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Department of the Army Historical Summary Fiscal Year 1975

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Department of the Army Historical Summary Fiscal Year 1975

Compiled by
KARL E. COCKE

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Preface

The *Department of the Army Historical Summary for Fiscal Year 1975* is the latest in a series of periodic reports of the Army's expenditures, work, and accomplishments that began with Secretary of War John C. Calhoun's report to President James Monroe in 1822. This year's report is the fifth to be published separately by the Army following cancellation of the *Annual Report of the Secretary of Defense*—a document which had incorporated the annual reports of all the service secretaries from 1948 through 1968.

The *Army Historical Summary* is based upon narrative contributions prepared by Army staff agencies having primary responsibility for the subject matter covered. The objective of the report is to present a clear, succinct account of major events and developments within the Army and to serve as a primary source of reasonably comprehensive and quickly retrievable information for both official and public use.

The compiler gratefully acknowledges the cooperation of the action officers on the Army staff who assisted in preparing the report and expresses his appreciation to the members of the Histories Division, U.S. Army Center of Military History, for their suggestions and wise counsel. His special thanks go to Mrs. Rae T. Panella for her work in editing the summary.

KARL E. COCKE

Washington, D.C.

DEPARTMENT OF THE ARMY HISTORICAL SUMMARY

Fiscal Year 1975

I. Introduction

On 14 June 1975 over one million soldiers and civilians at virtually every Army installation throughout the world turned out to celebrate the Army's 200th anniversary of service to the nation. President Gerald R. Ford attended festivities at Fort Benning, Georgia, with Secretary of the Army Howard H. Callaway. Among other birthday activities were presentations by the 1st Battalion, 3d Infantry (The Old Guard), of a pageant entitled Spirit of America to over 40,000 enthusiastic citizens in the Washington, D.C., area; a reunion of former members of once all-black combat units at Fort Huachuca, Arizona; and a memorial service at Arlington National Cemetery, during which Sfc. Ralph Lee Bowerman's composition "Mighty Is Our Army," the winning selection from over 1,200 entries in the Army Chaplains' Bicentennial Army Hymn Composers Competition, was presented.

The spring of 1975 also marked the fall of allied governments in Cambodia and South Vietnam, bringing to an end a security assistance effort that lasted over twenty years. Billions of dollars were spent on aid, but in the end much of the equipment supplied to the Cambodians and South Vietnamese was lost. Partially as a result of the experience, the United States has begun to reduce its security assistance to allied governments.

The Army at home continued to adjust to a peacetime environment, but without the wise and understanding leadership of General Creighton W. Abrams, who served as Army Chief of Staff from 12 October 1972 until his death on 4 September 1974. Vice Chief of Staff General Fred C. Weyand was appointed to the Army's top job on 3 October 1974.

On 9 October 1974 Secretary of the Army Callaway announced that all draftees would be released during the period 13–22 November. At the time of the announcement there were 3,126 draftees on active duty, and 17.8 percent of them elected to remain in the service as volunteer soldiers. On 22 November 1974 the Army became an all-volunteer force for the first time since 1948. By emphasizing recruiting and reenlistments, it was able to stabilize its actual strength at 784,000. Meanwhile, the composition of the Army continued to shift away from head-

quarters and support forces toward combat units in a concentrated effort to achieve sixteen active divisions.

In December 1974, the Secretary of the Army and the Chief of Staff set three primary goals for fiscal year 1975: improving the quality of the enlisted force while maintaining recruiting momentum, making the best use of resources, and shaping the Army for the rapidly changing future. In support of these goals, Secretary Callaway established five priority objectives for the Army: (1) reduce the officer corps to minimum essential strength; (2) improve the quality of personnel and insure that the Army remains representative of the population; (3) increase combat strength in Europe, attain a sixteen-division active Army, and maintain the readiness of active and reserve component forces; (4) improve management for materiel acquisition; and (5) establish communications with all members of Congress.

Basic to accomplishing these objectives was the support of Congress and the American public, and an important ingredient of that support was candor on the part of the Army in its public contacts. Recognizing this, the Secretary of the Army started the "glad you asked" policy to encourage members of the Army to bring a new spirit of openness to their jobs, to present bad news as forthrightly as good news, and to acknowledge mistakes. The emphasis given to the traditional value of frankness and the prompt acknowledgement of errors and problems helped to reduce criticism of the Army. More importantly, the "glad you asked" policy helped improve the public's confidence in the Army and overcome much of the suspicion and hostility between the Army and the press that had been created by a decade of conflict in Vietnam.

At the close of the fiscal year, the Army was within reach of meeting its five priority objectives. What follows explains how the Army went about that task.

II. Operational Forces

The Army's authorized military strength for fiscal year 1975 was a stable 785,000. The ratio of combat to support forces increased considerably as the Army moved ahead with its plan to increase the number of active Army combat divisions from thirteen to sixteen. Implementation of the sixteen-division structure, originally scheduled for completion by fiscal year 1978, was advanced to the end of fiscal year 1977 due to the success in reducing the size and number of Army headquarters and eliminating combat support spaces in Europe to meet the dictates of Congress and the Department of Defense. Two of the new divisions will be infantry units—the 7th Infantry Division stationed at Fort Ord, California, and the 24th Infantry Division, which will be located at Fort Stewart, Georgia. The third new division, the 5th Infantry Division (Mechanized), will be stationed at Fort Polk, Louisiana. The latest plans call for the 5th Infantry Division and the 24th Infantry Division each to have three active Army brigades and one affiliated reserve component brigade. The 7th Infantry Division will contain two active Army brigades and one reserve component round-out brigade.

Major changes in the Army force structure during the past year included the activation of one division (less one brigade), three separate brigades, and eleven battalions, including the second of three planned Ranger battalions. The 7th Infantry Division, less certain organic elements, was activated at Fort Ord, and the 1st Brigade, 5th Infantry Division and the 1st Brigade, 24th Infantry Division were activated as separate units at Fort Polk and Fort Stewart. The 6th Cavalry Brigade (Air Combat) was formed from the air cavalry brigades of the 1st Cavalry Division. When a divisional brigade was then re-formed with armor units, the reorganization of the 1st Cavalry Division to an armored configuration was complete. In the 2d Armored Division, a fourth brigade was organized to compensate for the temporary loss of the third brigade, which was sent to Europe.

There were no major unit inactivations within the Army during the past year. A number of small units, however, were dropped from the troop list, including one airmobile battalion,

two field artillery battalions (Honest John), and three assault helicopter companies.

In May 1974 the Chief of Staff approved a proposal to modify the mission, organization, equipment, and doctrine of the engineer construction battalion, which will be renamed the combat engineer battalion (heavy). The conversion, not to take place until next year, will provide the Army with units that can perform combat engineering and heavy construction missions and fight as infantry.

The House Appropriations Committee in November 1974 began an inquiry on the feasibility of unit rotation as an alternative to the individual overseas replacement system. Interested in unit rotation as a possible way to reduce greatly the number of military dependents overseas and thereby achieve substantial savings, the committee had its staff members visit major United States and overseas commands during the last half of the fiscal year to gather field data. Meanwhile, the Department of Defense coordinated efforts by the Army and Air Force to write staff studies on unit rotation. Completing its study in May 1975, the Army concluded that unit rotation would not be a practical alternative for the individual replacement system because of the geographical distribution of interchangeable units. It would not reduce costs; instead, it would decrease unit readiness and cause personnel problems. The Army recommended that further consideration of unit rotation await the evaluation of the limited rotation program under way to boost the combat capability of U.S. forces in Europe.

Europe and the Middle East

The Nunn Amendment to the fiscal year 1975 Military Appropriation Act (Public Law 93-365) required the Secretary of Defense to reduce noncombat forces in Europe by 18,000 troops no later than 30 June 1976. Not less than one-third of the reduction was to be completed by the end of fiscal year 1975. The amendment also authorized the Secretary of Defense to increase combat forces in Europe by an amount equal to reductions made in noncombat forces.

Responding to the Nunn Amendment, the Army reduced the number of support spaces in Europe by 6,000, raised manning levels in selected European-based combat units, and on 14 March 1975 began deployment of the 3d Brigade, 2d Armored Division from Fort Hood, Texas, to the Federal

Republic of Germany. Stationing plans for the brigade, called Brigade 75, were unique. Only 664 members of the brigade headquarters and its support battalion will be stationed in Europe. The remainder of the brigade, consisting of a tank battalion, two infantry battalions, a field artillery battalion, a cavalry troop, and an engineer company, will rotate between their bases in the United States and Europe, spending six months at a time overseas. Rotation will be scheduled so that an effective brigade is always on hand in Europe.

This year's **REFORGER** exercise took place during the period 30 September–21 November 1974. In the first phase of the three-part exercise, the U.S. Air Force, using C-5 and C-141 aircraft, transported over 11,400 soldiers from the 1st Infantry Division, the 212th Artillery Group, the 3d Armored Cavalry Regiment, and other units based in the United States to airfields in the Federal Republic of Germany. The units received prepositioned sets of equipment and then moved to assembly areas. **CERTAIN PLEDGE**, the field training phase of **REFORGER**, involved the airlifted units, as well as U.S. Army, European; German; and Canadian forces in extensive offensive and defensive exercises during the period 10–23 October 1974. The final phase began on 24 October 1974 when the airlifted units test-fired large caliber weapons and performed the maintenance necessary to prepare the prepositioned stocks for storage. During this phase tactical operations center personnel from the airlifted units participated in command post exercise **CERTAIN RESOLVE**. Afterward the units departed Nurnberg and Ramstein Air Force bases and returned to their home stations by 21 November 1974.

During fiscal year 1975 the Army continued as the Department of Defense executive agent for logistic support to United Nations observation and peacekeeping forces in the Middle East. These comprised the United Nations Truce Supervision Organization (UNTSO), the United Nations Emergency Force, and the United Nations Disengagement Observer Force. The Army also supported the thirty-six U.S. military observers (nineteen Army, six Marine Corps, six Air Force, and five Navy) who served the truce supervision organization. The U.S. observers were active in Egypt, Israel, Lebanon, Jordan, and Syria, and six of them occupied UNTSO staff positions. The United States concurred in a Soviet proposal to downgrade the senior American and Soviet positions within UNTSO to the grade of lieutenant colonel.

The Pacific and the Far East

In the spring of 1975 world attention focused on the fall of Cambodia and South Vietnam to Communist-supported insurgent movements and invasion. On 12 April 1975 the last U.S. diplomatic and military personnel left Phnom Penh, Cambodia, just before the Khmer Rouge takeover. The hurried evacuation of Americans from Saigon and the fall of the South Vietnamese government to the Viet Cong and its North Vietnamese allies followed less than three weeks later. At the end of the fiscal year the coalition government in Laos continued its tenuous hold over that country, but a takeover by the Communist Pathet Lao appeared imminent.

In neighboring Thailand, the Army decreased its strength, mainly in logistic support units, from slightly over 4,000 at the beginning of the fiscal year to about 3,000 by 30 June 1975. As part of the decrease, the U.S. Army Support Command, Thailand, a major Army command, was discontinued on 1 July 1974. Its functions were assumed by the U.S. Military Assistance Command, Thailand, Support Group, a joint organization charged with providing administrative and logistic support to all U.S. military forces in Thailand and to selected U.S. government agencies in Southeast Asia. This arrangement will be temporary, however, since the government of Thailand has requested that U.S. military forces leave the country by March 1976.

The Eighth Army and U.S. Army, Japan, became major commands upon the termination of U.S. Army, Pacific, on 31 December 1974. Both commands continued as Army components of unified commands. U.S. Army Support Command, Hawaii, a subordinate headquarters of U.S. Army Forces Command, was made responsible for Army forces stationed on Hawaii, Guam, and Johnston Island. Its commander also headed U.S. Army Commander-in-Chief, Pacific, Support Group, a field operation under the proponentcy of the Deputy Chief of Staff for Operations and Plans, that coordinated actions in the Pacific affecting more than one major Army command.

The Western Hemisphere

U.S. Army, Alaska, was officially discontinued on 31 December 1974. Six months earlier, on 1 July 1974, U.S. Army Forces Command had assumed control of Army troop units in

Alaska, including the 172d Infantry Brigade. The U.S. Army Health Services Command took over responsibility of Army nontactical medical units and facilities (not attached to combat units), and the U.S. Army Training and Doctrine Command assumed selected training and doctrine functions that were previously performed by U.S. Army, Alaska.

Far to the south, similar changes in command relationships were completed in the Canal Zone. Headquarters, U.S. Army Southern Command, was disestablished on 31 December 1974. The 193d Infantry Brigade took over Army component responsibilities of the unified command and installation management functions. The Training and Doctrine Command assumed responsibility for the Army Reserve officer training program in the Canal Zone as well as other training and doctrinal functions. Earlier, nontactical medical units and facilities began reporting directly to the Health Services Command, while the Army Communications Command continued to oversee communications activities in the Canal Zone.

Of the specialized support units that comprised the Security Assistance Force in Latin America at the beginning of the fiscal year, only the 3d Battalion, 7th Special Forces Group (Airborne), remained in the Canal Zone on 30 June 1975. The 9th Psychological Operations Battalion, 146th Engineer Detachment, 550th Military Police Detachment, and 610th Military Intelligence Detachment were inactivated in December 1974 as part of the Army-wide reduction in personnel. Army units in the United States will replace mobile training teams previously drawn from Canal Zone units in providing security assistance support to Latin American countries.

Within the United States, the Army continued to phase out its Nike Hercules air defense batteries. By the close of fiscal year 1975, thirty-five of the forty-eight batteries had been inactivated, including the twenty-seven batteries in the Army National Guard. The Army also discontinued its Air Defense Command on 4 January 1975 and assigned the residual forces and missions to the Forces Command and the Ballistic Missile Defense Program Manager.

Army installations in the United States received a surge of applications for political asylum from the 91 Vietnamese and 132 Cambodian military personnel who were attending Army schools at the time their governments fell. The trainees were permitted to stay, and at the close of the fiscal year arrangements were nearing completion to transfer them to local jurisdictions where they could receive federal assistance under

the \$405 million refugee settlement program signed by President Ford on 21 May 1975.

Readiness

The readiness of the Army continued to improve during fiscal year 1975. The number of units attaining prescribed readiness objectives stood at 57 percent at year's end, as compared to 54 percent the year before, a gain realized in spite of a slight decline in logistical readiness. In this particular area, there was a drop from 93 percent to 90 percent in units having their authorized level of equipment, and equipment status goals (including the condition of equipment as well as its availability) were met by 78 percent of the units reporting, down 2 percentage points from the previous year. All active Army combat divisions were judged capable of performing their wartime missions. Those divisions located in the United States were rated fully ready or substantially ready; divisions stationed in Europe were rated substantially ready. In the Pacific, the division in Hawaii and the division in Korea, with its Korean Army augmentation, were considered ready to perform their assigned missions.

The readiness of the reserve components also improved during the past year, especially in the area of training, where increased active Army participation proved beneficial. Equipment levels rose, but shortages still existed and the influx of modern equipment actually decreased due to unprogrammed diversions to meet high priority requirements elsewhere.

In December 1974 the Vice Chief of Staff directed the Army staff to analyze the operational readiness of the Army and to find out what should be done to reach prescribed readiness goals. The analysis, which received the name OMNIBUS, involved an examination of the Army's force structure and its ability to mobilize, deploy to Europe, and sustain itself in combat. OMNIBUS has since evolved into a computer-assisted analysis (Force Readiness Analysis System) that will develop conclusions on the Army's readiness and recommendations to improve it on an annual basis. These recommendations will be incorporated with those of the Total Force Analysis in each publication of the Program Objective Memorandum.

Another management tool, the Materiel Assistance Designated Report, was developed to augment unit readiness reports. Unit commanders prepare the materiel assistance reports, which the U.S. Army Materiel Command uses in

scheduling delivery of equipment and spare parts to needy units in order to bring their logistical readiness condition to authorized levels. A study has also been started to determine requirements for a fifteen- and thirty-day supply of spare and repair parts to support combat operations following mobilization.

Command and Control

The Army's Tactical Command and Control Program, formerly titled the Integrated Battlefield Control System, will enable ground commanders to direct combat operations more effectively in the 1982-85 time frame. Using an integrated management structure composed of representatives from the Department of the Army and selected Army commands, the program involves an evolutionary, iterative process of interacting studies, tests, and computer systems. During fiscal year 1975 two components of the program, the Field Artillery Tactical Fire Direction System and the Air Defense Command and Control System, underwent extensive developmental and operational tests and were being produced in limited quantities for further testing. After these tests, the Army will decide whether to equip all its tactical forces with these systems.

Other components of the Tactical Command and Control Program under development include the tactical operations system (TOS) and a system for the Army Security Agency Control and Analysis Center. A prototype of the latter was under construction as the fiscal year ended. For the former, potential users were refining requirements in preparation for the full-scale engineering phase of development. Different versions of TOS will be tested at division level in order to compare the merits of an automated system with a manual one.

The Army also participated in two joint tactical command and control programs, the Tactical Air Control Systems/Tactical Air Defense Systems (TACS/TADS) Interoperability Program and the Joint Interoperability of Tactical Command and Control Systems in Support of Ground and Amphibious Military Operations (GAMO) Program. The objective of these programs is to develop and test joint message standards and to adapt the command and control systems of the military services so that information can be interchanged. During the past fiscal year, the AN/TSQ-73 had the best operational record of all the systems used in TACS/TADS tests. Meanwhile, activity in the GAMO program concentrated on technical design and the

development of test plans. The GAMO Joint Interface Test Force was established in June 1975 to conduct compatibility and interoperability tests.

Exercises

Field training and command post exercises conducted under the Joint Chiefs of Staff (JCS) Directed/Coordinated Exercise Program have recently been emphasized in training and in testing strategic mobility capabilities. In fiscal year 1975, the JCS approved six directed exercises relating to strategic mobility or of major scope and thirty coordinated exercises involving more than one unified command or military service. The Army planned to participate in five of the directed exercises and twenty-one of the coordinated exercises, but because of budgetary and airlift constraints, took part in only three directed exercises, **REFORGER 74**, **GALLANT SHIELD 75**, and **SOLID SHIELD 75**, and thirteen coordinated exercises. Because of these constraints, future programs will probably include more command post exercises and fewer but larger field training exercises involving all the unified commands.

Civil Affairs, Psychological Operations, and Special Forces

Two changes in the civil affairs structure of the active Army were completed during fiscal year 1975. The 3d Civil Affairs Group in Panama was inactivated in December 1975, and the civil affairs units stationed at Fort Bragg, North Carolina, were organized into a single, 115-man unit, the 96th Civil Affairs Battalion. The only civil affairs unit still in the active Army, the 96th can support a deployment package of up to corps size.

The long delayed reorganization of Army Reserve civil affairs units under the H-Series modified tables of organization and equipment went into effect on 1 June 1975. The aggregate strength of the new civil affairs structure was 6,938 as compared to 6,964 before. Changes in unit designations are shown in the following table:

Old Designation	H-Series Designation	No. of Units
Civil Affairs Area A	Civil Affairs Command	3
Civil Affairs Area B	Civil Affairs Brigade	10
Civil Affairs Group	Civil Affairs Group	15
Civil Affairs Company	Civil Affairs Company	24

Inactivation of the 5th Psychological Operations (PSYOP) Battalion, located at Boeblingen, Germany, and the 9th PSYOP Battalion in the Panama Canal Zone left the 4th PSYOP Group

at Fort Bragg, North Carolina, as the only active Army psychological operations unit. The latter was reorganized, and with three battalions it will take over the responsibilities of the two inactivated groups and in addition will act as the worldwide psychological operations augmentation unit. Additional organizational changes will be made to place the 4th's 50-kilowatt radio broadcast and printing resources within group headquarters. The group's three battalions will have light mobile and medium mobile printing equipment as well as mobile speakers and audiovisual equipment.

Throughout the period of reorganization the 4th PSYOP Group maintained readiness to respond to worldwide contingencies, supported training activities at the John F. Kennedy Center for Military Assistance, and operated the PSYOP Automated Management Information System (PAMIS). It also put the Foreign Media Analysis (FMA) subsystem into limited operation for training and evaluation and assumed the FMA coding input function that had been performed by the PAMIS Detachment on Okinawa before inactivation in December 1974.

Elements of the 4th PSYOP Group deployed to Guam; Fort Chaffee, Arkansas; Eglin Air Force Base, Florida; and Fort Indiantown Gap, Pennsylvania, in support of Operation New Arrivals, and participated in two joint exercises, **SOLID SHIELD 75** and **GALLANT SHIELD 75**.

In other matters related to PAMIS subsystems, operational coverage of the PSYOP Foreign Area Data Subsystem was expanded to twelve countries, and an in-process review committee studied the PSYOP Effects Analysis Subsystem, which continued under development throughout the year. A committee recommendation on a software program for portions of the subsystem was scheduled for fiscal year 1976.

Special Forces followed the pattern set by the Army as a whole and modified their tables of organization to improve the ratio of combat support within each group. The number of operational detachments (A Teams) authorized each special forces battalion rose from fifteen to eighteen, but authorized detachment strength declined from fourteen to twelve men. Headquarters company (B Team) strength was reduced from twenty-four to five. The support battalion organic to each special forces group was replaced by separate signal and service companies, and the battalion headquarters was eliminated. The 5th and 7th Special Forces Groups have already converted to the new table of organization. The 10th Special Forces Group will change in November 1975. The two Army National Guard

and two Army Reserve special forces groups will reorganize later in fiscal year 1976. Personnel savings resulting from the reorganization of special forces units will total approximately seven hundred in the active Army and one thousand in the reserve components.

Chemical, Biological, and Nuclear Matters

On 22 January 1975 President Ford signed the instruments of ratification for the 1975 Geneva Protocol on the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare. Since most parties to the protocol, including the United States, reserved the right to retaliate against a chemical attack with like weapons, the agreement did not remove the threat of chemical warfare. Nor did it prohibit the development, production, and stockpiling of lethal chemical weapons. The protocol, however, may deter the first use of chemical weapons and ease the way for more effective arms control measures.

American policy, unilaterally announced in 1969, has been consistent with what came to be embodied in the Geneva Protocol. That policy is based upon deterring the use of chemical weapons by other nations and being able to retaliate with chemical weapons should deterrence fail. The chemical warfare programs are designed to assure the Army's ability to survive initial chemical attacks, operate effectively in a toxic environment, and retaliate with chemical weapons upon receipt of proper authorization. A review of the Army's chemical warfare capability and nuclear-biological-chemical defense training was completed in January 1975. The review highlighted training equipment and organization as areas that require substantial improvement.

The Army continued the chemical demilitarization of unserviceable and excess toxic munitions. Disposal of the biological stockpile, some defective chemical rockets, excess bulk mustard, and bulk GB nerve agents was completed during the year. Major projects that continued into fiscal year 1976 included disposal of bulk GB, phosgene agents, and munitions at Rocky Mountain Arsenal, Colorado; disposal of leaking munitions now encased in sealed metal containers; and disposal of obsolete identification and training sets.

President Ford issued an Executive Order on 8 April 1975 that renounced the first use of herbicides in wartime, except for control of vegetation within U.S. bases and installations or

around their immediate defensive perimeters. The Executive Order also prohibited the first use of riot control agents in wartime, except for defensive operations such as riot control in areas under U.S. military control, including prisoner of war compounds; situations in which civilians are used to disguise or screen enemy attacks and use of riot control agents would reduce civilian casualties; the rescue of downed aircrews and passengers in remote areas; the recovery of escaping prisoners of war; and the protection of convoys from civil disturbances and attacks by terrorists and partisans in rear areas. The Executive Order specifically prohibited the wartime use of any herbicide and riot control agent without prior approval by the President, but did not apply to peacetime use on U.S. bases for protection and security.

The 1973 Biological Weapons Convention entered into force on 26 March 1975 following ratification by the Soviet Union, the United Kingdom, and the United States. The convention prohibited the development, production, and stockpiling of bacteriological toxins, as well as associated weapons and equipment. It also required each ratifying government to destroy or divert to peaceful purposes all prohibited toxins and associated weaponry. The Army, in compliance with a policy announced in 1969, completed destruction of all biological offensive warfare agents in 1973.

In regard to nuclear matters, the Army completed a survey of its nuclear storage sites and began planning to close a number of them and to strengthen others against terrorists and saboteurs through the installation of new intrusion detection systems and the improvement of security forces. The Army also held its first nuclear surety conference, which brought together representatives of the general staffs, operational commands, and technical agencies to exchange views on nuclear weapons employment, safety, and security.

On 28 May 1975, the Vice Chief of Staff approved the establishment of a focal point for nuclear matters within the Office, Deputy Chief of Staff for Operations and Plans, and the formation of the Nuclear Munitions Project Office and the Army Nuclear Agency. These changes followed a review of goals, programs, and staff organization to determine ways to draw all nuclear matters together into a coordinated program that could be presented adequately in Department of Defense budget deliberations and congressional hearings. A revised national nuclear strategy placed increased reliance upon the Army's tactical nuclear capabilities, and the review was

prompted by difficulties the Army experienced in presenting its case for a new employment doctrine, new force goals, and modernization programs.

Military Support to Civilian Authorities

The Army expanded its assistance to civilian authorities with the publication on 30 October 1974 of Chief of Staff Memorandum 74-360-69, Army Support to Other Governmental Agencies for the National Bicentennial. The memorandum designated the Director of Military Support as Army staff coordinator for all Bicentennial-related requests from other governmental agencies, except for requests pertaining to ceremonies and public information activities. These exceptions, as well as overall Army participation in the Bicentennial, were made the responsibility of the Chief of Information. Examples of assistance by the Director of Military Support included arranging for the use of rail facilities at Cameron Station, Virginia, to assemble and prepare the Freedom Train for its tour across the United States and lending Army field lighting equipment for the Estonian-American Salute to the Bicentennial.

On 24 June 1975 the Secretary of the Army, acting as executive agent for the Secretary of Defense, and the president of the American National Red Cross signed a memorandum of understanding. This new document, which superseded a 1966 agreement, pledged the support of all Defense components to the Red Cross during natural disasters and emergencies. On June 1975 a new memorandum of understanding between the Department of Defense and the departments of Agriculture and Interior for mutual support in fire emergencies replaced a 1971 Defense-Agriculture memorandum. This new agreement included the Department of the Interior as a major signatory because of Interior's involvement in the Boise Interagency Fire Center, which was formed in 1972. The center is an inter-agency organization supported by the Bureau of Land Management, the Forest Service, and the National Weather Service and provides for pooling resources and centralizing fire-fighting service for lands under the jurisdiction of the supporting agencies.

As the Army staff agency charged with coordinating support for the U.S. Secret Service, the Directorate of Military Support processed 791 requests for assistance during fiscal

year 1975. These requests pertained primarily to explosive disposal, medical service, and aircraft and vehicle support. In addition, the Army was charged with providing communications support to the Secret Service during the 1976 presidential campaign.

Besides helping the Secret Service, Army explosive ordnance disposal (EOD) units responded to a large number of requests from other civil authorities. They eliminated hazards associated with bomb threats, deactivated improvised explosive devices, assisted at transportation accidents involving explosives, and disposed of war souvenirs. The Army is reorganizing its EOD units into detachment teams to employ more effectively personnel with special skills and to increase technical proficiency.

In fiscal year 1975, the Directorate of Military Support received five requests for assistance from the U.S. Customs Service. These involved the transfer or procurement of sensor equipment, the provision of explosives for training, and the loan of experimental night vision equipment. All requests were met, except for the experimental night vision equipment which was still undergoing test and evaluation. In December 1974 the Department of the Army sent a message to the field that authorized emergency evacuation services for the Customs Service.

Support to the Drug Enforcement Administration during the year consisted of the loan of a centrifugal pump, two pairs of night vision goggles, and miscellaneous expendable supplies provided under local support agreements. Meanwhile, sixteen M16 rifles on loan since the previous fiscal year were returned to the Army.

At the close of fiscal year 1975, sixteen installations were participating in the Military Assistance to Safety and Traffic Program, and one other installation was about to begin. Previously, the Department of Defense prepared a directive covering the use of military helicopters and personnel to support the program, as authorized by Public Law 93-155, and a comparable Army regulation was written and staffed.

The Director of Military Support continued to monitor and manage Department of Defense assistance to the District of Columbia in combating crime. Support during the year consisted of providing aviation fuel from Andrews Air Force Base, Maryland, lending fuel trucks, and training District of Columbia police officers in the use of the polygraph at the Army Military Police School, Fort Gordon, Georgia.

Security Assistance

For nearly a quarter of a century the Army has participated in U.S. security assistance programs without significantly decreasing its readiness for war. In 1973, however, large quantities of materiel and services were taken from Army resources and furnished to South Vietnam; Israel and other Mideast countries received similar help. Critical shortages were soon apparent. Taking the initiative to alleviate these shortages, the Army, with the support of the Department of Defense, asked Congress for a \$300 million inventory replenishment fund, but congressional committees struck the item from the budget request.

In recent studies on the impact of renewed demands for materiel to meet urgent international requirements, the Army concluded that it could supply many items with little loss in readiness, but that certain items remained critical. Confirming these critical shortages, the General Accounting Office recommended that Congress provide relief to the Department of Defense.

As the effects of security assistance on readiness persisted, the Army made pertinent organizational changes. Following an August 1974 evaluation of the Army staff's role in security assistance matters, the Director of International Logistics, Office, Deputy Chief of Staff for Logistics, was designated as the staff's primary point of contact. The Department of Defense, meanwhile, called for a review of the foreign military sales portion of the security assistance program. The review identified a requirement for 1,095 additional personnel for the Army Materiel Command, the Training and Doctrine Command, and the Army staff in order to put foreign military sales on a proper footing. Satisfying this need will be difficult in light of tight fiscal year 1976 manpower ceilings.

Improved management of the security assistance program was also the object of a study contracted out by the Army to the Stanford Research Institute, which was published in January 1975. The study, "An Analytical Approach for Assessing Combat Service Support and Related Security Assistance Requirements," should prove helpful in determining appropriate program levels for recipient countries.

Aid to Indochina during fiscal year 1975 consisted of \$700 million appropriated under the Defense Assistance, Vietnam, Program; \$30 million for Laos under the Military Assistance Program (MAP); and \$275 million in MAP funds for Cam-

bodia. The presidential request for an additional \$300 million for Vietnam and \$222 million for Cambodia was before Congress when those countries fell.

Although the full effect of Communist victories in Indochina on security assistance programs elsewhere has yet to be seen, a number of countries asked for additional aid to meet the growing threat of Communist and other insurgent factions. On the other hand, several countries expressed doubts about the firmness of U.S. commitments to their security and were considering closer ties with their Communist neighbors.

