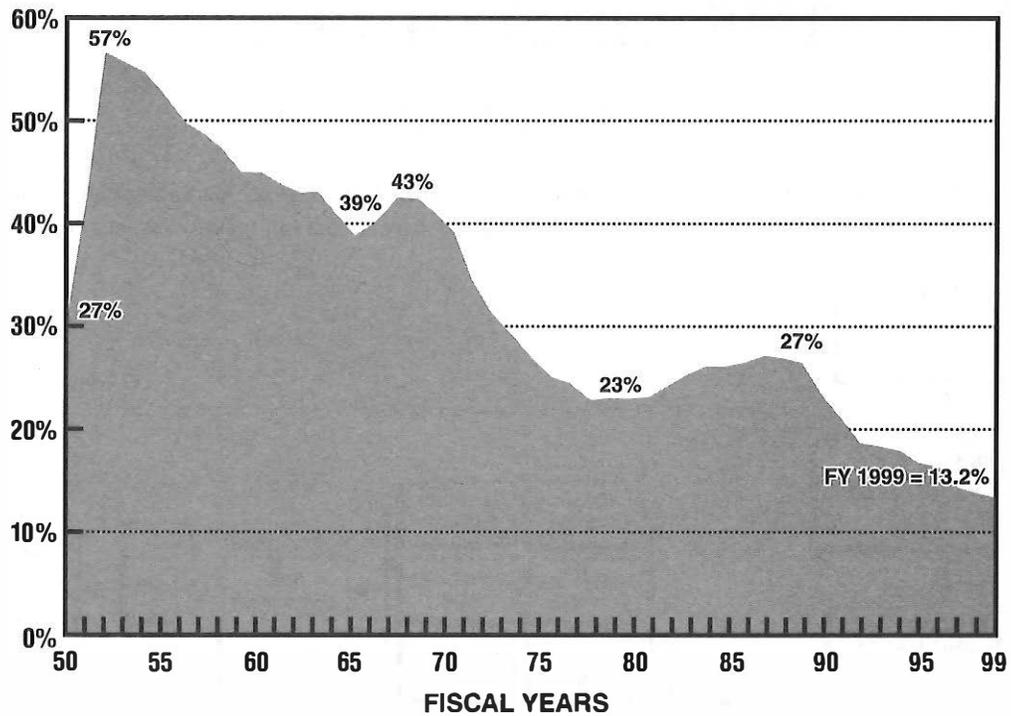
DEFENSE BUDGET TRENDS

To put the Army budget in context it is necessary to appreciate defense budget trends. The next two charts depict defense spending as (1) a percentage of gross domestic product and (2) a percentage of total federal spending.

Defense Outlays as a Share of GDP



Defense Outlays as a Share of Federal Outlays



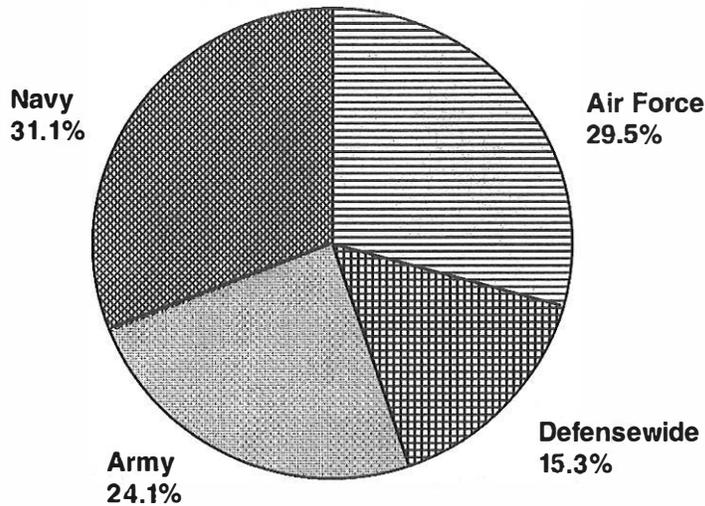
THE FY 1994 ARMY BUDGET

The approved Army Budget for FY 1994 was \$60.7 billion in budget authority, or about 24.3 percent of the Department of Defense budget. It was broken out as follows:

Military Personnel	\$ 26.8 billion
Operation and Maintenance	19.7
Research, Development and Acquisition	12.1
Military Construction and Family Housing	2.2
Total	\$ 60.7 billion (Does not add due to rounding)

THE FY 1995 DOD BUDGET ALLOCATION

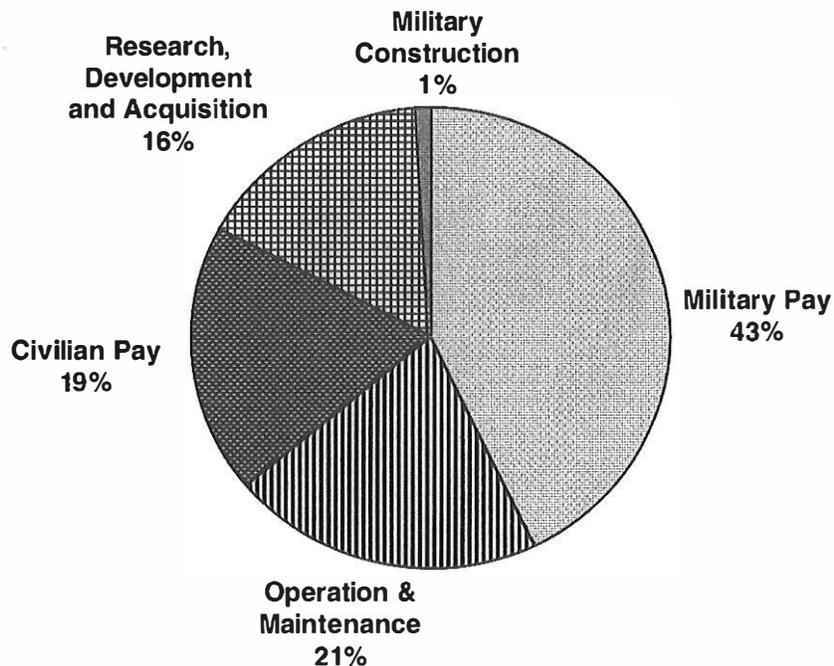
The allocation among the services of DOD's proposed FY 1995 budget is shown in the chart below.



