



INSTITUTE FOR DEFENSE ANALYSES

**Army Personnel by Defense Mission
Category, FY1962-FY2000**

John R. Brinkerhoff

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PREFACE

This document partially fulfills the task entitled “Organization and Manning of the Institutional Army,” performed by the Institute for Defense Analyses for the Office of the Director, Program Analysis and Evaluation. The overall task is to define and assess the Institutional Army, including a historical survey of the Army force structure, personnel strength allocations, and funds spent on operational and support forces from the end of World War II until present day. The purpose of this report is to use the DMC categories to show how the Army’s balance between output and overhead has varied over the 39-year period since the Future Years Defense Plan was established. Other reports on this task include the following:

IDA Document D-2469, Army TOE and TDA Personnel FY1979–FY1999, August 2000

IDA Document D-2498, Army Combat Potential FY1962–FY2000, January 2001

Messrs. Daniel L. Cuda, David Drake, and Stanley A. Horowitz of IDA were the technical reviewers of this paper.

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SUMMARY

This paper examines the composition of the United States Army over the 39-year period from FY1962 to FY2000 to identify trends that might indicate a tendency on the part of the Army to maintain excessive overhead. Personnel strength data from the Future Years Defense Program for the FY2000 President's Budget for active military personnel and civilian employees of the active Army, National Guard, and Army Reserve are arrayed by Defense Mission Category (DMC). The personnel strength used for output functions is compared with personnel used for support functions to indicate the overall balance over the years between output and overhead. Personnel strengths for each three-digit Defense Mission Category are examined for trends or discontinuities that indicate whether overhead has increased out of proportion to overall resources during the period. In order to examine the Land Forces Category, it was necessary to use data at the program element or five-digit level of detail. This approach does not establish whether the Army's balance between output and overhead at any time is the best balance, but it does show trends and discontinuities that indicate how the balance between output and overhead has behaved historically.

The paper presents a detailed exposition of Army personnel utilization among operational and support functions. Two kinds of output are defined. One output is the Expeditionary Army, which consists of deployable Table of Organization and Equipment units available to the Unified Commands to conduct military operations in a theater of operations. The other output consists of the personnel and other resources that support non-Army programs, such as Defense-wide Intelligence or International Headquarters and Activities. Personnel that perform the Army's Title 10 functions specified in the Goldwater-Nichols Defense Reorganization Act of 1986 constitute the Institutional Army.

The analysis shows that the proportion of Army personnel in the Expeditionary Army in the Total Army strength has increased gradually over the past 39 years.

There is no evidence to support a hypothesis that the Army's overhead is excessive or has increased in recent years. However, this analysis is based on actual strength and does not take into account the several reorganizations and accounting changes that have occurred in the last 15 years. Nor does it identify fully Army personnel

used to support non-Army programs. To provide a basis for analyzing these matters, eight categories for subsequent, detailed investigation are identified: Land Forces Operational Support, Special Operations Forces, Supply Operations, Maintenance Operations, Personnel Acquisition, Training, Departmental and Land Forces BOS & Management Headquarters combined, and General Research and Development & Field Research & Development combined. The results of these additional investigations will be reported in a separate paper.

I. INTRODUCTION

This paper examines the composition of the United States Army over the 39-year period from FY1962 to FY2000 to identify trends that might indicate a tendency on the part of the Army to maintain excessive overhead. The approach taken in this analysis is to use personnel strength as the indicator of emphasis and array personnel strengths for each year by function and overall. The trend in the overall distribution between output and overhead indicates how the Army historically has performed in this regard. Trends for specific functional areas may indicate whether overhead has increased out of proportion to overall resources during the period. This approach does not establish whether the Army's balance between output and overhead at any time is the best balance, but it does show trends and discontinuities that indicate how the balance between output and overhead has behaved historically.

The products of this analysis are as follows:

- A detailed exposition of Army personnel utilization among operational and support functions.
- An overall measure of the balance within the Army between output and overhead as defined below.
- Identification of functional areas that warrant additional investigation in order to take into account the several reorganizations and program element changes that have occurred in the past 39 years.

A. DEFINITIONS OF OUTPUT AND OVERHEAD

In order to do this analysis, it is necessary to establish the meanings of "output" and "overhead" as it applies to the Army. For the purposes of this paper, the following definitions are applied.

The principal output of the Army is taken to be that part of the Army that contributes directly to accomplishment of Army missions by deploying to a theater of operations and engaging in combat or other military operations. This part of the Army

consists of deployable Table of Organization and Equipment (TOE) Units composed of military personnel. In an earlier paper,¹ the output of the Army was defined as the combat potential represented by the aggregate number of combat battalions (infantry, tank, reconnaissance, combat aviation, artillery, air defense, and special operations) in the force structure. In this paper, the measure used to describe the output of the Army is the total number of military personnel of all components that are assigned to all of the deployable TOE units in the Army. The output part of the Army is called the Expeditionary Army. The Expeditionary Army includes combat, combat support, combat service support, and headquarters units that comprise the army-in-the-field in a theater of operations.

Some Army resources are engaged in providing support for DoD programs that do not involve the conduct of military operations and do not contribute to the formation of the Expeditionary Army. These non-Army programs are output for the Army but are overhead for DoD.

The overhead of the Army is that part of the Army that creates, maintains, and sustains the Expeditionary Army and provides resources to support non-Army programs. This part of the Army consists mostly of non-deployable Table of Distribution and Allowance (TDA) units, although there are also some TOE units that provide central support. TDA units are composed of military personnel and civilian employees. The overhead part of the Army is called the Institutional Army.²

The balance between the Expeditionary Army and the Institutional Army as is not a perfect measure of output to overhead. The Institutional Army does not contain all of the Army's support units or personnel. Support is embedded and distributed in the army-in-the field as a basic organizational principle. There is a great deal of support within the Expeditionary Army. All Army TOE units have some support personnel, and all Army combined arms organizations (brigades, divisions, corps) have some support units. The balance between the Expeditionary Army and the Institutional Army is, however, a useful indicator of size of the base used by the Army to field and support its expeditionary forces. Although there may have been a few exchanges of support personnel between the Expeditionary Army and the Institutional Army over the past 39 years, these have been small compared with the numbers of personnel involved.

¹ John R. Brinkerhoff, *Army Combat Potential FY1962–FY2000*, IDA Document D-2498, April 2000.

² The Army uses the term “Generating Force” for what I choose to call the Institutional Army.

B. METHODOLOGY

The basic approach in this paper is to array historical time series data according to a logical functional system and compare the trends revealed therein.

The data for this analysis was obtained from the DoD comptroller as reported by the Army to the Future Years Defense Program (FYDP) for Fiscal Years 1962 through 2000.³ The FYDP is an aggregation of basic line items, called program elements (PEs). The FYDP contains three basic kinds of data: forces, manpower, and funding. The forces tables of the FYDP show the numbers of all combat units and some combat support units by unit type. These data were used in the earlier paper that arrayed Army combat potential represented by the numbers of combat battalions. The funding tables of the FYDP show by appropriation for each fiscal year the dollars allocated to each program element. The manpower tables of the FYDP show the number of military personnel and civilian employees in the Army at the end of each fiscal year.

In this paper, personnel strength is the basis for the historical time series. Personnel strengths recorded for each FYDP element at the end of each fiscal year are aggregated in accordance with Defense Mission Categories (DMC) to show the number and types of Army personnel reported for general functional areas over time.