Security assistance to Latin America during fiscal year 1975 continued to shift from grant aid to foreign military sales, although military assistance training was funded for most countries at only slightly reduced levels. As Latin American countries continued to modernize their armed forces, foreign military sales requests increased to such an extent that at times the United States was unable to comply; Peru was an example. Elsewhere there were other problems. Congress discontinued aid to Chile, and in Ecuador another fishing incident caused a seven-month suspension in the recently reinstated military assistance program.

On 20 May 1975 the congressionally imposed \$40 million ceiling on foreign military sales to African nations was lifted to permit sales credits and MAP training for Kenya. Restrictions were also lifted on such items as medium tanks and Vulcan, Chaparral, and TOW missiles for selected countries. This shift in policy will allow greater flexibility in the use of security assistance as a foreign policy instrument. Several African countries, particularly those with U.S. installations, became increasingly interested in receiving equipment and materiel under the foreign military sales program.

Training of foreign personnel by the Army again increased, although the emphasis shifted from MAP training to that paid for under the foreign military sales program. The following table shows the training provided in the past fiscal year.

Support to Vietnamese Refugees

On 1 April 1975 the Department of State requested Army help in providing temporary care for Vietnamese and Cambodian orphans who would arrive in the United States shortly. One day later the Secretary of the Army pledged his cooperation and designated the Director of Military Support to coordinate Army participation in Operation BABYLIFT. On 3

**Military Training Under the Foreign Assistance Act
Fiscal Year 1975**

	Europe	Pacific	Latin America	ABC*	Total
CONUS Schools					
Spaces	3170	3410	271	336	7187
Students	2516	2713	176	266	5671
Overseas Schools					
Spaces	1614	3	1940		3557
Students	1614	3	1926		3543
Orientation					
Tours	9	4	8		21
Participants	48	18	406		472
Mobile Training					
Teams (man-years)	5	4	7		16
Field Training					
Service (man-years)	13	16			29
Training for Other Departments					
Spaces	10	10	1		21
Personnel	10	10	1		21
Total Training					
Dollar Value (in millions of dollars)					
MAP	\$2 552	\$7 217	\$4.882		\$14 651
FMS	7.978	.655	.078	244	8.955
					<u>\$23 606</u>

* Australia, UK, Canada

April 1975, the first airlifted orphans arrived at the Presidio of San Francisco. Afterward, Fort Benning, Georgia, and Fort Lewis, Washington, served as reception centers. In all, the Army provided temporary housing and care for 1,853 of the 2,715 orphans evacuated to the United States before turning them over to voluntary adoption agencies.

On 18 April 1975 an interagency task force headed by the State Department was organized to handle the influx of military and political refugees from Indochina. A two-phased operation was developed. Operation **NEW LIFE** would deal with the evacuation of refugees to processing centers in the Pacific, where they would be medically screened and treated and administratively processed. Operation **NEW ARRIVALS** would cover their later movement to the United States and assimilation into American society. The Army's role would be to receive, process, and otherwise support the refugees until the State Department and other civilian agencies had arranged their resettlement.

On 22 April the Joint Chiefs of Staff directed the establishment of refugee camps on Guam. In response, the Army deployed approximately 2,000 support troops to Guam and set up a tent city capable of housing more than 50,000 refugees. On 30 April the Joint Chiefs directed the Army to open Fort Chaffee, Arkansas, and establish a refugee center there.

Twenty-four hours after notification, all twenty-seven support units, totaling approximately 1,800 troops had arrived at Fort Chaffee and had it ready for operation. The first group of refugees arrived on 2 May. Later in May a second refugee center was established at Fort Indiantown Gap, Pennsylvania.

Food service support of Operation NEW ARRIVALS at Fort Chaffee at first involved 315 Army cooks feeding 25,000 persons in thirty dining facilities. Later, contractual arrangements were made for meals. Based upon the Fort Chaffee experience, the Army used contractors from the beginning of operations at Fort Indiantown Gap, where 16,000 refugees were fed in fifteen contractor-operated dining facilities.

On 4 June 1975, the Joint Refugee Information Clearing Office was established to provide information to potential sponsors of refugee families; locate spouses, relatives, and friends among the refugees; and deal with other refugee matters. The office was composed of Army, Air Force, Navy, and Marine elements, and its staff consisted primarily of reserve personnel on short, active duty for training tours.

At the close of fiscal year 1975, Army support of refugee operations had not abated. The refugee centers were expected to continue operations through December 1975; the joint office should remain active for some time afterward.

International Humanitarian Law

The second session of the Diplomatic Conference on the Law of War met at Geneva, Switzerland, from 3 February to 18 April 1975. Sponsored by the International Committee of the Red Cross, the conference convened to consider two draft protocols designed to update the Geneva Conventions of 1949. Unlike the first session, the second was not preoccupied with divisive political issues, and the work of the conference was carried out in a spirit of cooperation. Positions favored by the United States on evacuating wounded from the battlefield and providing greater safeguards to civilians caught up in armed conflicts were advanced by conference action on the first protocol. The status of the second protocol, which dealt with internal armed conflicts, was not as encouraging, and it seemed doubtful that an effective agreement could be reached. The third session of the Diplomatic Conference on the Law of War is scheduled for 21 April to 11 June 1976 in Geneva. There is a reasonable chance that this session will conclude the substantive work of the conference.

In recent years, there has been growing concern about the legality of some of the weapons in today's arsenals. Much of this debate has focused on weapons used by the U.S. armed forces, in part because of the attention given to the conflict in Vietnam, but also because modern technology has permitted the creation of weapons that are a departure from older, more familiar ones.

This concern and the fact that the United States has entered into a number of arms control agreements prompted the Department of Defense to publish Instruction 5500.15 on 16 October 1974. The instruction required the Judge Advocate General of each military service to review all weapons to insure that their use in armed conflict would be consistent with the obligations assumed by the United States. The instruction further required a review at each stage of acquisition or procurement and prior to the award of an initial contract for production.

To comply with the requirement, Army Regulation 15-14. Systems Acquisition Review Council Procedures, was amended to require a legal review before the start of full-scale engineering development and again before initial production. Additionally, Army Regulation 70-1, Army Research, Development, and Acquisition, was changed to require the responsible Army agency to coordinate early in the development cycle, and in any event, prior to engineering development, with the Office of The Judge Advocate General to insure that weapons being developed or acquired are in conformance with international law.

III. Force Development

Historically, the United States has relied upon citizen soldiers for national defense. The effectiveness of these soldiers has been, and remains, a product of organization, leadership, training, and the judicious blending of Regular Army professionals, members of the reserve components, and individuals entering military service directly from civilian life. In the current environment of constrained defense resources, it is essential that all components of the Army be both spartan and capable of carrying out prescribed missions.

Force Structure

The force structure is based largely on the annual Total Force Analysis, a process that defines the minimum essential force for performing Army missions and the proportioning of the force among the various components. The analysis, which supports the Army's Planning, Programming, and Budgeting System, begins with a scenario provided by the Secretary of Defense. The Army staff determines the major combat forces required to deal with the crisis conditions outlined and conducts war games. The results of the war games provide a rationale for determining the minimum number of combat and combat support units for the peacetime force structure. Since any proposed course begins on the first day of mobilization and continues for a prolonged period, the time phasing of requirements is a basis for establishing programming priorities.

Manpower

Because of congressional concern over rising manpower costs, a Department of Defense decision to reduce Army officer strength to 98,125 by fiscal year 1976, and the goal of a sixteen-division active Army, the Chief of Staff in November 1974 directed a thorough review of all Army tables of distribution and allowances (TDA) to identify officer positions for elimination or downgrading. The first phase of the review, completed on 15 January 1975, resulted in the elimination of 3,179 officer positions and the downgrading of 924 others.

The second phase, completed in mid-June 1975, included recommendations by TDA analysis teams sent out to assist major commands in the review and a Training and Doctrine Command survey of officer positions in table of organization and equipment (TOE) units. This phase called for the elimination of 1,512 additional officer positions and the downgrading of 2,173 others. The Chief of Staff is not expected to act upon second phase recommendations until their potential effects on the Officer Personnel Management System and on officer morale have been analyzed.

As a follow on to this review of officer positions, the Assistant Secretary of the Army (Manpower and Reserve Affairs), called for a study to achieve a balanced noncombat support structure with minimum staffing and grades for enlisted and civilian positions. Designated SASTAR (Support Activities Staffing Review), it will also examine grade imbalance and grade constraints for enlisted positions set by Congress and the Department of Defense. The review is being conducted in three phases; Phase I, which sought to avoid duplication of effort, involved identification of projects started since 30 June 1974 by Army staff agencies and major commands that resulted in the elimination of enlisted or civilian positions. Completed in May 1975, Phase I identified approximately 45,000 enlisted and civilian positions that have been or will be eliminated by the end of fiscal year 1977. Approximately 28,000 were military positions and could be reallocated to the sixteen-division force. Phase II of SASTAR is a review by major commands of enlisted and civilian positions (excluding those identified in Phase I) in TDA and modified TOE units to determine which enlisted positions could be eliminated, downgraded, or converted to civilian positions, and which civilian positions could be eliminated. Begun in April 1975, Phase II should be completed by 30 September 1975. Phase III of the review will identify GS-12 to GS-15 nonsupervisory civilian positions in major commands that can be regraded.

Concepts and Doctrine

In August 1973 the Secretary of Defense initiated the Total Force Study, a major examination that covered all aspects of the role of the guard and reserve in the total force. The study concentrated on identifying functions and missions that could be shifted from active to reserve forces, reserve component activities that could be eliminated or converted to more useful

ones, situations where increases or modifications to the guard and reserve were warranted for improved readiness, and internal management improvements.

Based on the study findings, on 3 June 1975 the Secretary of Defense issued comprehensive instructions. He directed the General Counsel to prepare a legislative proposal that would impose a Ready Reserve obligation through age twenty-eight for people entering military service and would eliminate the requirement that after five years reservists be transferred to the Standby Reserve upon request. In addition, the legislation would require each Individual Ready Reservist to notify his service of any change in address, job, or physical condition. Addressing the military services, the secretary instructed them to assign only those mobilization requirements to the reserve components for which there was a demonstrable need and for which they could train in peacetime.

The Army should identify Individual Ready Reserve manpower in the grades and skills required to bring it to wartime strength in the event of full mobilization. The secretary also wanted to know how the Army planned to fill unmanned units after mobilization and the extent to which Ready Reservists who also filled key civilian positions constituted a problem. He directed the Army to prepare a revised division forces accounting system that would include separate brigades as front-line combat organizations in manpower and logistics planning, reduce requirements for U.S. support forces through greater dependence on allies, and develop reporting procedures on equipment and manning status. The secretary also asked the Army to examine the integration of active and reserve forces beyond the current affiliation program. Specifically, the Army was called upon to develop and evaluate a plan that uses the wartime chain of command for supervising peacetime training, readiness, and operational planning for active and reserve units scheduled for early deployment. The effects of the Secretary of Defense's instructions on force development are likely to be far-reaching, and without question these instructions will be the subject of much attention during the coming year.

Based on recommendations of a 1971 Defense study group, the Army undertook a test and evaluation program to improve the reserve components. Field testing extended over three years and involved sixteen battalions, four brigades, one maneuver area command, and six divisions of all components. The test, completed this year, identified ways to improve

peacetime planning, equipping, and training and to reduce the time required between mobilization and deployment. Above all, it verified the value of composite organizations made up of active and reserve units.

The growing need for electronic warfare capability has prompted the Army to expand Army Security Agency support of combat forces. Sufficient signal intelligence/electronic warfare units have been activated to support ten divisions in combat. Plans provide for supporting thirteen divisions by the end of fiscal year 1976 and sixteen divisions three years later. Work also began on an advanced development model for a corps-level control and analysis center, the Aircraft Electronic Warfare Self-Protection Equipment program made good progress, and systems were chosen for continued development under triservice coordination of missile detectors for all military aircraft. Work on systems to detect and jam the electromagnetic signals of enemy antiaircraft weapons continued: advanced development of one system was completed and engineering development of another. Procurement of the AN/APR-39 Radar Warning Receiver was started, as well.

Tactical nuclear warfare emphasis during fiscal year 1975 shifted from formulating general policy to developing doctrine. The Training and Doctrine Command pursued the task of converting broad policy concepts into detailed doctrine suitable for field manuals, while the Concepts Analysis Agency and Engineer Studies Group reviewed and refined existing methods for determining tactical nuclear requirements to support new policy and employment concepts. Both agencies completed their studies in December 1974.

Systems

The Ballistic Missile Defense (BMD) program made significant progress in several areas. Limited operations began on 1 April 1975 at the nation's only BMD site near Grand Forks, North Dakota. The site, designated on 1 October 1974 as the Stanley R. Mickelson Safeguard Complex, is expected to be fully operational in October 1975.

The Safeguard System Test Program, which began at Kwajalein Missile Range in 1970, was completed in August 1974 with the successful tracking of an ICBM target nose cone by the missile site radar. Of the fifty-four tests conducted, forty-seven achieved test objectives, two were partially success-

ful, and five failed. The test program at Kwajalein validated critical functions performed within the range of conditions in which the tactical system is designed to operate.

At congressional direction emphasis on the Site Defense Program was reoriented from prototype demonstration to the technological development of subsystems and components such as sensors, missiles, and software. Major changes resulting from the reorientation were: cancellation of the program's equipment readiness date; elimination of all effort on tactical deployment and production planning; cancellation of interceptor flight tests; and elimination of software programs that do not contribute to solutions of key technical issues. Work on the site defense radar and data processor, which will form the core of a BMD systems technology test bed at Kwajalein Missile Range, continued on schedule. Construction of a single facility to house the radar, data processing, and essential support equipment began in December 1974 on Meck Island at the Kwajalein Missile Range and is scheduled to be completed in the spring of 1976.

A number of advances marked the BMD Advanced Technology Program in fiscal year 1975. In data processing, the development of the first version of an automated system for producing engagement software was completed; this may reduce software costs and development time. The design of a parallel element processing ensemble that can perform computations was also completed.

The last flight of the Fly-Along Infrared (FAIR) series was conducted in October 1974. FAIR was a joint Army and Air Force program to obtain exoatmospheric optical signatures of various types of reentry vehicles and other objects from a typical ICBM complex. The experiments included gathering data on the earth background and moon and starshine that the optical sensor would record in a space environment and on the effects of missile exhaust plumes on optical sensors. In the Special Targets Program, Athena rockets fired from Wake Island boosted reentry vehicles and decoys to altitudes and velocities associated with sea launched ballistic missiles (SLBM). Data obtained by radars at Kwajalein has helped to fill an important gap in the knowledge of signatures of bodies reentering the atmosphere at typical SLBM velocities. A program to gather radar and optical data on booster tanks purposely fragmented in the exoatmosphere was completed in January 1975. Real time experiments to identify the reentry vehicle among the tank fragments were conducted, but results

of the tests had not been analyzed fully by the end of the fiscal year. In March 1975 representatives from the Ballistic Missile Defense Program Office met with Department of Defense officials to discuss joint Army and Air Force support of the Cobra Judy phased array radar system for collecting highly accurate endoatmospheric data on Soviet reentry systems. Procedures for this joint effort should be completed early in fiscal year 1976.

Designs were completed for a new digital signal processor. If it can be economically produced, this device will be a valuable contribution in solving the bulk filter problem.

Tests on the Dome antenna model proved the feasibility of providing hemispherical coverage with a single planar array. A Dome antenna requires only about one-third as many components as a conventional four-faced radar, and is therefore more reliable and less costly.

Also completed were tests of several small advanced propellant motors (interceptor). The goal is to determine the feasibility of high burn rates for extremely high performance interceptors. Preparations continued for full scale ground tests of the miniature homing interceptor. Design of the test facility was completed, and construction will begin in fiscal year 1976.

Although the Force Development Management Information System supports the force development process at the Army staff level, no automated system in the field encompasses all aspects of force development. Virtually no automated support exists below major command level. This gap in automated support has allowed the generation of misinformation which has adversely affected force-related statements used for personnel and logistic management and development of budgets and materiel acquisition programs. A study to identify and correct specific problems has led to a new management information system concept, the Vertical Force Development Management Information System. This system would be developed around a centralized and integrated data base available to all users through a telecommunications network linking Washington, major commands and their installations, or major subordinate commands. All levels are therefore given the information and tools needed to perform their tasks in the force development process. At the close of the period, the general functional system requirement and the economic analysis for the Vertical Force Development Management Information System were being staffed.

Army Study Program

The 1975 Army Study Program, published in July 1974, covered science and technology, manpower and personnel, concepts and plans, operations and force structure, and logistics and management. The program consisted of 411 studies of which 131 were contract efforts. The contract funding level was \$13.7 million. Additionally, 280 in-house studies requiring 1,003 professional man-years of effort were programmed. Members of the Army staff served on an ad hoc committee organized within the Office of the Secretary of Defense; the committee reviewed all Defense Department study programs and conducted a systematic review of the DOD directive that governs studies and analyses.

During the year, reporting of study efforts received emphasis; Army studies in the Defense Documentation Center (DDC) data bank increased almost twofold. Approximately 750 individual studies conducted from 1962 to the present were on file at the end of the fiscal year. The reporting form was modified to include results and probable use information. To provide a link with the DDC, the Army Library installed a computer terminal that makes study information held in the documentation center more accessible. And complete sets of all study summaries within the center were made available in the Army Library.

Training and Schooling

One-station training of recruits was working well at the six installations that initiated the program late in fiscal year 1974. During the current reporting period a variation of the basic program—one-station unit training—underwent testing at Fort Polk. Through this program, the Army wants to reduce training needed to prepare a recruit for combat to twelve weeks for infantrymen, thirteen weeks for armor personnel, and fourteen weeks for artillerymen and other combat soldiers. As the year closed, the House Appropriations Committee was investigating the programs, particularly in regard to construction costs and training quality.

Unit exchanges with allied countries during the year provided challenge and variety to the participants. From 3 March to 9 April 1975 a company-level unit exchange took place between elements of the 25th Infantry Division in Hawaii and Australian armed forces. The 25th Division also exchanged platoons with New Zealand forces from 26 October through 2

December 1974. The 4th Infantry Division at Fort Carson participated in two exchanges; a platoon-level exchange with the Canadian armed forces, 6 October to 12 November 1974, and a company-size exchange with the British Army in May 1975. The Army National Guard also participated in the program; a platoon from the 47th Infantry Division (Iowa) exchanged places for two weeks with a similar Norwegian Home Guard unit in February 1975.

In order to meet 1975 funding limitations, the Training and Doctrine Command in fiscal year 1973 had begun to revise Army courses of instruction; 44 courses were eliminated, 9 were consolidated, and 104 were reduced in length and frequency. Annual savings are estimated at \$5.4 million, 91 civilian and 498 military man-years, and 1,270 student man-years. Simulation has been introduced into the unit training environment to maintain quality and reduce costs and energy and ammunition consumption.

The Interservice Training Review Organization, since its inception in 1972, has been responsible for consolidating 164 courses offered separately by the military departments into 104 interservice courses. At the close of the fiscal year this organization was studying the possible consolidation of undergraduate navigator, helicopter, and fixed-wing pilot training for a potentially significant saving.

The Army's efforts to streamline training also resulted in several service school realignments. Consolidation of Defense Language Institute training at the Presidio of Monterey; transfer and consolidation of courses taught at the Signal School, Fort Monmouth, New Jersey, with courses taught at the Southeastern Signal School; and relocation of the Military Police School from Fort Gordon, Georgia, to Fort McClellan, Alabama, were among the major changes.

Following approval of the Enlisted Personnel Management System in August 1974, the Army began restructuring the Noncommissioned Officer Education System to support the required career development objectives. This restructuring should be completed during the coming year. Implementation of the Officer Personnel Management System (OPMS) has also wrought training changes. All basic entry specialties under OPMS have a specific resident training requirement to prepare their respective specialists for company-level command. To meet this requirement the Officer Advanced Course has been reduced in length from thirty-six to twenty-six weeks. The course for chaplains remained thirty-six weeks in length.

IV. Intelligence and Communications

Intelligence

Intelligence support to tactical units was advanced during the year with the assignment of military intelligence officers to G-2 and S-2 positions at division headquarters, maneuver brigades, and armored and air cavalry squadrons. The objective was to achieve a better balance between the operational skills of combat arms officers and the technical knowledge of intelligence personnel in tactical units. In a related development, the Office of the Assistant Chief of Staff for Intelligence represented the Army on the National Intelligence Support to Field Commanders Study Group. Formed to identify intelligence support that could be provided from national intelligence assets, the study group plans to submit its report early in fiscal year 1976.

At Fort Hood, Texas, the 2d Armored Division tested a new divisional combat intelligence company that showed promise of improving the collecting, processing, and disseminating of intelligence. The heart of the new development was the Battlefield Information Coordination Center and its secure communications net, which has been accepted as the basis for developing military intelligence doctrine.

Army Systems for Standard Intelligence Terminals, described in some detail in last year's report, will standardize automatic data processing equipment (hardware) and applications (software) for the Army's Intelligence Data Handling System. AN/GYQ-21(V) minicomputers installed in Europe and Washington, D.C., in 1975 during Phase I of the project enabled intelligence analysts to query computer data bases of the World-Wide Military Command and Control System.

Full Army compliance with Department of Defense policies that restrict the acquisition of information concerning persons and organizations not affiliated with the department continued to be a matter of much concern. The Army letters that originally implemented these policies were superseded by the publication of AR 380-13, Acquisition and Storage of Information Concerning Non-Affiliated Persons and Organizations, 30 September 1975. This regulation extends restrictions on the

acquisition and storage of information to include those U.S. citizens not affiliated with the Department of Defense anywhere in the world. (Previously the restrictions applied only within the United States and in U.S. territories and possessions.) Another major change is a new retention control sheet. This form must be completed and affixed to all documents kept in accordance with the regulation. The general rule, to be applied by all Army commands, is that information unessential for mission accomplishment would not be acquired.

During the year the declassification review of all pre-1946 Army classified records in General Services Administration depositories was completed. A total of 44,454 linear feet of records was reviewed: 99.5 percent of the records were declassified. The remaining documents, containing intelligence sources and methods, were referred to the Secretary of the Army with recommendations for classification beyond thirty years as provided for in Executive Order 11652, 8 March 1972. National Archives declassification reviewers also found a large number of documents originated by the Army in retired files of other U.S. Government agencies. A project to declassify Army records from 1946-54 also moved forward. Some 9,000 linear feet of records were examined during the year, bringing the total to nearly 24,000, or 47 percent of the 51,000 linear feet to be reviewed. Declassification was often in bulk lots because records were of a type unlikely to require continued classification.

Reserve officers on short tours of active duty or working for retirement points performed most of the page-by-page declassification review of both World War II and postwar intelligence records. Many reservists had extensive technical knowledge of the subject matter because of military or civilian experience or training; they worked a total of 13,294 man-hours during the year.

The Pentagon Telecommunications Center recommended that the thirty-two-year microfilm collection of War Department and Department of the Army electronic messages (1942 through 1974) be destroyed after unsuccessful attempts by The Adjutant General to offer portions of the collection to the National Archives. The Chief of Military History strenuously opposed destruction, and in December 1974 The Adjutant General recommended that the Center of Military History assume custody and administration of the entire collection. The Chief of Military History agreed, and in March 1975 a one-time exception to the prevailing regulations to permit

permanent retention by the Army was granted. This collection of messages is historically important. Only in these records is there a chronological progression that would enable researchers to locate information that is otherwise irretrievable because of difficulties in determining which functional files to search or because files may have been destroyed.

The 17,401 reels in the collection will be withdrawn from temporary storage at the Washington National Records Center and forwarded to the U.S. Army Military History Research Collection (MHRC) at Carlisle Barracks, Pennsylvania, where they will be stored in a vault. The Commanding Officer, Central U.S. Registry, will authorize the establishment of NATO, SEATO, and CENTO subregistries at the Military History Research Collection. Only a limited number of MHRC archival personnel will be cleared for access to the files. No reference to or use of NATO, SEATO, or CENTO documents by any outside agency or the Center of Military History will be authorized.

Army records managers completed the initial phase of a project to establish effective physical control over about 40,000 linear feet of Vietnam War records. This involved the collection and correlation of a master index of record shipping documents that will be computerized. Similar actions were under way for records of other operations and missions in Southeast Asia.

The Adjutant General Center personnel conducted several records management surveys of Army staff agencies and their staff support and field operating agencies. The surveys revealed a number of deficiencies, particularly in files maintenance and disposition, records management training, and management of permanent records. Surveyors noted a general lack of emphasis on the management of records by key agency officials. Many of the records management officials designated by agency heads were overburdened with clerical and other administrative duties and could devote little time to records management.

On 31 December the President signed the Privacy Act of 1974. The primary purposes of the act were to limit access by other persons to information about an individual and to permit individuals to see information about themselves in federal records and to request that erroneous information be corrected. Federal agencies maintaining records from which information is retrieved by name or by number or other symbol assigned to an individual must publish annually in the *Federal*

Register a notice of the existence and character of such records systems. By the close of fiscal year 1975, the Army had made good progress in implementing the Privacy Act. System notices had been completed for Army records subject to the act, preparation had begun on privacy notification statements for forms, initial planning had been started for a Privacy Act training program, and actions had been initiated to establish and staff a permanent privacy and rule-making office on the Army staff.

In November 1974 Congress amended the Freedom of Information Act. Generally, the amendments made withholding information more difficult, authorized federal judges to inspect documents withheld from release, required disciplinary action against officials who acted arbitrarily in denying requests for information, set time limits for answering requests, and required annual reports to Congress concerning implementation of the act. The amendments required quick revision of pertinent regulations. Between November 1974 and 19 February 1975, the effective date of the amendments, Department of Defense Directive 5400.7 was completely revised and Army Regulation 340-17 was changed substantially. That the Army was able to meet the new requirements was evidenced by its on-time response to most requests for information.

In the wake of the killing of civilians by American troops at My Lai, South Vietnam, in April 1969, Lt. Gen. William R. Peers was directed to conduct an inquiry into the circumstances of the incident. In March 1970 General Peers submitted a four-volume report to the Secretary and the Chief of Staff of the Army. On 13 November 1974, the Secretary of the Army ordered Volumes I and III of the *Peers Report* released to the public. These volumes contained a summary of the evidence, together with findings and recommendations, maps, photographs, and exhibits of the inquiry. Volumes II and IV, which contained raw investigatory material, including impressions, suppositions, rumors, and hearsay concerning various individuals, were not released. Between November 1974 and February 1975, the Secretary of the Army pondered releasing Volumes II and IV. In keeping with the letter and spirit of the Freedom of Information Act he determined that these volumes should be released. In order to reconcile the right of the public with the privacy of persons accused, perhaps unjustly, names of individuals against whom there were unsubstantiated allegations were deleted. Volumes II and IV of the *Peers Report* were made public in March 1975.

Communications

The Army Telecommunications Automation Program moved forward during the past twelve months. The first Automated Multi-Media Exchange (AMME) began providing service to the Oakland, California, area on 14 November 1974, and the installation of a second AMME in Huntsville, Alabama, was completed in May 1975. Requests for proposals on the Standard Remote Terminal (SRT) were submitted in May 1974 and drew two firm responses. By June 1975 only one bidder, Astronautics Corporation of America, continued to show interest.

On 14 February 1975, the Director, Telecommunications and Command and Control Systems, Office of the Secretary of Defense, instructed the Navy to obtain AMME's from the Army to meet their need for additional automated telecommunications centers. The Navy and the Air Force were also directed to get AUTODIN (automatic digital network) terminal equipment under the Army SRT contract, at that time still unawarded. The Deputy Secretary of Defense in March 1975 announced publicly that the AMME and the SRT had become standard equipment for telecommunications center improvement.

The Integrated Tactical Communications Systems Study being developed by the Martin-Marietta Corporation proceeded on schedule. The study was broadened to include echelons above the division and expanded to consider the Single Channel Ground and Airborne Radio Subsystem and the Joint Tactical Communications Program. All technology and equipment that might be introduced by 1986 could be considered. In some cases, it was necessary to lift all constraints to define an efficient system representative of the concept.

Another study, the Special Analysis of Net Radios (SPANNER), was to determine appropriate acquisition objectives and recommend improvements in radio management. The completed study was approved and distributed to the field on 2 August 1974. Of the ninety-seven SPANNER recommendations, forty had been adopted by the close of the year.

For the Ground Mobile Forces Tactical Satellite Communications System, engineering development models of three ¼-ton trailer-mounted and four 1 ¼-ton truck-mounted superhigh frequency earth terminals were delivered to the Army from the contractor, RCA, for developmental and operational testing. Development of ultrahigh frequency vehicular and man-pack terminals was still in the conceptual stage.

Digital data transmission capability remained in the engineering development phase; distribution of pulse code modulation multichannel transmission equipment to the reserve components continued; and plans were made for field testing in Europe early in the coming year the Army's large analog tactical automatic circuit switch, the AN/TTC-38. Army responsibilities under the Joint Tactical Communications Program (TRI-TAC) remained the same—development, testing, and acquisition of the AN/TCC-39 Automatic Switch, the Family of Digital Group Multiplexers, the Super High Frequency Time Division Multiple Access (SHF/TDA) satellite modem, and Mobile Subscriber Access Equipment. During the past year the AN/TCC-39 Automatic Switch continued in engineering development at GTE Sylvania. Specifications for the Family of Digital Group Multiplexers were approved and a full-scale development contract was awarded to Raytheon on 16 May 1975. COMSAT Labs continued a study to determine quantitative requirements for the SHF/TDA satellite modem under terms of a 24 June 1974 contract. The Mobile Subscriber Access aspect of TRI-TAC was still in the conceptual phase.

Under the Defense Satellite Communications System (DSCS), civilian contractors continued work on an order for twenty-three new 60-foot parabolic dish antenna earth terminals (AN/FSC-78/70). Delivery of the terminals was to begin in December 1975. Procurement of signal processing equipment began, and the Tobyhanna Army Depot was putting together more than fifty digital communications subsystems for the DSCS. In the research and development area, work on the spread spectrum modulator/demodulator AN/USC-28, the medium terminal antenna, and a larger antenna for DSCS contingency terminals continued. In May 1975, the third flight of two DSCS Phase II spacecraft was unsuccessful because of a launch vehicle failure.

Additionally, replacement of the Signal Operations Instructions (SOI) by the Communications-Electronics Operating Instructions (CEOI) was completed in Regular Army units, and production of an automated CEOI for separate brigades and larger units was well advanced. The Department of Defense Electromagnetic Compatibility Analysis Center advised that analytic data showed that the SAM-D radar system could operate compatibly with other users of the electromagnetic spectrum. Finally, the expansion of microwave systems in Germany and Korea resulted in better television viewing for American soldiers and their dependents.