FY 1995 = \$252.2 billion

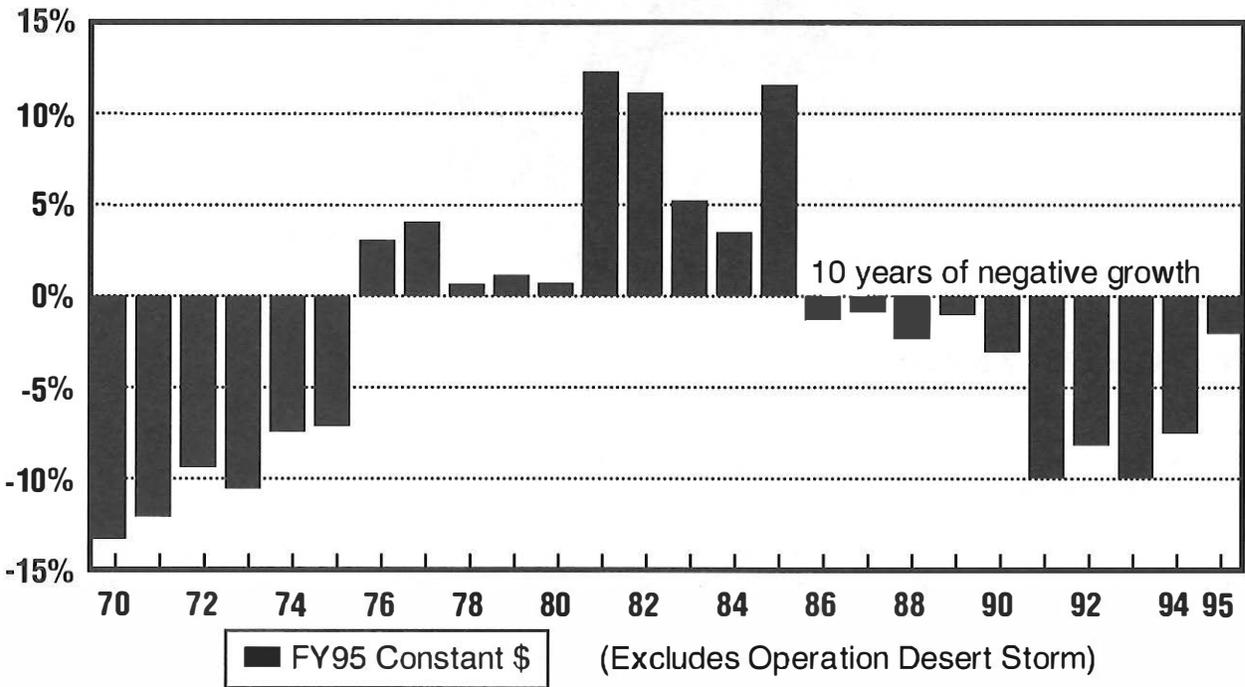
HOW THE FY 1995 ARMY BUDGET IS ALLOCATED

The figure below shows the Army budget broken out by functional elements. Almost two-thirds of the Army budget is for the pay of military and civilian personnel. Personnel separation incentives and other transaction costs associated with the downsizing of the Army have kept these accounts relatively high.



ARMY BUDGET TRENDS

The Army budget reflects the same general trend lines as the overall defense budget. Real growth trends over time are shown on the chart below. This illustrates the overall decline in the Army's buying power since FY 1985.



SECTION VI

THE ARMY IN TRANSITION

A NEW SECURITY ENVIRONMENT

The world security environment has changed significantly during the past four years with the:

- breakup of the Warsaw Pact;
- dissolution of the Soviet Union;
- rise in historic ethnic disagreements;
- emergence of new economic powers;
- major force reductions and new orientations in NATO;
- U.S. fiscal constraints/defense budget reductions; and
- availability of advanced military technology to many Third World countries.

Our new National Military Strategy, as stated in the DoD Bottom-Up Review, was developed to deal with the new security requirements in the post-Cold War world. The new strategy includes the following objectives for the armed forces:

- deter the use of nuclear and other weapons of mass destruction;
- deter and defeat major aggression in regions important to the United States;
- be capable of fighting and winning two major regional conflicts nearly simultaneously;
- prepare forces to participate in multilateral peace enforcement and unilateral intervention operations.

An inherent part of the emerging strategy is the new military success criterion, which requires U.S. forces to apply decisive force to win swiftly with minimum casualties.

ARMY STRATEGIC ROLES

The Army's roles under the military strategy are to provide:

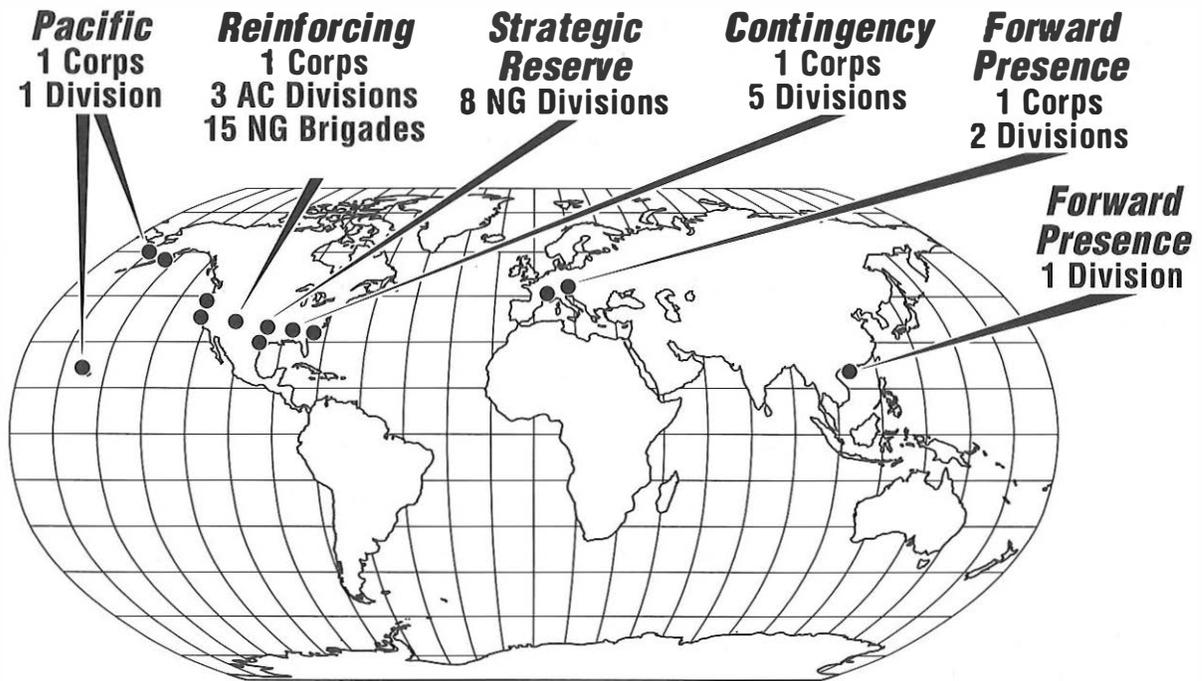
- a rapidly deployable force capable of deterring aggression and fighting worldwide;
- combat-ready ground forces for crisis response, sustained land combat and other immediate requirements;
- forward presence forces strategically positioned to support friendly nations through peacekeeping, security assistance and army-to-army initiatives;
- active and reserve component forces capable of rapid expansion to meet a myriad of contingencies;
- forces for disaster relief and emergency assistance and to aid in interdiction of illicit drug traffic.