1. Defense Mission Categories

The Defense Mission Categories (DMCs) are a way to view the Department of Defense by what are considered to be “missions” as opposed to the “programs” that are established by the FYDP. In 1973, in response to congressional guidance, DoD was required to submit an annual Defense Manpower Requirements Report (DMRR) in a format that would separate operational units from support units. The format devised by the Office of the Assistant Secretary for Systems Analysis for this purpose was named “Manpower Planning Categories.” These were a variation of the Fiscal Guidance Categories used in the 1970s to guide the development of programs and budgets. After the Fiscal Guidance Categories were discontinued, the Manpower Planning Categories continued to be used in the Planning Programming, and Budgeting System (PPBS) and the DMRR, but by 1979 they had evolved into a new system called Defense Planning and Programming Categories (DPPCs). In 1990, the Office of the Assistant Secretary of Defense for Program Analysis and Evaluation created for its own use another system,

³ Data provided by David Drake, Cost Analysis and Research Division, Institute for Defense Analyses.

Defense Mission Categories.⁴ In recent years, yet another system, Force and Infrastructure Categories (FICs), was created to facilitate intensive scrutiny of overhead activities. Each of these schemes has good and bad features, and it is apparent that no single accounting structure can suit the needs of all users of the basic FYDP information.⁵

This particular presentation of Army resources is done in accordance with the Defense Mission Categories. Table I-1 compares major force programs of the FYDP and the first- and second-level aggregations of the DMCs. Although some of the category names are the same for both languages, the contents may be different. A major difference between the FYDP and the DMC is that the Guard and Reserve program elements, which are segregated into a single major force program in the FYDP, are joined in the DMC with the active elements pursuing the same mission. Another important difference is that “overhead” elements that are allocated to the major force programs of the FYDP are aggregated into central support functions in the DMCs. The intent of each system is to identify the type and amount of overhead provided for the operating forces, and each system does this in a slightly different way. This is another reason why it is difficult to determine the “real” breakout between output and input.

Table I-1. FYDP and DMC Structures

Future Years Defense Program	Defense Mission Categories
1. Strategic Forces	1. Major Force Missions
2. General Purpose Forces	11. Strategic Forces
3. Intelligence & Communications	12. General Purpose Forces
4. Airlift and Sealift	2. Defense-wide Missions
5. Guard & Reserve	21. Intell, Comm, C2, and Information
6. Research & Development	22. General Research and Development
7. Central Supply & Maintenance	23. Other Defense -wide Missions
8. Training, Medical, & Other General Personnel Activities	3. Defense-wide Support Missions
9. Administration and Associated Activities	31. Logistics Support
10. Support to Other Nations	32. Personnel Support
11. Special Operations Forces	33. Other Defense-wide Support

⁴ The origin and evolution of these languages is presented in an excellent paper by Patricia I. Hutzler, *Defense Planning and Programming Categories: A Special Tool for Special Purposes*, Logistics Management Institute, Report FP802R1, May 1989.

⁵ For a complete listing of the DMCs and the assignment of program elements to DMCs, see Timothy J. Graves, David Drake, Pamela W. Forsyth, and James L. Wilson, *A Reference Manual for Defense Mission Categories, Infrastructure Categories, and Program Elements*, IDA Paper P-3113, June 1995.

2. Personnel Strength Data

This analysis uses personnel strength to indicate the relative emphasis that the Army places on each function. For the purpose of investigating trends in Army overhead, personnel strength is convenient and adequate as a starting point. Personnel strength is not a complete measure, for funds expended and capital equipment maintained are also measures of emphasis. These data show the numbers and types of personnel actually on hand. They have not been adjusted for transfers of missions and personnel into or out of the Army as the result of reorganizations and centralizations.

Four categories of personnel strength are used in the charts to demonstrate allocation of emphasis among the DMCs. These are:

- Active component military strength (Active)
- Army National Guard military strength (Guard)
- Army Reserve military strength (Reserve)
- Army civilian employee strength (Civilian)

Charts showing the Total Army include Active, Guard, and Reserve military strength and total civilian employee strength.⁶ National Guard and Reserve strengths are only for the Selected Reserve—including drilling reservists, full time personnel, and individual mobilization augmentees. A listing of the personnel strength by DMC is at appendix A.

3. Problems with the Data

There are two general problems with using the FYDP database for time series analysis or other work with respect to the Army, and there are specific problems with the database used for this analysis.

The most important problem in using FYDP data for analysis of the Army is that the Army does not use the FYDP structure for its internal management and decision processes. Instead, the Army uses a completely different accounting system, which is translated into FYDP elements after the decisions are made and the actual results are recorded. As with any case of converting from one language to another, something is lost

⁶ Additional detailed data are available for excursions, including officer, warrant officer, and enlisted strengths, three categories of civilians (direct hire, indirect hire, and foreign national indirect hire), and part-time and full-time Guard and Reserve military strengths.

in the translation. One important consequence of this practice is that it is difficult to determine in some cases the exact content of an FYDP program element, notwithstanding the DoD definitions.

The other systemic problem is that there have been several revisions in both the FYDP structure and the DMC structure over the past 39 years. Although there have been efforts by the DoD comptroller to adjust for these changes, the time series data may not be exactly comparable over the entire period of interest.

The FYDP version that serves as the basis for this analysis is for the FY2000 President's Budget. The data reflect actual personnel for the fiscal years up to FY1998 and programmed manpower authorizations for FY1999 and FY2000. The data for the last two fiscal years has changed as the FY2000 budget has been approved and executed.

In addition to the general problems already noted, numerous specific discontinuities in the data might have resulted from changes in accounting procedures or simply errors. In several cases, these data have been adjusted to smooth out the graphic presentation. Many of these problems occur in the last 2 years of the database (FY99 and FY00), and most of these are in the Army Reserve.

C. ORGANIZATION OF THE PAPER

The paper is organized to lead the reader gently into that complex and sometimes bewildering organization that is the United States Army.

Section II, Overview of the Army. In order to provide a basis for understanding what follows, this section is devoted to an overview of the personnel distribution of the Total Army and each component of the Army. The Army is divided into three major groups of programs: Expeditionary Army, Non-Army Missions, and Institutional Army. The Expeditionary Army is defined in specific terms. The Institutional Army is defined and explained in some detail. The concept of "non-Army missions" is explained and illustrated. Finally, the overall composition of the Army's balance between the Expeditionary Army, Defense-wide Missions (as defined by the DMC), and the Institutional Army is presented and evaluated.

Section III, Land Forces. The first order of business is to examine the Land Forces in detail to divide the wheat from the chaff. The casual reader of force structure analyses may have assumed that the General Purpose Forces, and particularly the Land Forces, would contain only Table of Organization and Equipment (TOE) units intended to deploy and fight. Such is not the case. There is in fact a significant amount of overhead

sequestered in the Land Forces. This is particularly true of the Guard and Reserve, whose overhead activities do not appear in the categories one would expect to find them.

Section IV, Strategic Forces and Other General Purpose Forces. This section examines the Strategic Forces Category and the categories in General Purpose Forces other than Land Forces. Each of these categories includes units, programs, and activities that contribute to DoD's capability to conduct military operations, both in war and in operations other than war. The other categories of the General Purpose Forces include Mobility Forces, Special Operations Forces, and a variety of smaller activities, including the Counterdrug Program. There are some overhead elements embedded in the Strategic Forces and Other General Purpose Forces categories.

Section V, Defense-wide Missions. These are the units, programs, and activities that provide to the Office of the Secretary of Defense, the Military Departments, Armed Forces, and Defense Agencies essential services that contribute indirectly to the major force missions. They include central intelligence, central communications, research and development, investigative services, and international support. These outputs may not benefit the Army per se but contribute to the overall output of DoD.

Section VI, Defense-wide Support Missions. These are infrastructure programs and activities that sustain the entire DoD. They include supply, maintenance, transportation and other logistical operations, personnel acquisition, training, medical support, personnel support, management headquarters, and a host of other minor DoD activities. However, not all of this support benefits the Army, for some sustains OSD, the Defense Agencies, and Joint Headquarters and activities.