V. Personnel

The Army's strength declined from 782,900 on 30 June 1974 to a low of 772,300 in December, but by the end of the fiscal year strength had risen to 783,900, broken down as follows:

Army Strength (as of 30 June 1975)		
	Programmed	Actual
Officers	102,500	102,600
Enlisted	679,600	678,300
USMA cadets	2,900	3,000
Total	785,000	783,900

The fluctuations reflected monthly average strength limitations imposed during most of the year to keep personnel expenditures to levels prescribed by the fiscal year 1975 Department of Defense Appropriations Act. The shortage in programmed enlisted strength at the close of the fiscal year was not caused by the Army's inability to attract recruits without the stimulus of the draft. Rather, the shortfall came about because of management practices required to keep personnel costs down and a decision not to overtax the training base late in the fiscal year by accepting 1,100 more persons without former service than the 22,960 who had already been recruited in June 1975.

Financial constraints also led to involuntary extensions of overseas tours. The extensions, which went into effect on 1 April 1975, were for three months in long-tour areas and one month in short-tour stations. The Army took this step reluctantly because of the effect it would have on morale, but the extensions were necessary to overcome shortages of permanent change of station travel funds due primarily to the rapid inflation of transportation costs.

Enlisted Personnel

The Army improved the quality of enlisted accessions in a number of ways, such as: raising the number of high school graduates recruited to sixty-five percent of all enlistees with no prior service, limiting prior service accessions to high school

graduates with selected skills, and reducing the number of enlistees in the lowest acceptable mental ranking (Category IV) to ten percent of all those without prior service. The success of these actions and the availability of young men and women ready to enlist led to the development of plans for greater improvement in the quality of accessions in fiscal year 1976.

Combat arms recruits numbered 52,927 for the year, 106.7 percent of the established goal. On 1 March 1975, the Army limited two-year enlistments to the combat arms and certain critical skills required in Europe. A total of 16.7 percent of the year's new recruits selected this option before the Department of Defense terminated it on 1 July 1975.

Nearly 1,150 highly motivated men and women assigned to active Army units went on temporary duty with the U.S. Army Recruiting Command to obtain volunteers for the three options available under the Unit of Choice Program, i.e., CONUS Unit of Choice, U.S. Army Special Unit Enlistment Option, and the CONUS Station of Choice Option. A total of 116,000 persons enlisted under this program during the fiscal year, of whom 46 percent chose the Special Unit Enlistment Option, while the remainder selected one of the other two options in nearly equal numbers.

The 18-month-old Stripes for Skills Enlistment Option brought 3,147 skilled personnel into the Army's ranks. Enlistees were appointed to grades E-2 or E-3 and were offered a guaranteed tour with the unit of their choice. After completing basic combat training and at least eight weeks of satisfactory service in their units, they became eligible for accelerated appointment to grades E-3 to E-5. Objectives of this program included reduction of training costs and greater job satisfaction among highly qualified personnel.

In other recruiting actions, the Army expanded the Delayed Entry Program to include enlistees with prior service who could delay their entry for up to 120 days. New recruits could routinely delay their entry up to 180 days, and in special cases, such as high school seniors, up to 270 days. On 21 March 1975, the N.W. Ayer Company received the Army's recruiting advertising contract for fiscal year 1976. The contract, for which twelve firms competed, covered the active Army, the Army Reserve, and the Reserve Officers' Training Corps.

Because the number of soldiers likely to reenlist exceeded existing and projected requirements, the Army developed the Year Group Management Plan to help personnel managers balance the enlisted force in terms of grade, skill, and years of

service. A number of revisions in reenlistment criteria and control were developed to complement the plan, which the Army planned to put into effect during fiscal year 1976. These revisions included mandatory retraining of reenlistees for military occupational specialties (MOS's) that are in short supply and the establishment of a unified control MOS system using both decentralized and centralized management procedures. Under the new criteria, unit commanders can still reenlist high quality first termers who have a high school education and a current MOS score of over 100, and can recommend reenlistment in all other cases. The U.S. Army Military Personnel Center will authorize or deny reenlistment of first termers who do not meet high quality standards and will take action on Stripes for Skills enlistment applications.

Changes to reenlistment standards during the year included tightening reenlistment eligibility point criteria and not allowing reenlistment of soldiers whose current MOS evaluation score or whose primary MOS score is under 70. Effective 1 July 1975 soldiers having more than 15 days of absence without official leave or a general court-martial conviction during their current enlistment will no longer be eligible for reenlistment.

Following a successful test in U.S. Army, Europe, the Army broadened coverage of the Expeditious Discharge Program in November 1974 to include U.S. Army Forces Command, U.S. Army Training and Doctrine Command, and Eighth U.S. Army. In May 1975 the Army announced that the program would be expanded Army-wide on 1 July 1975, at which time battalion commanders and lieutenant colonels who command similar-size units will be authorized to discharge personnel. During fiscal year 1975, 21,290 soldiers were released under the Trainee Discharge Program. Personnel losses, AWOL and desertion rates, and company punishment declined in most units that received soldiers screened under the program.

In an effort to assure that graduates of Army training centers were qualified and well motivated, the Voluntary Release Option Test was given in six basic combat training (BCT) companies from July through October 1974. Approximately 18 percent of the BCT graduates in the test group received discharges. From 7 February to 28 March 1975, nine BCT companies carried out a second test that attempted to unearth causes for dissatisfaction among trainees. The test offered a change of MOS, a period of leave before advanced individual training (AIT), or both, to the 129 participants who requested discharges. Four of the 129 accepted leave; 10 got

MOS changes; and 118, about 9.3 percent of those participating in the test, were given discharges. A third test, which was being devised at the close of the fiscal year, will involve 600 to 1,200 recruits of high quality, i.e., Mental Category I or II with at least two years of college. Written into the enlistment contract of test group members will be an option to request discharge after completing four weeks of AIT or 110 days of active service if AIT is not required.

The MOS mismatch problem, which last year's report described in detail, continued to show improvement. The number of soldiers whose primary and duty MOS's were not the same decreased from 46,300 in June 1974 to 38,900 in June 1975. The Army used several management tools to monitor the mismatch project and improve mismatch accounting. By elimination or consolidation, the number of MOS's was reduced from 476 to 451 during fiscal year 1975. The improved situation enabled the Project Director's Office for MOS Mismatch to be reduced to two temporary officer positions in the Structure and Sustainment Branch, Enlisted Division, Office of the Deputy Chief of Staff for Personnel.

The enlisted grade structure was more in line with long-range goals at the end of the year than at the beginning. The Army also met Department of Defense ceilings within the top six enlisted grades, which were set at 60.4 percent of total enlisted strength. Army enlisted strength, by grade, for the last two fiscal years was as follows:

Composition of the Enlisted Grade Structure

Grade	30 June 1974	30 June 1975
E-9	3,698	3,711
E-8	12,104	12,682
E-7	45,798	45,739
E-6	71,378	72,215
E-5	96,272	108,286
E-4	176,715	167,047
E-3	94,101	104,925
E-2	103,397	104,295
E-1	70,996	59,423
Total	674,459	678,323

Officer Personnel

Officer strength declined slightly during fiscal year 1975. Programmed year-end strength, as set forth in the President's budget for fiscal year 1975, was 101,550. Actual strength was 102,567, which represented a 3 percent decrease from fiscal year 1974 end strength and a 41 percent decline from the peak strength during the Vietnam war.

The following table provides a breakdown by grade of the Army's commissioned officer and warrant officer strength as of 30 June 1975:

Officer Grade Structure in Fiscal Year 1975

Commissioned Officers	
General officer	440
Colonel	4,717
Lieutenant colonel	10,956
Major	17,042
Captain	33,478
First lieutenant	12,209
Second lieutenant	10,487
Total	89,329
Warrant Officers	
CW4	1,334
CW3	3,327
CW2	6,589
WO1	1,986
Total	13,236

Army officer procurement for fiscal year 1975 totaled 9,224, down from 9,466 during the previous year and another post World War II low. The Reserve Officers' Training Corps (ROTC) continued as the largest source of new officers. A total of 39,346 people were enrolled in 291 Senior ROTC units, up from 33,220 in fiscal year 1974. Junior Reserve Officers' Training Corps (JROTC) enrollment totaled 115,022, including 33,573 women cadets. JROTC training was conducted in 662 schools, including 12 institutions that participated under the National Defense Cadet Corps (NDCC) program. During fiscal year 1975, ROTC cadets received 1,009 four-year scholarships, 662 three-year scholarships, 525 two-year scholarships, and 190 one-year scholarships, bringing to 6,500 the number of ROTC scholarships in effect. Fifty Army enlisted persons with two years of college credit won ROTC scholarships for the 1975/76 school year under a program to provide highly qualified active duty enlisted personnel an opportunity to be commissioned through ROTC.

Fiscal Year 1975 Officer Procurement by Source

U.S. Military Academy	823
Reserve Officers' Training Corps	4149
Officers' Candidate School	337
Voluntary active duty	160
Direct appointment (JAGC, MSC, Chap.)	366
Women's Army Corps	350
Medical Corps, Dental Corps, Veterinary Corps	1274
Other	2
Miscellaneous*	68
Nurses and Medical Specialists	647
Warrant Officers	1048
Total	9224

* Includes administrative gains such as recall from retired list, interservice transfer, etc.

Rising costs and the need to obtain maximum benefit from manpower spaces led the Army to eliminate or suspend a number of procurement programs that train active duty personnel for service as Army Medical Department officers. No new commitments for subsidizing nursing education at the undergraduate level, including the Walter Reed Army Institute of Nursing and the Army Student Nurse Program, have been made since September 1974. During the year two Military Physician's Assistant Program classes graduated, and selections were made for two additional classes. This will complete the eight, sixty-member classes planned under the program. Beginning in fiscal year 1976, no new admissions will be made in the following active duty medical training programs: Senior Students' Program, including medicine, osteopathy, veterinary medicine, and optometry; Army Student Occupational Therapist Program; Registered Nurse Student Program; Medical Service Corps Graduate Student Program; Army Medical Specialist Corps Graduate Student Program; and the Environmental Health Sciences and Engineering Program. In order to meet prior commitments, the Army will continue the Osteopathic, Dental, and Veterinary Education Program for U.S. Military Academy cadets in the classes of 1975, 1976, and 1977.

The termination of these programs has made the direct procurement of trained professionals—through voluntary recall of reservists, ROTC, and the Uniformed Services Health Profession Scholarship Program—more important in obtaining Army Medical Department officers. The Scholarship Program, authorized by Congress in fiscal year 1973, created 542 graduates in the following disciplines during the past year: dentistry 141, veterinary medicine 33, optometry 14, and medicine/osteopathy 354. Army postgraduate medical education programs for training first year medical graduates and residents remained highly selective; nearly all spaces were filled on a competitive selection basis. Currently, there is a need for optometrists, nuclear science officers, veterinarians, general medical officers, and some medical specialists. Active duty accessions under the Berry Plan, a draft-motivated program that has served as the primary source for medical specialists, will cease by fiscal year 1977. Accessions from another new source, the Uniformed Services University of Health Sciences, will not be available until about 1981. They are expected to help resolve long-term shortages for general medical officers, family practitioners, optometrists, veterinarians, and most medical specialties.

**Army Medical Department Active Duty
Accessions Fiscal Year 1975:**

	Student Programs ^a	Direct Procure- ment ^b	Berry Plan
Medical Corps	292	75	658
Dental Corps	243	104	
Veterinary Corps	53	5	
Army Nurse Corps	555	83	
Medical Service Corps	421	110	
Army Medical Specialist Corps	35	7	
Warrant Officers	106 ^c	10 ^d	
	<hr/> 1,705	<hr/> 394	<hr/> 658

^a Includes ROTC and active duty medical training programs.

^b Includes Reserve recalls.

^c For MOS 911A (Military Physician's Assistant).

^d For MOS 202A (Medical Equipment Repair Technician).

The number of promotions to all grades increased during the year as the decline in year-end strength authorizations slowed, but time in service and time in grade upon promotion to all grades except captain and first lieutenant continued to grow longer. Total promotions to each grade, excluding medical and dental corps officers, were:

COL	LTC	MAJ	CPT	CW4	CW3
598	1416	1397	5378	298	728

Time in service and time in grade at the end of the fiscal year were:

To	Years in service	Years in grade
Colonel	21.0	7.0
Lieutenant Colonel	15.8	7.8
Major	10.2	7.6
Captain	4.0	2.0
1st Lieutenant	2.0	2.0
CW4	11.2	6.0
CW3	7.3	6.3

Personnel Management

The Enlisted Personnel Management System (EPMS) continued to improve during fiscal year 1975. The U.S. Army Training and Doctrine Command (TRADOC) completed plans for expanding the training system to include integrated, career-long training and education programs that will be responsive to the goal of improved professional development for career soldiers. Plans completed, the phased implementation of the system began in January 1975. The Department of the Army instructed field commands to change authorization documents and to reclassify and convert personnel to reflect the redesigned career management fields (CMF) and military occupational structure for CMF 11 (Maneuver Combat Arms), CMF

16 (Air Defense), CMF 63 (Mechanical Maintenance), CMF 74 (Automatic Data Processing), and CMF 95 (Law Enforcement). Phase I of EPMS will affect some 188,000 soldiers and should be completed in September 1975. Subsequent phases are scheduled to begin at six-month intervals. Completion of the system is set for October 1977. An important feature of the EPMS is a performance-oriented skill qualification test to replace the written MOS evaluation test. The test, which was being developed by the Training and Doctrine Command, will be available for CMF's 11, 16, 63, 74, and 95 in November 1976, and for all remaining CMF's by the end of 1978.

The Army participated in congressional hearings on the proposed Defense Officer Personnel Management Act, which relates to the appointment, promotion, separation, and retirement of officers in the armed forces. A new field grade authorization table, a single promotion system, an all-regular career force, revised tenure, and selective retention of officers were proposed. Since passage of the Defense Officer Personnel Management Act would have an impact on the Army's own Officer Personnel Management System, the Army staff was developing plans to adopt the proposed officer management concepts as smoothly as possible.

Pay, Leave, and Travel

Implementation of the Variable Incentive Pay Act for medical officers, described in last year's report, began in September 1974. By the close of the year, 1,453 physicians, nearly one-third of those on active duty, were receiving bonuses ranging from \$9,000 to \$13,000 per year requiring an outlay of over \$16.5 million. While exclusion of Medical Corps officers in their initial residency and other inequities hampers the act's effectiveness, it does provide a useful method to attract and retain physicians.

A number of changes marked the Army's proficiency pay and reenlistment bonus programs. Both the superior performance and shortage specialty programs expired, leaving only the special duty assignment program which authorizes proficiency pay for drill sergeants, recruiters, and career counselors. The selective reenlistment bonus, authorized by the Armed Forces Bonus Revision Act of 1974 (Public Law 93-277), has in general worked well in aiding the Army to achieve and maintain the numbers of careerists possessing critical skills required to meet force goals. The Department of Defense

decision to end lump sum reenlistment bonuses and the general trend of reductions in the amount of individual bonuses may, however, keep the Army from meeting future reenlistment objectives. The Army has advised the Department of Defense's Quadrennial Review of Military Compensation Committee of its concern and the need for greater payment flexibility.

Project Copper, begun in fiscal year 1974 to consolidate military pay and personnel functions, continued satisfactorily. The U.S. Army Training and Doctrine Command prototype of the proposed system, under development at Fort Bragg, will be tested during fiscal year 1976. By combining pay and personnel actions in a single system, service to the soldier should improve.

For the last three years the Department of Defense has submitted to Congress legislative proposals to modernize the military retirement system; to date, none has been passed into law. The Army also has sought legislative relief from a Comptroller General ruling, which held that the law required retirement pay to be based upon the pay rate preceding the one in effect at time of retirement. Subsequent adjustments would reflect cost of living increases reported in the Consumer Price Index. The effect of this ruling was to create a pay inequity: cost of living increases for retirees higher than active duty pay raises penalize individuals eligible for retirement who remain on active duty.

A number of changes to Army pass and leave policy became effective on 1 June 1975 with the revision of Army Regulation 630-5, Leave, Passes, Administrative Absence, and Public Holidays. The "day of grace" was eliminated by making the day of departure the first day of leave and the day of return the last day of leave. Authorized were a 3-day (72-hour) pass that includes at least 1 duty day, and a 4-day pass that includes at least 2 consecutive nonduty days. The taking of 30 days of leave en route for all permanent change of station moves was sanctioned, and 4 days—not chargeable to leave—were allowed in conjunction with permanent moves to or from overseas assignments. Service members were also encouraged to take the full 30 days of leave earned each year rather than lose it or cash it in at reenlistment or upon separation.

Race Relations and Equal Opportunity

Three actions highlighted the Army's race relations and equal opportunity program during fiscal year 1975. The

Department of the Army Ad Hoc General Officers' Steering Committee on Equal Opportunity (GOSCEO) was convened; a new Department of the Army Affirmative Actions Plan (AAP) was published; and a new training program for Army instructors studying at the Defense Race Relations Institute began.

The Army formed GOSCEO in response to a presidential directive for a complete review of personnel and contract policies in light of allegations that federal agencies were engaged in discriminatory practices in their dealings with certain foreign governments. This committee, consisting of general officers representation from each Army staff agency, reviewed military personnel selection and assignment policies: recruitment, placement, management, and use of civilian personnel; and methods of employee selection and assignment by firms under contract to the Army. The committee identified 143 practices involving discriminatory considerations such as race, color, sex, age, religion, and national origin. Most of these were eliminated outright, but others required additional study and consideration before resolution. The committee recommended that a standing committee be formed to provide a continuing review of Army personnel and contract policies to insure their compatibility with principles of equal opportunity. The Secretary of the Army approved the recommendation, and the new committee will be formed in fiscal year 1976.

In 1974 an Army Research Institute study revealed discrimination in career progression and opportunity against soldiers who were members of minority groups. Using experience gained under its 1972 Affirmative Actions Plan, the Army developed a new plan that became effective in June 1975. This plan established specific programs, objectives, responsibilities, and policies to achieve racial harmony and equal opportunity within all components of the Army. The plan focused on minority and female recruitment and career development; goals relating to the racial, ethnic, and female composition of the Army; equal treatment in dispensing military justice and in education and training; the relationship of human readiness to unit readiness; policy and guidance from the top; and assessment and management of the plan.

Changes in the Defense Race Relations Institute course for race relations instructors, noted in last year's report, went into effect in September 1974. The initial five-week phase of the course continued to stress minority studies, behavioral sciences, development of teaching techniques, and Department of Defense policies and directives. The revised final phase of the

course, six weeks long and taught by Army personnel, emphasized Army policies and directives, managerial skills needed by equal opportunity staff officers, local affirmative action plans and their implementation, and methods of reporting results.

Women's Army Corps (WAC) strength rose from 27,596 to 39,171 officers and enlisted personnel during the year, a substantial gain consistent with an Army objective to achieve a WAC strength of at least 50,400 by 1979. Enlistments totaled 19,070, as compared to 15,446 for fiscal year 1974. A three-fold increase in participation in the law enforcement career field—1,115 enlisted and 150 officers—indicated how opening military occupational specialties to women can enhance the attractiveness of military service. The Judge Advocate General's Corps increased its complement of women attorneys from twenty-one to forty-one during the year, and commissioned its first black female attorney, Capt. Savella Jackson. The first woman Army Chaplain, Capt. Alice Mae Henderson, also a black, received her appointment on 8 July 1974.

In June 1975, the Army discontinued its policy of involuntarily separating pregnant soldiers, replacing it with a new one that permitted up to four weeks prenatal leave and six weeks postpartum leave. Immediate hardship discharges for sole parents, male or female, and married enlisted women when there is a conflict in performing one's military tasks and providing adequate child care were also authorized.

Alcohol and Drug Abuse

Approximately 2,900 soldiers received help each month under the Army-wide Alcohol and Drug Abuse Prevention and Control Program (ADAPCP) during fiscal year 1975. Of those admitted to the program, 35 percent had alcohol-related problems; the remainder were using other drugs. Less than 15 percent of the cases required detoxification or inpatient treatment. At the close of the year 197 halfway house and nonresident rehabilitation centers were giving assistance to 17,569 service members. Approximately 9,000 civilian employees and dependents also received assistance, primarily for problems related to the use of alcohol.

Since the inception of the ADAPCP in 1971, urine testing has been a principal method of identifying drug abusers within the Army. Discharges based upon evidence obtained through such testing were either honorable or general, depending upon

the service member's character and service record as determined by local commanders. On 5 July 1974, however, the Court of Military Appeals, in the *Ruiz* decision, ruled that an order to produce a urine sample that could lead to an administrative separation under less than honorable conditions violated a soldier's right against self-incrimination. Faced with the choice of continuing urine testing or limiting the local commander's prerogative concerning the type of discharge, the Army decided to stop the urine testing program. The Office of the Secretary of Defense suspended the urine testing program on 18 July 1974, but on 7 January 1975 directed the services to resume the tests no later than 1 February 1975 (later changed to March 1975). The Office of the Secretary of Defense also directed that all service members who had been identified as drug abusers through urinalysis, and who later had been determined to be beyond rehabilitation, would receive honorable discharges upon their administrative separation.

Training and education, particularly at the entry and supervisory levels, were the major alcohol and drug abuse prevention efforts over the year. Related audiovisual and printed materials were reviewed for pertinency. Approximately \$200,000 was spent for new materials to support installation education and training programs. The ADAPCP training center at Fort Sam Houston, Texas, trained approximately 600 persons in program management, counseling, and civilian program coordination. Also, the Teen Involvement Program, a school-based early prevention effort, was strengthened and expanded.

Leadership and Motivation

In November 1974 (Change 2, AR 310-25) the Army redefined the terms "military personnel management" and "human resources development" to help integrate the two. The new definitions were:

Military Personnel Management: The process of planning, organizing, directing, coordinating, and controlling the procurement, training/education, utilization, separation/retirement, development and motivation of military personnel to assist in the successful accomplishment of the organizational mission. It includes all procedures related to: military job analysis and evaluation; position classification; personnel classification, assignment and utilization; maintenance of an

adequate system of records and reports required for successful operation of the Army personnel system; development of individual potential; and development of an organizational climate that enhances the attitude, motivation, commitment and sense of well-being of soldiers and their families.

Human Resources Development: The process of planning, organizing, directing, coordinating, and controlling activities designed primarily for their effect on individual morale and organizational esprit, development of individual potential, and development of an organizational climate that enhances the attitudes, motivation, commitment, and sense of well-being of soldiers and their families. It includes activities related to: Leadership and discipline, job and career satisfaction, human relations, alcohol and drug abuse prevention, spiritual guidance and counseling, physical and mental well-being, community services, and maintenance of law and order.

These definitions acknowledged that motivation, family well-being, other people, and group-oriented concerns were factors in achieving and sustaining organizational effectiveness. To help further integrate human resources development into personnel management, the Army took steps to give commanders a single staff manager with broader responsibilities for human resources development.

On 16 September 1974, President Ford began a clemency program for Vietnam-era draft evaders and military deserters. The Department of Defense role in the program was to process individuals subject to military jurisdiction who, by reason of an unauthorized absence of more than thirty days during the period 4 August 1964 through 28 March 1973, were classified as deserters. While the program was in effect, from 16 September 1974 to 31 March 1975, a total of 4,314 Army deserters—55 percent of those who were eligible to participate in the program—were processed and separated at the Joint Clemency Processing Center, Fort Benjamin Harrison, Indiana.

Less than 15 percent of the Army returnees claimed to have been motivated to desert because of antiwar sentiments. Most had served only a short time, were assigned to units based in the United States, and left the service because they could not adjust or because of personal, family, or financial problems. Only 18 percent had served in Vietnam, 3 percent had deserted from Vietnam based units, and 1 percent from combat. Most of the returnees (88 percent) remained in the United States throughout their absence; of those who fled to foreign countries, two out of three crossed the border into Canada.

Casualty Statistics

Army casualties in Southeast Asia rose by 33 during fiscal year 1975 as a result of presumptive findings of death by board action. The 19 combat casualties included in the figure brought the total number of Army battle deaths in Southeast Asia for the period 1 January 1961 through 30 June 1975 to 30,669. At the close of the year, 260 Army personnel were still listed as missing, of whom 187 were missing in action. An additional 12 soldiers who did not return to military control during Operation Homecoming were carried on Army roles as prisoners of war.

Crime, Discipline, and Military Justice

The Army took a number of actions to improve crime reporting during the year. The Serious Incident Report, Provost Marshal Activities Report, and Quarterly Crime Report underwent revision to eliminate nonessential information, add pertinent data, and provide better presentation of the material. Revised military police forms have improved the quality of the reports and have facilitated processing. A new, computer-based centralized numbering system for military police reports has proved beneficial, especially for prompt identification of missing final disposition reports that local commanders must submit for each military police report received. The Army initiated prototype testing of two components of the Military Police Management Information System—the Law Enforcement Reporting System and the Correctional Reporting System. The Army also agreed to become a part of the National Law Enforcement Telecommunications System, which serves federal, state, and local law enforcement authorities.

Crimes of violence in the Army numbered 8.38 per thousand during the year as compared to 7.94 during fiscal year 1974. Crimes against property leveled off at 89.86 per thousand as compared to 89.87 per thousand in the previous year. AWOL rates continued their decline, down from 129.9 incidents per thousand in fiscal year 1974 to 92.3 this year. Desertion rates dropped from 52.1 to 26.0 incidents per thousand.

The number of Army personnel tried by courts-martial for the past two fiscal years was as follows:

Persons Tried by Courts-martial in Fiscal Year 1974

	Convicted	Acquitted	Total
General	1,696	152	1,848
Special	13,644*	1,170	14,814*
Summary	4,825	500	5,325
Total	20,165	1,822	21,987

* 1249 of these were special courts-martial where a bad conduct discharge was adjudged.

Persons Tried by Courts-martial in Fiscal Year 1975

	Convicted	Acquitted	Total
General	1,462	173	1,635
Special	9,424*	1,101	10,525*
Summary	3,727	391	4,118
Total	14,613	1,665	16,278

* 1158 of these were special courts-martial wherein a bad conduct discharge was adjudged.

The Army continued to serve as executive agent for the Department of Defense in preparing the annual report submitted to the Senate Armed Services Committee, which shows the prosecution of Department of Defense personnel and their dependents by foreign courts. From 1 December 1973 through 30 November 1974, 50,748 United States military and civilian personnel and their dependents were charged with offenses subject to the primary or exclusive jurisdiction of foreign tribunals. Most of these offenses (47,663) were charged against military personnel; 23,273 of the charges against military personnel were concurrent jurisdiction offenses over which the host country had the primary right to exercise jurisdiction. United States military authorities obtained a waiver of primary foreign jurisdiction in 18,650 (80.1 percent) of these incidents.

Of persons charged, 36,748 were Army military personnel, and 2,158 were Department of the Army civilians or dependents; 16,875 of the charges were concurrent jurisdiction offenses. Army authorities obtained a waiver of primary foreign jurisdiction in 15,970 (94.6 percent) of these incidents. There were 302 members of the armed forces in foreign jails as of 30 November 1974. This figure included 124 soldiers, 108 sailors, and 70 airmen.

The Army and the Department of Defense took a number of actions during the year affecting the administrative due process of service members convicted or accused of committing offenses listed in the Uniform Code of Military Justice. In May 1974 the Under Secretary of the Army proposed that the Department of Defense review the parole procedures of the military departments to determine whether they should include reasons for denial and the opportunity to appeal a denial. The

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Army initiative led to a 23 December 1974 change in DOD Instruction 1325.4, Treatment of Military Prisoners and Administration of Military Correction Facilities: Prisoners denied parole were to receive written notification of the reasons and could file a written appeal within thirty days. The secretary concerned or his designee was required to inform prisoners, in writing, of any decisions concerning an appeal. The Special Assistant to the Under Secretary of the Army was designated to act for the secretary on all parole appeals made by Army prisoners.

The withdrawal of the Air Force from the Army and Air Force Clemency Board led to the creation on 1 April 1975 of the Army Clemency and Parole Board. The board consists of three members: a civilian chairman from the Office of the Under Secretary of the Army and two field grade officers, one of whom has legal training. The board will convene as often as the Special Assistant to the Under Secretary of the Army deems necessary to consider clemency and parole matters promptly.

The Military Magistrate Program, described in last year's report, was implemented Army-wide on 15 October 1974. The random jury selection pilot project begun last year at Fort Riley, Kansas, was suspended on 31 December 1974, pending the results of a General Accounting Office study on the random selection of jury members.

Article 67(g) of the Uniform Code of Military Justice establishes a Code Committee to recommend legislative changes in the operation of the code. In August 1972 the service Judge Advocates General established the Joint Service Committee on Military Justice. During fiscal year 1975 proposals to streamline and modernize the code were studied by the joint committee and its working group. The proposals included a system of discretionary appeals, with a modified record of trial similar to the federal system; a limitation on the number of defense counsels in appropriate cases; and changes in areas where the convening authority currently acts.

The Defense Corrections Council, composed of six members representing the military services, the Office of the General Counsel, DOD, and the Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs), held its first meeting on 6 August 1974. It is to meet at least bimonthly and is to achieve maximum uniformity in service corrections programs. As the year ended the Defense Corrections Council was considering a General Accounting Office report on widespread

differences among the military services in the administration of military correctional facilities, differences not prescribed by the Military Correctional Facilities Act of 1968.

The expansion of the Army's Military Police Investigator program continued during the year. Certified investigators increased from 865 to 1,200, while the number of women in the program rose from 7 to 31. Military Police investigators began conducting collateral investigations, originally the job of U.S. Army Criminal Investigation Command personnel, on lesser cases within the United States involving Army personnel or property outside military reservations. These cases were not of sufficient importance to warrant an investigation by the Criminal Investigation Command parallel to that of the civilian law enforcement agency having primary investigative jurisdiction.

Civilian Personnel

Army civilian personnel strength (appropriated fund employees) stood at 434,679 (355,019 U.S. citizens and 79,660 foreign nationals) at year's end, a 1.5 percent reduction compared to fiscal year 1974 figures. This decrease would have been larger but for the conversion of 3,759 military positions to civilian jobs. These conversions virtually completed a program begun late in fiscal year 1973 to change 14,000 positions from military to civilian status to reduce costs and achieve combat readiness objectives within established military manpower ceilings.

The high degree of turbulence that has characterized Army civilian personnel management since the end of the Vietnam War continued. Though overall strength reductions were small, many employees were affected by the reorganization, transfer, and consolidation of functions, and manpower cuts at many installations. Hardships were minimized by advance planning, long lead times, early retirement of employees as provided for by Public Law 93-39, and transfers. Only rarely were employees dismissed.