LIVING WITH CHANGE

The Army is undergoing some of its most dramatic changes in more than a half-century. To meet the demands of the new security environment, the Army's focus has changed from engagement in a major war in Europe to ensuring the capability to protect vital U.S. national interests against regional contingencies worldwide.

The Army is much smaller than its Cold War predecessor. The new Bottom-Up Review force is designed as the minimum force necessary to deal with two nearly simultaneous regional crises which may threaten American interests. The Bottom-Up Review would reduce the Army from its current level of 12 active and eight National Guard divisions to 10 active divisions and five National Guard divisions by FY 1999.

20 Division Stationing by the End of FY95

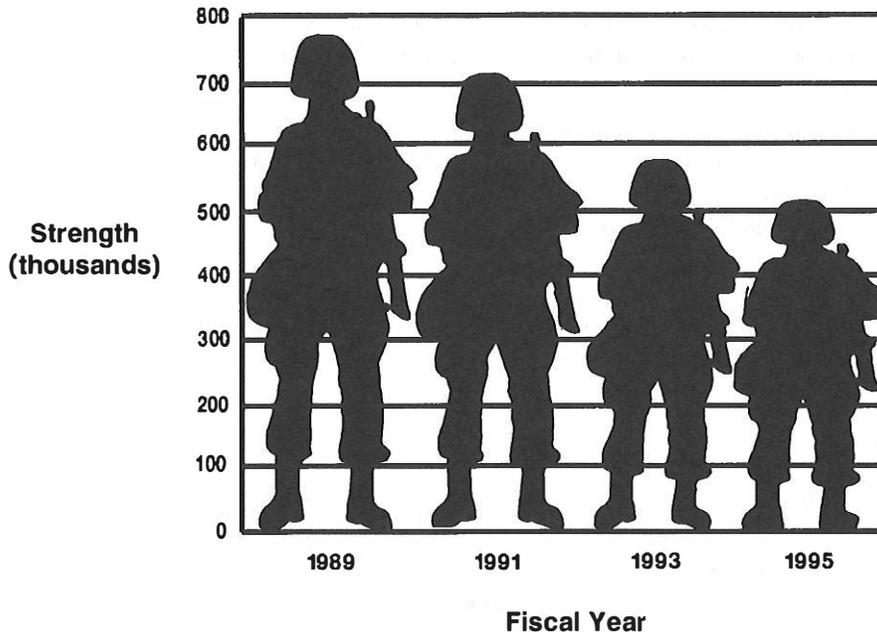


DRAWDOWN STATUS REPORT

The Army has undergone an extensive downsizing since 1989. During the past four years, the Army has reduced its military and civilian personnel strength by 315,000; reduced active Army force structure by six divisions and National Guard force structure by two divisions; redeployed almost 200,000 soldiers and their families from Europe; removed or disposed of 31,000 vehicles and 533,000 short tons of ammunition from Europe; and closed 62 military facilities and installations in the United States and 327 overseas. The projected Army end

strength of 540,000 in FY 1994 consists of 344,800 soldiers in field units, 136,200 in the Army support structure, and approximately 59,000 in transient and student status.

By the end of FY 1995, the U.S. Army in Europe will be drawn down to a strength of 65,000 personnel; active Army strength will be reduced to 510,000. The Army's reserve components will be reduced to a total of 642,000.



REDUCING PERSONNEL STRENGTH

Cutting back Army strength in a planned way, while maintaining both balance and quality, is a major challenge. Some of the tools being used to achieve the 33 percent cut in the active force (from 770,000 to 510,000) include:

- reducing input by cutting accessions to a minimum level that maintains long-term sustainment of the force;
- normal attrition, administrative actions and tightened reenlistment standards;
- voluntary separation, providing incentives to encourage people to leave the Army voluntarily;
- maximum retirement of those eligible, either voluntarily or by action of selective retirement boards.

TAKING CARE OF SOLDIERS

In a concerted effort to preclude having to force soldiers to leave the Army involuntarily, Congress and the Defense Department have provided a program of monetary incentives for soldiers who elect to curtail their military careers on a voluntary basis. The two options of this plan are called the Voluntary Separation Incentive and the Special Separation Bonus. Both require the soldier to have between six and twenty years' service and to have served five continuous years immediately prior to separation; both may be limited by the Army Secretary. There is also an early retirement program that allows soldiers to retire with 15 years' service. There is a similar package of transition benefits and retirement options for Reservists.

BASE CLOSURES AND REALIGNMENTS

As the Army is reduced in force structure and personnel strength, it is also necessary to consolidate and reduce the number of military facilities and installations. Base realignments and closures are an inherent aspect of the downsizing process. The Defense Base Closure and Realignment Commission was first established in 1988 (P.L. 100-526) as an independent commission to review the recommendations of the Secretary of Defense for the closure or realignment of military installations in the United States. The Defense Base Closure and Realignment Act of 1990 extended the commission to 1995.

The recommendations of the 1988, 1991 and 1993 commissions were approved by the President and Congress, and are now being implemented. The commission will meet for the final time in 1995. It is quite possible that it will consider closing some existing division posts in the United States due to the reduction in the number of Army divisions by the Bottom-Up Review. The loss of division posts could be damaging to the Army's ability to expand to meet future emergencies.

When the base closure and realignment process is eventually completed, the Army will have closed approximately 20 percent of its installations in the United States. In addition, 60 percent of Army installations in Europe, 30 percent in Korea and 100 percent in Panama will also be closed.

THE ARMY OF THE FUTURE

Though much smaller than the Army of the 1980s, the Army of the 1990s and the 21st century will capitalize on the potential of technology to improve its capabilities in critical areas such as information management, weapon lethality, battlefield mobility and protection of the individual soldier.

The Army is in the process of upgrading intelligence, maneuver, fire support, sustainment, and command and control capabilities with advanced technologies. Technological insertions and upgrades will allow Army forces to observe, decide and act faster and more precisely than before.