Section VII, Comparisons and Observations. This section assesses the results of the foregoing detailed examination of the Army in an attempt to determine what it all means. The Expeditionary Army is defined and compared with the total Army strength to establish the trend in the Army's efficiency over the years. Candidates for detailed analysis are identified, and methods to consider the effects of contracting out are suggested.

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II. THE INSTITUTIONAL ARMY

This section provides an overview of the personnel distribution of the Total Army and each of the Army's components over the past 39 years. This overview is designed to provide a basis for understanding the detailed examination of personnel distribution by Defense Mission Category presented in the remainder of the paper. It also establishes a three-part breakout of the Army intended to clarify the difference between output and overhead.

A. TOTAL ARMY PERSONNEL DISTRIBUTION

Figures II-1 and II-2 show the Total Army by the four personnel categories: Active, Guard, and Reserve military personnel, and civilian employees. Figure II-1 shows the actual strengths; and figure II-2, the relative proportions of each component.

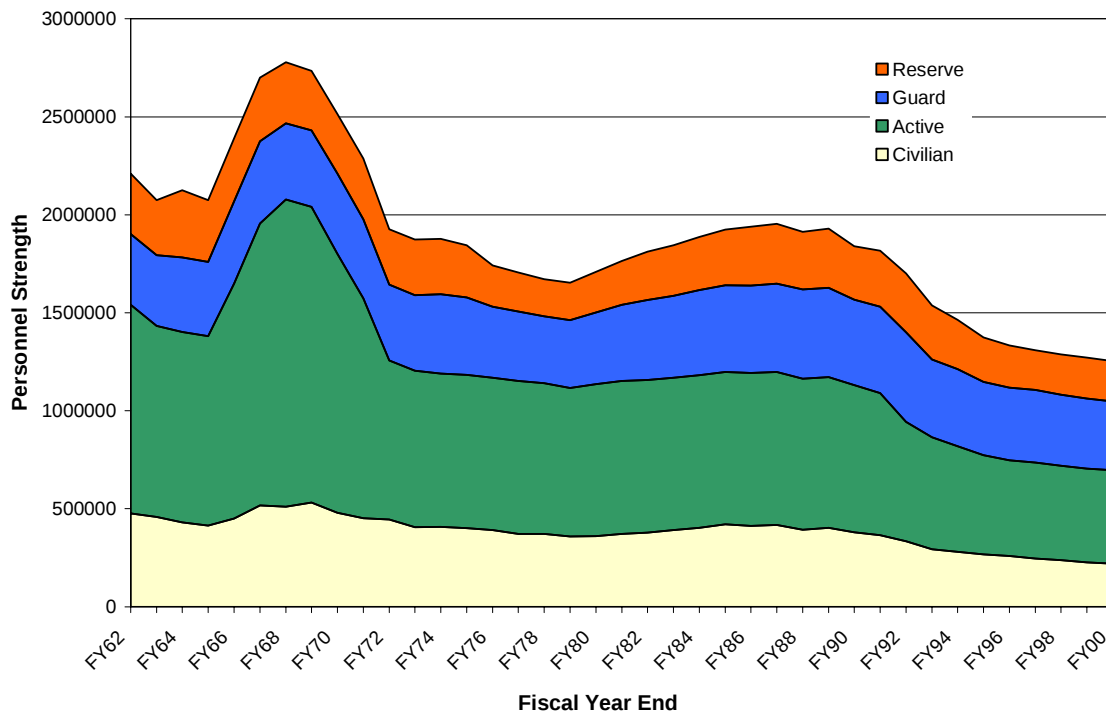


Figure II-1. Total Army Personnel Distribution

Over the past 39 years, Army personnel strength has varied from well over 2.75 million military and civilian personnel at the height of the Vietnam War to 1.25 million at the end of FY2000. There are four stages in the fluctuations of strength.

The Vietnam War Buildup (FY66–70) was a significant increase to conduct the active phase of land combat in South Vietnam. The buildup was achieved almost entirely by a massive increase in active military strength enabled by large draft calls and characterized by short initial active duty tours. Civilian strength increased modestly, and Guard and Reserve strength was unchanged from the prewar strengths.

The Post-Vietnam Drawdown (FY71–FY79) was characterized by a rapid decline in active military strength for the first 5 years as personnel strength adjusted to levels supportable by voluntary enlistments. During the second half of this drawdown, active military strength leveled off at about 750,000 personnel. Civilian strength was reduced to slightly below prewar levels. Guard and (particularly) Reserve strengths went down significantly after the end of the draft. Total Army strength bottomed out at 1,650,000 at end FY79.

The Cold War Buildup (FY80–FY89) was designed to achieve a credible capability to wage and win a global war with the Soviet Union. Total Army strength increased to 1.9 million personnel. However, the increase was achieved to a great extent by increases in Guard and Reserve Strength, which went from about 537,000 in FY79 to 759,000 at the end of FY89, an increase of over 200,000. Active military strength remained level during this buildup at just under 780,000. Civilian strength during this buildup increased modestly from 360,000 to about 400,000.

The Post-Cold War Drawdown (FY90 to FY00) commenced at the end of the Cold War and continues to this date. In this decade, Total Army strength declined from over 1.75 million to about 1.25 million personnel—a reduction of a half million people. Reductions were made in each of the personnel components, and at the end of FY2000 each is programmed to reach new lows for the entire 39-year period, except for the Army Reserve, which had its absolute low strength at end FY97.

Despite these strength fluctuations, the mix of Army personnel among the personnel components remained fairly stable, as shown in figure II-2.

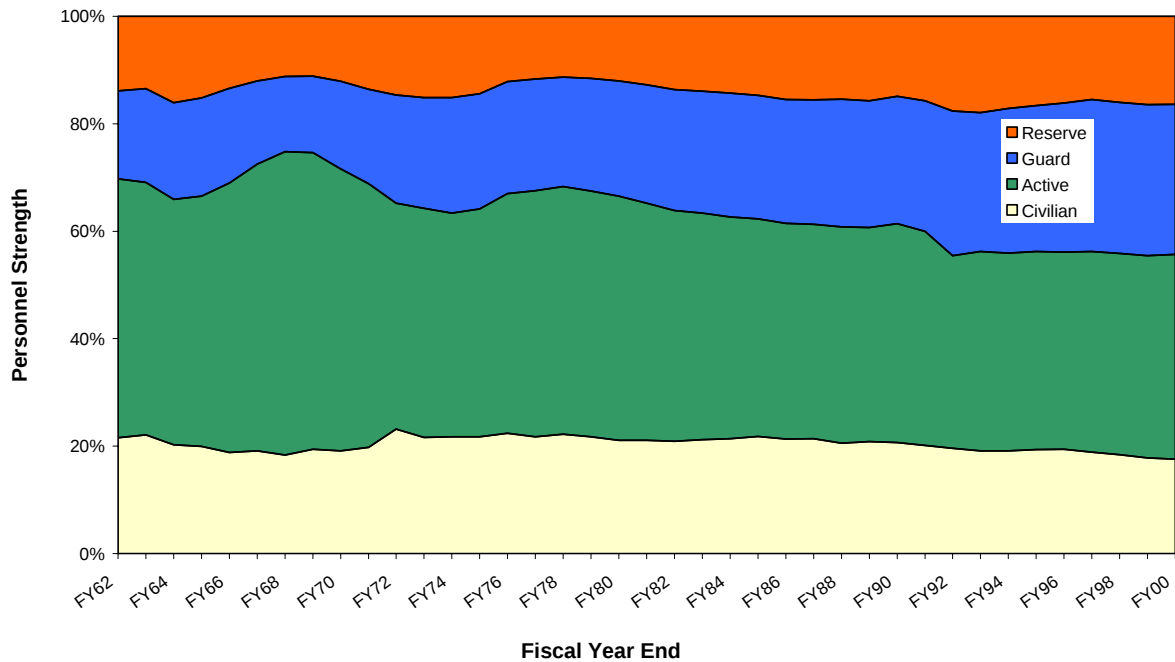


Figure II-2. Total Army Personnel Proportions

Civilian employees constituted from 18% to 22% of the Total Army, with the higher numbers at the start of the period and the smaller numbers in the last decade. This trend toward a smaller proportion of civilians may reflect the increased use of contractors to replace them. There has also been a distinct trend toward a smaller proportion of active military personnel. During the first part of the period, active military personnel comprised 45% or more of the mix (well over 50% during the Vietnam War). In the last decade of the period, the Army has had an average of about 37% active military personnel. Countering these downward trends, the proportion of the total Army staffed by Guard and Reserve personnel has increased from about 30–35% to about 45% in the last decade.