Keeping civilian personnel costs down remained a key Army objective throughout the reporting period. The average grade of general schedule (GS) employees was 7.39 at the end of the fiscal year, well below the ceiling set by the Office of the Secretary of Defense and a substantial reduction from the 7.74 average grade when controls were introduced in fiscal year 1971. During the same period the number of full-time, upper

grade employees (GS-13 through GS-15) declined from 23,359 to 21,159.

The employee suggestion program continued to be important in reducing costs. The Army again led all federal agencies with estimated first-year savings from civilian suggestions of \$59.8 million. Suggestions from military personnel increased the total saved to \$69.5 million. The civilian savings figure was 43 percent above the previous year and indicated that the new effort to increase suggestion savings each year at least 10 percent above the average for the three preceding years was off to a good start.

Training of managers and executives and the identification and development of employees who possess executive potential received increased attention during the year. An assessment of individual skills, knowledge, abilities, and personal characteristics was made of approximately 2,000 managers and 1,500 high potential nonmanagers. Plans were then developed for each person. By the close of the year, about 71 percent of the Army's managers and high potential nonmanagers had such plans to help them improve their performance and prepare for more demanding assignments.

For the first time in three years, the number of employees represented by unions rose significantly. On 30 June 1975, unions represented 231,605 employees, an increase of 18,568 from the end of fiscal year 1974. The number of bargaining units decreased slightly, due in large part to the consolidation efforts of unions and management.

The Department of the Army sharply curtailed its centralized labor relations training activities due to restrictions on travel funds early in the year. To compensate for the cutbacks, many installations took advantage of courses offered regionally by the Civil Service Commission, participated in specialized training programs conducted by local universities and by the Federal Mediation and Conciliation Service, and developed their own training courses.

On 6 February 1975, Executive Order 11491, Labor Management Relations in the Federal Service, was amended by Executive Order 11838. The new order made many substantive and procedural changes concerning negotiability of agency regulations, midcontract bargaining, consolidation of units, grievance and arbitration procedures, and approval of agreements. To inform Army managers of these changes the offices of the Deputy Chief of Staff for Personnel and the Judge Advocate General conducted six joint orientation seminars

during the fourth quarter attended by civilian personnel officers, labor relations specialists, and labor law counselors. Attendees were told of the many changes and then returned to their own installations to develop and conduct similar orientations. By the end of the fiscal year, 1,385 military and 4,516 civilian supervisors and managers had received instruction on the latest program changes.

The Army made headway during the year in negotiating agreements that provide union support for management objectives. Fiscal year 1976 should see even greater advances as more management-initiated demands are negotiated. Practically all agreements made during the year contained articles that addressed such specific management concerns as equal employment opportunity, energy conservation, and productivity. In most cases, management got unions to go beyond the so-called agree-to-support stage by including language requiring unions to help management meet its objectives, particularly concerning the employee suggestion program, the development and implementation of modern and progressive work practices, and participation on joint labor-management committees.

Blacks, other minorities, and women in the civilian work force increased during the year, despite a decline in the number of employees. Minorities (appropriated fund personnel) increased from 16.5 to 17.7 percent during the year, and women from 31.7 to 33.1 percent. Minorities in grade levels GS-12 and above increased from 4.2 to 5.5 percent. Women in these grade levels went from 4.5 to 4.8 percent. More minorities and women were also recruited for career intern positions. In fiscal year 1975 minorities represented 14.8 percent and women 29.7 percent of the total program intake.

The General Officers' Steering Committee on Equal Opportunity, mentioned earlier, identified twenty-three discriminatory civilian personnel management practices. Corrections included reaffirming a prohibition against screening out candidates for overseas employment because of policies of foreign governments, and removal of age guidelines and implications in career program regulations and regulations on training and development opportunities. Despite the Army's efforts to assure equal opportunities for all employees, the number of formal complaints alleging discrimination increased, requiring six additional investigators on the staff of the U.S. Army Civilian Appellate Review Agency. Field commands also were told to become involved in such cases.

The Civil Service Commission program that gives prefer-

ence to dependents of Defense Department personnel in filling positions in foreign areas supported the volunteer Army concept by improving employment opportunities for dependents. Aimed particularly at dependents of lower grade military personnel who want and need work, this three-year-old program has stabilized at 50 percent of U.S. citizen employment in Europe and somewhat less in the Far East where dependents are not as numerous.

During the fiscal year, 11,924 Vietnam veterans were given jobs. These appointments represented 23.7 percent of all new hirings for the year, exceeding the Army goal of 20 percent. At the end of the fiscal year 5,337 veterans were employed under the Veterans' Readjustment Authority, which provides for special appointments and special job training for veterans during their readjustment period. Approximately 3 percent of Vietnam-era veterans working for the Army were handicapped. The Department of Defense also continued its summer youth employment program, with emphasis on providing jobs for the underprivileged. During the summer of 1974, more than 17,700 young people were employed, including 10,900 disadvantaged youths.

VI. Reserve Forces

Title 10 of the United States Code identifies the three principal components of the Army as the Regular Army, the Army National Guard of the United States, and the Army Reserve. The traditional mission of the Army National Guard of the United States and the Army Reserve has been to provide trained units and qualified individuals for active service in time of war, national emergency, and at such other times as the national security requires. In addition to its federal role, the Army National Guard, as part of the organized militia, has the state mission of protecting life and property and preserving peace, order, and public safety.

The fledgling Affiliation Program, initiated during fiscal year 1974 to aid in training twenty-six reserve component battalions, proved effective during annual training exercises conducted in the summer of 1974 and gained the support of active Army and reserve component commanders as a concept that demonstrates the "one Army" policy at work. By the end of this fiscal year, eighty-nine reserve component battalion-size combat and combat support units, and every active Army division in the United States and Hawaii, were participating in the program. Twenty-four reserve component units round out active Army divisions. The remaining affiliated units will provide additional combat or support forces more rapidly. All reserve component affiliated units were given higher priorities on the Department of the Army Master Priority List; roundout units held the same priority as their sponsoring divisions.

Force Structure

Progress continued in consolidating Army National Guard divisions within individual states to improve command and control, training, logistic management, and administration. The 28th Infantry Division, previously incorporating units in Pennsylvania, Virginia, and Maryland, was realigned entirely within Pennsylvania in a move that also resulted in the inactivation of an armored cavalry regiment and the activation in both Virginia and Maryland of a separate brigade headquarters and headquarters company, three separate infantry battalions, and

one separate artillery battalion. The realignment of the 42d Infantry Division consolidated elements previously located in Pennsylvania and New York entirely within New York, while the 50th Armored Division went from tristate (New York, New Jersey, and Vermont) to bistate by inactivating units in New York and reactivating them in New Jersey.

In other actions, inactivation of twenty-seven Army National Guard Nike Hercules firing batteries and eleven headquarters batteries was completed; two medical groups in Mississippi and Ohio were converted to medical brigades and given the responsibility for supervising the activities of 107 widely dispersed medical units; two assault helicopter companies were organized, one in Florida and one in Virginia; and two helicopter ambulance detachments were activated.

As of 30 June 1975, the Army National Guard consisted of 3,245 company- or detachment-size units, a decrease of 58 from the 30 June 1974 figure. The organizations in the structure were:

5 Infantry divisions	3 Separate armored brigades
1 Mechanized infantry division	3 Armored cavalry regiments
2 Armored divisions	2 Special Forces groups
9 Separate infantry brigades	151 Separate battalions
6 Separate mechanized infantry brigades	992 Other company- and detachment-size units

For the Army Reserve, activations included the 3d Battalion, 87th Infantry in Colorado; the 5th Brigade (Advanced Individual Training, Armor) with headquarters in Nebraska; a new maneuver training command at Jackson, Mississippi; and four companies in Puerto Rico (adjutant general, composite service, military police, and transportation). The 1st Battalion of the 313th Infantry in Pennsylvania and all Army Reserve units in the Virgin Islands (three military police units) were inactivated. After a long delay, the Army Reserve's civil affairs units were reorganized under the H-series modified tables of organization and equipment. In other reorganizations, six surgical and six evacuation hospitals became combat support hospitals; the 310th Field Army Support Command was reorganized as the 310th Theater Army Area Command; and an infantry battalion located in Philadelphia was redesignated as a mechanized battalion and reorganized as part of the 157th Infantry Brigade (Mechanized).

As of 30 June 1975, the Army Reserve structure consisted of 3,260 company- and detachment-size units. Major organizations were as follows:

19 U.S. Army Reserve commands	2 Engineer brigades
12 Training divisions	3 Support brigades
2 Maneuver area commands	3 Civil affairs areas (A)
2 Engineer commands	4 Hospital centers
1 Military Police command	5 Hospitals (1,000-bed)
1 Mechanized brigade	1 IX Corps (augmentation)
2 Infantry brigades	8 Maneuver training commands
1 Theater Army area command	98 Hospitals (miscellaneous)
3 Transportation brigades	2 Special Forces groups
3 Military Police brigades	61 Battalions (separate)

Completion of a new reserve component troop basis late in the fiscal year, which was developed to bring troop programs in line with force requirements as determined by the Total Force Analysis, will bring about more extensive changes in the number and type of reserve component units during the coming year.

Personnel

The paid drill strength of both Army National Guard and the Army Reserve declined during fiscal year 1975. The federally recognized strength of the Army National Guard dropped from 410,682 on 30 June 1974 to 401,981 on 30 June 1975. During the same period Army Reserve paid drill strength fell from 234,886 to 225,057. The continuing decline in Army Reserve strength served as the catalyst for two new recruiting concepts to be tested during fiscal year 1976. A new area recruiting concept will be tried in Readiness Region V, and the use of Army recruiters in behalf of the Army Reserve will be tried in a project involving five district recruiting commands.

The Individual Ready Reserve of the Army Reserve declined sharply from 532,575 at the close of fiscal year 1974 to 355,099 at the end of this year. During the year the Ready Reserve was screened: 257,428 members were transferred to the Standby or Retired Reserve, and 41,843 were discharged. The composition of the Individual Ready Reserve, as of 30 June 1975, was as follows:

	Officer	Enlisted	Total
Control group annual training ^a	21,418	201,412	222,830
Control group MOBDES ^b	5,536	38	5,574
Control group reinforcement ^c	19,823	100,012	119,835
Control group delayed ^d		1,710	1,710
Control group officer active duty obligor ^e	5,150		5,150
Total	51,927	303,172	355,099

^a Persons having a remaining statutory obligation and subject to mandatory training requirements.
^b Reservists having specific assignments upon mobilization and who train with their unit of assignment for this eventuality.
^c Includes obligated members who are not subject to mandatory training requirements and nonobligated members not assigned to a unit who volunteer to participate in Ready Reserve training.
^d Enlisted obligated members awaiting entry on active duty for training.
^e Obligated officers awaiting entry on active duty or active duty for training.

The Standby Reserve's strength at the close of fiscal year 1975 was 282,696 (38,744 officers and 243,952 enlisted men). Retired Reserve year-end strength stood at 365,489 (172,076 officers and 193,413 enlisted men).

Both of the Army's reserve components recruited more minority group members. The number of blacks in the Army National Guard rose from 22,377 at the beginning of fiscal year 1975 to 31,029 by the end of the year; black members of the Army Reserve increased from 16,766 at the close of fiscal year 1974 to 24,998 one year later, 11.1 percent of the Army Reserve's paid strength. Army Reserve female strength as of 30 June 1975 stood at 15,693, a gain of 9,024 for the year. The Army National Guard, in expanding its women's program, exceeded its goal of over 6,000 women in the guard. The 6,771 women serving at the close of fiscal year 1975 included the guard's first woman warrant officer (appointed in August 1974) and its first woman helicopter pilot (graduated in June 1975).

The requirement for Army National Guard direct-hire technicians decreased from 34,463 to 32,098 during the year. The loss of 2,764 positions due to the inactivation of on-site air defense units was partially offset by a gain of 399 other positions to support more aircraft, aviators, and equipment. Authorized technician strength for fiscal year 1975 was 28,654 or 89.8 percent of the number required. Actual direct-hire technician strength rose from 28,654 at the beginning of the year to 28,831 as of 30 June 1975.

The efficiency of the Army Reserve technician program continued to be hampered by understaffing and the absence of a requirement that Army Reserve technicians, unlike their National Guard counterparts, be members of the units where they work. Proposed Department of Defense-sponsored legislation requires all technicians to occupy military positions in their units, and establishes the dual military/civilian status needed to manage the technicians and maintain the readiness of Army Reserve units when mobilized. Little relief can be expected in alleviating the problem of understaffing because of lack of funds. The status of the Army Reserve technician program at the end of the fiscal year was as follows:

	Fiscal Year 1975	Fiscal Year 1976	Fiscal Year 1977
Required	9,051	11,333	12,270
Authorized	8,219	8,549	8,548
Actual	8,221	—	—

Management

To improve the management and administration of reserve components, several actions were taken at various levels. A joint working group composed of representatives from the Office of the Deputy Chief of Staff for Personnel (ODCSPER), Office of the Chief of the National Guard Bureau, and Office of the Chief, Army Reserve, sponsored by ODCSPER, was organized in February 1975. Required to develop an enlisted force objective for the Army National Guard and the Army Reserve, the group completed its work in June 1975 and began coordinating a report of its findings within Headquarters, Department of the Army, and selected field commands. Approval of long-range enlisted objectives for the reserve components will provide the basis for their fuller integration into the enlisted personnel management system. In other developments related to enlisted personnel management, the Army adopted a discharge program that permitted the release of unsuitable and poorly motivated enlistees before their entry into initial active duty for training. Procedures were also simplified for processing and disposing of reserve component personnel who were AWOL during initial active duty for training.

Improved management of Army Reserve officers was the goal of The Officer Personnel System, The Army Reserve (TOPSTAR), which began testing operations in November 1974. TOPSTAR emphasizes centralized management, career development, and optimum use of each Army Reserve officer. It provides for the rotation of officers to career enhancing positions within Army Reserve troop program units and the Individual Ready Reserve.

Development of the Standard Installation/Division Personnel System—Reserve Components continued during the year with the approval of an economic analysis of the system and the publication and staffing of a detailed description of functions the system would have to perform. Prototype testing has been authorized and the test units selected—the 96th Army Command and the Indiana Army National Guard. Another new automated management system, the Joint Uniform Military Pay System—Reserve Components was extended throughout the Army National Guard and a portion of the Army Reserve. Implementation in the Army Reserve should be completed during fiscal year 1976.

In the fall of 1974, the Reserve Components Personnel and Administration Center assumed responsibility from U.S. Army,

Europe, and U.S. Army, Pacific, for the administration and control of approximately 3,300 members of the Individual Ready Reserve who then resided in Europe and the Far East. The center also administered newly established Army Reserve dual component control groups, which for the first time provided a valid list of reserve officers and warrant officers who were serving in the active Army as enlisted men. By the close of the fiscal year 1,567 such persons had been identified. During the past fiscal year, the administration center completed the transfer of military personnel records of some 300,000 former guardsmen to the National Records Center, General Services Administration. The active files of 30,976 officers and warrant officers serving in the Army National Guard were transferred to the National Guard Bureau.

Equipment and Maintenance

Reserve components continued to improve during the year in terms of equipment modernization: the dollar amount of equipment issued increased slightly from \$256 million in fiscal year 1974 to \$272 million in fiscal year 1975. Withdrawals and diversions to meet Middle East demands created critical equipment shortages of such items as standard medium tanks, self-propelled artillery, radars, tactical bridges, tactical radios, and other communications items. The number of aircraft on hand, however, continued to increase. The Army National Guard aircraft inventory rose from 2,230 at the end of fiscal year 1974 to 2,428 at the close of the current fiscal year. The number of Army Reserve aircraft rose from 476 to 536 during the same period.

Equipment Status, Reserve Components
(in billions of dollars)

Mobilization Requirement	5 835
Training Requirement	5 369
Inventory (Assets)	3 445
Standard	(3 044)
Obsolete	(. 401)
Amount of Training Requirement on Hand	64 percent

Maintenance in reserve component units compared favorably with the active Army for most equipment items. By the end of the year newly overhauled equipment with an acquisition cost of \$99 million had been added to the inventory of Army National Guard and Army Reserve units under the reserve components dedicated maintenance program, but as in fiscal year 1974, shortages of items and diversion of certain assets to foreign military sales hindered deliveries.

Construction and Facilities

The Army Reserve military construction program for the year amounted to \$43.7 million, an increase of \$3 million over fiscal year 1974. An additional \$23.2 million carried over raised the amount available to \$66.9 million, which was less than the \$73.2 million for the Army Reserve's construction program in fiscal year 1974. The amount actually obligated during the past fiscal year was \$46.2 million, \$3.8 million less than the 1974 figure. Cost escalation, more Army Reserve aircraft, expanding equipment inventories, and more stringent building codes resulted in an increased construction backlog for needed facilities—from \$338.4 million at the end of fiscal year 1971 to \$401 million at the close of this year.

During the year the Army National Guard military construction program was allotted a total of \$61 million—\$59 million in new obligational authority and \$2 million in carry-over appropriations. This was a substantial increase over the \$38.2 million available in fiscal year 1974. The guard obligated \$55.3 million for military construction during the year. At the close of the year there was a construction backlog of \$552 million, sixty percent of which was for armories. (Inadequate armory facilities used by over 700 Army National Guard units has resulted in a waste of training time, lower morale, loss or damage to supplies and equipment, recruiting and retention problems, and an overall decline in unit readiness.) The remainder of the backlog was for administrative and logistical facilities, state operated training sites, and a number of semiactive Army camps used for annual training.

Readiness and Training

The overall readiness of the reserve components continued to improve during fiscal year 1975, with over half of the major combat units meeting minimum readiness goals by achieving and maintaining company-level proficiency. These units included four of eight divisions, eleven of twenty-one separate brigades, and two of three armored cavalry regiments. In contrast at the close of fiscal year 1974 only one of the separate brigades had attained company-level proficiency. This improvement in the readiness status of the reserve components took place despite shortfalls in Army Reserve strength, the lack of substantial improvement in the equipment status of reserve and guard units, and a slight decline in the readiness of the

National Guard's 28th Infantry Division and 42d Infantry Division resulting from their reorganization from multiple state to single state units.

Unit training was enhanced by the Affiliation Program, which for the first time included support units and eighty-nine reserve component battalion-size units at the close of fiscal year 1975. Congressional restrictions on overseas travel caused the cancellation of overseas training exercises scheduled for a number of reserve component units. Within the continental United States, thirty-one units plus members of the Individual Ready Reserve participated in LOGEX/RC-75 during the first half of June 1975. The objective was to train participants in a conventional, limited war situation. United States forces consisted of an independent corps of three divisions and a separate infantry brigade. Participants followed the latest logistical doctrine, including echelons-above-division, direct supply support, containerization, and the CONUS Wholesale Logistics System.

Because of travel restrictions and cutbacks in Army service school curricula, more reliance was placed on classes taught at the unit level and within each Army area. Training of individuals in new military occupational specialties—required by the conversion of units to new tables of organization and equipment—was slow because not enough active Army instructors were familiar with the older equipment used by reserve component units.

State and Federal Service

The Army National Guard, in its role as the organized militia, responded to a record number of calls by civil authorities for assistance in protecting life and property and preserving law and order. A total of 15,945 guardsmen from 41 states were employed in 216 separate incidents during the year.

The largest number of call-ups (138) was because of natural disasters—66 floods, 24 snowstorms, 21 tornadoes, 20 forest fires, and 7 windstorms and hurricanes. Other emergencies, such as the need to supply water, search and rescue, traffic safety, disaster relief, and airlifts, brought guardsmen into state service on 65 other occasions with 10,576 guardsmen from 37 states participating.

The Army National Guard responded to 13 civil disturbances in 9 states during the past year; 5,369 guardsmen were involved. These call-ups involved 9 incidents of striking em-

ployees or disturbances in correctional institutions, 2 incidents of Indian groups occupying buildings illegally, 1 school busing incident, and a disorder at a rock music festival. Units with civil disturbance control missions conducted up to twenty hours of refresher training. Key people in these units continued to receive special leadership training. Also, 217 National Guard officers attended the Civil Disturbance Orientation Course offered at the Army Military Police School, Fort Gordon, Georgia.

VII. Organization, Management, and Budget

Organization

At the close of fiscal year 1975, little more than one year after the 20 May 1974 Army staff reorganization, indications were that reorganization goals had been met. Improved direction and control of the Army staff, consolidation of fragmented responsibilities, removal of staff layering, clearer definition of responsibilities, and manpower savings were a few of these goals. The completion of the reorganization, described in last year's summary, reduced the Army staff and supporting agencies to 5,547 people, the lowest level since the Korean War.

During the past year a major review of field operating agencies eliminated 3,525 spaces which will be allotted to combat units. Significant organizational changes included the elimination of the Officers Interchange Group; the transfer of the Standardization Groups (Australia, Canada, and the United Kingdom) from the supervision of the Deputy Chief of Staff for Research, Development, and Acquisition to the Materiel Command; and the transfer of supervision of the Army Medical Historical Unit from The Surgeon General to the Chief of Military History.

In accordance with plans announced on 27 June 1974 and reported in last year's summary, the following major headquarters were eliminated: U.S. Army Intelligence Command, Fort Meade, Maryland, 30 June 1974; Theater Army Support Command, Europe, and Engineer Command, Europe, 30 September 1974; U.S. Army, Pacific, and U.S. Army, Alaska (the 172d Infantry Brigade—Alaska—assumed the Army component functions of the unified command), 31 December 1974; U.S. Army Forces, Southern Command (the 193d Infantry Brigade—Canal Zone—assumed the Army component functions of the unified command), 31 December 1974.

The Secretary of Defense approved the integration of Headquarters, United Nations Command/U.S. Forces, Korea, and Headquarters, Eighth U.S. Army, into a single headquarters on 1 July 1974. Completion of the action on 1 October

1974 eliminated 271 spaces for a manpower saving of 24.6 percent for the Army and 18.8 percent overall.

Planned and installation closings and realignment of functions under Project CONCISE continued into fiscal year 1975. On 22 November 1974 the Secretary of Defense announced plans to close Frankford Arsenal; realign several Army Materiel Command depots that would cause major reductions at Lexington-Blue Grass, Pueblo, Sharpe, and Savanna Army Depots; and reorganize Fort Hamilton, New York, as a subinstallation of Fort Dix, New Jersey. These closures and realignments began on 1 July 1975 and were to be completed by the end of fiscal year 1977. On 18 March 1975 the Secretary of the Army announced additional realignments involving a number of Army medical laboratories, the Computer Systems Command Support Group at the Presidio of San Francisco, and the U. S. Army Communications Command.

General Research Corporation in December 1974 completed a study on the effectiveness of the Army reorganization of 1973 within the United States, particularly as it related to the effectiveness of the Training and Doctrine Command, the Forces Command, the Health Services Command, the Operational Test and Evaluation Agency, and the Concepts Analysis Agency. A study advisory group composed of command and agency representatives will meet early in fiscal year 1976 to review study findings and discuss follow-up actions.

Responding to a request to the Chief of Staff by the Commander, Army Materiel Command (AMC), the Management Directorate on 7 April 1975 formed a group to study the organization of AMC headquarters. Objectives of the study, which should be completed in July 1975, are to improve management and control of the materiel acquisition and logistics base and strengthen the working relationships between the Army staff, AMC, and other major commands.

Management Programs, Systems, and Techniques

The Department of the Army Management Review and Improvement Program was modified during the past year to identify and promote management practices that have paid the largest dividends. One of these, the Defense Integrated Management Engineering System, was responsible for savings of approximately \$10 million in fiscal year 1975. And the Value Engineering Program generated savings of \$135 million during the year.

The Army word processing program expanded in fiscal year 1975, with 102 new systems approved during the program's second year of operation. The cost of equipment for the new centers was \$638,000, with projected annual personnel savings of \$2 million. By the end of the fiscal year, the Army was using more than 5,000 automated typing devices throughout the world.

Several improvements in micrographics management were made during the year. More than 100 new microfilm systems were approved with annual savings or cost avoidance of about \$2.3 million. Publication in November 1974 of MIL-STD-399, Microform Formats, permitted more use of microfilm production and viewing equipment within the Army and other services. Change 1 to AR 340-22 established on 15 February 1975 major policy concepts in the microforms program such as a microforms systems classification and a requirement for Army staff agencies and major commands to designate microform management officers.

A survey of Army staff military and civilian personnel revealed that 73 percent of the 1,500 participants were satisfied with their job, 24 percent were not, and 3 percent had no opinion. Civilians were slightly less satisfied than their military coworkers. Organizational efficiency was rated positive by 59 percent, 37 percent rated it negative, and 4 percent registered no opinion. A view that the staff environment had improved during the past year was expressed by 42 percent, 48 percent thought it had not, and 10 percent had no opinion. Steps have been taken to correct problems uncovered in this survey.

A simpler and less formal staffing process resulted from a recent revision of Department of the Army Memorandum 340-15. The Summary Sheet was replaced with the Decision/Information Memorandum and signature and coordination authority was delegated to the lowest possible level.

Management of data processing installations that serve Headquarters, Department of the Army, came under increased scrutiny during the year. Duplication of services has been reduced, and coordination between installations has increased. Much of the computer workload of the Deputy Chief of Logistics was transferred from Radford, Virginia, to the Army Management Systems Support Agency in the Pentagon. Modernization of computers at the Military Personnel Center—Project 70X—was completed in May 1975 with acceptance of the last of eight UNIVAC 1108 central processing units.

Use of the Base Operating Information System (BASOPS),

the Army's first multicommand and multifunctional computer system, was extended to a new location during the year, but was eliminated from two other installations because of reduced activity. By the end of 1974 the Standard Installation/Division Personnel System, the latest BASOPS personnel module, had replaced the Military Personnel Accounting Subsystem at all Army installations.

By the close of fiscal year 1975, the Standard Army Intermediate Level Supply Subsystem (SAILS) had been extended to twenty Army installations within the United States. Work proceeded to correct a number of deficiencies at installations where it had been installed and on expanding SAILS to accommodate overseas and medical requirements.

The Army Forces Command recommendation that the Combat Service Support System (CS₃) be extended to all sixteen active Army divisions was approved by the Assistant Secretary of the Army (Financial Management) in July 1974. The extension of CS₃ should be completed by June 1977 and will bring such software packages as the Standard Installation/Division Personnel System, the interim Division Logistics System, and the Maintenance Reporting and Management System to all the divisions.

The Army Authorization Documents System (TAADS) was extended to the National Guard Bureau; Headquarters, U.S. Army, Japan; and Headquarters, Eighth Army, during the past year. In May 1975 work began on determining the requirements for extending TAADS to the installation level. Progress was made in documenting fiscal year strength positions before the year began: eighty percent of the documentation for fiscal year 1976 was in by 30 June 1975, with the remaining twenty percent expected by 30 September 1975.

In February 1975 the Assistant Secretary of Defense (Comptroller) selected the Standard Army Civilian Payroll System as the base system for developing the Department of Defense Standard Civilian Payroll System. A working group, chaired by the Army with representatives from the Navy, Air Force, Defense Supply Agency, and National Security Agency, began meeting in March to mold the Army system into one that met the requirements of all.

During the past year several improvements were made in the Standard Finance System for appropriated fund accounting at the installation level. These refinements included the addition of a cost distribution capability and the inclusion of an

expenditure reporting capability that permits the system to tie in with the Comptroller of the Army data base.

The Program Optimization and Budget Evaluation System entered the third year of development. Major attention centered on the design and structure of a subsystem that will provide alternative allocations of Army resources following changes in fiscal guidance from the Office of the Secretary of Defense.

The Army's Commercial and Industrial-Type Activities (CITA) Program implements a national policy of maximum reliance on private enterprise for products and services needed by federal departments and agencies. During fiscal year 1975, 153 persons attended the Department of Defense Commercial and Industrial-Type Activities training course conducted at the Army Logistics Management Center, Fort Lee, Virginia. The 2,646 CITA functions reported for the year represented a capital investment of \$4.663 billion and an annual operating cost of \$1.75 billion. Major commands submitted 82 new start requests, of which 31 were approved, 3 were disapproved, 8 remained under review, and 40 were returned for more justification.

Budget and Funds

The Army's budget request for fiscal year 1975 totaled \$22,879.6 million in total obligational authority (TOA). Following reviews by the Office of the Secretary of Defense and the Office of Management and Budget, the President requested \$23,168.7 million for the Army; the Congress appropriated \$21,104.5 million. A fiscal year 1975 supplemental appropriation, together with reprogramming actions and transfers, increased the Army's TOA to \$21,577 million. The table that follows traces the chronological development of the fiscal year 1975 budget.

Financial Management

The Comptroller of the Army coordinates the preparation of the Army Management Structure (AMS), which is a framework for coordination of programming, budgeting, accounting, manpower control, and technical data reporting by a standard classification of activities and functions. The large number of accounts within the management structure has caused undue burdens in accounting, budgeting, and reporting in the field.

**CHRONOLOGY OF THE FISCAL YEAR 1975 BUDGET
DIRECT BUDGET PLAN (TOA)**
(In millions of dollars)

	DA Submission to OSD	Amended President's Budget	Budget Approved by Congress	Supplemental Approved by Congress	Approved Reprogramming and Transfers	Total Obligational Authority
Military Personnel, Army	7,582.6	7,963.2	7,790.3	291.8	10.1	8,092.2
Reserve Personnel, Army	513.0	490.6	493.8		-3.9	489.9
National Guard Personnel, Army	590.7	621.7	660.8			660.8
Operation & Maintenance, Army	6,982.3	7,048.5	6,137.5	233.1	99.1	6,469.7
Operation & Maintenance, Army Reserve	292.6	281.4	276.6	8.3	-9	284.0
Operation & Maintenance, Army National Guard	640.9	614.9	589.5	18.7	-7	607.5
National Board for the Promotion of Rifle Practice	2	2	2			.2
Aircraft Procurement, Army	359.0	339.5	253.8		-11.6	242.2
Missile Procurement, Army	466.1	459.2	436.5		-49.7	386.8
Procurement of Weapons & Tracked Combat Vehicles, Army	375.3	385.3	352.8		-32.3	320.5
Procurement of Ammunition, Army	1,092.0	1,344.8	890.2		-27.5	862.7
Other Procurement, Army	909.5	786.2	689.1		-24.1	242.2
Research, Development, Test and Evaluation, Army	2,116.3	1,986.0	1,787.3		-37.9	1,749.4
Subtotal, excluding Construction	(21,920.6)	(22,321.5)	(20,358.4)	(551.9)	(-79.4)	(20,830.9)
Military Construction, Army	856.3	744.5	643.4			643.4
Military Construction, Army Reserve	43.7	43.7	43.7			43.7
Military Construction, Army National Guard	59.0	59.0	59.0			59.0
Subtotal Construction Accounts	(959.0)	(847.2)	(746.1)			(746.1)
Total Direct Budget Plan (TOA)	22,879.6	23,168.7	21,104.5	551.9	-79.4	21,577.0

To alleviate the situation, the Comptroller of the Army has sought to reduce the amount of detail in the AMS. Appropriations with the greatest number of accounts such as Operation and Maintenance, Army (OMA) and Operation and Maintenance, Army Reserve (OMAR), received special attention. Close coordination with appropriation and program directors resulted in the elimination of over 500 OMA accounts, a 28 percent reduction, and over 200 OMAR accounts, a 61 percent reduction. Subsequent action on the Reserve Personnel, Army, appropriation resulted in a 35 percent reduction in the 51 subsidiary accounts that had been carried.