In operations other than war, the versatility of the Army makes it uniquely qualified to support national and international interests. Following civil disturbances and national disasters, the Army can move quickly and with substantial capabilities to directly assist local, state and national authorities.

Providing medical support to the sick and injured, feeding thousands of people whose homes have been destroyed, containing the spread of disease, assisting local governments to begin cleanup and repairs, and providing security are examples of how the Army can help in times of national need.

The Army will continue to support America's friends and allies through nation, security and humanitarian assistance, and to protect American citizens and interests through forward presence and crisis response.

The Army of the future will continue to provide the United States with the finest land force in the world, capable of winning on any battlefield, and with the versatility to apply its organizational skills and operational capabilities in support of a wide range of operations. Despite its decreased size, the Army must remain a trained and ready force, capable of decisive victory.

SECTION VII

APPENDICES

Appendix A: Officer & Enlisted Rank Insignia

Appendix B: Branches of the Army

Appendix C: Army Unit Structure

Appendix D: Major U.S. Army Installations
by Congressional District

Appendix E: Army Demographics

Appendix F: Where Soldiers Serve

Appendix G: Selected Army Weapon Systems

APPENDIX A

OFFICER & ENLISTED RANK INSIGNIA
ARMY INSIGNIA OF RANK/PAY GRADE

Officer		Enlisted	
	GENERAL OF THE ARMY		SERGEANT MAJOR OF THE ARMY/E-9
	GENERAL/O-10		COMMAND SERGEANT MAJOR/E-9
	LIEUTENANT GENERAL/O-9		SERGEANT MAJOR/E-9
	MAJOR GENERAL O-8		FIRST SERGEANT/E-8
	BRIGADIER GENERAL O-7		MASTER SERGEANT/E-8
	COLONEL/O-6		SERGEANT FIRST CLASS/E-7
	LIEUTENANT COLONEL/O-5 (SILVER)		STAFF SERGEANT/E-6
	MAJOR/O-4 (GOLD)		SERGEANT/E-5
	CAPTAIN/O-3		CORPORAL/E-4
	FIRST LIEUTENANT O-2 (SILVER)		SPECIALIST/E-4
	SECOND LIEUTENANT O-1 (GOLD)		PRIVATE FIRST CLASS/E-3
			PRIVATE/E-2
			PRIVATE/E-1
Warrant Officers			
	CHIEF WARRANT OFFICER (W-5)		CHIEF WARRANT OFFICER (W-4)
	CHIEF WARRANT OFFICER (W-3)		CHIEF WARRANT OFFICER (W-2)
			WARRANT OFFICER (W-1)

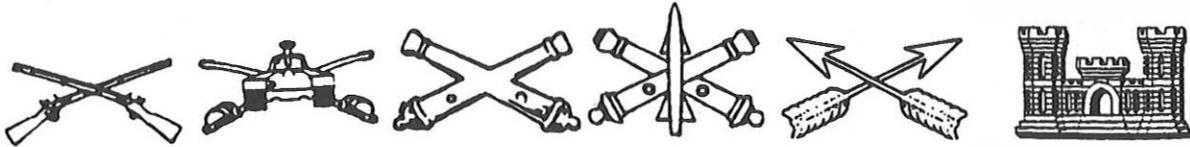
APPENDIX B

BRANCHES OF THE ARMY

All the people in the Army are assigned to — and trained or schooled in — one of the branches of the Army according to the functions they would perform in combat or in support of the combat units. The branches of the Army are grouped as to whether their primary mission is to engage in combat, to directly support the combat elements, or to provide combat service support or administration to the Army as a whole.

Depicted here are the various branches of the Army along with their distinctive insignia.