The preceding charts have shown the Total Army. In order to provide a better understanding of the personnel distribution, the next three charts will show the composition of each of the Army's three components: Active, National Guard, and Army Reserve.

Figure II-3 shows active military personnel and Active component civilian employees. For the military personnel, the massive expansion and subsequent contraction for the Vietnam War is apparent, as is the significant reduction after the end of the Cold War. The level active military strength during the Cold War Buildup is apparent. The gradual but consistent reduction in the number of civilian employees is also apparent.

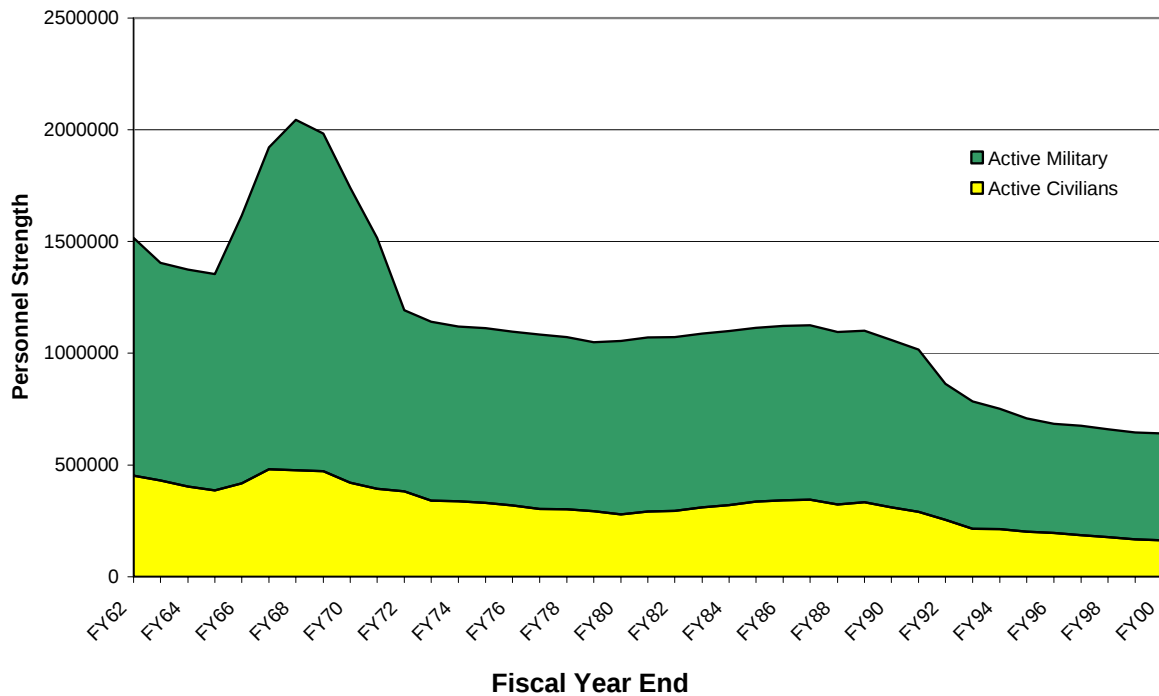


Figure II-3. Active Army Personnel

The Army National Guard and the Army Reserve are shown in figures II-4 and II-5, which delineate three kinds of personnel: part-time military personnel (traditional guardsmen or drilling reservists); full-time military personnel on Active Guard-Reserve (AGR) status, and civilian employees in support of the Guard or Reserve, respectively.

The charts show the increased role played by full-time military personnel in each of these Reserve components. Starting in 1970 as part of a program to increase the readiness of the Guard and Reserve to participate in a major conventional war in Europe, the number of full-time personnel in Guard and Reserve units and headquarters was increased significantly. For the Guard, most of the AGR personnel were in addition to existing civilian technicians who were also unit members. For the Reserve, the AGR personnel tended to replace civilian employees who were not unit members. For the end of FY00, the Guard was programmed to have 21,807 AGRs; the Reserve, 12,804 AGRs—about 6% of military strength for each component.