Work continued during the past year on developing Data Element Management/Accounting Reporting and the Comptroller of the Army Data Base System. Selected parts of the system were used in April 1975 to satisfy a Treasury Department requirement for earlier reporting of monthly collection and disbursement data.

A number of steps were taken during the year to develop more realistic cost estimates for weapons systems. Responsibility for validating cost estimates was realigned and attention was focused on full life-cycle costs—from development until the system is no longer used. To improve forecasts of cost for the Planning, Programming and Budgeting System, a better understanding was developed of the relationship between the cost of weapons systems to total force costs. Expanding the data contained in the Force Cost Information System was another improvement.

In other financial management matters, the Directorate of Finance and Accounting in the Army Comptroller's Office was reorganized in January 1975. Its responsibilities for military pay, accounting system maintenance, and several other tasks were transferred to the Army Finance and Accounting Center. And the Productivity Enhancing Capital Investment Program was established to generate savings in operating costs by timely investments in capital tools and equipment. Its goal has been to exploit many "fast-payback" capital investment opportunities often lost due to administrative delays in the normal budgetary review and competition from higher priority mission requirements. During fiscal year 1975 a total of 186 of the program's projects, costing \$4,500,579, produced estimated annual savings of \$7,640,445.

VIII. Logistics

During fiscal year 1975, the Army logistics community shouldered a considerable portion of the Army's readiness requirements, provided for the personal equipment and clothing needs of its soldiers, supplied and distributed materiel to allied nations, and supported the increase to a standing Army of sixteen divisions—all this under austere economic conditions. This chapter gives the highlights of supply and maintenance, transportation, military aid, logistics systems development, and logistics management.

Logistics Management

As part of the response to the August 1974 Chief of Staff directive calling upon the Army to identify savings in men, money, and materiel in order to meet the needs of a sixteen-division Army, the Deputy Chief of Staff for Logistics established Project LEAP (Logistical Efficiencies to Increase Army Power). By the end of the year this comprehensive review of Army logistics policies, missions, and activities had led to fourteen changes in the management of logistics resources, representing a saving of approximately \$2.5 million and 1,189 military and civilian positions. Most of the savings represent cost avoidance and do not reflect the cost of contracting or civilian replacement. Additional savings are expected as the review continues. Issues being analyzed by the LEAP task force include the Division Logistics System, wholesale and retail logistics operations, stock reductions at installations and within units, Military Standard Requisitioning and Issue Procedures response time requirements, and replacement of nondivisional combat service support units by civilian contractors.

The Logistics Studies Steering Group (LSSG) held three sessions during the year. On 11 December 1974 the group met to review the status of Army logistics studies in view of budget constraints for contract studies and the impact of new developments such as Project LEAP and the Defense Logistics Studies Information Exchange (DLSIE). The 18 June 1975 session discussed 146 proposals for future logistics and management studies. Areas of possible duplication were eliminated, studies

were recommended for inclusion in the Logistics System Master Plan, and all logistics studies were screened prior to their review by the Study Review Council.

The Logistics Models Working Group (LMWG) assisted the LSSG in managing logistics studies by insuring that maximum use was made of existing logistics models and that duplication in the development of new models was avoided. The five LMWG meetings held during fiscal year 1975 primarily reviewed Army Materiel Command logistics support models. The capabilities of integrated logistics support models were also reviewed to insure compliance with Department of the Army policy. These meetings provided a valuable information exchange and contributed to the refinement of the DLSIE catalog of logistics models.

The July 1974 edition of the Army Logistics System Master Plan (LOGMAP) contained a number of revisions to improve the document's use as a management tool and to tie it more closely to the Planning, Programming, and Budgeting System. These changes included the following: expanding the scope of LOGMAP to include significant features of the post-1980 logistics system; assuring that LOGMAP was compatible with the objectives and actions prescribed in the Department of Defense Logistics System Plan and with objectives established by the Assistant Secretary of the Army (Installations and Logistics); consolidating LOGMAP's general goals into one overall objective—achievement of an improved logistics system; and assigning Army staff responsibility for each LOGMAP initiative.

During fiscal year 1975 the Army furnished about fifty-five percent of the assistance supplied under the Interservice/Interdepartmental/Interagency Support Program. In an effort to conserve men and money, many support functions that would reduce costs to the federal government, yet would not primarily benefit the Army, were transferred to other agencies. By the end of the fiscal year, thirty-eight agreements had been transferred, resulting in a cost reduction of \$1.086 million. The Army also fed its interservice agreements into the Defense Supply Agency's Retail Interservice Support Program Computer Bank, thus permitting quick retrieval of details of the agreements and the identification of additional savings.

On 30 September 1974 new regulations covering the Army Equipment Status Reporting System went into effect. In general, the new rules standardize and simplify methods and procedures for processing data and correct weaknesses in the

quarterly status reports submitted by active Army and reserve component units. Specific improvements included removal from quarterly reporting requirements of information available elsewhere; use in the field of a unified printout format, standardized updating procedures, and standard data processing editing criteria; better verification of information by using the Unit Identification System for positive identification of registered property accounts; and the assignment within major Army commands of responsibility for the support required by units within their areas.

In other logistics management matters, planning continued for a single small arms central registry for all Department of Defense components, and Congress appropriated the funds needed by the Army to operate the registry, which forms part of the Weapons Management Improvement Program. Conversion of federal stock numbers to the new thirteen-digit national stock number system was completed. The Army worked with the Navy and the Air Force in drafting a joint document to standardize guidance and procedures pertaining to logistical support for multiservice communications systems. The Army also participated with the other military services and the Defense Supply Agency on expanding the application of vertical materiel management concepts and procedures throughout the Department of Defense.

Logistics Systems Development

Progress continued this year on the Army Materiel Command's (AMC's) Five Year Automatic Data Processing Program. Installation of the AMC Logistics Program/Hardcore Automated portion of the Commodity Command Standard System was completed at the Army Aviation Systems Command, the Army Missile Command, and the Army Troop Support Command, and started at the Army Tank Automotive Command, the Army Electronics Command, and the Army Armament Command.

Extension of the Division Logistics System (DLOGS) to the reserve components was completed in seventeen of the eighteen National Guard divisions and brigades initially scheduled to receive the system. Conversion of the remaining two Regular Army divisions not yet covered by DLOGS is scheduled for completion early in fiscal year 1976.

Development and use of the systems and subsystems that comprise the Integrated Transportation Management Infor-

mation System continued during the year. The Army adopted the Standard Port System (SPS) component of the Terminal Operations and Movements Management System (TOMMS) for general use at major overseas water terminals, corrected deficiencies uncovered during trials at Bremerhaven and Rotterdam, and put the Army version of SPS into operation at the ports of Pusan, Naha, and Yokohama. The Army began development work on another TOMMS component, the Movements Management System. At the close of the fiscal year the Army staff was reviewing the Administrative Use Vehicle Management System before seeking approval from the Assistant Secretary of the Army, Financial Management.

Development of the Standard Army Maintenance System moved forward during the year; general tasks for the new system were approved, and work began on expanding these into detailed functional requirements.

A number of refinements, including the addition of data on guided missiles and large rockets, increased the capability of the Standard Army Ammunition System to provide automated management support at the theater level. Future development efforts will extend the system to below theater levels both overseas and in the United States.

Development of the Selected Item Management System-Expanded continued during the year. This system will correct the deficiencies of the basic Selected Item Management System and will provide greater control of post, camp, station, and depot stocks.

Materiel Maintenance

During the year \$523.3 million was expended for depot materiel maintenance and support activities: \$343.1 million for overhauling unserviceable equipment, \$169.7 million for maintenance engineering and other support activities, and \$10.5 million for training.

Use of the term "Backlog of Maintenance and Repair (BMAR)," the new designation given to Backlog of Essential Maintenance and Repair by the Office of the Secretary of Defense, became effective with end of fiscal year 1974 reporting requirements and for the preparation of fiscal year 1975 command operating budget submissions. All unfinanced maintenance and repair projects that represent valid requirements were to be reported as BMAR. The seriousness of the backlog problem was indicated by a breakdown of the \$950 million

estimate for fiscal year 1976 for maintenance and repair of real property: \$436 million was for annual maintenance and repair, while \$514 million was for the backlog.

Another factor impairing maintenance was the lack of modern maintenance facilities, particularly among troop units. In 1973 the Army estimated that \$750 million was needed to upgrade or replace substandard maintenance facilities. In 1975 this figure had increased to nearly \$933 million.

By the beginning of fiscal year 1974 Army depot maintenance facilities at Sagami, Japan; Camp Carroll, Korea; and Machinato, Okinawa, had reverted to direct and general support work. The Army Materiel Command's Taiwan Materiel Agency continued to perform depot maintenance on items shipped to Taiwan following the cease-fire in Vietnam. The backlog of equipment to be overhauled had been cleared up by 30 June 1975, and the agency was scheduled to be discontinued on 30 September 1975.

Reduction of depot maintenance facilities in Europe received increased impetus following approval of recommendations made in a March 1975 study: that cost savings could be achieved without reducing operational readiness by transferring substantial portions of the depot maintenance performed in Europe to Army Materiel Command depots in the United States. The Schwaebisch Gmuend Maintenance Plant was closed, and the Boeblingen Maintenance Plant was being phased out and will be closed by 31 December 1975. Appropriate work was transferred to facilities in the United States, and general support maintenance that had been performed at depot level was turned over to lower echelon general support units. A follow-up study should identify additional depot maintenance functions for transfer to the United States, and depot maintenance at Pirmasens and Kaiserslautern may also be terminated. Transferring the government-owned and contractor-operated U.S. Army Maintenance Plant, Mainz, and the Rubber Fabrication Facility, U.S. Army Maintenance Plant, Ober-Ramstadt, to the Army Materiel Command was also considered.

The first Army regulation on Integrated Logistic Support was published in April 1975. Other Army publications dealing with materiel requirements, research, development, and acquisition were revised to reflect the policy of integrating logistical considerations, including maintenance, with the materiel acquisition process.

To improve aviation maintenance, field testing of the

computer Model for the Analysis of Vehicle Inspections Systems (MAVIS) began in August 1974, and will continue for about one year. The initial test involves UH-1 and CH-47 helicopters. MAVIS will be extended to the AH-1G and OH-58 helicopters some time in the coming fiscal year. Test data collected and analyzed to date indicates that the phased inspection method incorporated in the new system will reduce both the ratio of maintenance time to flying time and the time aircraft remain out of operation while awaiting maintenance. The On Condition Maintenance program permitted a twenty-five percent reduction in the amount of depot maintenance scheduled for the UH-1 during fiscal year 1975. Aircraft improvements during the year required approximately 500,000 manhours to complete. At year's end the backlog remained at about 600,000 manhours, a manageable figure that represents a considerable reduction from the 2,900,000 man-hour backlog that existed in fiscal year 1972 when the Aircraft Modification Clean Up Program began.

Supply and Depot Operations and Management

Fiscal year 1975 Army stock fund obligations amounted to \$3.6 billion in support of \$3.4 billion in sales. Obligations were \$400 million above those for fiscal year 1974 and sales were \$500 million higher. Although the greatest factor causing the increase was inflation, requirements for the 16-division force, the tank program, and expanding foreign military sales also contributed. Because standard methods for recording price changes could not keep pace with rapidly increasing costs for new procurement, a new, mechanized system was installed to expedite listing of price changes at Army National Inventory Control Points (NICP's). During installation of the new system NICP's were unable to record price changes except by off-line methods. The Office of the Secretary of Defense authorized the NICP's to apply a temporary surcharge of fifteen percent in fiscal year 1976 to recoup losses sustained during the price change moratorium.

Total obligational authority for secondary items financed under the Procurement Appropriation (formerly PEMA) in fiscal year 1975 was \$277 million, and \$243 million was obligated. Carry-over of unused fiscal year 1975 funds into fiscal year 1976 will be permitted if the funded requirements remain valid. The number of parts and assemblies returned by users in fiscal year 1975 was at about the same level as in fiscal

year 1974, a leveling off that signals a return to pre-Vietnam War rates.

The Back Order Validation program continued to help conserve supplies and materiel. Of the 854,978 requisitions referred for validation during the year, 84,268, valued at \$463.3 million, were canceled.

In January 1975 the Assistant Secretary of Defense (Installations and Logistics) approved a plan completed by a joint task force the previous October to eliminate duplicate wholesale inventories of nonconsumable items within the Department of Defense. By the close of the fiscal year, 396,234 joint-use nonconsumables had been classified and tentatively placed under a single manager for procurement, cataloging, disbursement, and depot maintenance. Under the integrated materiel management concept, each service will continue to determine the need and fund its requirements for a particular item and maintain accountability for the item upon receipt.

The Army took several actions during fiscal year 1975 to improve the Care of Supplies in Storage (COSIS) program in light of deficiencies revealed by the 1974 Army Audit Agency survey noted in last year's report. The position of program manager was filled; a number of Army publications on depot storage were revised; a COSIS course was added to the curriculum of the Joint Military Packaging Training Center; and the Army Materiel Command completed two studies on COSIS-related subjects.

The Army started converting its supply publications to microfiche, beginning with a limited edition of Supply Bulletin 700-20. The new format is being tested at Camp McCoy, Wisconsin; Fort Hood, Texas; and Fort Sill, Oklahoma. Preliminary results indicate general acceptance of microfiche.

Army property disposal operations have been reduced sharply since the transfer of functions to the Defense Supply Agency last year. Demilitarization of condemned, obsolete, and surplus ammunition and explosives cost \$73.1 million; combat materiel originally costing \$2 million was donated to municipalities, veterans' organizations, and museums; and an equivalent of \$1.6 million was realized in credits or proceeds under a program that permits procurement officials to trade in or sell certain categories of nonexcess items that require replacement. The Pacific Utilization and Redistribution Agency, which was responsible for assuring maximum use of excess personal property in the Pacific, was transferred to the Defense Supply Agency on 1 February 1975.

Transportation

During fiscal year 1975 the Army shipped about 5,039,000 measurement tons of cargo via the Military Sealift Command and approximately 61,400 short tons of cargo and 351,400 Army-sponsored passengers via the Military Airlift Command. (A measurement "ton" equals forty cubic feet.)

During the final phase of the Vietnam Campaign, transportation agencies kept constant track of cargo en route to Vietnam and exercised the high degree of control required in a very sensitive and dynamic situation. Data on shipment, receipt, and lift of cargo was used in decision making, coordinating changes in requirements, rerouting shipments under way, and advising other Department of the Army staff elements on movement cost priority and transportation resource availability and allocation.

The number of movements by Special Assignment Airlift Missions (SAMM) increased due to Operation NEW LIFE and Operation NEW ARRIVALS. Fifty-five SAAM's moved 5,000 persons and 2,500 short tons of cargo between the continental United States, Hawaii, and Guam, and between various continental installations and refugee centers at Fort Chaffee, Arkansas, and Indiantown Gap, Pennsylvania.

Military Standard Transportation and Movement Procedures (MILSTAMP) were extended overseas on 1 December 1974, and the regulation governing the program was rewritten and simplified. Also, a MILSTAMP training course for first-line supervisors was established at the Army Transportation School, Fort Eustis, Virginia.

Early in the year the Army completed moving the nuclear weapons located at forty-eight inactivated Nike Hercules missile sites to Army depots. By the close of the fiscal year, the Army had nearly completed movement of Sprint and Spartan nuclear warheads from depots to remote launch sites in North Dakota. Army and Air Force personnel associated with the operation, named the GREEN MITTENS project, took every precaution to assure the safe transportation and installation of the warheads, including the use of CH-47 helicopters and C-141 aircraft.

The Army continued to integrate containers into current and future logistics systems. The two major areas of concern continued to be the offshore discharge of nonself-sustaining containerhips and an effective system for shipping ammunition in commercial containers. The deployment of cranes with ships was selected as the interim solution for offshore dis-

charge. Efforts continued to develop restraint systems that will permit safe and effective use of commercial containers for ammunition.

The Army's watercraft inventory declined from 1,200 to about 950 during the year as disposal of obsolete and unserviceable craft continued. Approval of recommendations contained in the February 1975 Trans-Hydrocraft Study established a new family of Army watercraft and will reduce the types of craft maintained from 78 to 12 by 1985: 2 amphibians, 3 landing craft, 3 harbor craft, and 4 barges. A contract was let for two 30-ton air-cushion vessels for use as lighters, with delivery scheduled during March and April of 1976.

The Army's rail fleet consists of approximately 9,000 pieces of equipment ranging in age from seventeen to thirty-three years. During the past year the Army participated in a review of the condition of the U.S. rail system, gathering data on rail service requirements in the midwest and northeast in order to develop an Army position on the proposed abandonment of trackage and curtailment of rail service within those sections of the country. Work continued on a five-year depot maintenance program for diesel and electric locomotives and on upgrading and modernizing the Army's rail fleet.

The Do It Yourself Moving Test Program began in January 1975. An interim evaluation reveals that the program is successful and is well received by service members. As of 30 June 1975, 217 moves were made from the six test installations at a saving of \$74,000. Based on these results, it is anticipated that the program will be extended Army-wide during the next year.

To improve air passenger service, Port-Call Centralized Assignment Procedures were modified in October 1974 to give Advanced Individual Training installations greater flexibility in the use of reservations made for graduates who were unable to move as originally scheduled. The Air Force, in coordination with the other military services, will conduct a six-month test program during the coming year to determine the feasibility of making international reservations directly through the Military Airlift Command Passenger Reservation Center, rather than through reservation facilities at the service level. Elimination of this intermediate step should reduce port-call time requirements. The movement of passengers on scheduled commercial flights at charter rates (Category Y service), in lieu of charter airlift, received widespread acceptance among those served and resulted in substantial fuel savings. For example, from Decem-

ber 1974 to March 1975, conversion of eighty-three round trip charters to Category Y service saved 3,789,000 gallons of fuel. Despite both user satisfaction and fuel savings, the continuation of this service was in doubt because of objections raised by the Civil Aeronautics Board and the airlines that provide contract service.

Data on the seizure of drugs, narcotics, and contraband in Army Post Office mail and at passenger terminals overseas and in the United States indicate that Army support of the Department of Defense customs inspection program has been effective in deterring trafficking in such items. Improved training programs for military customs inspectors provide the latest technical information from U.S. Customs Service advisers. The experience gained by the overseas commands in support of the inspection program has permitted a relaxation of Department of the Army-imposed inspection requirements, and has enabled the commands to establish their own inspection standards within prescribed limits.

The Mechanization of Selected Transportation Movements Reports (MECHTRAM), an automatic system for processing data of worldwide tonnage and passenger movements on a monthly basis, has, since fiscal year 1974, provided timely movement and unit-cost information. Automated overocean transportation forecasting procedures allow major overseas commands, the Army Materiel Command, and other Department of Defense and Army shipping agencies to submit short-range and long-range movement requirements via AUTODIN. Data compiled in management reports compatible with the MECHTRAM performance reports facilitate detailed comparison of forecasted requirements with actual performance. The forecasts are adjusted as required to reflect the latest policy guidance and are then developed into worldwide movement programs. Automation also provides a more accurate transportation budget using cost data based upon worldwide tariff rates.

Facilities and Construction

The Army military construction budget approved by Congress for fiscal year 1975 amounted to \$656.8 million, as compared to the Army's request for \$856.3 million and the President's amended budget request of \$740.5 million. A number of reprogramming actions started during the year would increase funds available for construction projects, but

none had received congressional approval by year's end. A total of \$68 million was appropriated for the medical and dental construction program described in last year's report. Construction contracts of approximately \$108 million were awarded for the Army Materiel Command's Munition Production Base Support (PBS) program, and design started on a number of new PBS projects that will cost another \$93 million.

The President's fiscal year 1976 budget proposed \$961.9 million in total obligational authority for Army construction. About sixty percent of the request, excluding NATO and general authorization requirements, was for soldier-oriented projects. The request also included \$33.1 million for energy projects, \$36.7 million for nuclear weapons security, \$147 million for stations for sixteen divisions, and \$88.7 million for one-station training.

Savings in construction costs engendered by the value engineering program amounted to \$20 million in fiscal year 1975. Training, management support, and improving the content of value engineering change proposals submitted by contractors received major emphasis during the year. The number of change proposals developed climbed to 319, as compared to the year's goal of 230. The Army, concerned that the design of its buildings is esthetically and environmentally suitable, participated in the Federal Design Improvement Program administered by the National Endowment for the Arts. In October 1974 the Army Corps of Engineers sponsored a design improvement seminar to consider problems related to design quality and the rapid completion of military construction projects. New design guides were being prepared for different types of facilities, including recreation and physical fitness centers, noncommissioned officer and officer clubs, general education centers, libraries, chapels, service schools, and administrative and office facilities.

During fiscal year 1975, Army engineers contracted for approximately \$500 million in construction for other federal agencies and foreign governments; the Air Force, with \$280 million worth of such projects, received over half the support.

The Army worked with other agencies in representing the United States on the U.S.-USSR Joint Committee on Cooperation in the Field of Housing and Other Construction. Six working groups were formed, with an Army engineer named chairman of the group dealing with building in extreme climates or unusual geological conditions. In addition to better U.S. relations with the Soviet Union, the objective was to

improve our technology base through the exchange of information.

The Army cooperated with the Navy and Air Force in identifying common applications for the work each has done in developing theater-level facilities. This effort will reduce duplication and achieve more standardization. For example, final design drawings for three standard-size hospitals using modern, relocatable, paneled structures, developed by a contractor for the Navy at a cost of \$2 million, have been adapted by the Army for its own use. In another case, the Army began work on preliminary design drawings of maintenance facilities for wheeled and tracked vehicles in divisions, separate brigades, and support units. The other services will review the product, and their suggestions will be considered for inclusion in the final design.

During the year the Army announced a number of changes in the status of various installations. Frankford Arsenal, Pennsylvania, will be closed. Army depots at Savanna, Illinois; Pueblo, Colorado; and Lexington, Kentucky, will be downgraded to depot activities. Fort Hamilton, New York, will become a subinstallation of Fort Dix, New Jersey. Plans for the disposition of a portion of Fort Meade, Maryland, and portions of Fort Story, Virginia, and Camp Swift, Texas, have been held up due to Congressional opposition.

At the close of the fiscal year the Army controlled approximately 12,732,484 acres of land throughout the world. These holdings had an acquisition value, with improvements, of nearly \$13 billion. Land acquisitions during the year totaled 156,689 acres at a cost of \$91,184,809, including 8,539 acres costing \$7,789,763 obtained for other federal agencies. Most of the purchases (approximately ninety-three percent) were for civil works. The purchase of land and the extinguishment of mining claims at White Sands Missile Range, described in last year's report, will be completed if requested funding is provided in fiscal year 1976. About 11,030 acres remain to be acquired. The Army spent \$9.8 million during the year to assist 2,401 persons who were affected by Corps of Engineer projects, chiefly in the form of replacement housing benefits to homeowners and fixed payments to displaced farmers.

During the year, the Army disposed of 32,383 acres having an acquisition cost, with improvements, of \$73,816,802. An additional 11,934 acres valued at \$135,141,724, including improvements, were reported as excess to the General Services Administration.

Better management of the Army's real property is the goal of the Integrated Facilities System, a three-part package consisting of management of existing facilities, planning of new ones, and planning and management of new construction. Development of facilities management continued throughout fiscal year 1975. A systems integration test in November 1974 was moderately successful and led to prototype evaluation tests at three Virginia Army posts. The tests were in progress as the fiscal year ended.

Physical Security

The Department of the Army Physical Security Review Board was established in September 1974 to evaluate concepts, management systems, doctrine, construction programs, and supporting materiel systems for physical security within the Department of the Army. The board consists of a representative from each Army staff agency, and a nonvoting representative from the Training and Doctrine Command, the Army Materiel Command, and the Army Criminal Investigation Command. The Chief, Law Enforcement Division, Human Resources Development Directorate, serves as board chairman. Since its inception, the board has undertaken two specific studies to improve security programs for arms, ammunition, and explosives. The first study concerned physical security of conventional arms, ammunition, and explosives. As a result, the Secretary of the Army approved sixty-two actions for upgrading security. The second study concerned physical security of chemical munitions and agents; the report is currently being staffed. A third study will be undertaken early in fiscal year 1976 on security of conventional arms, ammunition, and explosives while in transit.

The Joint-Services Interior Intrusion Detection System (J-SIIDS), which is designed to insure the security of arms rooms, was approved for use on 12 June 1975. Initially, it will be installed in 3,600 active Army and Reserve Officers' Training Corps units and will also be tested in selected Army National Guard units. If the test is successful, and if new procurement costs are competitive with commercial equipment, the system will replace commercial devices already installed in reserve component units as they become obsolete or require extensive repair. Development of an advanced J-SIIDS that will provide better protection for large indoor areas and will be compatible

with commercial alarm monitor equipment used at civilian police stations got under way during fiscal year 1975.

The Army approved plans for the Facility Intrusion Detection System (FIDS) late in fiscal year 1974, and full-scale development began in the first quarter of fiscal year 1975. This detection system is an extension of J-SIIDS that will be applicable to the interiors of all military facilities, including those housing the most sensitive intelligence material. Development work will continue through fiscal year 1976.

A Defense Department survey of conventional ammunition stocks and facilities in the Pacific, conducted during the period 20 January–8 February 1975, uncovered a number of Army security and safety deficiencies. To correct these shortcomings, a five-year upgrading program for conventional ammunition storage facilities in Okinawa, Hawaii, Japan, and Korea has been developed. The program will get under way in fiscal year 1977.

Support of Operations in Europe

Authorizations for the U.S. share of the NATO infrastructure program amounted to \$112.8 million—\$84 million in the Military Construction, Army, portion of the fiscal year 1975 budget and \$28.8 million carried over from previous years. Total funding of \$88 million consisted of \$69 million in new obligational authority, \$4 million in recoupments, and \$15 million in unobligated, prior year appropriations.

Efforts to arrange for a wartime line of communication in Europe made considerable progress during the year. The project, Minimum Required—Logistical Augmentation, Europe, calls for opening and operating a line of communication through certain Western European coastal countries to Central Europe. It relies on existing host nation capabilities and government-to-government agreements for logistical support. Following successful negotiations for most of the required technical agreements, the Commander-in-Chief, United States Army, Europe, started action to obligate \$8.1 million in NATO infrastructure funds for the design and construction of project facilities.

In July 1974 the Office of the Deputy Chief of Staff for Logistics, United States Army, Europe (USAREUR), and the Army Logistics Center began project LEADER to integrate echelons-above-division doctrine, the Standard Army Intermediate Level Supply Subsystem, and the Direct Support System

within USAREUR. The goals of the project are to provide additional supply management capabilities within corps support commands and the 1st Support Brigade, establish a theater-level materiel management center, develop plans for a smooth transition from peacetime to wartime, and conduct wartime logistical support operations in accordance with approved doctrine.

Support of Operations in the Pacific

The supply of conventional ammunition to South Vietnam and Cambodia was drastically reduced during the year. Funding of the Vietnam portion of the program was transferred from Military Assistance Service Funded to Defense Assistance, Vietnam. Control passed from the Army to the Office of the Secretary of Defense. Despite funding limitations, stocks on hand remained high and there were no ammunition shortages. Expenditures were exceeding programmed amounts at the time South Vietnam fell, however, and shortages would have developed had the war continued. Ammunition supply to Cambodia was satisfactory until just before the pro-U.S. government surrendered, when all ammunition had to be flown in because of the deteriorating tactical situation. Ammunition shortages due to funding constraints would have developed had the Cambodian struggle been a prolonged one.

During the Vietnam conflict the Okinawa depot complex had an active depot supply and maintenance support mission for western Pacific activities. It stored and maintained allied war reserves and operational stocks and received a large portion of the vehicles and supplies returned by U.S. Army, Vietnam, both before and after the cease-fire. Since 1972 the depot has had much materiel to dispose of.

As part of the reorganization of U.S. forces in the western Pacific, the U.S. Army Base Command, Okinawa, was redesignated U.S. Army Garrison, Okinawa (USAGO). Support missions away from the island were to be eliminated. The USAGO island support mission will be reduced to a small installation supply activity and storage of prepositioned war reserve stocks. Original plans for reducing the Okinawa depot complex called for a completion date of 31 August 1974, but nearly 200,000 short tons of supplies, much of which was in unprotected outside storage, remained to be identified and disposed of at the beginning of fiscal year 1975; accordingly, the date was changed to 31 March 1975. In November 1974 a nineteen-man

Army Materiel Command task force arrived in Okinawa to assist in the drawdown. The task force rewrote and streamlined local operating procedures and helped local personnel carry out inventory, identification, and disposition actions. The completion date was moved back again, this time to 1 July 1975, but even this date proved optimistic due to local labor difficulties and inventory and identification problems. Completion of the drawdown is not expected before 15 December 1975.

International Logistics

The Army contributes substantially to U.S. foreign policy goals, military security objectives, and economic well-being through its international logistics activities. Since the Military Assistance Program (MAP) began in 1950, the U.S. has supplied \$19 billion in grant aid and \$17.5 billion in foreign military sales. The Army's role during fiscal year 1975 in support of these programs, as well as other international logistics activities such as coproduction, cooperative logistics, and international logistics management, is outlined below.

The Army's MAP program in fiscal year 1975 amounted to \$800 million, including \$366 million in new authorizations. Actual deliveries to thirty-three countries of \$1.2 billion in goods and services included materiel provided under Military Assistance Service Funded and Defense Appropriations, Vietnam. The undelivered MAP balance, as of 30 June 1975, was \$500 million. Assistance to Cambodia and South Vietnam, a major part of the aid program at the beginning of the year, had halted by year's end. Aid to Laos was also terminated.