Combat and Combat Support



Infantry

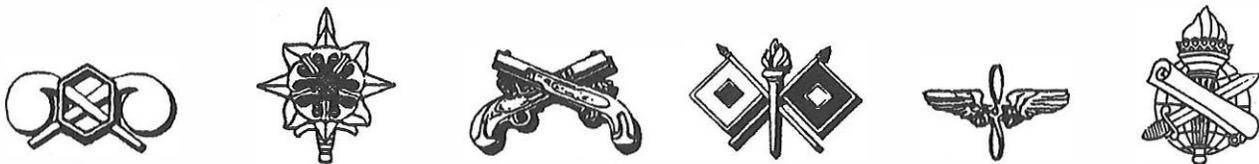
Armor

Field
Artillery

Air
Defense

Special
Forces

Engineer



Chemical

Military
Intelligence

Military
Police

Signal

Aviation

Civil
Affairs

Combat Service Support



Ordnance

Quartermaster

Transportation

Adjutant

Chaplain



Finance



Judge
Advocate
General



Inspector
General

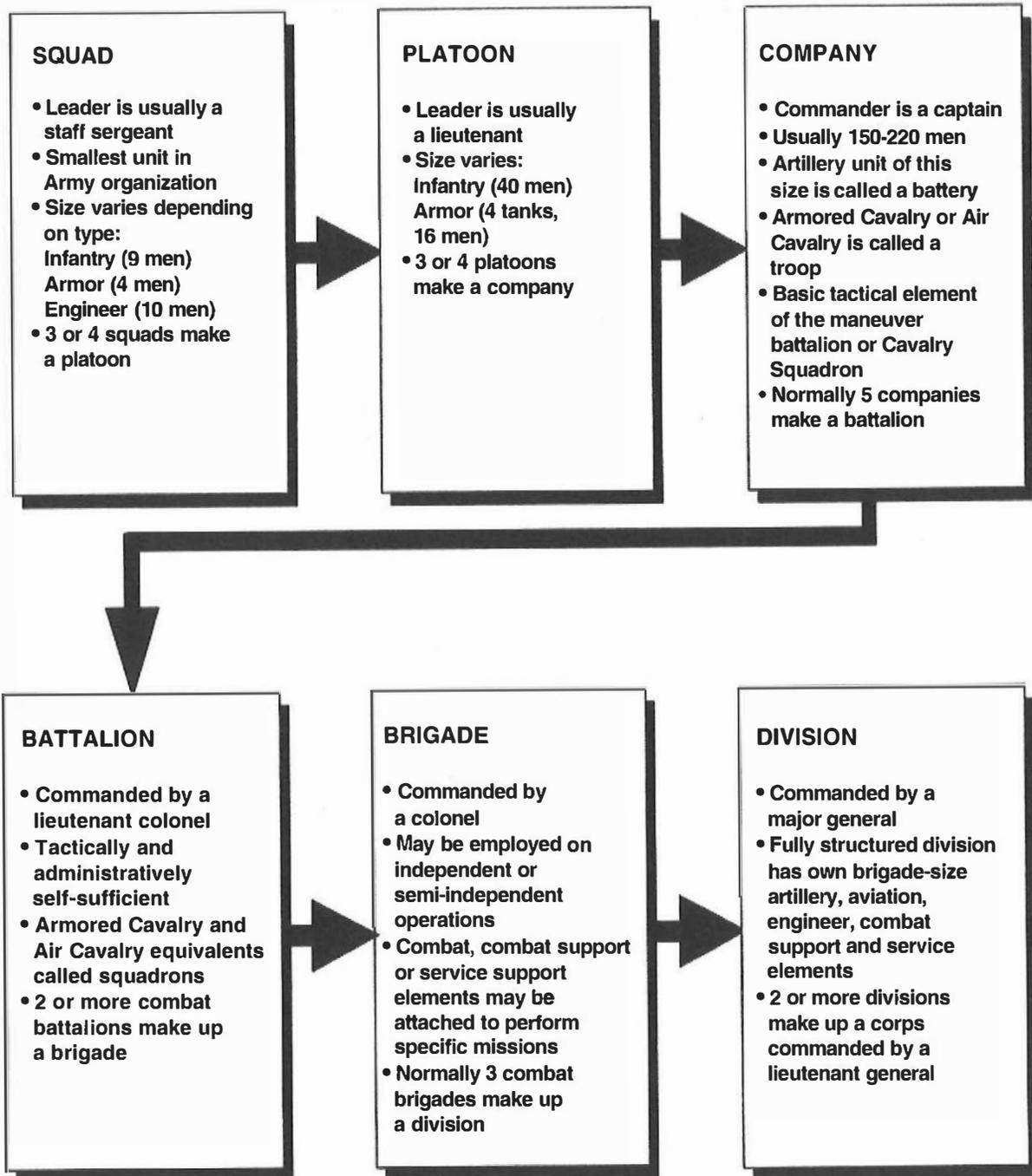


Medical
Department

APPENDIX C

ARMY COMBAT ORGANIZATION

Army organizations are inherently built around people and the tasks they must perform. Major combat organizations are composed of smaller groups of forces as shown here.



APPENDIX D

MAJOR U.S. ARMY INSTALLATIONS BY CONGRESSIONAL DISTRICT

(with active-duty population of 300 or more)
(as of November 1993)

ALABAMA

Fort McClellan, Anniston (3)
Redstone Arsenal, Huntsville (5)
Fort Rucker, Ozark (2)

ALASKA

Fort Greely, Delta Junction (AL)
Fort Richardson, Anchorage (AL)
Fort Wainwright, Fairbanks (AL)

ARIZONA

Fort Huachuca, Sierra Vista (5)
Yuma Proving Ground, Yuma (2)

CALIFORNIA

Fort Hunter Liggett, Monterey (17)
Fort Irwin, San Bernadino (40)
Fort Ord, Monterey (17)
Presidio, Monterey (17)
Presidio of San Francisco (8)
Sierra Army Depot, Herlong (2)

COLORADO

Fort Carson, Colorado Springs (5)
Fitzsimons Army Medical Center, Aurora (1)

GEORGIA

Fort Benning, Columbus (2)
and Phenix City, AL (3)
Fort Gillem, Atlanta (3)
Fort Gordon, Augusta (10) (11)
Hunter Army Airfield, Savannah (1)
Fort McPherson, Atlanta (5)
Fort Stewart, Hinesville (1)

HAWAII

Schofield Barracks, Honolulu (2)
Fort Shafter, Honolulu (1)
Tripler Army Hospital, Honolulu (1)

NOTE: Number in parentheses indicates congressional district(s) where installation is located and (AL) indicates At Large congressional district.

**MAJOR U.S. ARMY INSTALLATIONS BY
CONGRESSIONAL DISTRICT**
(continued)

INDIANA

Fort Benjamin Harrison, Indianapolis (10)

KANSAS

Fort Leavenworth, Leavenworth (2)
Fort Riley, Junction City (2)

KENTUCKY

Fort Campbell, Hopkinsville (1)
and Clarksville, TN (7,8)
Fort Knox, Louisville (2)

LOUISIANA

Fort Polk, Leesville (6)

MARYLAND

Aberdeen Proving Ground, Aberdeen (2)
Fort Detrick, Frederick (6)
Edgewood Arsenal, Aberdeen (2)
Fort George G. Meade, Laurel (5)
Fort Ritchie, Hagerstown (6)
and Blue Ridge Summit, PA (19)

MASSACHUSETTS

Fort Devens, Ayer (5)

MISSOURI

Fort Leonard Wood, Rolla (4)

NEW JERSEY

Fort Dix, Wrightstown (3)
Fort Monmouth, Redbank (12)

NEW MEXICO

White Sands Missile Range, Las Cruces (2)

NEW YORK

Fort Drum, Watertown (24)
Fort Hamilton, Brooklyn (11)
Seneca Army Depot, Geneva (27,31)
Fort Totten, Queens (6)
U.S. Military Academy, West Point (19)

NORTH CAROLINA

Fort Bragg, Fayetteville (7)

OKLAHOMA

Fort Sill, Lawton (4)

**MAJOR U.S. ARMY INSTALLATIONS BY
CONGRESSIONAL DISTRICT**
(continued)

PENNSYLVANIA

Carlisle Barracks, Carlisle (19)
New Cumberland Army Depot, Harrisburg (19)

SOUTH CAROLINA

Fort Jackson, Columbia (2)

TEXAS

Fort Bliss, El Paso (16)
Fort Hood, Killeen (11)
Fort Sam Houston, San Antonio (20)

VIRGINIA

Fort A.P. Hill, Bowling Green (1)
Fort Belvoir, Fairfax (8)
Cameron Station, Alexandria (8)
Fort Eustis, Newport News (3)
Fort Lee, Petersburg (4)
Fort Monroe, Hampton (1)
Pentagon, Arlington (8)
Fort Myer, Arlington (8)
Fort Pickett, Blackstone (4)
Vint Hill Communications and Electronics
Support Activity, Warrenton (10)

WASHINGTON

Fort Lewis, Tacoma (9) (6)

DISTRICT OF COLUMBIA

Fort Lesley J. McNair, Washington, D.C. (AL)
Walter Reed Army Medical Center, Washington DC
(AL)

APPENDIX E

ARMY DEMOGRAPHICS

(1993)