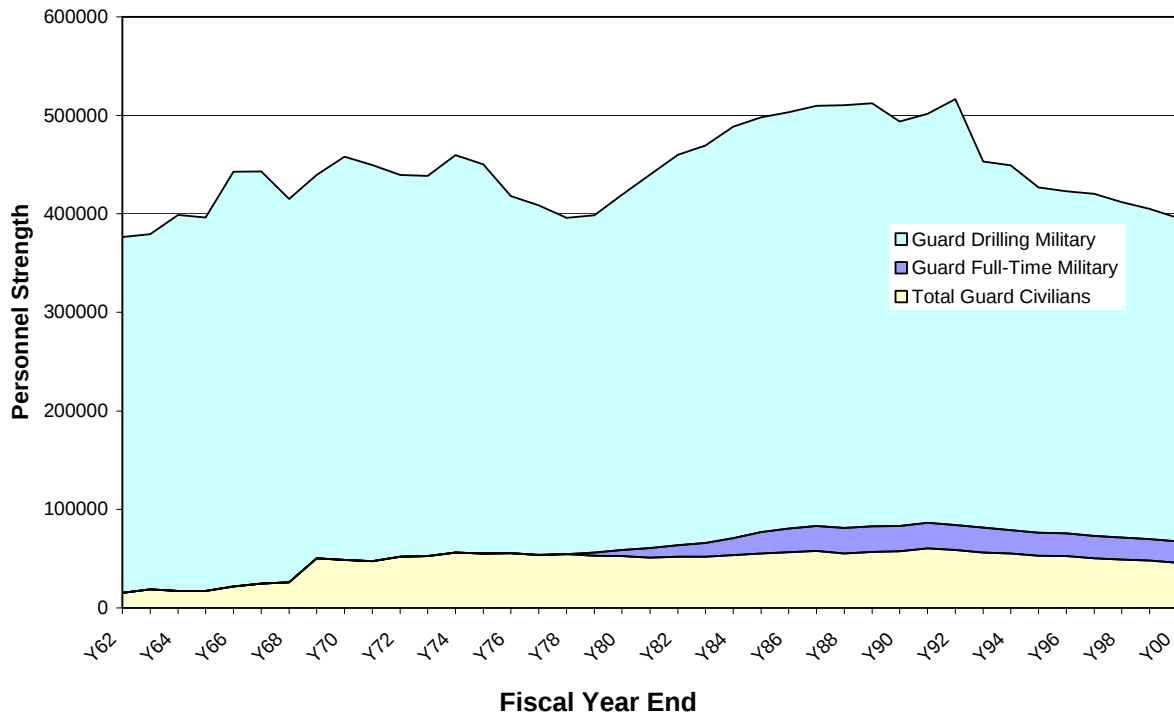


Figure II-4. Guard Personnel Composition

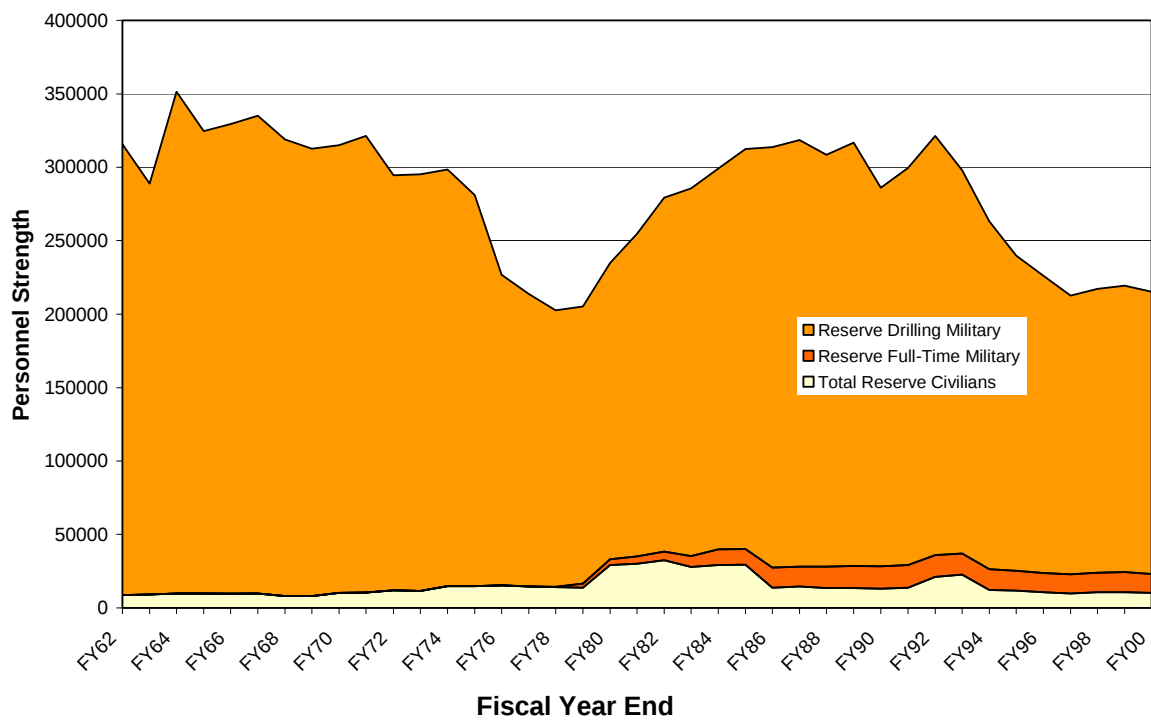


Figure II-5. Reserve Personnel Composition

B. COMPOSITION OF THE ARMY

For the purposes of this analysis, the Army is composed of three major elements: Expeditionary Army, Army Support for Non-Army Missions, and Institutional Army. In this section, each of these elements is derived and defined in terms of the DMC.

1. The Expeditionary Army

The Expeditionary Army includes all units and headquarters designed to engage in military operations in overseas theaters. The Expeditionary Army consists almost entirely of TOE units that are either forward deployed in peacetime or would be deployed to a theater of operations either from the United States or from another overseas theater. In the DMC, the Expeditionary Army is part of the General Purpose Forces of the Major Mission Forces.

The General Purpose Forces category of the DMC includes the bulk of the Army military personnel of all components. For the end of FY2000, almost 83% of the Army's military personnel were programmed for General Purpose Forces. This major mission force category is organized into subcategories as shown in table II-1. No Army personnel are included in Tactical Air Forces or Naval Forces. The Land Forces include both Army and Marine Corps units, but this paper addresses only Army units. The last three categories of General Purpose Forces—General Purpose Support, Theater Missile Defense, and Counterdrug Operations—have few Army personnel and are aggregated in this paper as Mission Support Forces. Most Army military personnel are in the Land Forces Category, and in order to have a basic understanding of the Army's composition, it is necessary to examine the Land Forces at yet another level of categorization, as also shown in table II-1.

Table II-1. Subcategories of General Purpose Forces

121 Land Forces
1211. Army Division Increment
1212. Army Non-Divisional Combat Increment
1213. Army Tactical Support Increment
1214. Marine Ground Forces
1215. Army Special Mission Forces
1216. Base Opns Spt & Management Headquarters
1217. Operational Support
1218. Army R&D Support
122. Tactical Air Forces
123. Naval Forces
124. Mobility Forces
125. Special Operations Forces
126. General Purpose Support
127. Theater Missile Defense
128. Counterdrug Operations

The Expeditionary Army comprises the DMC subcategories shown in table II-2. From FY90 to FY98, several changes were made in the program elements for Programs 2 and 52 to take into account the end of the Cold War. The pre-1990 elements shown in table II-2 reflected a threat-based posture for a global war with the Soviet Union. The post-1998 elements reflect the post-Cold War posture of a capabilities-based force. In FY93, the Special Operations Forces units (Special Forces, Civil Affairs, Psychological Operations, and Special Operations Aviation) and support were transferred from Programs 2 and 52 to Program 11 and established in a separate DMC. The post-1998 elements are an excellent way to address the composition of the Expeditionary Army.

Table II-2. The Expeditionary Army

Pre-1990 FYDP	Post-1998 FYDP
Land Forces	Land Forces
1211 Division Increment	Divisions
1212 Non-Divisional Combat Increment	Separate Combat Units
1213 Tactical Support Increment	Corps Troops
1215 Special Mission Forces	Theater Troops
	Special Operations Forces
	12510 Special Operations Units

2. Army Support of Non-Army Programs

The Army does not divide easily into the Expeditionary Army and the Institutional Army. Some Army personnel have been used for programs that are not part of the Expeditionary Army and are not involved in creating, maintaining, or sustaining the Expeditionary Army. Many of these non-Army missions are found in the DMC major category of Defense-wide Missions.

Defense-wide Missions include three major programs:

- Intelligence, Communications, C2, and Information Management
- General Research & Development
- Other Defense-wide Missions, to include geophysical sciences, international support, and security and investigative functions

For the purposes of this paper, the Defense-wide Missions category is taken to express those Army outputs that support DoD programs and are not overhead for the Army. These are discussed in section V. It is possible, however, that some support for non-Army programs is to be found also in the Defense-wide Support Missions category. It is also possible that some programs in the Defense-wide Missions category are really part of the Institutional Army. It is not possible to deal with these issues using the three-digit DMC codes, and they will be addressed in a subsequent paper at the program element level of detail.

3. The Institutional Army

The purpose of the entire project for which this paper is an interim report is to define and explain the Institutional Army. In this paper, the Institutional Army has been equated, provisionally, with the Defense-wide Support Missions category of the DMC. As we shall see, this is not exactly correct, for elements of both the Major Force Missions Category and the Defense-Wide Missions category fit properly.

The Institutional Army is that part of the Total Army that fulfills the Title 10 functions of the Department of the Army as specified in the Goldwater-Nichols Defense Reorganization Act of 1986. The role of the Army under this act is to provide trained units, trained personnel, services, and supplies to the combatant and supporting unified commands that marshal and organize joint forces and direct their operations as required to execute the National Military Strategy. The Institutional Army is the part of the Army that develops, resources, generates, projects, and sustains the Army individuals, units, services, and supplies that are provided or are intended to be provided to the operational

commands. The Institutional Army is devoted to the performance of the Title 10 functions of the Department of the Army, as follows.¹

Recruiting	Servicing
Organizing	Mobilizing
Supplying	Demobilizing
Equipping	Administering
Training	Constructing

Performing these functions involves the continuous application of 12 core processes, as follows:

- Planning and policy development
- Direction and assessment
- Acquiring, training, and sustaining people
- Identifying and developing leaders
- Developing doctrine
- Developing requirements
- Supporting organizational training
- Tailoring, mobilizing, and projecting land power
- Acquiring, maintaining, and sustaining equipment
- Maintaining and sustaining Army, Joint, and combined land operations
- Acquiring and sustaining infrastructure
- Operating installations

The core processes are applied to the Title 10 Functions to support the expeditionary forces destined for the joint operational commands and other Defense-wide missions.