During the year, the value of materiel and logistical services provided under the Army's foreign military sales program reached the highest level in its 25-year history. Sales were made to sixty countries and five international organizations. Orders amounted to almost \$3.8 billion for the year as compared to less than \$2.4 billion in fiscal year 1974. Actual deliveries through the fourth quarter of fiscal year 1975 totaled almost \$1.5 billion, with over \$6 billion in goods and services remaining to be delivered. Major recipients included Israel (over \$700 million), Kuwait (\$120 million), and Jordan (\$66 million). On 5 February 1975 the U.S. suspended military assistance and sales to Turkey. The ten-year embargo on arms sales to Pakistan was lifted later in the year.

During fiscal year 1975, Indonesia, South Korea, Thailand, and Switzerland joined the ranks of countries having bilateral agreements with the United States for coproduction of such items as M16 rifles, PRC-77 tactical radios, mortars, and certain tactical vehicles. In another major cooperative logistics activity, the Army, through arrangements with eighteen countries and NATO, provided repair parts and logistical services for major end items and weapons systems of U.S. origin. Support in 1975, which is funded by the recipients, was valued at about \$220 million.

In December 1974, a new Chief of Staff regulation was published better to define major Army staff responsibilities in security assistance matters and to facilitate effective working relationships among the Army staff, the Army Secretariat, the Office of the Secretary of Defense, and other agencies. The regulation specifically designated the Director of International Logistics, Office of the Deputy Chief of Staff for Logistics, as the officer on the Army staff responsible for security assistance matters. This regulation also established the Army Security Assistance Coordination Group to coordinate security assistance. Permanent members of the group are the Director of International Logistics, who serves as chairman, the Director of Strategy and Security Assistance, and the Deputy Director of Materiel, Plans and Programs. Representatives of other Army staff agencies are invited to attend when matters in their areas of responsibility are to be discussed. The chairman also invites representatives of the Army Secretariat and the U.S. Army Materiel Command when necessary. The International Logistics Directorates at both Headquarters, Department of the Army, and the Army Materiel Command have been reorganized along regional lines to manage foreign military sales and grant aid more efficiently and effectively.

IX. Support Services

Health and Medical Affairs

The Army Medical Department's fiscal year 1975 end strength authorization was 15,722 officers and 36,426 enlisted persons. Actual strength at the end of the fiscal year was 15,909 officers and 35,894 enlisted persons. Authorized and actual officer strength by corps was as follows:

	Authorized	Actual
Medical Corps	4,512	4,496
Dental Corps	1,800	1,856
Veterinary Corps	450	431
Medical Service Corps	4,814	4,957
Army Medical Specialist Corps	440	463
Army Nurse Corps	3,706	3,706
Total	15,722	15,909

The Army spent \$1,144.6 million for medical services in fiscal year 1975 under the following appropriations:

Operations and Maintenance, Army	\$ 506.2 million
Military Personnel, Army	467.9 million
Reserve Personnel, Army	9.6 million
Other Procurement, Army	35.0 million
Research and Development, Army	57.9 million
Military Construction, Army	68.0 million
Total	\$1,144.6 million

Expenditures under the operations and maintenance account were much less than the \$607.7 million spent during fiscal year 1974, which included \$137.7 million for the Army's portion of the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). Since 1 July 1974 funding for CHAMPUS has been borne by different Department of Defense appropriations. Other operations and maintenance medical costs have risen, due primarily to increases in civilian salaries, conversion of enlisted personnel spaces to civilian positions, and higher medical supply prices.

The most important medical work load trend in Army hospitals in fiscal year 1975 was a nine percent decrease in bed occupancy, although active Army strength decreased by only one percent. The primary reason for the decline was a shorter average patient stay, which for all patients decreased from 8.36 days in fiscal year 1974 to 7.76 days in fiscal year 1975 and

from 11.24 days to 9.9 days for active Army personnel. A two percent increase in the number of visits to clinics during the year reflected the continued emphasis on outpatient care.

The Army added a new dimension to its oral health program during the past year by prescribing annual dental examinations for all active duty personnel. The three major objectives of yearly examinations are: reduction of loss of duty time by periodic correction of dental problems before they develop into major ones, improvement of the oral health of active duty personnel, and more effective use of the Army's dental health resources.

The Army submitted eleven medical construction projects to Congress for consideration during fiscal year 1975. These included additions to Army Hospitals at Fort McClellan, Alabama, and Fort Knox, Kentucky; a new health clinic at Bamberg, Germany; and eight dental clinics in the continental United States. At the close of the fiscal year, health facility projects costing \$260.8 million were under construction, including four new hospitals, six hospital alterations or additions, twelve health and dental clinics, and two hospital electrical and mechanical improvement projects. The 1,280-bed Walter Reed Army Medical Center was fifty percent complete and the 760-bed Dwight David Eisenhower Army Medical Center at Fort Gordon, Georgia, was ninety-nine percent complete by year's end. Authorized projects not yet under construction amounted to \$19.8 million and included two hospital alterations, four hospital electrical and mechanical improvement projects, and two health and dental clinics.

There were several changes in the status of Army medical units and facilities during the past year. In Korea, the 11th Evacuation Hospital was inactivated and operations of the 43d Surgical Hospital were limited to clinical services, leaving the U.S. Army Hospital, Seoul, as the only Army inpatient medical treatment facility in that country. In Germany, the U.S. Army Hospital at Bad Kreuznach ceased patient admissions on 1 May 1975 to allow an orderly transition to health clinic status on 1 July 1975. On 30 June 1975 the 31st Medical Group in Darmstadt was inactivated to comply with the Nunn Amendment to increase combat capability in Europe and reduce support functions. The Tehran, Iran, Medical Department Activity was activated on 1 July 1974 and assumed responsibility for Army medical support in the Middle East and Africa south of the Sahara. Within the continental United States, Army hospitals at Dugway Proving Ground, Utah; Sierra Army

Depot, California; and Yuma Proving Ground, Arizona, were reduced to health clinic status.

Religion

The Army's size at the close of fiscal year 1975 was about the same as it was fourteen years earlier, but the authorized strength of the Chaplain Branch had risen by some thirty percent—from 1,110 on 30 June 1961 to 1,446 on 30 June 1975. Expansion to a sixteen-division force, initiatives in preventive ministry, and command generated programs have placed increased demands on chaplains, resulting in a proportionate requirement for additional personnel.

During the year the Chaplain Branch Organization Development Program entered a new phase with the assignment of chaplain consultants to the Alaskan Command. A test project, this program was designed to raise the personal expertise of command chaplains and their key subordinates, develop a team spirit within the chaplain community and produce more creative means for setting objectives and evaluating the effectiveness of religious programming. The success of the Alaskan project has led to plans for expanding the use of chaplain consultants during fiscal year 1976.

In other steps to upgrade the professional competence of Army chaplains, a policy was established under which each chaplain will receive thirteen weeks of intensive training at accredited clinical pastoral education (CPE) centers; a one year community CPE course was begun at selected Army posts, which 120 chaplains have completed; and six Army chaplains were enrolled in graduate degree programs in communications to improve preaching skills. A number of chaplains have attended an American Institute of Family Relations course designed to develop family-enrichment and community-building skills. Chaplains who received this training have begun community programs at Fort Campbell, Kentucky; Fort Benning, Georgia; Fort Dix, New Jersey; and Fort Ord, California. They stress the problem-preventing aspects of community building and the development of strong, healthy family relationships. Their goal is to improve the quality of life in the military community and reduce the need for crisis resolution.

During the past year the Chaplain School has worked with the Infantry School to integrate principles of moral leadership, moral responsibility, and human relations into military leadership training. In this regard, chaplains on the faculties of the

Infantry School, eight other Army schools, and the Sergeants Major Academy taught courses related to the values, beliefs, and attitudes of today's soldier. The instruction emphasized integrity, self-discipline, moral courage, and loyalty as ingredients of military professionalism.

Other chaplain activities during fiscal year 1975 included beginning the development of materials for an approved Personnel Effectiveness Training program and distribution of a new, 815-page *Book of Worship for U.S. Forces*. A joint Army, Navy, and Air Force effort, it contains 611 hymns, and has received considerable acclaim from Protestant, Catholic, and Jewish leaders. Work also continued on rewriting specifications for the position of chaplain assistant/chaplain administrator and developing a new design guide for use in constructing chapels and religious education facilities.

Housing and Homeowners Assistance

The approved fiscal year 1975 Army Military Construction Program provided \$136.4 million to build troop housing for 10,714 soldiers and \$107.5 million to modernize existing housing for 22,904 others. Except for 188 spaces in Korea, all new construction was to be in the continental United States, and includes a 1,850-man barracks complex at Fort Stewart, Georgia, to support requirements for the sixteen-division Army. Construction costs for troop housing in Germany were covered by offset agreements. The fiscal year 1974-75 agreement allocated 503 million Deutschmarks to the Army for rehabilitation of 40 kasernes and housing at a number of border and remote sites. At the close of the year construction was under way at 13 kasernes, and plans were prepared to advertise projects at 3 more kasernes. Work at 40 kasernes and 20 remote sites under the fiscal year 1972-73 agreement was approximately ninety percent complete by 30 June 1975.

Based on long-range strength and deployment estimates, the Army has requirements for 323,000 family housing units. Military controlled housing and suitable off-post housing total 293,000 units, leaving a deficit of 30,000. During fiscal year 1975 the Army gained 4,799 family housing units: 1,012 by construction, 3,009 by lease, and 778 by conversion or transfer. Deducting disposal, conversion, and transfer losses, there was a net gain of 2,212 units.

Contracts were awarded for construction of 3,817 family housing units during the past year, and contracts for construc-

tion of 4,696 units authorized in fiscal year 1975 and preceding years remained to be awarded. The fiscal year 1976 budget request to Congress included \$78.3 million for construction of 2,100 new units, \$35 million for improvements, and \$2.2 million for minor construction and planning. The financial program for fiscal year 1976 through fiscal year 1981 includes \$743 million for construction of 11,642 new units, \$296 million for improvements, and \$18 million for minor construction and planning.

Operations and maintenance support was provided for 138,700 family dwelling units and supporting facilities during fiscal year 1975. Currency revaluation and escalating utility costs seriously eroded the operation and maintenance program and resulted in an increase in deferred maintenance from \$155 million to \$162 million.

Leased family housing in Germany increased from 1,209 to 2,819 units during the past year, but many more units were required. Relief could be forthcoming, because the fiscal year 1976 budget request to Congress would provide for 13,446 leased family units, of which 9,500 would be in Germany. The request also included \$22.9 million for furniture and equipment, \$331.5 million for operation and maintenance, and \$37.8 million for the deferred maintenance backlog.

During fiscal year 1975, housing and referral offices at 155 Army installations obtained private housing for 132,842 military personnel. The offices also handled 146 complaints of discrimination and 28,989 tenant and landlord complaints. Over 100,000 housing facilities with approximately 1,000,000 rental units were listed with these offices.

The Department of the Army, as executive agent for all military services, made payments under the Homeowners Assistance Program to 470 applicants in the amount of \$1.6 million during the past year. Mortgage assumptions of 151 properties acquired under the program totaled \$1.8 million for the year. The fiscal year 1976 program of \$5 million provides for 395 payments or assumptions. Funds from prior year appropriations and the sale of acquired homes made a new appropriation unnecessary.

Food Services

The number and type of food service facilities supporting the Army Food Service Program, as of 30 June 1975, were as follows:

	U.S.	Overseas	Total
Dining facilities	852	494	1346
Garrison bread bakeries	0	3	3
Central pastry kitchens	3	0	3

Army dining facilities served 241,448,404 meals valued at \$234,272,665 during the year; garrison bread bakeries produced 1,313,600 pounds of bread; and central pastry kitchens created 7,710,900 pastry servings.

The dining facility modernization portion of the Modern Food Service System, described in last year's report, began as scheduled on 1 July 1974. The program was funded under the Military Construction, Army, appropriation and provided for modernizing 117 dining facilities at 22 installations. As of 30 June 1975, contracts had been awarded to improve 93 facilities.

Fiscal year 1975 appropriations provided for the construction of nine new dining facilities, eight of which had been contracted for by the close of the reporting period. The Office of the Chief of Engineers and the U.S. Army Troop Support Agency collaborated in developing standard designs for eight enlisted personnel dining facilities of varying sizes and one facility for use at training centers.

In order to aid the Army Troop Support Agency and Headquarters, Department of the Army, in determining dining facilities to be retained or converted to other uses and how many and where new dining facilities should be constructed, major commands began work on food-service management plans for each command installation. By the close of the year 120 plans had been developed and submitted to the Troop Support Agency.

As noted in last year's report, funds had been appropriated for two permanent central food preparation facilities—one at Fort Benning, Georgia, and the other at Fort Lee, Virginia. An interim facility, also at Fort Lee, was to begin operations during fiscal year 1975. Modifications on three of the four buildings that comprised the interim facility were completed in March 1975, but difficulties in converting the fourth building, which was to serve as the central kitchen, made it necessary to relocate the kitchen. Since the cost would exceed the dollar limit allowed by law for urgent minor construction projects, further action on the interim facility was suspended until regular financing could be arranged. Design of the two permanent facilities was suspended and authorization for the projects permitted to expire.

The three-year test of the full operation of military dining

facilities by commercial contractor conducted at Fort Myer's triservice dining facility was completed on 30 June 1974. Results indicated that the contract operation was satisfactory, but that there was no particular advantage in using contract services.

Alternatives to the time-consuming signature-headcount system used in Army dining facilities continued to be considered during fiscal year 1975. A favorable report on a meal card number test conducted in Europe was forwarded to the Department of Defense, but no response had been received by year's end. Equipment and software to test a fully automated headcount system was being tested at Fort Lee, Virginia, as the fiscal year drew to a close.

On 19 January 1975 the Commandant of the Army Quartermaster School signed a memorandum of understanding with the American Culinary Federation in what was the beginning of the Food Service Certification Program described in last year's report. Certification should help to attract and retain capable persons for food service careers.

During fiscal year 1975 the Army Troop Support Agency increased the number of food management teams from three to four. The teams provide dining facility management and technical assistance to Army commands, installations, and food service personnel around the world. This past year the teams visited 54 installations and 942 dining facilities, and provided instruction and guidance to 7,563 food service personnel.

Commissaries and Subsistence Supplies

Program Budget Decision Memorandum 282, which the Secretary of Defense approved in December 1974, called for an end to the use of appropriated funds for civilian employees, military personnel, and overseas utility costs of commissaries. It ordered a study to determine ways to improve the efficiency, organization, and operating structure of military commissary stores. Accordingly, the Department of Defense budget for fiscal year 1976 provided for the phaseout of appropriated funds for commissary store direct expenses beginning on 1 October 1975, when fifty percent of these costs would be covered by surcharge collections.

A joint service study group convened in February 1975 to carry out the second Memorandum 282 requirement. The group's report, released late in the fiscal year, recommended that each service adopt a centralized management system for

commissary stores. Tentative Army plans call for central management by the Army Troop Support Agency. Five field offices (four in the United States and one in Europe) would control commissaries located in their respective regions. The Western Field Office in the United States would also control commissaries located in the Pacific.

The Army has about thirty-five commissaries in the United States that should be replaced. In December 1974, Congress stipulated that commissary construction in the United States be financed by a surcharge or price adjustments on commissary sales. An additional one percent surcharge would permit construction of about two large stores each year.

In Europe, the Direct Commissary Support System (DI-COMSS) expansion program was completed with the addition of two more commissary stores in Germany in late 1974. This brought the number of Army stores serviced by DICOMSS to forty-eight.

Efforts to upgrade the automated commissary system were suspended by the Assistant Secretaries of Defense (Comptroller and Installations and Logistics) when they barred further development pending establishment of a standard Department of Defense commissary automatic data processing system.

Implementation of Phase I of the Worldwide Integrated Management of Wholesale Subsistence stocks continued during fiscal year 1975. The task was completed in Europe on 1 July 1975; substantial progress in integration had been made in Hawaii; and planning moved forward in Korea, Japan, and Okinawa.

Laundry and Dry Cleaning

A program to replace old, obsolete, and worn-out laundry and dry cleaning equipment with new machinery was ninety percent complete at the close of fiscal year 1975. In the future, however, more equipment will be needed as innovations in the cloth used to make uniforms and the scarcity of unskilled labor create additional demands for more sophisticated equipment. An example of the newer equipment is the hydraveyor, described in last year's report, which has been undergoing testing at Fort Jackson, South Carolina. This unit, manned by two employees, will accomplish the same amount of work that has required thirteen employees using more conventional machines.

To improve customer service, all outer garments are now

returned on hangers rather than folded and packaged. Considerable progress has been made in providing pickup and delivery service to units. Until recently, military personnel whose laundry services were paid for by payroll deduction were required to turn in their laundry on a fixed schedule each week. These persons can now turn in their laundry any time in a new procedure that has proved very popular.

Clothing and Personal Equipment

Tests have been completed on the durable press polyester-cotton uniforms that will replace the cotton khaki and fatigue uniforms now in use. The Defense Personnel Support Center has begun buying the new items, which are in great demand because they keep a neat appearance considerably longer than cottons and do not require as much laundering.

During fiscal year 1975 severe shortages in women's clothing were corrected as manufacturers showed greater interest in producing the items and meeting delivery schedules. Current market trends in the textile industry indicate that the situation is now well in hand, and no further problems are expected.

A test in which the Army-Air Force Exchange Service operated the Army clothing sales stores at Fort Benning, Georgia, was completed during the past year. Experiment results indicated that no economic or operational benefit would be gained by transferring clothing sales stores to the exchange service.

Heraldic Activities

During the year the Institute of Heraldry designed 410 heraldic emblems, created 3,594 drawings and paintings, and completed 254 sculptured items and displays. In addition, 159,713 actions were taken under the heraldic quality control program, and 4,210 development, research, and engineering support actions were performed.

Institute sculptors assisted in decorating Arlington Cemetery's new administration building, which featured a 36-inch bronze coat of arms of the United States, and in renovating the cemetery's trophy room. Other projects completed during the year included designing the seal and flag of the Uniformed Services University of the Health Sciences, insignia and badges for the Armed Forces Bicentennial Band, a new flag for the

U.S. Capitol Police, and seals for the Energy Research and Development Administration, the U.S. International Trade Commission, the Nuclear Regulatory Commission, and the Postal Rate Commission.

As in past years, the institute advised the Deputy Chief of Staff for Personnel, and other military services, on proposed changes in policies governing insignia, decorations, medals, badges, and other awards. The institute seeks to bring about as much standardization in these policies as possible while retaining sufficient distinctiveness in symbolic items to promote *esprit de corps*.

Morale and Recreation

Despite continuing declines in Army Central Welfare Fund revenues, the Army took a number of initiatives to provide for the morale, welfare, and recreation of its members. The Information, Tour, and Travel Program, after little more than a year's existence, had grown by 30 June 1975 to 165 offices located in Army recreation centers around the world. The program proved of real value as a central source of information to Army people and their families for recreational activities on and off post, regular and charter tours, and individual tour planning assistance.

In September 1974 a six-week program to provide women in the Army more opportunities to develop their skills and levels of physical fitness through sports competition began on a trial basis at Fort Campbell, Kentucky, and Fort Dix, New Jersey. Each test installation appointed a full-time coordinator to organize the program. During the first week, instructors conducted two-day sports clinics covering tennis, archery, karate, horseback riding, swimming, bowling, basketball, and volleyball. During the remaining weeks, women were released from duty two hours a day, two days a week to participate in the sport of their choice. Two evenings a week were also set aside for women's sports. The success of this pilot program led to publication of Department of the Army Circular 28-95, which provided guidance for promoting women's sports activities throughout the Army.

The Army was well represented in Consul International du Sport Militaire (CISM) and national championship meets, as indicated below:

National Championships

Sport	Dates	Sites	Army Participants
Basketball, AAU	18-22 Mar 75	Baton Rouge, La.	12
Boxing, AAU	10-14 Jun 75	Shreveport, La.	15
Fencing	21-28 Jun 75	Los Angeles, Calif.	10
Judo, AAU	12-16 Mar 75	Los Angeles, Calif.	3
Softball, FP	6-13 Sep 74	Clearwater, Fla.	3
Softball, SP	30 Aug-3 Sep 74	York, Pa.	8
Team handball	22-26 May 75	Columbus, Oh.	15
Track & field	20-21 Jun 75	Eugene, Oreg.	12
USVBA	14-18 May 75	Reno, Nev.	8
Weightlifting	19-22 Jun 75	Culver City, Calif.	1
Wrestling, AAU	26-29 Jun 75	Berkeley, Calif.	4

CISM Championships

Basketball	18-28 Jun 75	Salonika, Greece	13
Boxing	3-12 May 75	Camp LeJeune, N.C.	5
Cross country	1- 7 Apr 75	Algiers, Algeria	2
Parachuting	21-31 Aug 74	Ft. Bragg, N.C.	6
Shooting	6-15 Jun 75	Oulu, Finland	11
Swimming	1-10 Sep 74	Canary Islands, Spain	2

The popularity of the Army Outdoor Recreation Program continued during the past year. Twenty-nine travel camps, located in nineteen states, provided services during the 1975 summer season. Equipment for camp support buildings, washers, dryers, playground equipment, picnic area equipment, and indoor recreational equipment, was distributed to Army installations. To improve Army travel camps a fourteen-man dormitory unit and a two-family duplex unit were designed and developed and procurement began. In addition, an attractive, rustic travel camp sign assembly unit was developed.

The Army expanded its Arts and Crafts Program during fiscal year 1975 by providing assistance grants to installations for vocational and technical training courses in such subjects as auto mechanics, carpentry, electronics, photography, upholstery, and welding. Interest in vocational and technical subjects has been keen: From February through May 1975 installations have submitted more than fifty requests for grants. The popularity of this type of instruction was also indicated in a recent survey conducted by the Army Military Personnel Center, which showed that 75 percent of enlisted personnel polled would like to enroll in an off-duty skills training course. Another Military Personnel Center survey indicated that 47 percent of officers and 40 percent of enlisted personnel take part in the Army Arts and Crafts Program.

A major review of Army bands underscored the inadequacy of the 29-member band and led to the inactivation of 13 of the 63 bands. Personnel savings permitted an increase in the

authorized strength of the remaining bands to 43 spaces (division bands) or 45 spaces. The new organization provided the basic instrumentation needed to perform satisfactorily.

Army Bands Inactivated

Band	Location	Date Inactivated
9th Army Band	USARAL	1 Sep 1974
29th Army Band	Okinawa	15 Oct 1974
264th Army Band	HQ USARPAC	15 Oct 1974
30th Army Band	USAREUR	20 Feb 1975
82d Army Band	USAREUR	20 Feb 1975
72d Army Band	Ft MacArthur, Calif.	15 Mar 1975
55th Army Band	Redstone Arsenal, Ala.	25 Jun 1975
75th Army Band	Ft Belvoir, Va.	25 Jun 1975
323d Army Band	Ft Sam Houston, Tex.	25 Jun 1975
324th Army Band	Aberdeen Proving Ground, Md.	25 Jun 1975
336th Army Band	Peterson Field, Colo.	25 Jun 1975
371st Army Band	Ft Leavenworth, Kans.	25 Jun 1975
384th Army Band	Ft Eustis, Va.	25 Jun 1975

The Department of the Army, in cooperation with the National Federation of Music Clubs, for the past several years has cosponsored the Parade of American Music. Supported by a grant from the American Society of Composers, Authors, and Publishers, this annual event encourages U.S. composers and arrangers, and each year draws between 300 and 400 Army entries. In recognition of the outstanding original works by Army composers during past competitions, the National Federation of Music Clubs now includes a composers' competition for Army personnel. Cash awards are made to winning composers of instrumental or choral works.

The management of Army clubs has begun to show marked improvement as a result of the establishment of club management as a specialty under the Officer Personnel Management System. This specialty provides a tailored career pattern for qualified and motivated officers and permits their advancement to interesting and challenging club management positions, the most responsible of which carry the rank of colonel. After completing a worldwide review of club management positions, the Army added 49 officers and 67 enlisted spaces, while the number of warrant officer positions decreased by 20. At the close of the fiscal year there were 906 military club management positions throughout the Army.

Education

The Adjutant General took over policy responsibilities for the Army's General Education Development (GED) program from the Deputy Chief of Staff for Personnel in October 1974.

Policy development and program execution were thus combined, enabling the Army to respond more promptly to queries relating to educational policy and resulting in more effective management of GED resources and personnel. A revised GED information and reporting system came into use early in the fiscal year. This system has already proved to be of great value in following the program budget, monitoring program changes, and isolating problem areas.

The Defense Activity for Non-Traditional Education Support (DANTES) was established by the Department of the Defense in 1974 to continue some of the services formerly provided by the U.S. Armed Forces Institute. These services included all testing overseas and College Level Examination Program (CLEP) tests and subject standardized tests in the United States. Excluded was high school GED testing within the United States, a responsibility taken on by state agencies. During fiscal year 1975, DANTES administered 47,200 CLEP general and 4,190 subject examinations and, through Army education centers overseas, 27,234 high school GED examinations. DANTES also prepared and distributed an independent study catalog listing the courses available to military personnel from accredited colleges and universities. The Army will pay up to seventy-five percent of the tuition for approved correspondence courses.

In June of 1974 The Adjutant General's Office awarded a contract to the Commission on Education Credit of the American Council on Education to study the feasibility of using the Army MOS classification system to apply the experience of enlisted personnel to learning required in apprenticeship training and post-secondary educational programs. The study covered 100 MOS's, and involved the examination of performance standards, related training materials, on-the-job training, and the Enlisted Evaluation System. As the only national organization that recommends granting credit for nontraditional learning to educational and training institutions the commission recommended that credit be granted for 91 of the 100 MOS's studied. A new contract has been signed with the Commission on Education Credit to evaluate 200 additional MOS's. The commission also worked with the educational community to gain acceptance of its recommendations.

During fiscal year 1975, the Army began a project called Army Help for Education and Development (AHEAD), which permits young men and women to enroll in college and to enlist in the Army at the same time. Over 1,300 colleges,

universities, and nonprofit technical institutes agreed to participate in the program by establishing tailored admission policies, appointing academic advisers, accepting transferred credits, and establishing and maintaining records for the soldier-student. The soldier benefits from this arrangement by earning college credits while performing military service. The Army benefits from the AHEAD program by obtaining qualified, well motivated personnel, with a secondary benefit of establishing rapport with the educational community. Educational institutions benefit from increased enrollment, a broader financial base, reduced dropout rates, and access to soldiers on active duty.

During the past year the Army operated dependents' schools at the following installations: Forts Benning, Bragg, Campbell, Jackson, Knox, McClellan, Rucker, Stewart, and the U.S. Military Academy at West Point. Average daily attendance was 18,238. The U.S. Office of Education provided \$18,345,564 to operate the schools under provisions of Section 6, Public Law 81-874, as amended.

Prior to fiscal year 1975, the Army budget included funds for dependents' schools in the European area. This year, however, responsibility for these schools was shifted to the Office of the Secretary of Defense in a move to improve budget management. The Department of Defense now allocates the funds to the military departments and exercises more control over budgetary line items; it controls curriculum development, teacher recruitment, and the interarea transfer program, while the military departments control all personnel spaces.

Army Safety Program

Fiscal year 1975 was the first year the Army Safety Program functioned under the staff responsibility of the Inspector General and Auditor General. A second milestone for the year was publication of the first Army Accident Experience Annual Report, a detailed account that provides data needed for a complete analysis of all accidents to help prevent their recurrence in the future.

The U.S. Army Agency for Aviation Safety (USAAVS), a field operating agency under the Inspector General and Auditor General, sponsored a vigorous aviation safety program. The USAAVS's Five-year Operating Program, begun in fiscal year 1973, covers items considered to be most important in

preventing aircraft accidents, and encompasses command program management, education and training, system safety concepts, air operations, mishap information, physiological and psychological concerns, and the internal administration and management of USAAVS. The program is updated each year to insure that specific projects meet overall objectives.

Memorial Affairs

The Army's mortuary workload for current deaths totaled 2,699 during the year: 1,386 remains in the continental United States were prepared by commercial firms under contract with the Army, and 1,313 remains were prepared at eight Army mortuaries overseas. Oakland Army Base, California; Fort Hamilton, New York; and Dover Air Base, Delaware, served as ports of entry where remains were shipped by overseas mortuaries and arrangements made for their final disposition.

As in past years, the U.S. Army Central Identification Laboratory at Camp Samae San, Thailand, worked with the U.S. Joint Casualty Resolution Center, Thailand, to resolve the status of U.S. personnel missing in Southeast Asia. Progress in investigating specific locations in Vietnam and recovering the bodies of U.S. servicemen was limited due to inaction of the Four Party Joint Military Commission, lack of security for research teams, and the fall of South Vietnam.

The remains of fifteen soldiers or airmen from World War II were recovered during the year: eleven in New Guinea, one in the Philippines, one in Germany, and two in the mountains of Arizona. Three of the remains were individually identified and disposition was made in accordance with the wishes of the next of kin. The ten individually unidentifiable remains recovered in New Guinea received a group burial in Arlington National Cemetery with relatives in attendance; the two recovered in Arizona were buried in the San Francisco National Cemetery with next of kin in attendance at the interment.

Interments during the past year at the two national cemeteries under Army control numbered 2,610—2,503 at Arlington National Cemetery and 107 at the Soldiers' Home National Cemetery. A total of 18,301 grave sites was available at Arlington, and 293 sites remained at the Soldiers' Home.

Since approval of the Arlington National Cemetery Master Plan in 1967, Congress has appropriated \$17,300,000 to develop and maintain the historic character of this national shrine. Completed major projects include 214 acres of land-

scaping, installation of a 500-acre irrigation system, and construction of a temporary visitor's center and parking lot. Work on the new administration building and partial renovation of the memorial amphitheatre were nearing completion as the fiscal year ended.

Revised eligibility requirements for burial in Arlington National Cemetery went into effect on 10 April 1975. The spouse of a service member remarried subsequent to interment of the service-connected spouse and whose remarriage is voided, terminated by death, or dissolved by annulment or divorce, regains eligibility for burial in Arlington National Cemetery unless the Secretary of the Army determines that the annulment or divorce was secured through fraud or collusion. Also, the term "minor child" has been redefined to include unmarried, natural, adopted, or stepsons or daughters of a service-connected parent, who at time of death, were less than 21 years of age, or who after attaining the age of 21 and until completion of education or training (but not after attaining the age of 23 years), were pursuing a full time course of instruction in an approved educational institution.

In addition to its responsibilities at Arlington National Cemetery, the Army maintains twenty-eight post cemeteries and plots in three private cemeteries. Of these, only sixteen of the post cemeteries have available grave space. During fiscal year 1975, 443 interments were made. In order to make the best use of the remaining spaces, on 1 May 1975 the Army extended to the post cemeteries the policy of "one gravesite per family," which had applied to national cemeteries since 1961.