	Number	% of Total	
Active duty personnel	586,123		
Women	78,063	11.3	
Black	198,638	28.7	
Other minority	60,998	8.0	
Officers (includes warrants)	91,036		
Women	11,305	12.3	
Black	10,286	11.1	
Other minority	5,700	6.0	
Enlisted			
Women	59,785	12.3	
Black	150,258	31.0	
Other minority	50,368	10.0	
Officer Grades	Number	Enlisted Ranks	Number
WO/W1-5	13,799	PVT/E-1	22,626
2LT/01	8,208	PVT/E-2	38,661
1LT/02	10,728	PFC/E-3	57,313
CPT/03	28,520	CPL/SPEC/E-4	141,153
MAJ/04	15,694	SGT/E-5	99,616
LTC/05	9,485	SSG/E-6	75,377
COL/06	4,296	SFC/E-7	46,195
GO/07-010	356	FSG/MSG/E-8	10,911
		CSM/SGM/E-9	3,335

ARMY FAMILIES

	%		Number
Married		Family Members	
Officers	79	Spouses	372,431
Enlisted	56	Children	578,591
		Other dependents	3,930
		Total	954,952

	Number
Where Family Members Live	
CONUS (including Alaska & Hawaii)	816,384
U.S. Territories	736
Foreign countries	137,832

APPENDIX F

WHERE SOLDIERS SERVE

The Army is shifting to a force based primarily in the continental United States. Although the bulk of the Army is stationed at major military posts, there are members of the active Army stationed in every state. However, nearly 20 percent of the force will still serve overseas as part of our forward presence, in peacekeeping operations, or in a security assistance or other role.

Almost 25,000 soldiers are serving in 65 countries and 125,000 are forward stationed in Europe, Korea and Panama. Special operations forces are providing assistance in 50 countries and soldiers are supporting United Nations peacekeeping operations worldwide.

Some of the other locations where soldiers are serving are shown below.

- | | |
|--|--|
| <input type="checkbox"/> Saudi Arabia | <input type="checkbox"/> Macedonia |
| <input type="checkbox"/> Egypt (Sinai) | <input type="checkbox"/> Honduras |
| <input type="checkbox"/> Turkey | <input type="checkbox"/> Kuwait |
| <input type="checkbox"/> Croatia | <input type="checkbox"/> Northern Iraq |

The demands of these types of operations are expected to increase in the future. There is a distinct possibility that major U.S. Army units will be assigned a peacekeeping role in Bosnia, and there are indications that the evolving peace process in the Middle East may require the presence of additional troops.

APPENDIX G

SELECTED ARMY WEAPON SYSTEMS

M2/M3 SERIES BRADLEY FIGHTING VEHICLE SYSTEM (FVS). The M2 allows for mounted combat and means for infantry to protect tanks and consolidate gains in the offensive. Designed for a nine-man infantry squad, it includes a two-man turret for the commander and gunner. Armament includes the 25mm "chain gun," a 7.62mm coaxial machine gun, and a TOW antitank missile launcher housed in an armored rectangular box. Fire control includes an integrated day/night sight with a thermal-imaging infrared device. Top road speed is 38 mph; cruising range is 300 miles. The M2A1 incorporates the more lethal TOW 2. The M2A2 adds spall liners, enhanced applique armor and provisions for armor tile. The M3 series armored cavalry scout version accommodates the five-man cavalry squad.



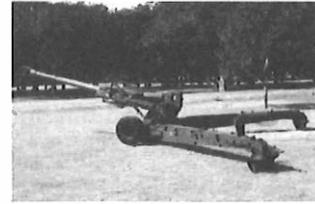
M113 SERIES ARMORED PERSONNEL CARRIER. The first M113 was powered by a 175-horsepower gasoline engine. The M113A1, with a 212-horsepower six-cylinder diesel engine, has a loaded weight, with a two-man crew and an 11-man infantry squad, of 12.3 tons; maximum road speed is 40 mph and cruising range is 300 miles. Armament includes a .50-caliber machine gun. Other variants of the M113 are M106A2 carrier for the 4.2-inch mortar; M125A2 carrier for the 81mm mortar; M577A2 command post vehicle; M741 chassis for the M163 Vulcan air defense gun; M730 for the Chaparral air defense missile system; and M901 improved TOW vehicle (pictured). The M113A2 has a turbocharged engine rated at 275 horsepower. The M113A3 version has incorporated interior spall liners, armored external fuel tanks, upgraded engine and transmission, and mounting points for bolt-on armor.

M1 SERIES ABRAMS MAIN BATTLE TANK. The Abrams tank is the Army's primary ground combat weapon for closing with and destroying enemy forces. Its special armor, compartmentalization of fuel and ammunition stowage, automatic fire detection and suppression system, and mobility provide the crew with the greatest possible levels of protection. The M1 tank is armed with a 105mm main gun. The M1A1 tank added a 120mm smoothbore cannon and an NBC microclimatic cooling system to the already proven combination of thermal sight, laser rangefinder and full stabilization. The M1A1 weighs 67 tons (combat loaded), is powered by a 1500-horsepower turbine engine, and has a top speed of 41 mph, a cruising range of 275 miles and a crew of four. Other armament includes one .50 cal machine gun and two 7.62mm machine guns. The M1 tank is to be upgraded to the M1A2 version.



TOW MISSILE SYSTEM. The TOW (Tube-Launched, Optically Tracked, Wire Command-Link Guided) antitank missile system is mounted on the FVS, the Improved TOW Vehicle, the High Mobility Multipurpose Wheeled Vehicle (HMMWV) and the AH-1S Cobra Helicopter. When the system is fired, a sensor in the launcher tracks a beacon in the tail of the missile; the gunner keeps the crosshairs on the target and a computer in the launcher sends corrections to the missile via two extremely thin wires that deploy in flight. The ground launcher version weighs 240 lbs; the missile weighs 62.4 lbs; its range is 3,750 meters. There is a three-man crew. Basic TOW is being converted to TOW 2 to incorporate a thermal night sight and improved warhead. The TOW 2A missile, which will defeat Soviet reactive armor, is being fielded. Other improvements are underway.

M198 SERIES 155MM TOWED HOWITZER. The M198 provides significant improvements in lethality, range, reliability, availability, emplacement and movement. The cannon will fire a 96-lb rocket-assisted projectile to a range of 30 kilometers. The maximum rate of fire is four rounds per minute, and two rounds per minute sustained. The accuracy of the M198 is enhanced by its highly stable firing platform. Less than five minutes are needed to set up the howitzer for firing or to displace. The M198 weighs 15,750 lbs, but is still light enough to be lifted by the CH-47 medium helicopter. It can also be towed cross-country by a five-ton truck. The M198 is replacing the M114A1/A2 howitzers. A program to upgrade reliability, safety and ease of operation is underway.