In general, the Army personnel in the Defense-wide Support Missions category engage in these activities and may be taken as a first approximation of the Institutional Army.

¹ The source for this description is Department of the Army Pamphlet 100-1, Force XXI Institutional Army Redesign, Draft, 5 March 1998. This pamphlet refers to “the Operational Force” and the “Institutional Force.” In paraphrasing parts of this document, I have changed the term from “Institutional Force” to “Institutional Army.”

C. ARMY PERSONNEL DISTRIBUTION BY MAJOR CATEGORIES

The next two charts show the composition of the Total Army personnel in the three major categories of the DMC: Major Force Missions, Defense-wide Missions, and Defense-wide Support Missions. Figure II-6 shows the number of personnel in each major category, and figure II-7 shows the proportion of total strength in each category.

Figure II-6 shows the increases and decreases in total strength over the past 39 years. For the Vietnam War, the number of personnel in Defense-wide Support Mission category increased about the same amount as total strength. This was due to the large numbers of trainees and transients necessary to support a policy of 1-year rotation in the theater and 2-year initial enlistments.

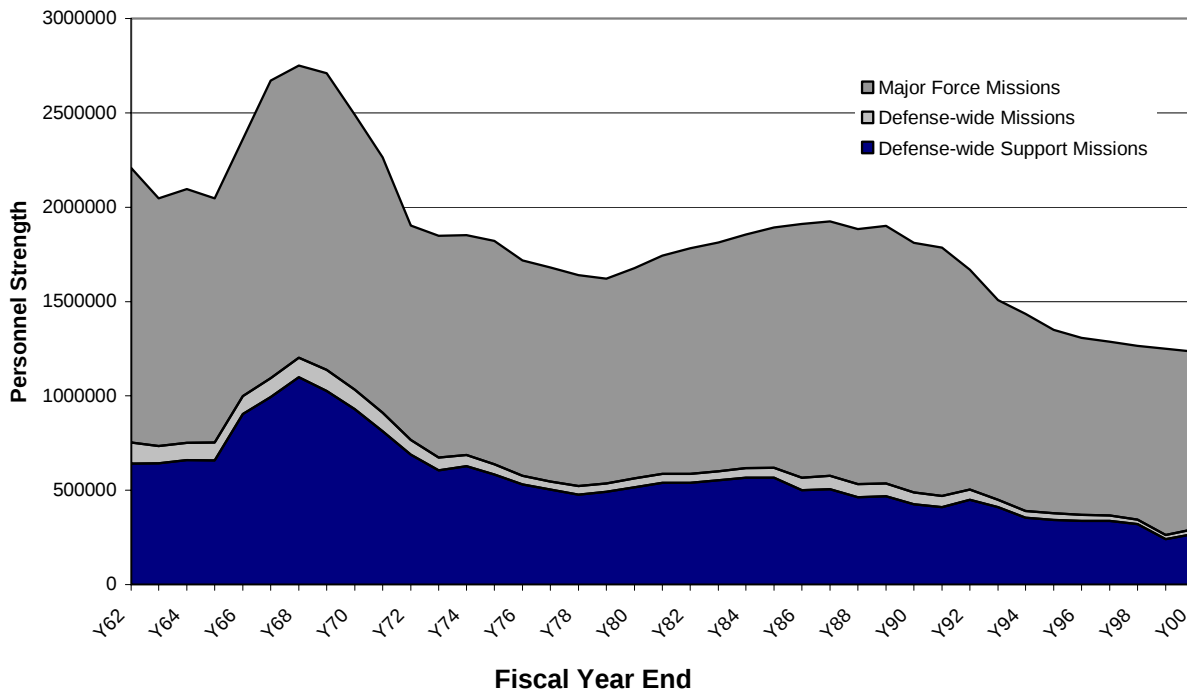


Figure II-6. Total Army by Major Mission Category

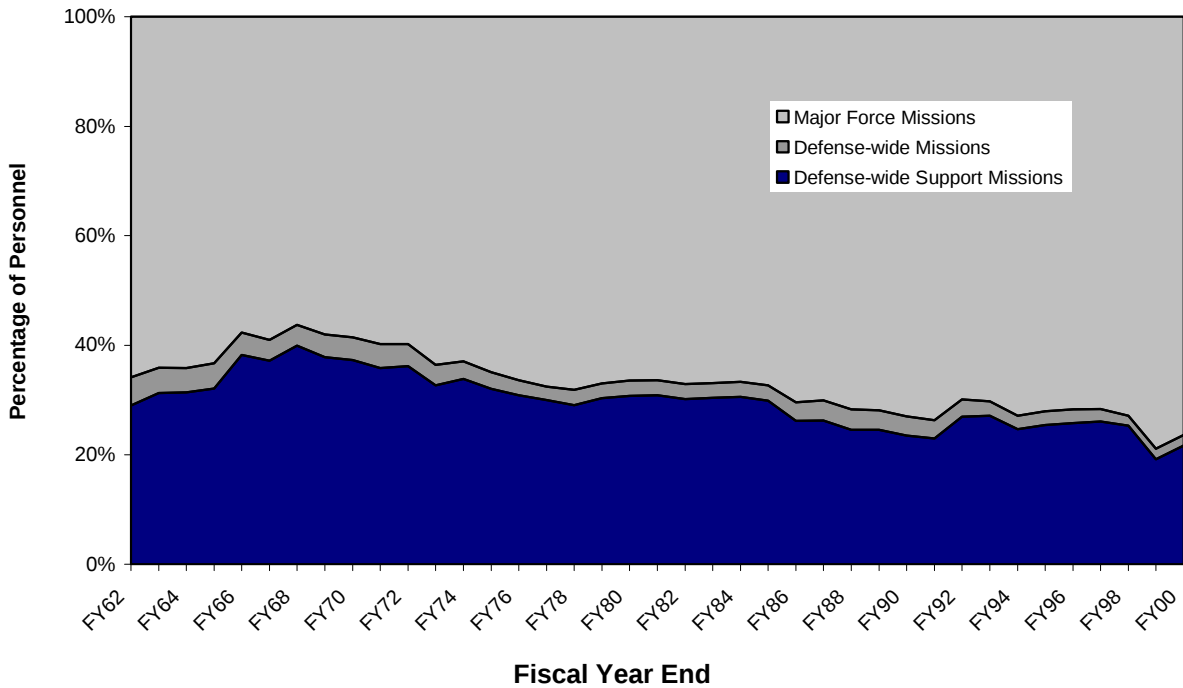


Figure II-7. Total Army Personnel Proportions by Major Mission Category

When the Army's personnel distribution is normalized to show the percentages of personnel in each major mission category, it is apparent that the proportion of total Army personnel devoted to support has decreased from a high point during the Vietnam War. The proportion of Army personnel engaged in Defense-wide Missions ranges from 2% to 5% and averages about 3%. In the in 1960s, the Army devoted 4% to 5% to this category. Over the last decade of the period, this figure is about 2%. The proportion of Army personnel in Defense-wide Support Missions was over 30% in the first two decades of the period, but it has been about 20% in the final decade. The apparent trend to have more personnel in the Major Force Missions category is deceptive and needs to be clarified by a close examination of the Land Forces.