X. Research, Development, and Acquisition

Budget and Management

The fiscal year 1975 Department of Defense Appropriations Act, passed in October 1974, provided \$1,767.3 million in research, development, test, and evaluation (RDTE) funding. New appropriations amounted to \$1,759.3 million, while \$8 million represented foreign military sales RDTE surcharges. Additional recoupments of \$20.2 million from the surcharges and favorable reprogramming actions were more than offset by transfers from the RDTE account to other appropriations. Total obligational authority for fiscal year 1975, therefore, amounted to \$1,769.4 million. The Army exceeded its goal of reducing the unobligated balance of RDTE funds to \$96 million by the end of the fiscal year with a year-end balance of \$87 million, but lost \$2 million of fiscal year 1974 funds that had not been obligated by 30 June 1975.

In complying with Army Budget Review Committee guidance, the Office of the Deputy Chief of Staff for Research, Development and Acquisition limited its RDTE request to \$2,287 million for fiscal year 1976 and \$608 million for the transition quarter but also submitted several other requirements and requested that they be funded. The Army Budget Review Committee responded by raising the funded figures to \$2,376 million and \$621 million, which were incorporated into the Army's budget submission to the Secretary of Defense. The Office of the Secretary of Defense and the Office of Management and Budget then reduced the RDTE request to \$2,189 million for fiscal year 1976 and \$586 million for the three-month interim period (1 July 1976 through 30 September 1976). These amounts were included in the President's budget request to Congress, where committee hearings were under way as fiscal year 1975 drew to a close.

During fiscal year 1975 the Army began to restructure its materials research and development program to include consideration of potential applications, as well as expansion of the technology base. The major thrust of the broadened program will be the development of improved, cost-effective materials for use in aircraft, armament, missiles, armor, and armored vehicles.

The Army took a leading role in organizing the Joint Committee on Tactical Shelters, which was formed to manage the Department of Defense Tactical Shelter Program after the Deputy Secretary of Defense, in January 1975, gave his approval to begin the program. The committee will seek to reduce duplication and achieve standardization in the development of tactical rigid-wall shelters. The Army's Natick Development Center will support the program.

Several steps were taken during the past year to provide more effective management of research, development, testing, evaluation, and acquisition matters through the use of computers. These included starting work on the Research, Development, and Acquisition Information System, putting Systems Technology for Acquisition Resources into use, and initiating testing of the Modernized Army Research and Development Information System.

A number of management improvement actions came out of recommendations made by The Army Materiel Acquisition Review Committee (AMARC), an ad hoc advisory group comprised mostly of people from outside the Department of Defense. The committee made a number of recommendations in a report released on 15 August 1974. By 30 June 1975 the Army had acted on 144 of the report's 172 recommendations. Among major steps taken was the revision of materiel acquisition policies to emphasize evolutionary improvement of standard equipment as the preferred method of obtaining new capabilities. The Cost and Operational Effectiveness Analysis (COEA) process was improved by: (1) assigning primary responsibility for it to the Training and Doctrine Command (TRADOC), (2) reassigning the Safeguard Systems Analysis Agency to TRADOC, and (3) establishing a TRADOC-COEA review board. To improve operational tests and evaluations, the Operational Test and Evaluation Agency was assigned to the Office of the Chief of Staff, and the test boards of the Army Materiel Command, except for the Aviation Test Board, were reassigned to TRADOC. Finally, a materiel acquisition review committee was established within the Office of the Deputy Chief of Staff for Research, Development, and Acquisition to monitor progress on AMARC recommendations and to seek further improvements in the materiel acquisition process.

In response to another AMARC recommendation, the Army staff examined the problems of layering and fragmentation in the materiel acquisition process. Completed in May

1975, the study recommended a number of improvements that were being acted upon as the fiscal year closed. These included revising procedures for estimating and analyzing costs, examining in greater detail the methods used to validate materiel requirements, clarifying responsibilities and relationships of Army agencies and commands involved in integrated logistics support, reducing the layers of intermediate headquarters between project managers and the Army staff, and emphasizing that the user representative, rather than the project manager, should define the requirements for a materiel system.

AMARC also recommended the establishment of mission oriented development centers in order to separate development and procurement from logistics support functions. The Army considered the feasibility of the suggestion, and by the close of the fiscal year had established two development centers—the Mobility Equipment Research and Development Center at Fort Belvoir, and the Natick Development Center at Natick.

Science and Technology

The Army chartered the Advanced Concepts Team on 9 July 1974 to facilitate the review of unsolicited proposals dealing with new technological concepts or new applications of existing technology. Composed of eight members from the Office, Deputy Chief of Staff for Research, Development, and Acquisition and the Army Materiel Command, the team serves as a point of contact for inventors who wish to submit their ideas for consideration. During fiscal year 1975 the Advanced Concepts Team received 736 inquiries and 329 proposals, and recommended that 9 of the submissions be funded.

The Army participated with the Air Force in ICECAP-75, a program sponsored by the Defense Nuclear Agency to investigate aurora and polar substorms and their effects on the performance of military weapons and communications systems. Other Army activities included successful field tests of the Automated Meteorological System's prototype artillery subsystem and the continuous wave laser cross-wind sensor for tank fire.

Army scientists engaged in basic and applied research made a number of gains in the areas of geodesy, geography, and mapping. For example, experiments with sensing arrays and optical devices in aerial imagery measurement and data extraction should increase automation and reduce costs in mapping operations. Field tests of a vehicle-mounted experimental

inertial system demonstrated the feasibility of achieving accuracies of 1 meter in elevation, 1.5 seconds of arc in deflection and 2 milligals in gravity, and indicated potential savings during development of launch site gravity surveys to support land based strategic missile systems.

In other topographic matters, a new photographic image digital processing facility—equipped with an array processor, an on-line display system, a scanning digitizer, and appropriate software—has been used to good effect in conducting digital photogrammetry, image matching, and data compaction. Final modifications and initial terrain analysis experiments were concluded on an advanced image data extraction system that will use automated photo interpretation techniques to provide terrain data and military geographic information for tactical commanders.

On 7 April 1975 the Terrain Analysis Center was activated under the Army Engineer Topographic Laboratories, Fort Belvoir, Virginia. Primary missions of the center are to determine the adequacy and applicability of available Military Geographic Information/Military Geographic Documentation (MGI/MGD), collect additional data as required, and prepare MGI studies to support planning and operational requirements.

Progress during fiscal year 1975 in ice engineering research included completion of successful field tests on mechanical, water jet, and electrical deicers at the Poe lock, St. Mary's River, Michigan. An extensive field evaluation is planned for next winter to determine the conditions under which each system would be most effective. Tests begun in Lake Superior to measure the uplifting forces on piles will continue in the coming year. Construction of a \$5.5 million Ice Engineering Facility at the Cold Regions Research and Engineering Laboratory, Hanover, New Hampshire, will begin in late 1975 and be completed in early 1977. Included will be a refrigerated test basin and recirculating flume and a large test-cold-room. It will provide for the first time a controlled environment in which a variety of solutions to ice problems can be tested without costly field evaluations.

Research demonstrated the feasibility of shock wave deicing techniques. Basic research in the thermodynamics of ice-water-air mixtures was conducted to acquire a fundamental understanding of the mechanical behavior of wet snow. Relationships were established between unfrozen water in thawing soils and the specific surface area to predict the strength of thawing soil.

A model for crack propagation in thin ice formations was validated. Confirmed also were analytical procedures for predicting the Rayleigh wave signal as a function of target, substrata conditions, and distances. The first phase of a site evaluation process for helicopter landing and take-off operations, and a prototype air-transportable shelter suited to very cold environments were both completed. Additionally, a final report was published on tests of polyurethane-coated nylon fabrics and nonshed adhesives compounds for construction on wet, freeze-thaw soils.

Environmental technology emphasized the development of allowable effluent and emission standards at Army plants and installations. Progress was made in the continuing effort to establish environmental standards for some twenty primary air and water pollutants resulting from the manufacture of explosives and munitions. Detailed studies of five chemical compounds have been completed, and research has started on an additional fifteen compounds. An extensive toxicological literature search was completed for all primary compounds, and aquatic field surveys were performed at ten ammunition plants. Studies in the health aspects of recycling and reusing field hospital wastewater showed that a technique involving ultrafiltration, reverse osmosis, and ultraviolet catalyzed ozone was effective in restoring wastewaters not containing human wastes to acceptable standards for uses other than drinking. Studies of land treatment techniques for sewage wastewater disposal showed them to be an environmentally safe and a cost-effective alternative to tertiary treatment if suitable land is available.

Progress was also made in the development of a computer-aided procedure for preparing environmental impact assessments. Field tests indicated that the procedure was responsible for a cost avoidance of seventy-five percent and a time saving of eighty-four percent over previous methods.

Research in noise pollution was marked by completion of field noise measurements on Army and Navy helicopters at Fort Rucker, Alabama, and Camp Pendleton, California, for use in developing a helicopter noise prediction model. This model, when validated by field test and integrated with other noise source prediction models, such as the artillery blast model, will provide a basis for installation master planning. Research into techniques for controlling explosive and munitions manufacturing wastes demonstrated that a polymeric resin can absorb aromatic nitrocompounds such as TNT and can be renewed to restore its original absorbent capacity. The use of

ionized electrodes for monitoring the cyanide content of waste solutions has been proved to be reasonable in cost—compared with the electrolyte method costs \$1.30 per kg versus \$2.40 per kg for chemical methods. The prototype system for enzymatic hydrolysis of cellulose wastes to glucose operated at a rate of 1,000 pounds of cellulose per month. Nearly complete conversion of nitrocellulose waste to nitrates and nitrites for fertilizer was also demonstrated using a five percent solution of ammonium hydroxide. This technique is economically competitive with fertilizer industry production costs.

The Army's research and development effort for military construction and engineering encompasses a variety of subjects, including soil and rock mechanics structural systems, weapons effects, mobility, and the problems of conducting military operations in cold regions. During the year the Long-Range Pavement Research Program continued with the establishment of interim standards for the design of an all-bituminous surface for roads and airfields, development of a pavement design that can use all types of structural material, and a data bank that correlates compatibility of construction techniques, quality control, guide specifications, and design concepts for pavement systems. Army engineers have now tested precracked steel-fiber reinforced concrete beams that had been subjected to flowing salt solutions and have completed work on a prototype computer model for predicting load-carrying capacity of cracked steel-fiber concrete slabs-on-grade. Techniques have also been developed to form inflatable fibrous concrete domes up to fifteen feet in diameter. Other significant engineering research accomplishments included a series of three, ten-ton nitromethane explosive tests to develop computer techniques for simulating underground detonations of nuclear weapons at shallow depths. Progress was made in developing the Automated Engineering and Architectural Design System, and work was completed on a computer program that determines bridging requirements in tactical situations.

Activity in cold-regions research during the past year included development of a model capable of predicting the thaw-weakening of soils at airfields. Also developed were methods for analyzing the stability of slopes, and techniques measuring ground resistance to identify permafrost, bedrock, and certain types of soils. Field and lab tests to obtain data on ballistic attenuation in snow, ice, and frozen ground were performed as well.

A number of research projects sought to decrease the

vulnerability of combat vehicles to fuel and hydraulic fluid fires. Work was completed on a fire resistant hydraulic fluid, and evaluation of various additives to fuels and their effects on engine and fuel systems continued as planned.

Efforts during the past year to develop more efficient and silent portable electric power sources centered on the use of lithium batteries, generators powered by gas turbine engines, and fuel cells. Engineering development for a 400Hz 10kw gas-turbine-driven generator to provide power for the mobile mortar-locating radar began. Contracts with U.S. firms for the development of smaller generators continued.

Fiscal year 1975 marked the first full year that the Human Resources Program came under the Office of the Deputy Chief of Staff for Personnel. During the year the Defense Science Board Task Force for Training Technology completed a one-year examination of how the military services managed research and development in the area of training. And the Office of the Director of Defense Research and Engineering analyzed the military services' human resources and medical research and development programs.

In aviation technology, the joint Army and National Aeronautics and Space Administration (NASA) project to demonstrate the tilt rotor concept moved forward. Final design review was held in December 1974, and all drawings were released during the first half of 1975. The fuselage structure and many other components for the first tilt rotor research aircraft have been completed, and work has begun on modifying and refurbishing the 25-foot tilt rotor and its controls in preparation for wind tunnel testing. In a second Army-NASA project, developing a rotor systems research aircraft, the contractor has nearly completed the aircraft's design, except for the stability augmentation system and the rotor active isolation/balance system.

Testing of the small turbine advanced gas generator by the four civilian contractors involved showed that all requirements were being met. Meanwhile, plans were made to resume flight testing of the advancing blade concept aircraft early in fiscal year 1976.

Development

The NAVSTAR Global Positioning System is a joint service program for broadcasting highly accurate navigation informa-

tion on a 24-hour-a-day basis. It will include twenty-four satellites, ground stations to control the satellites, and receiving equipment on ships, airplanes, and ground vehicles. Army participation centers on developing and testing aircraft, vehicular, and hand-carried equipment to meet a broad variety of requirements in navigation, artillery and engineering survey, target acquisition, signal intelligence, and control of tactical operations. During the past year a \$6.1 million program began for the design and development of new equipment items needed for NAVSTAR.

Command and control developments also included completion of second phase tests and a cost and operational effectiveness analysis of the Tactical Fire Direction System (TACFIRE). Favorable results led to the procurement of fourteen TACFIRE units for further test and evaluation. Limited procurement of the Air Defense Command and Control System was also approved. In October 1974 the Tactical Operations System Operable Segment (TOS²) was delivered to Fort Hood in preparation for field testing in January 1976. A TOS² duplicate is in use at Computer System Command's Falls Church facility where system software is being readied for testing in the fall of 1976.

Civilian contractors completed the AN/TPQ-37 artillery locating radar, and competitive testing of the two models produced began in February 1975 at Fort Sill. Meanwhile, Hughes Aircraft Corporation completed the first of five engineering models of the AN/TPQ-36 mortar locating radar. This model underwent testing at Yuma Proving Grounds in June 1975. Plans have been drafted for comparative testing and evaluation of the AN/TPQ-36 and the U.S. Marine Corps Hostile Weapons Location System, a dual frequency radar for locating both mortars and artillery. The data obtained from these comparative tests, scheduled for mid-1976, will be compared to data collected during testing of the AN/TPQ-37 before deciding on production of any of the radars.

First phase development and operation tests on the Remotely Monitored Battlefield Sensor System were conducted at Fort Bragg. At year's end the Training and Doctrine Command was preparing a revision of materiel requirements, and the Combined Arms Combat Development Activity was preparing a cost and operational effectiveness analysis. In December 1974 Lockheed Missiles and Space Company received a contract to develop the television and photographic surveillance, target

acquisition, target location and fire adjustment, and laser target designation components for a remotely piloted vehicle.

Development of more sophisticated night vision apparatus moved forward, except for the interim AN/TAS-3 Dragon Night Sight, which did not perform well in Phase II development and operation tests. In January 1975, the AN/PAS-7 Handheld Thermal Viewer became the Army's first ground-use far-infrared system approved for production. Also approved for production were the AN/PVS-4 Individual Weapon Sight, and the AN/PVS-5 Crew Served Weapons Sight. An expanded acceptance test program was conducted on the two engineering development models of the Man-Portable Common Thermal Night Sight (MCTNS). Both candidates exceeded performance requirements for lightweight, high performance, day and night vision systems. In May 1975, the Assistant Secretary of the Army for Research and Development and the Assistant Secretary of Defense for Installations and Logistics approved an accelerated development and procurement schedule for the MCTNS.

Design and construction of a Laser Obstacle Terrain Avoidance Warning System was completed, and flight tests will begin in the coming year. The final report on the Low Level Night Operations study was delayed, but neared completion at year's end. Finally, second phase development and operation tests were successfully completed on the AN/TSW-7A three-man air traffic control tower.

The Secretary of the Army approved the charter for the Project Manager, High Energy Laser Systems on 19 February 1975. In early April, management changes were made at the U.S. Army Missile Command, Redstone Arsenal, Alabama, to strengthen the authority of the project manager and provide one organization for all high energy laser research and development activities. Design, fabrication, and testing of the Mobile Test Unit, a high energy laser system mounted on a tracked vehicle chassis, continued. The long term DOD Special Laser Technology Development Program was initiated. Army projects in this program included an air breathing CO² laser experiment, fueled by JP-4.

The Ground Laser Locator Designator (GLLD), a precision laser designator, continued to be developed during the year. Delivery of engineering models under a contract with Hughes Aircraft Company should begin in October 1975. Earlier models of the GLLD were used during the year to support live fire evaluations of the Cannon Launched Guided Projectile

and the Hellfire Missile. Delivery of advanced development models of the Airborne Laser Locator Designator was completed and the system was renamed the Airborne Target Acquisition and Fire Control System.

Field testing of the Stand-off Target Acquisition System conducted late in the year demonstrated its target acquisition and surveillance capabilities at extended ranges and its potential for use in command and control. Future efforts will examine the feasibility of relying upon this system as the key element in devising a closed-loop fire support system.

The Army's development programs in aviation concern aircraft and weapons, the promotion of new systems, and the upgrading of older ones. The Advanced Attack Helicopter Program began in 1972 after the termination of the Cheyenne program. Two prime contractors, Bell Helicopter Company and Hughes Helicopter Company, continued work on two flying prototypes and one ground test vehicle. Bell began testing its ground vehicle on 19 April 1975, and Hughes began testing on 22 June. Flight testing should start in September 1975.

Sikorsky Aircraft Division of United Technologies Corporation and Boeing Vertol Company have each accumulated about 300 hours of flight testing on their models for the Utility Tactical Transport Aircraft. Competitive testing of the two candidates was scheduled to start in February 1976.

Drive system component problems have delayed completion of the advanced technology component program associated with the development of the Heavy Lift Helicopter. The engine program was on schedule, and the three major fuselage sections were spliced together as the first major step in building a prototype.

The task force mentioned in last year's report completed formulation of the Advance Scout Helicopter program. This reconnaissance aircraft will be capable of performing around the clock in all combat situations, and will be compatible with the advanced weapons systems of the 1980's. The Army System Acquisition Review Council has approved the program, and competitive advanced development should begin next year.

Both the AH-1Q Cobra/TOW and AH-1S programs continued on schedule. AH-1Q related milestones included delivery of the first engineering development model test set for the TOW (tube-launched, optically tracked, wire-guided missile) system and delivery of the first production AH-1Q Cobra/TOW. AH-1S events included completion of a prototype

aircraft, award of long lead time contracts for airframe and engine programs, completion of the T53-L703 engine qualification program, completion of development and operational tests, and the award of initial production contracts.

The Army Systems Acquisition Review Council will consider a special study group recommendation to modernize the CH-47 aircraft fleet to improve maintainability, reliability, survivability, and safety, and to reduce operating costs. Proposed was the development of fiberglass rotor blades, integrally lubricated transmissions, and modularized hydraulic system components; and improvements in the cargo suspension system, the auxiliary power unit, and flight control and electrical systems.

Development of new missile systems progressed during the year. The basic TOW system was completed, and work continued on developing a thermal night sight and a solid state track link. Dragon missile system development was also completed during the year. The Stinger continued in engineering development, while the Stinger alternate demonstration flight program proceeded according to schedule. Test firings of the Hellfire missile were completed in June 1975, with eight of ten missiles scoring direct hits. A cost and operational effectiveness analysis of the system had not been completed by the year's end.

The SAM-D surface-to-air missile program continued at the austere level directed by the Deputy Secretary of Defense in fiscal year 1974. Construction continued on the first two engineering development model fire control groups. Guided missile flight tests, begun in February 1975 to demonstrate track-via-missile guidance, were completed successfully. A short burn flyout test conducted in June 1975 demonstrated the compatibility of the missile with the tactical launcher cannister.

The Army completed development testing and approved the fielding of an improved version of the Chaparral missile that will greatly increase its effectiveness by providing a 360-degree target engagement capability and a more lethal fuze and warhead combination. Prototype models of a target acquisition aid were tested in late 1974. The tests showed not only that the aid was of marginal benefit but that it was expensive, and Congress noted these shortcomings by deleting funds for it.

The Army also approved replacement of the Pershing guidance section and warhead with a new terminally guided reentry vehicle and a low yield, earth penetrating warhead, while production continued of an automatic reference system

sequential launch adapter. Deployment of an improved Hawk missile was about fifty percent complete at the close of the fiscal year.

Chrysler and General Motors, the two principal contractors in the XM1 tank program, completed prototypes and were preparing them for competition in early 1976. Over 10,000 miles have been accumulated on automotive test rigs and significant refinements in layout, armor design, and fire control have been made. The program is proceeding on time and within design-to-cost goals.

Phase II testing of components for the M60A1 tank improvement program began on 21 October 1974 and were concluded on 24 January 1975. Test results will be incorporated into the overall evaluation of the new components. Greater requirements for first-line tanks and delays in increasing M60-series tank production have lead to an innovation: 105-mm. guns and diesel engines will be put in 324 M48-series tanks at a rate of 40 to 50 per month beginning in October 1975. The altered tanks will be practically indistinguishable from the M60 in configuration and performance.

Development of the Vehicle Rapid Fire System (Bushmaster), which was stopped last year, resumed following a favorable cost and operational effectiveness analysis and a December 1974 review that confirmed the need to develop a 25-mm. self-powered weapon as the primary armament for the mechanized infantry combat vehicle (MICV). An improved M139 20-mm. gun will serve as the MICV's interim weapon. A Defense Department review confirmed the Army's position, but also directed the Army to develop an externally powered 25-mm. weapon to be compared to the self-powered version before selecting a weapon for the MICV. The Army is preparing to contract for the self-powered weapon and ammunition and is requesting industry to submit bids on the externally powered system.

The MICV program continued to have problems, although suspension system irregularities that caused an early five-month delay were corrected. Problems with transmission reliability and durability had not been resolved by the close of the year. Increased costs caused by these problems posed a threat to the future of the program.

A mid-life review of the Armored Reconnaissance Airborne Assault Vehicle revealed a need for substantially increased reliability, particularly concerning the turrets and engines. In May 1975, the Army approved procurement of an improve-

ment package containing about forty-five items that will cost over \$50 million during the next few years.

The effectiveness of Soviet surface-to-surface missiles in the 1973 Mid East War called for more emphasis on smoke screening techniques to protect armored vehicles. Efforts centered on development of wicking material to improve dispersion and prolong smoke emission of white phosphorous smoke rounds. A plastic wafer concept was tested and offers good performance at reasonable cost. The screening smoke system used in the British Chieftain tank also showed promise.

In the development of scatterable mines, final tests were completed on the helicopter delivered M56 antitank mine system, and the results are being evaluated. Testing of the artillery delivery and minefield effectiveness of the XM692E1/XM731 area denial artillery munition was completed, and the item is now being considered for type classification standard. Both the XM718 artillery-delivered antitank mine system and the ground vehicle dispensed mine system remained in engineering development. Work on the Gator, air-delivered, triservice mine development program continued: the Army is developing the mine, the Air Force is developing the dispenser, and the Navy and Marine Corps are participating in the testing program.

As for countermine equipment, engineering development continued on the surface-launched fuel-air explosive unit in an effort to be able to breach a minefield rapidly. The vehicle-mounted mine detector demonstrated good capability for detecting in roads both metallic and nonmetallic mines with a low false alarm rate. In an advanced state of development at year's end was a man-portable version of a metal reradiation mine detector for surface mines and booby traps. Concerning demolitions, the Army identified a need for bulk explosives as an antiarmor weapon and for general demolition tasks. Development of the XM122 remote demolition firing device continued.

To provide impetus to the recently approved camouflage pattern painting program, over 60,000 gallons of a new alkyd paint were distributed to field units. A new training circular on pattern painting was distributed in September 1974, and patterns for painting equipment were prepared and issued. The new camouflage screening system (woodland blend) was delivered to Europe for use in the October 1974 REFORGER exercise, while the desert blend screen was type classified and a production contract was awarded. Engineering development

was completed on the lightweight company mortar during the year in preparation for development and operational testing. Reliability of the new XM734 multioption fuze continued to be a problem because of a high dud rate when fired in the delay option and premature detonation when the fuze was set for a proximity burst. The Harry Diamond Laboratory corrected both problems, and in May 1975 the Army Materiel Command verified that reliability had improved.

In other development actions during the year, the Army terminated work on a 6-mm. squad automatic weapon, but continued development of 5.56-mm. and 7.62-mm. versions; the Cannon Launched Guided Projectile remained in advance development; and the XM198 medium towed 155-mm. howitzer, the XM204 light towed 105-mm. howitzer, and the M110E2 heavy self-propelled howitzer were in various stages of development.

International Research and Development

In December 1974, the United States and the Federal Republic of Germany signed a memorandum of understanding under which the Leopard-2 tank will be evaluated along with Chrysler and General Motors prototypes for selection as the XM1. Should either the General Motors or Chrysler prototype be selected, Germany and Great Britain will be invited to join the XM1 development program in an effort to standardize NATO tank requirements. In a related development, the United States, Great Britain, and the Federal Republic of Germany agreed to a joint evaluation of tank guns to reach agreement on a common gun for future tanks. The U.S. 105-mm. with XM735 penetrator round, the German 120-mm. smooth bore, and the British 110-mm. rifled guns are being tested. Firing trials were completed in May 1975.

On 29 July 1974 a request for proposals for the Short Range Air Defense (SHORAD) system was released. By 12 September 1974 four contractors had responded with proposals: Hughes Aircraft Company with Boeing Aerospace Company for the French-German developed Roland II; Norden Division of United Aircraft for the British developed Rapier-Blindfire; Rockwell International for the French developed Crotale; and Philco-Ford for an all-weather version of the U.S. developed Chaparral. The Army Missile Command conducted the source selection during the period 12 September 1974 to 6 January 1975, and selected Roland. The Secretary of Defense

approved the selection and on 9 January 1975 the SHORAD contract was awarded to Hughes and Boeing. A special Department of Defense review on 15 April 1975 approved a reduced RDTE program contingent on the success of flight tests. The requested RDTE budget of \$35.1 million for fiscal year 1975 was reduced to \$21.2 million by the House and Senate Armed Services Committees.

In other international research and development matters, the United States planned a September 1975 U.S.-British-Canadian conference on the evaluation of individual chemical protective clothing. Progress was also made in the standardization of small arms ammunition for NATO. Finally, the Army selected a group from the membership of its Scientific Advisory Panel to review the U.S. position on the discontinued U.S.-French Javelot project.

Materiel Acquisition

The President's budget for fiscal year 1975 requested \$339.5 million for the Aircraft Procurement, Army, appropriation. Of this amount \$112.5 million was for procurement of new aircraft, \$165 million for modification of existing aircraft, \$21.9 million for spare and repair parts, and \$40.1 million for support equipment and facilities. Congress approved \$253.8 million, which resulted in a number of cutbacks in planned procurement. The cuts included \$12.5 million for fifteen AH-1Q (Cobra/TOW) Attack Helicopters; \$41.4 million for nineteen CH-47C (Chinook) Cargo Helicopters; and \$25.1 million for eighty UH-1H (Iroquis) Utility Helicopters. The fiscal year 1973 funded C-12A (formerly U-X) procurement program for 20 aircraft was awarded in August 1974. The major portion (\$54.3 million) of the fiscal year 1975 AH-1G to AH-1S modification program was awarded in January 1975.

The fiscal year 1975 budget request for Army missile procurement submitted to Congress amounted to \$459.2 million, which provided financing for selected missile systems, ground support equipment, improvements to missile systems, repair parts support, and support equipment and facilities. From this request, Congress deleted \$22.7 million for the following: TOW procurement, \$19.8 million; Dragon procurement, \$2.5 million; and \$400 thousand for initial repair parts associated with the reduced procurement.

During the year producers delivered 2,721 Dragon missiles and 454 trackers. By 1978 production capacity is expected to

be about 10,000 missiles and 800 trackers per month. Acceleration of TOW production to field the system as rapidly as possible continued. Planned peak production rates for missiles and launchers were achieved on schedule in March 1975. In February 1975 multiyear contracts for missiles and launchers were awarded to Hughes Aircraft Company and Emerson Electric Company, respectively. Both contracts were awarded after competition in keeping with efforts to obtain the best possible prices for these systems. The TOW continued to be a popular item abroad; seventeen countries have now purchased it.

The President's fiscal year 1975 budget proposal contained \$385.3 million for weapons and tracked combat vehicles (W&TCVA). This sum provided for the procurement of tanks, medium and light tracked recovery vehicles, tank turret trainers, general purpose and tank machine guns, and incendiary rocket launchers; for the high priority modifications of tanks, artillery, assault vehicles, recovery vehicles, air defense guns, and machine guns; and for associated support equipment, repair parts, and facilities. The request also included \$14.5 million for personnel and mortar carriers, rifles, and repair parts for service-funded military assistance to the Republic of Vietnam. The Appropriation Act for fiscal year 1975 deleted \$32.5 million: \$14.5 million for military assistance to the Republic of Vietnam (disapproved for W&TCVA, but approved in another appropriation); \$1.5 million for thirty-four tank turret trainers; \$0.8 million for the M202A1 incendiary launcher; and \$25.3 million for the Armored Reconnaissance Scout Vehicle, \$9.6 million of which was returned to the Army for procurement of M113A1's and Vulcan modifications.

In December 1974 a fiscal year reprogramming request was submitted to Congress to improve the Army's tank inventory, which was seriously depleted as a result of significant diversions following the October 1973 Mid East War and the inability of manufacturers to increase production rapidly. This request, approved in increments during the first half of calendar year 1975, included \$52.3 million to convert 573 older model 90-mm. gun, M48-series, diesel-powered tanks to 105-mm. gun gas-powered models; and \$34.8 million, most of which was intended for increasing production of M60-series tanks to a rate of 103 per month.

The approved fiscal year 1975 ammunition procurement program provided for consumption by U.S. forces, pipeline requirements for Southeast Asia allies and Pacific Command

forces, NATO needs, and the maintenance of an active ammunition production base. Two unforeseen actions—an amendment to Section 514 of the Foreign Assistance Act that prohibited use of service funds to support allied requirements and the sudden collapse of Cambodia and South Vietnam—caused termination of contracts and reduction of the production base. Contracts with a value of \$86.6 million were to be terminated, from which \$51.1 million would be recoverable, and previous authorizations of \$292.4 million would not be placed on contract. Additionally, the Joliet Army Ammunition Plant would be inactivated, and the Scranton, Riverbank, and Longhorn plants might go inactive depending on the outcome of studies on the impact of Section 514 and new logistics guidance. Production would also be reduced in several other Army ammunition plants.