M109 SERIES 155MM SELF-PROPELLED HOWITZER. The M109 was designed to provide a medium-weight carriage with adequate mobility to support armor and mechanized infantry units. The M109 is an aluminum-armored, self-propelled, air-transportable field artillery weapon system. Most fielded Army howitzers are M109A2 or M109A3. The M109A2/A3 is capable of firing both conventional and nuclear munitions. Maximum range is 18,000 meters and 23,500 meters for rocket-assisted projectiles; weight is 56,000 lbs. Secondary armament includes a .50 cal machine gun. The crew consists of six personnel. Cruising range of the vehicle is 220 miles. A program to improve the M109 has resulted in the M109A4 (NBC protection), M109A5 (armament improvements) and M109A6 Paladin, which is capable of semi-autonomous operation.

M119 SERIES 105MM TOWED HOWITZER. The M119, originally developed by the United Kingdom, is a lightweight towed 105mm artillery system. It is intended for use in direct support field artillery battalions in the light infantry, airborne and air assault divisions. It weighs 4,000 lbs and is transportable by the UH-60-series helicopter. Its prime mover is the HMMWV. Using standard ammunition, the M119's range is 14,300 meters; rocket-assisted projectiles (RAP) and improved conventional ammunition now in development are expected to increase the range to 19,500 meters and improve lethality. The M119A1, with U.S. fire control (pictured), replaces the M102 howitzer (maximum range 11,500 meters; 15,000 meters with RAP) which in turn replaces the M101A1 (maximum range 11,270 meters; 14,500 meters with RAP).



MULTIPLE-LAUNCH ROCKET SYSTEM (MLRS). MLRS is a free-flight artillery rocket system that consists of a 12-round launcher capable of firing rockets one at a time or in rapid ripples to ranges beyond 40 kilometers. The primary missions of MLRS are counterfire and suppression of enemy air defenses. It supplements cannon artillery fire by delivering large volumes of firepower in a short time against critical, time-sensitive targets. MLRS employs shoot-and-scoot tactics to limit vulnerability to counterbattery fire. In addition to the dual-purpose conventional submunition, the system can deliver scatterable mine warheads, each of which dispenses 28 antitank mines. The MLRS launcher has been updated to employ the Army Tactical Missile system (ATACMS) against tactical surface-to-surface missile sites and other priority targets.

PATRIOT. The Patriot missile system is the centerpiece of theater air and tactical ballistic missile defense. The system's fast reaction capability, high firepower and ability to operate in a severe electronic countermeasure environment are features not previously available in air defense systems. The combat element of the system is the fire unit, which consists of a radar set, an engagement control station, a power plant, an antenna mast group and eight remotely located launchers. The system is highly automated, combining high-speed digital processing with various software routines to effectively control the battlespace. The single radar, using phased array



technology, provides for all tactical functions of airspace surveillance, target detection and tracking and support of missile guidance. The only manned element of the fire unit during air battle, the engagement control station provides the human interface for control of automated operations. Each launcher contains four ready-to-fire missiles, sealed in canisters which serve a dual purpose as shipping containers and launch tubes. Multiple targets can be engaged simultaneously. U.S. missile production deliveries include PAC-2 modifications. PAC-2 missiles and Post Deployment Build 3 software provide Patriot a limited asset defense against the theater ballistic missile threat.



STINGER MANPORTABLE ANTI-AIRCRAFT MISSILE. The shoulder-fired Stinger provides effective short-range air defense capabilities for ground personnel against low-level fixed-wing aircraft and helicopters. The 35-lb supersonic fire-and-forget Stinger, which has replaced the Redeye, features quick-reaction acquisition and tracking and the ability to engage aircraft approaching from any direction, including head-on. Three variants, Basic Stinger, Stinger-POST (passive optical seeker technique) and Stinger-RMP (reprogrammable microprocessor), are in the Army inventory. The Basic Stinger is an infrared (IR) system. The Stinger-POST employs a dual-detector (IR and ultraviolet). The Stinger-RMP improves microprocessor power and is highly resistant to countermeasures. New software reprogrammability allows upgrades without costly retrofit.

AVENGER SURFACE-TO-AIR MISSILE/GUN SYSTEM. The Avenger is a lightweight, highly mobile/transportable surface-to-air missile/gun system mounted on a High Mobility Multipurpose Wheeled Vehicle (HMMWV). The armament consists of eight ready Stinger missiles and a .50 caliber machine gun. It is operated by a two man crew and has a day/night capability. Avenger provides a forward air defense capability in the division tactical area.



M9 ARMORED COMBAT EARTHMOVER (ACE). The M9 ACE is a highly mobile (tracked), amphibious armored earthmoving vehicle that can move, survive, and work with the flow of battle, responding immediately to the need for elimination of enemy obstacles, creation of obstacles to enemy maneuver, preparation of fighting positions for the fighting forces, expedient antitank ditching, and maintenance of roads and supply routes. The M9 ACE weighs 18 tons empty and 26 tons loaded, with a road speed of 30 mph. It is transportable by C-30 and larger aircraft. Vehicle armor protects the crew from small arms, artillery fragmentation, and NBC threats.

The 7th Infantry Division (Light) was the first unit equipped. Deliveries of the full production vehicles to the field began in the June-October 1989 time frame. Due to Operation DESERT STORM, the M9 ACE was fielded to SWA units in November-December 1990.

UH-1-SERIES IROQUOIS UTILITY HELICOPTER. The UH-1 is a low silhouette, single-rotor helicopter powered by a single gas turbine engine. Missions include transportation of personnel, equipment and supplies; command and control; and medical evacuation. There have been several UH-1 models produced, the latest being the UH-1H and UH-1V. The UH-1V is a medical evacuation helicopter. Nicknamed the "Huey," the UH-1 has a crew of three, consisting of two pilots and a crew chief, and can transport a 3,000-lb payload (including up to eight combat troops) or a 4,000-lb sling load under standard day conditions. Maximum speed is 124 knots; endurance is 2.5 hours; and maximum gross weight is 9,500 lbs.



UH-60 SERIES BLACK HAWK TRANSPORT HELICOPTER. The UH-60 Black Hawk is a twin-engine helicopter that is used in the performance of the air assault, air cavalry, aeromedical evacuation and command and control missions. It is capable of carrying a crew of three and a combat-equipped 11-man infantry squad (or 14 with alternate seating). The Black Hawk can also transport a 105mm howitzer with its crew and ammunition. The Black Hawk is replacing the UH-1H Iroquois in air assault, air cavalry, aeromedical evacuation and special forces units. The UH-60L has improved durability and a new primary engine. Normal mission endurance is 2.1 hours. Under hot day conditions, the Black Hawk can lift its crew of three and 11 combat-equipped troops, with a rate of climb of 785 feet per minute and a cruising speed of 150 knots.