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III. LAND FORCES

This section examines the Land Forces category of the Major Force Missions to distinguish that part of the Land Forces that contributes to the conduct of land warfare in an overseas theater (the Expeditionary Army) from the part that is really overhead and part of the Institutional Army.

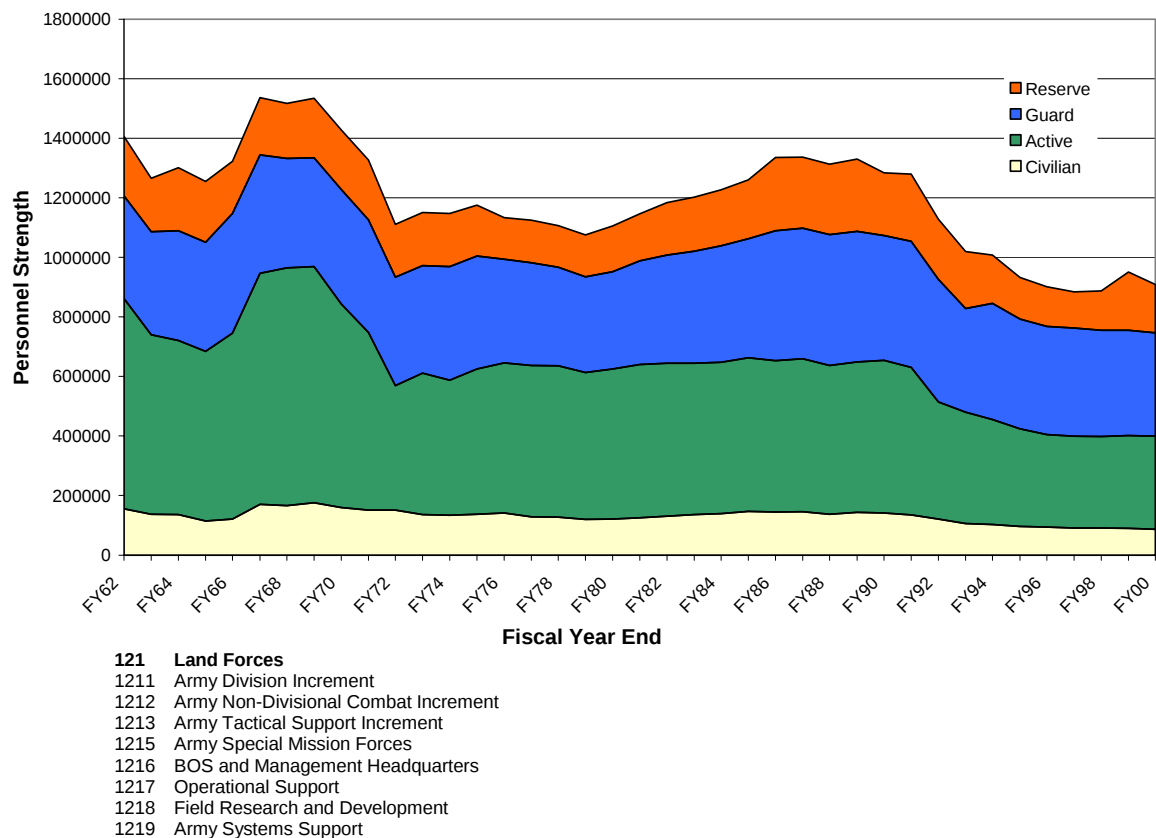
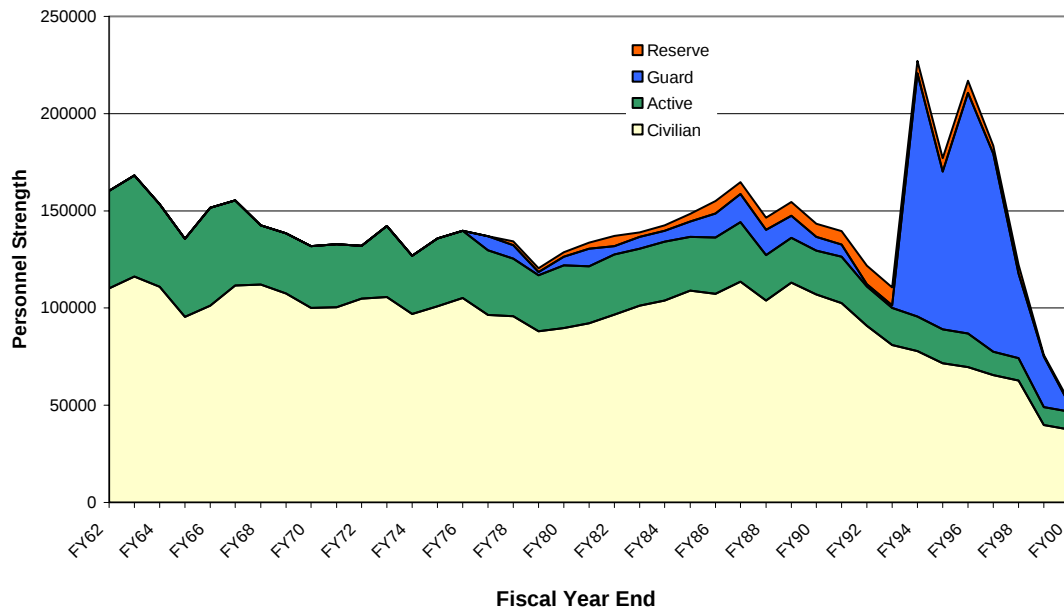


Figure III-1. Army Land Forces

Figure III-1 shows the Land Forces category of the General Purpose Forces by component.¹ As discussed in the Introduction, considerable overhead is embedded in the Land Forces category. In fact, almost the entire overhead of the Army National Guard and most of the overhead for the Army Reserve is in the Land Forces. The first four

¹ The DMC codes and contents of the categories are listed with the charts in this section and all succeeding sections.

categories are really operational categories and are the major part of the Expeditionary Army. The last three categories are overhead and part of the Institutional Army. The next step is to examine each of the overhead categories of the Land Forces, aggregate them, and then calculate the Expeditionary Army by combining the residual personnel of the Land Forces with the Special Operations Forces.



1216 BOS and Management Headquarters

Figure III-2. Land Forces BOS and Management Headquarters

Figure III-2 shows that the Land Forces category includes a significant number of civilians and military personnel to operate the bases and staff the management headquarters in support of the deployable forces.

Since FY89 this overhead category has decreased significantly for active military and civilian personnel. This apparent reduction in overhead may be an actual reduction resulting from increased efficiency or from reassignment of base operations (BOS) work formerly done by military personnel or civilian employees to contractors. This is an area that will be addressed in detail.

Another area for investigation is the sudden increase in FY94 of Guard personnel devoted to BOS and management headquarters in the Land Forces. The sudden increase in this category is likely the result of an accounting change intended to reduce the number of Guard personnel allocated to more obvious overhead accounts. Also, the massive decrease following the massive increase suggests either another accounting device or a large amount of outsourcing.

Figure III-3 shows the Operational Support Category. Army Reserve personnel strength in this category has remained about the same for the last 39 years, except for a massive increase shown for FY00. Civilians allocated to this category increased starting in FY98 from about 3,000 to about 15,000. Additional work needs to determine the nature of this category and why the Reserve does a lot of it and the Guard does none of it.