Congressionally approved reprogramming added \$76 million to the fiscal year 1975 ammunition production base appropriation of \$260.2 million. The extra funds covered the cost of repairing facilities damaged by an explosion at the Radford Army Ammunition Plant in Virginia. The funds also covered a cost increase in constructing the Army's first nitroguanidine (a component in military smokeless powder) production facility, building a prototype explosive melting and pouring facility, and purchasing and installing equipment for five small-caliber ammunition modules—all part of a nineteen-year program scheduled for completion in 1988 to modernize and expand the Army's ammunition production base. In August 1974, the Office of the Secretary of Defense approved an increase in funding for the program from \$300 million per year in fiscal year 1980 to \$500 million per year in 1981.

The Other Procurement, Army, Appropriation finances the procurement of tactical and commercial vehicles, communications and electronics equipment, and other support equipment. Expenditures for fiscal year 1975, by activity, were as follows:

		Fiscal Year 1975 (millions of dollars)
Activity		
Tactical and commercial vehicles	\$141.2
Communications and electronics	280.0
Other support equipment	243.8
Total—Other Procurement, Army	665.0

Plans continued for buying commercial substitutes for military design vehicles in fiscal year 1975. The 34-ton semitrailer

and the 40-ton lowbed trailer are two examples of commercial trailers to be purchased.

A contract was let during the year for 33,000 commercial 1 $\frac{1}{4}$ -ton trucks, which will replace the Army's M37 series ($\frac{3}{4}$ -ton) and M715 series (1 $\frac{1}{4}$ -ton) vehicles in the inventory. Replacement will start in calendar year 1976 and is scheduled for completion in 1977. Two versions of a commercial line-haul truck tractor will replace the 5- and 10-ton military design tractors in selected units. Procurement of these vehicles was scheduled to begin in fiscal year 1977.

Another review of heavy equipment transporters was initiated. A commercial vehicle is being procured to satisfy a portion of the Army's requirement. An examination of other tactical uses for commercial vehicles was completed during the year, and results were expected in the coming fiscal year.

XI. Special Functions

Civil Works

The civil works responsibilities of the Army are administered through the Corps of Engineers. As the only organized engineering force during the early days of the republic, the corps surveyed and explored new areas for the rapidly expanding nation and showed an environmental interest in the Yellowstone and Yosemite areas long before the establishment of the National Park System. In 1824 the corps took on the job of improving the Ohio and Mississippi rivers for navigation through removal of snags and other obstacles. This was the beginning of what has become a nationwide water resources development program.

The fiscal year 1975 civil works appropriations, including supplemental monies and transfers, totaled \$1,756,877,000. The general construction category accounted for fifty-five percent of this total, providing money for 258 projects, including 29 construction starts, and 119 planning projects, including 29 planning starts. Operation and maintenance, the second largest category, accounted for twenty-eight percent of total funding. The complete breakdown in thousands of dollars is shown in the table below.

Civil Works Fiscal Year 1975 Appropriations
(Includes Supplemental Appropriations, and Transfers)
(thousands of dollars)

General investigations	\$ 65,284
Construction, general	966,238
Operation & Maintenance, general	494,577
Mississippi River & tributaries	120,051
Flood control & coastal emergencies	65,400
Permanent appropriations	4,427
Special recreation use fees	700
General expenses	40,100
	<hr/>
	1,756,877

The Corps of Engineers exercises responsibility for developing and maintaining the nation's navigable waterways, some 22,000 miles of inland waterways, 3,000 miles of intracoastal channels, 226 lock and dam complexes, 107 commercial harbors, and 416 recreational boat harbors. Foreign and domestic waterborne commerce in 1975 totaled 639.5 billion ton-miles,

the lowest level since 1969. Domestic commerce accounted for about one-fourth of the nation's total intercity freight traffic. Cargo moved on the water was carried at an average cost of three mills per ton-mile and used less energy per ton-mile than any other form of transportation. Energy-producing commodities, predominantly petroleum and coal, accounted for about sixty percent of the domestic and forty-five percent of the inland water freight carried.

In March 1975 the District Court for the District of Columbia ruled that the responsibility and authority of the Corps of Engineers to regulate the disposal of dredged or fill material under Section 404 of the Federal Water Pollution Control Act of 1972 extended to "the waters of the United States." Previously, the corps had confined its permit activities to "navigable waters of the United States," defined as waters which were, had been, or could be navigable. The full impact of the court's ruling was unknown at year's end, but it seemed likely that the corps' jurisdiction over rivers, adjacent wetlands, and areas supporting aquatic vegetation may exceed 350,000 square miles as compared to the present 50,000 miles. The corps may also be held responsible for almost 2 million miles of lake shoreline, where previously it exercised jurisdiction over less than 50 thousand miles. Jurisdiction may be expanded from the ordinary high water mark along inland waters to include periodically inundated areas supporting aquatic vegetation, while jurisdiction along coastal areas may be expanded to the aquatic vegetation line.

Lack of funds in recent years has hindered the efficient operation of the corps' navigation program, which has grown from 192 Army-operated lock and dam installations in fiscal year 1971 to 226 such installations in fiscal year 1975. The maintenance backlog has also increased.

Under the Inland Navigation Systems Analysis program, described in last year's report, a set of models has been completed that can analyze inland navigation as part of a larger system of transportation and can provide planners with the recommended size, location, schedule of implementation, and benefit-cost analysis of each waterway improvement and a benefit-cost analysis for the system as a whole. The program will also standardize data collection at locks and dams and analyze the information collected on a system-wide basis. Current planning includes a model to generate waterborne commerce flows for simulation modeling and economic evaluation, a data file and analysis program of the physical charac-

teristics of waterways, a data file on the characteristics of the towing industry, and a model that will describe major transportation modes. Program components should be in use by mid-1976.

The Corps of Engineers requires much data on water quantity and quality for planning, designing, and operating water resource projects, as well as for other projects and studies. As the fiscal year ended, the Office of Water Data Coordination was completing plans for a National Water Data Exchange system that will help the corps meet its data requirement. The corps will make full use of the new system and will also contribute data from its own extensive network of data collecting points. These points include approximately 5,000 stream-gauging stations funded by the corps but operated both by the U.S. Geological Survey and the engineers.

Attendance at the 413 lakes managed by the corps reached a high of 352 million recreation days during calendar year 1974. Fuel shortages and increased fuel prices may have modified use patterns, because visits to nearby lakes increased while the number of trips to more distant ones were reduced, but the period of stay increased.

Under authority contained in Section 54 of Public Law 93-251, the Chief of Engineers appointed a 15-member Shoreline Erosion Advisory Panel to advise him on the Shoreline Erosion Control Demonstration Program. This program will develop and demonstrate low-cost erosion control devices for use on sheltered or inland water at sixteen representative sites on the Atlantic, Pacific, Gulf, and Great Lakes coasts, and in Alaska.

The Corps of Engineers' 63 hydroelectric power plants were capable of producing 15 million kilowatts from 283 generating units, making the Army the nation's largest single producer of electricity. During fiscal year 1975, the corps placed in service 3 new power plants and 7 generating units with a total capacity of 495,375 kilowatts. Nine more power-producing projects were under construction. When completed these projects will bring the corps' electricity-producing capacity to 16,751,275 kilowatts using 306 generating units. Additional generators at 9 existing plants could provide 4 million more kilowatts. Thirty-five potential locations have been studied or are being studied that could produce an estimated 22 million kilowatts.

During fiscal year 1975, the corps arranged twenty training programs in water and related land resources development activities for engineers and researchers from foreign nations.

Participants came from Australia, Bangladesh, Brazil, India, Nicaragua, Sri Lanka, Sudan, and Taiwan. Typical of the subjects studied were mathematical and physical model experiments in hydraulics; coastal zone management and developments in coastal engineering; dredging operations and procedures; planning, design, and construction of hydroelectric power plants; reservoir operations; and river regulation and reporting systems.

Army Energy Program

Throughout fiscal year 1975 the Army stressed the intensive management of energy resources it had initiated in fiscal year 1974. As a result, the Army reduced total energy consumption during the year by twenty-three percent. Approximately eighty-five percent of the energy consumed was for operating installations, while the remaining fifteen percent was for transportation. The major reductions were in purchased electricity and petroleum products, especially heating fuels, and reflected not only the mildness of the 1974-75 winter in Korea, Europe, and most of the United States, but better management as well. Using fiscal year 1973 as a base, energy conservation in the current fiscal year represented a saving of \$171 million. The Army consumption and conservation accomplishment is reflected in the following chart:

Army Energy Consumption
(Trillion BTU's)

	Fiscal Year 1973	Fiscal Year 1975	Percent Saved
Installation Operations			
Purchased electricity	121.5	84.5	30.5
Natural Gas	47.8	44.4	7.1
Liquefied Petroleum Gas	4.7	2.9	38.3
Coal	39.7	34.2	13.9
Purchased Steam	0.6	0.6	—
Petroleum Heating Fuels	78.5	58.9	25.0
Sub Total	292.8	225.5	23.0
Mobility Operations			
AVFUEL	20.9	12.3	41.1
MOGAS	20.3	16.2	20.2
DIESEL	20.6	16.9	18.0
Subtotal	61.8	45.4	26.5
Army Total	354.6	270.9	23.6

A number of actions were taken during the year to standardize bulk petroleum fuels in the Department of Defense. Diesel fuel and motor gasoline grades were standardized by all U.S. ground forces in Europe, and the Army began to standardize its aviation gasoline requirements. By reducing the

number of grades of fuel that need to be procured, stored, and distributed, the Army will improve petroleum logistics and conserve energy.

In a related development, the Army completed an unleaded motor gasoline test program at four installations in the United States. The tests indicated that use of unleaded motor gasoline did not hamper performance of, or require more maintenance on, combat and administrative types of vehicles. Information will continue to be collected to substantiate test results, but meanwhile Army installations have begun to convert their storage and dispensing facilities to handle unleaded gasoline. Seven installations (Forts Carson, Colorado; Eustis, Virginia; Riley, Kansas; Lewis, Washington; Stewart, Georgia; Dugway Proving Ground, Utah; and Letterkenny Army Depot, Pennsylvania) have completed conversion to unleaded fuel. Over thirty-five other installations have begun the conversion program which will continue into fiscal year 1976.

The Corps of Engineers has initiated a program to use solar energy for heating and cooling buildings, thus reducing energy costs and the consumption of fossil fuels. Working with the Energy Research and Development Administration and the Federal Energy Agency, the engineers are designing for construction next year a solar heated and cooled battalion headquarters and classroom building to be located at Fort Hood, Texas. Additionally, solar heating systems are planned for family housing units and barracks at five other Army installations. These installations are part of the program for testing system concepts developed by the Energy Research and Development Administration under the National Solar Energy R&D program. Other solar heating and cooling applications are being developed for three U.S. Army Reserve training centers, an academic building, and a large industrial building. The corps also has undertaken an economic and environmental assessment of the use of nuclear energy systems to supply large Defense installations and has studied the feasibility of using waste fission products from the nuclear power industry to heat buildings.

In other energy conservation matters, development of the Defense Energy Information System was completed, and work on a six-year Energy Conservation Investment Program moved forward. Also, the Army has canceled 2 limousines, 33 medium-prestige sedans and 12,319 light (intermediate and regular) sedans from fleet authorizations: The limousines and medium sedans were eliminated from the inventory, and the

12,319 light sedans were being reduced by attrition. The 1,884 sedans procured for replacement in fiscal year 1975 were subcompacts and compacts, as will be the 1,276 to be procured in fiscal year 1976.

Environmental Protection and Preservation

Until the position was abolished in February 1975, the Deputy Under Secretary of the Army served as the principal Department of the Army official responsible for environmental policies and programs. The Assistant Secretary of the Army for Civil Works has now taken this responsibility. Within the Army staff, the Chief of Engineers retained primary staff responsibility for directing and coordinating environmental matters.

The Army continued the efforts noted in last year's report to control or eliminate pollutants at Army installations. Despite these efforts, little progress was made in reducing the number of installations violating air pollution control standards. Because of complexities in the design, procurement, and installation of pollution abatement equipment, twenty-four installations were not in full compliance with the standards.

More substantial progress was achieved in eliminating domestic and industrial waste pollutants, although control of pollutants produced in the manufacture of explosives and munitions was difficult because of inadequate technology. By the end of the fiscal year the number of Army installations that had water pollution control problems was 83 compared to 120 last year.

The Army continued to attack solid waste pollution through programs to avoid waste generation and increase recycling. Emphasis was placed on reducing the amount and complexity of packaging to aid in recycling, the reuse of waste crankcase oil as a fuel, and environmentally satisfactory disposal of residual waste. In other actions aimed at reducing or preventing pollution at installations, the Army updated contingency plans for handling oil spills, issued revised instructions for preventing spills, and continued work on a method to predict noise levels from blasting and helicopter operations.

The Army encountered no major difficulties in complying with air emission standards for equipment during the year. As the year ended, however, it became apparent that waivers of 1975-78 exhaust emission standards would be required before

the Army could purchase any additional 1/4-ton trucks. Accordingly, the Army's procuring agency has recommended that the Army request relief from the U.S. Environmental Protection Agency. The Army continued to investigate cost-effective ways to prevent the discharge of oily bilge wastes and domestic sewage from Army vessels. During the year a prototype oil and water separation unit was installed on an Army landing craft, utility (LCU), and prototype development contracts were awarded for the installation of diverse sanitary waste treatment facilities on three other LCU's.

Because the Army is the trustee for many historic sites and structures, protection and enhancement of the nation's cultural heritage have become significant elements of the Army Environmental Program. By the end of 1974, forty-two Army-controlled sites were listed in the National Register of Historic Places. These sites included the U.S. Military Academy at West Point, the Fortress at Fort Monroe, and the Great Gun Factory at Watervliet Arsenal. Nine other nominations for inclusion on the register were submitted during 1975. Procedures to identify, maintain, and preserve historic sites will be covered in a two-volume historic preservation technical manual that was under preparation at the close of the fiscal year.

As a result of the stress on environmental education, all major commands and many installations sent personnel to Army-sponsored courses, such as the environmental executive course and the environmental management course, and to courses sponsored by universities or similar institutions. Additionally, the Army provided on-the-job training and presented environmentally oriented subject matter in the curricula of most of its schools.

The Army emphasized the importance of using the most modern land use planning techniques, incorporating the design of new facilities into the natural setting, and eliminating conditions that could detract from the appearance of installations and facilities. Many Army units joined with other federal and state agencies and local civic groups in pollution control programs and a variety of environmental enhancement projects. During the year far more attention was given to environmental amenities in the master planning of installations and in the design and location of individual facilities. In recognition of its efforts in this regard, Fort Sill received the first Secretary of Defense Environmental Quality Award on 11 July 1974.

The Army's interest in removing evidences of man's past abuse of nature was reflected in cooperation with the national

scouting movement in its Keep America Beautiful program and the Johnny Horizon program. All components of the Army have joined with local groups in cleaning up rivers and streams, assisting recycling projects, collecting abandoned automobile hulks, and similar activities.

Responding to congressional interest, the Secretary of the Army approved a program to decontaminate and restore to public use Army-held land that had been used for chemical, biological, and nuclear purposes. Rocky Mountain Arsenal, Colorado, and Weldon Spring Chemical Plant, Missouri, were designated as priority projects under the new program. Several other installations are under consideration for inclusion. Plans were made to set health standards, devise technology, start detailed surveys, and establish funding programs. Work is scheduled to begin in fiscal year 1976.

A different type of environmental concern continued to be a problem. During the past few years millions of starlings, grackles, and blackbirds established winter roosts at Fort Campbell, Kentucky, and Milan Army Ammunition Plant, Tennessee. The installations were subjected to increasing pressure to reduce the bird population, which posed threats to health and agricultural production. Accordingly, the Army published an environmental impact statement proposing to use an authorized bird control agent (PA-14) to spray the roosts. Opposition to the proposal was immediate, and on 3 February 1975 the Society for Animal Rights filed suit to stop the Army from spraying. On 13 February 1975 the U.S. Court of Appeals denied the injunction. Fort Campbell sprayed selected portions of large roosts in late February, and an estimated half-million birds were destroyed. Weather conditions at the Milan Army Ammunition Plant were not suitable for spraying. Public opposition to the program was again very evident, and a supplement to the environmental impact statement was prepared to substantiate further the method of control. Meanwhile, litigation against the Department of Defense in the U.S. District Court, District of Columbia (*Society for Animal Rights, Inc. et al. v. Schlesinger et al.*), could result in delaying or prohibiting further Army action.

Emergency Operations

No domestic situations during the past year required the use of Army troops. Emergency operations were confined to answering calls for disaster assistance and were handled exclu-

sively by Army engineers. In this regard, Corps of Engineer Districts provided disaster assistance twenty-eight times during the year. The cost amounted to \$2.3 million.

The Corps of Engineers continued its rehabilitation work in the Lower Mississippi River basin. This is a major effort to restore levees and other protective works damaged by high water in the spring of 1974 and has required the allocation of more than \$19 million in emergency funds. During March 1975, emergency flood control work was again necessary because of flooding in the Mississippi River basin, and more than \$22 million from the emergency fund was allocated for the task.

Civil Litigation

This year witnessed the first serious challenges by women to Army regulations and policies that provide different enlistment criteria for men and women. Grace Chandler, a seventeen-year-old female who dropped out of high school in the 11th grade, brought a class action suit in a U.S. District Court in California for injunctive and declaratory relief from Army enlistment policies which prescribe that only women who have attained age eighteen and are high school graduates are eligible to enlist. She alleged that this constituted unlawful sex discrimination, since males may enlist at age seventeen and need not be high school graduates. Chandler was followed by Barbara Parise and Helen Cartwright, who brought a class action suit in the U.S. District Court for the District of Columbia on 31 December 1974 attacking sex-differentiated enlistment criteria, test scores, and educational levels. Shirley Mae West then brought suit in Florida attacking the prohibition against enlisting unmarried persons with dependents under eighteen. The Army received a favorable decision from the District Court in the Chandler case and the plaintiff appealed. Before her appeal was heard, however, she joined the Marine Corps and a motion was made to dismiss the appeal for mootness.

Fiscal Year 1975 also saw the beginning of a potential series of cases arising out of Army participation in drug and biomedical research experiments. On 9 October 1974 nine prisoners in the Maryland House of Corrections brought a class action suit in the U.S. District Court, District of Maryland, against eighteen Maryland state officials and the Secretaries of Health, Education, and Welfare and Defense (*Bailey v. Mandel*). Plaintiffs claimed that even though they were ostensibly volunteers,

their services weren't truly voluntary because they were in severe financial straits and received extra pay for being in the program. Furthermore, they had not been fully advised of the physical consequences of their participation. The plaintiffs sought to halt the program and to obtain money damages for violations of their constitutional rights. The Secretary of Defense was named as a defendant because of contracts let by the Army Medical Research and Development Command involving human medical research.

There were several important developments in the area of tort litigation during the past year. A major item of legislation, HR 3954, commonly referred to as the Gonzales Bill, was introduced. The purpose of this bill was to amend the Federal Tort Claims Act to make the United States the exclusive source of relief for cases involving active duty and reserve component physicians accused of medical malpractice within the scope of their official duties. The amendment, if approved, will afford the same full immunity from personal liability now provided Veterans' Administration and Public Health Service physicians.

The U.S. Circuit Court of Appeals for the District of Columbia, in *Henderson v. Bluemink*, ruled that Army physicians performing their medical duties were not entitled to claim official immunity for alleged acts of malpractice. The decision was not appealed in order to avoid a possibly unfavorable, binding precedent from higher courts. Prior to completion of a rehearing in this case, the plaintiff died and the lawsuit was withdrawn. Several jurisdictions still recognize the doctrine of official immunity, and there have been no cases in which a military physician has been held personally liable.

The number and amounts of judgments awarded servicemen injured by defective ordnance became a cause of concern. Although these judgments were not against the United States, the contractors involved were entitled to reimbursement for both the judgment and attorney's fees under the cost-plus-fixed-fee contract under which government-owned, contractor-operated plants manufacture munitions. Servicemen win such cases without showing negligence on the part of the contractor under "the strict theory of tort liability." This strict liability is applied to anyone who manufactures or puts into "the stream of commerce" a dangerous instrumentality. In one such case (*Challoner et al. v. Day & Zimmerman*), the Army's contractor was seeking Supreme Court review of an adverse decision by the U.S. Court of Appeals for the Fifth Circuit.

Some Federal courts continued to hold that soldiers who

used their personally owned vehicle in "furtherance of their master's business," both with and without apparent authority to do so, were acting within the scope of their employment. For example, the U.S. District Court for the Eastern District of Tennessee ruled in the case of *Dodson v. Childs* that a reservist who drove his car to a Boy Scout camp, with the permission of a noncommissioned officer (who lacked authority to approve such action), was within the scope of his authority. The decision resulted in a judgment of \$46,500 against the United States under the Government Drivers Act.

In *Schlesinger v. Councilman*, the Supreme Court reversed a decision of the U.S. Court of Appeals for the Tenth Circuit. The Circuit Court had enjoined the court-martial of an Army captain who was charged with the off-post sale, transfer, and possession of marihuana. The Circuit court held the offenses were not "service-connected" under *O'Callahan v. Parker*. In reversing that decision, the Supreme Court held that the lower court's actions were an impermissible interference with the military judicial process and that whether the offenses were "service-connected" was a question for the military courts to decide. The Supreme Court further held that in the absence of extraordinary circumstances the federal courts must "refrain from intervention, by way of injunction or otherwise" in the court-martial process, and that Article 76, Uniform Code of Military Justice, did not limit collateral attacks on courts-martial solely to habeas corpus petitions.

Substantial reductions in the strength of the officer corps, reflected in part by stringent promotion policies, resulted in a class lawsuit brought by five Army captains. Plaintiffs in *Maxfield et al. v. Callaway*, all of whom had been passed over for promotion to major, challenged the authority of the Secretary of the Army to reject the recommendations of a promotion selection board and to convene a second promotion selection board, thereby enlarging the secondary zone of consideration. The case was still pending at the close of the reporting period.

In *Schick v. Reed*, the U.S. Supreme Court held that President Eisenhower's commutation of a service member's death sentence to life imprisonment without parole was within the pardoning powers under Article II, Section 2, Clause 1 of the Constitution. The court further held that its decision in *Furman v. Georgia*, which held death penalties unconstitutional, did not affect the commutation granted twelve years before.

The court specifically declined to rule on whether the *Furman* decision applied to death sentences imposed by courts-martial.

The Supreme Court will soon decide on the authority of installation commanders to control political activities on post. On April 14, 1975, the Supreme Court granted the Army's petition for certiorari in *Greer v. Spock* and agreed to review the propriety of the injunction against the commander of Fort Dix, which permitted Dr. Benjamin Spock to campaign on the post for President of the United States in the 1972 election. A lesser known issue in *Greer v. Spock* concerned the right of installation commanders to require civilians to obtain prior approval before distributing literature and pamphlets on military posts.

During the year the Army became involved in a new intelligence case, *Teague v. Alexander*, brought by the American Civil Liberties Union (ACLU) on behalf of political activists over the right of the Army to provide the Internal Revenue Service with intelligence data. An old ACLU case, *Socialists Workers Party et al. v. Attorney General of the United States et al.*, still had not been resolved. This case involved alleged mistreatment of members of the Socialist Workers Party and Young Socialist Alliance by the federal government.

Litigation arising from Army procurement activities continued unabated. The largest single type of case rose under the Renegotiation Act (50 U.S.C. App. 1191, 1211-1232): Either the Army requested the Department of Justice to collect a renegotiation debt or, more often, contractors brought suit in the Court of Claims challenging the Renegotiation Board's determination that the contractor made excessive profits.

In the area of contractor fraud, the U.S. District Court for the Northern District of Alabama ruled against the government and granted the defendant's motion for summary judgment in *United States v. Hangar One, Inc.* In this case the United States sued Hangar One for \$800,000 under the False Claims Act, alleging that the contractor had knowingly submitted a false payment claim for artillery shells when it knew that approximately 19,000 of the shells had critical defects. The contractor's main defense was that government inspectors erroneously misclassified minor defects as critical. The contractor also maintained that even if the defects were held to be critical under the terms of the inspection clauses of the contract, its conduct in submitting payment vouchers after delivery of the shells was without intent to defraud, since it was unaware that they contained critical defects. The court adopted all of Hangar One's points of contention, including the contractor's interpre-

tation of the various contract inspection clauses on critical, major, and minor defects.

Regarding environmental law, two cases decided during the past year obscure the Sixth Circuit Court of Appeal's decision in *Kentucky ex rel. Hancock v. Ruckelshaus*. In the Kentucky case, the court upheld the Army's position that federal facilities must comply with state environmental standards but not with their procedural requirements, such as obtaining licenses and permits. In *Alabama v. Seeber*, the Fifth Circuit Court ruled that federal facilities did have to comply with state and local licensing requirements. The Ninth Circuit Court, *EPA v. California*, also ruled that federal facilities must comply with such procedural requirements. The Supreme Court has granted certiorari in *Kentucky v. Ruckelshaus*.

In *Society for Animal Rights, Inc. et al. v. Schlesinger et al.*, the plaintiffs sought, as noted earlier, to enjoin the Army from proceeding with its plans to control blackbirds at Fort Campbell, Kentucky, and at Milan, Tennessee. The plan called for killing large numbers of the birds by spraying their roosts at night with Tergitol under certain climatic conditions of rain and temperature, allowing the insulating feather oil to be washed away, and causing the birds to freeze to death. The complaint was for a declaratory judgment, injunctive relief, and mandamus. The U.S. District Court for the District of Columbia denied the request for a preliminary injunction, and the Circuit Court of Appeals denied the motion on appeal. The Army's main interest in the case was to defend the adequacy of its environmental impact statement. The plaintiffs claim that the Army's statement did not comply with the National Environmental Policy Act.

One injunction action to prevent the transfer of operations of an Army Materiel Command facility in Philadelphia, Pennsylvania, to Fort Monmouth, New Jersey, was dismissed (*Local 1498 AFGE v. U.S. Army*, Eastern District of Pennsylvania). Two suits were filed in the Eastern District of Pennsylvania to prevent the closing of Frankford Arsenal in Philadelphia. One of these, *National Association of Government Employees v. Schlesinger*, included the congressional delegation from the Philadelphia area as plaintiffs. The other suit was the *City of Philadelphia v. Schlesinger*. In Alabama, the American Federation of Government Employees, in *AFGE v. Hoffmann*, obtained an injunction against the reduction in force of civilians employed at Redstone Arsenal as a result of the planned reorganization of the Ballistic Missile Defense System Command. The plaintiffs alleged, and

the judge agreed, that three contracts for services dating to 1971 violated Army regulations. The plaintiffs alleged that the jobs performed by contractor personnel decreased the number of spaces for which the released employees could compete. Finally, the realignment of functions from the Lexington-Bluegrass Army Depot was challenged on the grounds that the Army had not prepared an environmental impact statement as required by the National Environmental Policy Act (*Breckenridge et al. v. Schlesinger*, Eastern District of Kentucky).

Many suits were filed by local civilian employees in Italy. In the most significant of these, *Cali v. United States*, the plaintiff pressed claims for cost of living allowances. The lower court's decision in *Cali* was adverse to the United States but was reversed by the Court of Appeals in Florence, Italy. The plaintiff's appeal was before the Italian Supreme Court of Cassation at the end of the fiscal year. Millions of dollars in pay benefits depended on the outcome of this case.

Promotion of Rifle Practice

The National Board for the Promotion of Rifle Practice (NBPRP) was established by congressional action in 1903 and conducts its mission under authority of Title 10, U.S.C., paragraphs 4307–4313. Marksmanship training programs, as well as certain competitive marksmanship programs, are carried out by the Office of the Director of Civilian Marksmanship. Appropriated funds for the programs amounted to \$183,000 in fiscal year 1975.

With equipment and materials provided by the Secretary of the Army, the Director of Civilian Marksmanship furnished caliber .22 ammunition and appropriate targets and loaned caliber .22 rifles to 2,400 civilian rifle clubs having approximately 140,000 members, of whom approximately 80,000 are in the age group twelve through nineteen. Over 9,000 qualification medals were awarded to junior members. Additionally, some 5,000 undergraduate members of 92 college clubs participated in this rifle marksmanship program during fiscal year 1975.

The Director of Civilian Marksmanship furnished twelve sets of medals to the top ten percent of the teams firing in the National ROTC Interscholastic-Intercollegiate Smallbore Rifle Match, in which 118 teams of ten members each participated, representing high schools and colleges throughout the United States.

As in each year since 1968, the NBPRP authorized the National Rifle Association (NRA) to include four National Trophy Matches in the program of the 1974 NRA National Rifle and Pistol Championship matches fired at Camp Perry, Ohio, during August 1974. Sixty-eight teams, including thirty-one civilian teams and 1,153 individuals, participated in the National Trophy Service Rifle and Service Pistol events.

XII. Summary

Progress was evident throughout the Army during the year. A sixteen-division, all-volunteer active ground force was fast becoming a reality. The affiliation program was forging a common bond among active, reserve, and guard units and improving the ability of the reserve components to perform their responsibilities in the event of mobilization. More efficient organization and better management helped to achieve savings that were reinvested to strengthen the Army's fighting potential. Gains were made in other areas—materiel acquisition, force planning, education and training, tactics and doctrine, and readiness.

There were problems also. Congressional concern over high personnel costs threatened a number of programs that had helped retain careerists and attract new people. The mismatch of job requirements and individuals trained in specific military occupational specialties continued. Obtaining new recruits for the reserve components became a cause of concern, with the replenishment of the Individual Ready Reserve in an all-volunteer environment becoming particularly vexing. High rates of inflation made it difficult to fund operations and maintain facilities, equipment, and weapons.

These were but a few of the problems that the Army faced at the end of fiscal year 1975—the beginning of a third century of service. In solving them and in meeting international commitments and the demands of national security, the Army has two hundred years of experience to draw upon. No doubt some of that experience was reflected in General Abram's final statement on the status of the Army, which was prepared for publication shortly before his death.

We are, at root, an Army of people, not of machines nor policies nor structures. We cannot substitute organizational efficiency for human concern; they are mutually supportive, not interchangeable. Organizational efficiency and effectiveness are necessary for the Army, but human concerns are vital.

A leaner, more capable organization can make it possible for people to do their part more easily or more efficiently, but no organizational arrangement can lessen the need for strong and compassionate leadership. More precisely tailored force structures

may enable people to contribute more effectively, but in no way can improved structures diminish or supplant the need for excellence in individual skills and abilities. Sound management policies can help soldiers to do the job, but in the end it is motivation, discipline, and morale that create the spirit that makes them want to do the job better.

Concern for functions and organizations is right and proper and can help us achieve a better Army, but we should not allow these managerial concerns to obscure the fundamental strength of the Army—the people who comprise it.

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