AH-64 SERIES APACHE ATTACK HELICOPTER. The AH-64A is an advanced attack helicopter able to locate, engage and destroy enemy armor forces and a variety of other targets during day, night and bad weather. The Apache is operated by a crew of two. Maximum level flight speed is 158 knots, and the ceiling is 20,000 feet. Mission endurance is 2.5 hours carrying eight Hellfire antitank missiles, 38 2.75-inch rockets and 1,200 rounds of 30mm cannon ammunition at a speed of 146 knots. The crew station is protected by armor plating and a blast fragment shield.

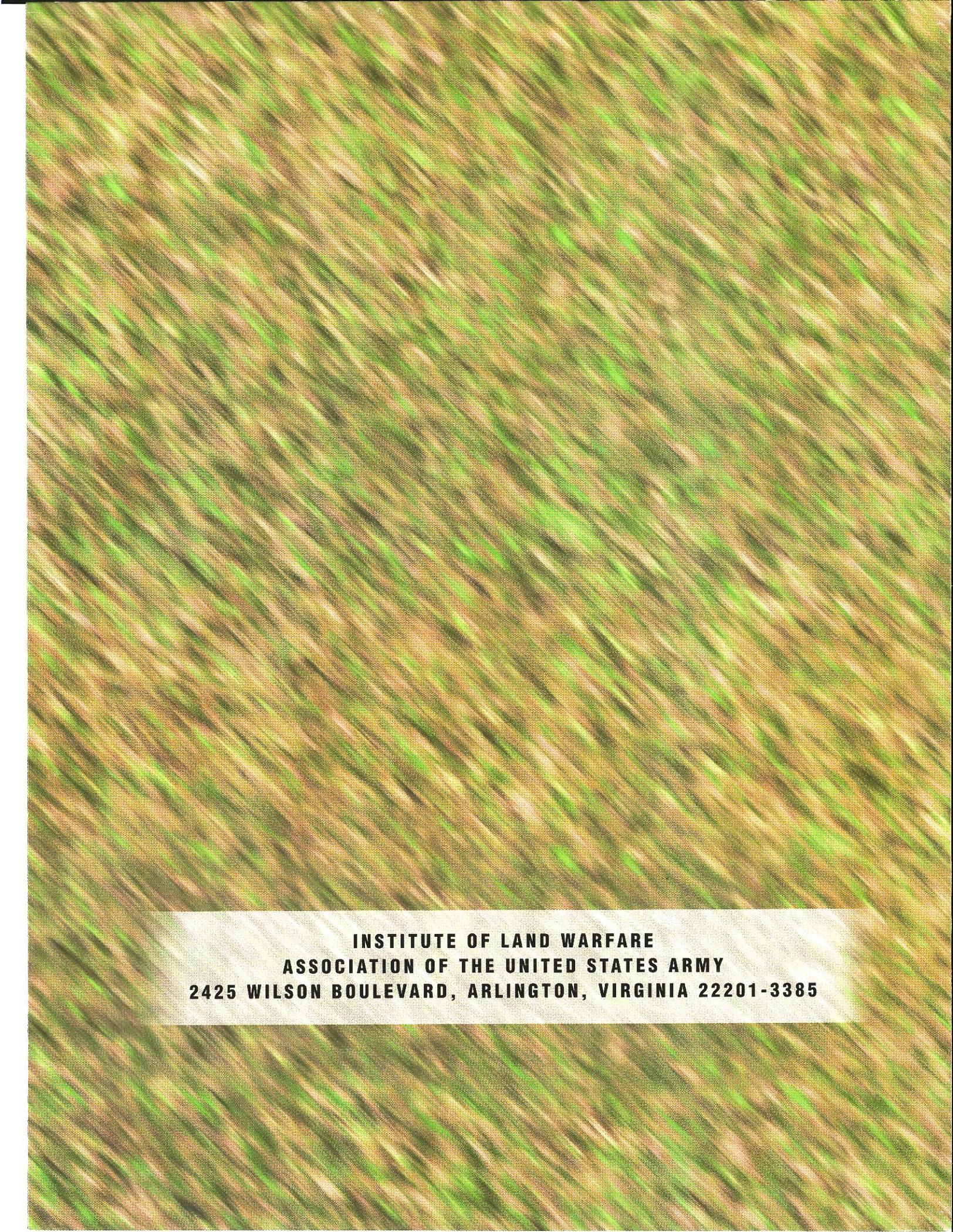
AH-1 SERIES COBRA ATTACK HELICOPTER. The primary missions of the AH-1S Cobra are antiarmor, armed escort and reconnaissance. It can carry a mix of the following weapons: eight TOW missiles, 750 rounds for the 20mm cannon, and 76 2.75-inch rockets. Maximum sea-level speed is 171 knots. Normal cruise speed is 123 knots, maximum endurance is 2.6 hours and rate of climb is 1,580 feet per minute. A major improvement is the Cobra "C-NITE" that gives the helicopter a night tank-killing capability. This enables the AH-1S to fire TOW missiles at night and under bad weather conditions in a limited electro-optical countermeasures environment.



CH-47 SERIES CHINOOK MEDIUM-LIFT TRANSPORT HELICOPTER. The CH-47D is a medium lift transport helicopter used primarily to transport personnel, weapons, ammunition, equipment and other cargo in general support of combat units. It has a payload of 24,000 lbs. The Chinook has a maximum level flight speed of 158 knots, single-engine service ceiling of 13,100 feet, the ability to hover out-of-ground effect up to 17,250 feet, and maximum rate of climb of 3,450 feet per minute. The Army continues to modernize CH-47A, B and C models to the "D" configuration for one-to-one replacement in the field.

OH-58D KIOWA WARRIOR. The OH-58D is the Army's first true scout helicopter. It provides a day, night, bad weather capability in high temperature/high altitude conditions. The aircraft system incorporates a new drive train consisting of a four-bladed rotor, 650 HP engine, compatible transmission and tail rotor systems. The OH-58D has a mast-mounted sight that provides day and night target acquisition sensors and a laser rangefinder designator located above the rotor to maximize aircraft survivability. A highly accurate navigation system permits precise target location which can be passed to other aircraft or artillery elements via the airborne target handover system. The laser designator enables the OH-58D to provide designation for laser guided weapons to include Hellfire and other precision munitions. The OH-58D can be equipped with Air-to-Air Stinger (ATAS) missiles. The OH-58D has a maximum speed of 118 knots with a crew of two.





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