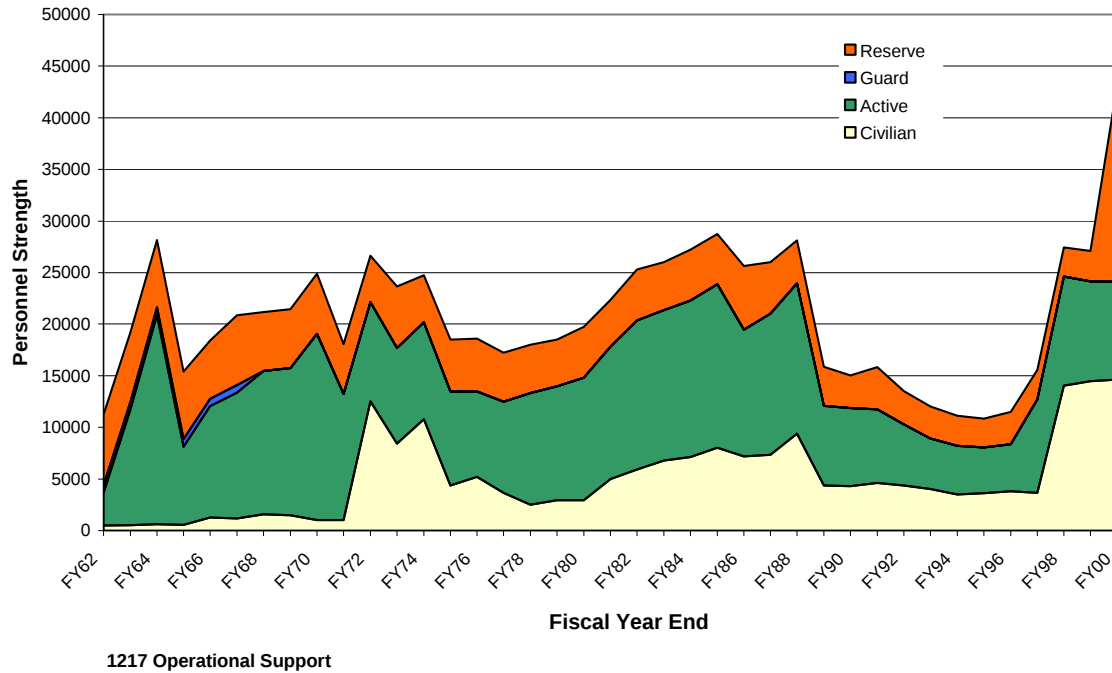
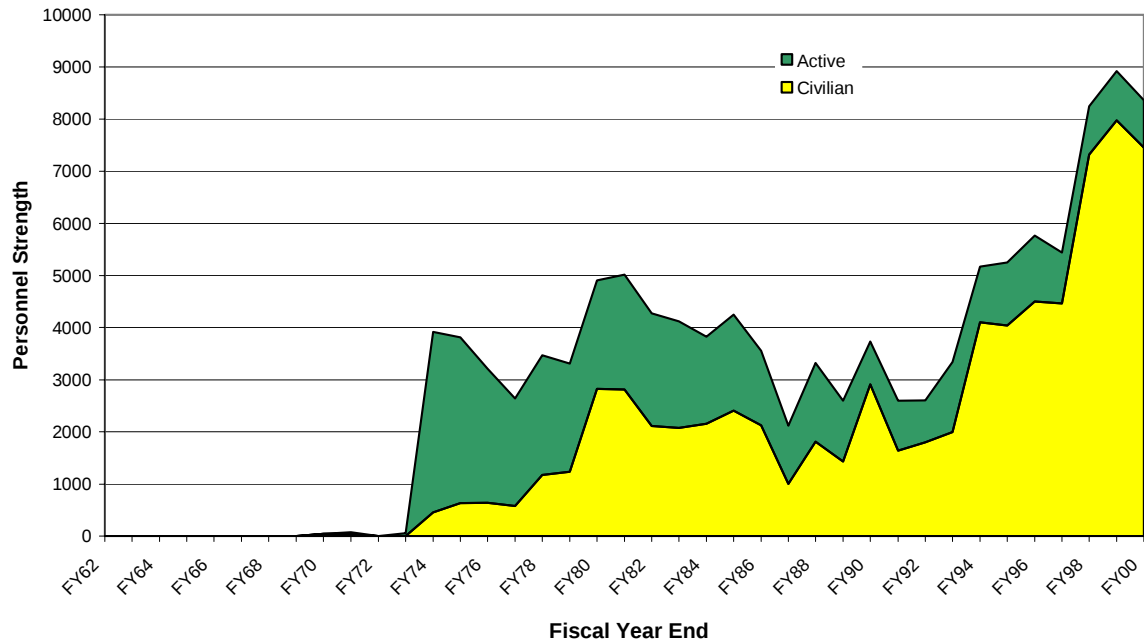


Figure III-3. Land Forces Operational Support

Figure III-4 shows that starting in FY1974 a significant number of personnel have been allocated to Land Forces to perform research and development in direct support of the combat forces. Over the years, this category has changed from one in which military personnel dominated to one staffed almost entirely by civilians.



1218 Field Research and Development

Figure III-4. Land Forces Research and Development

Figure III-5 shows that a significant part of the Land Forces is overhead rather than output. Over the past 39 years, about 200,000 personnel in the Land Forces category have been devoted to support activities. There was a large increase in support in FY94 and a substantial decrease in FY99 and FY00.

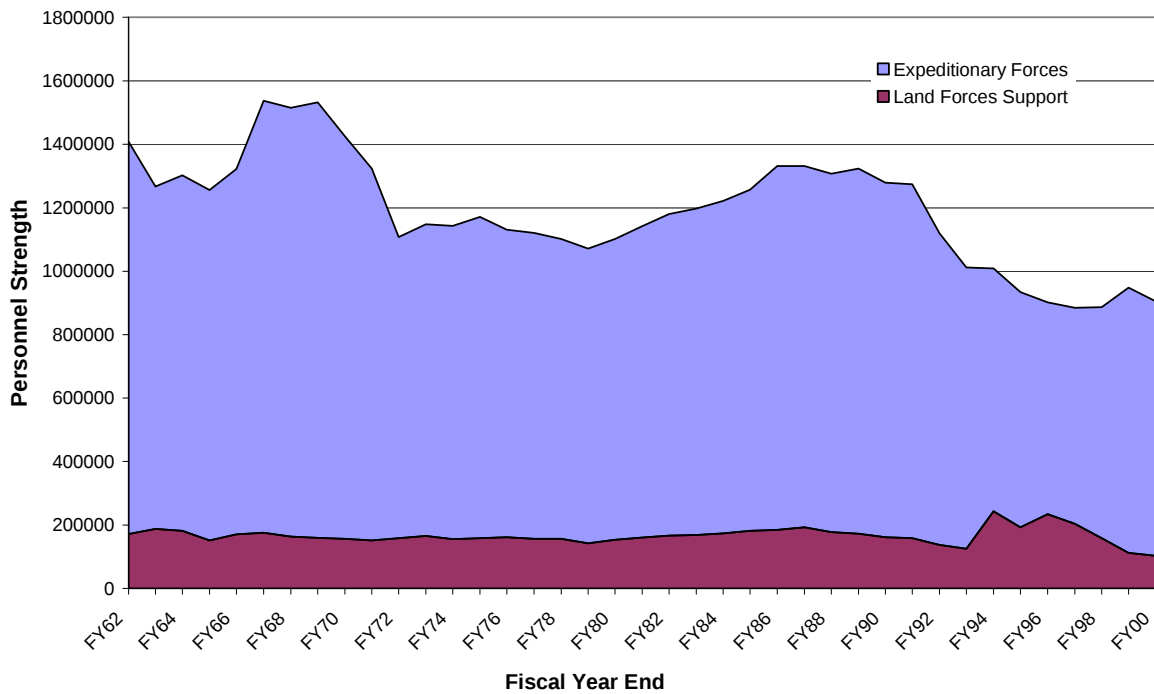
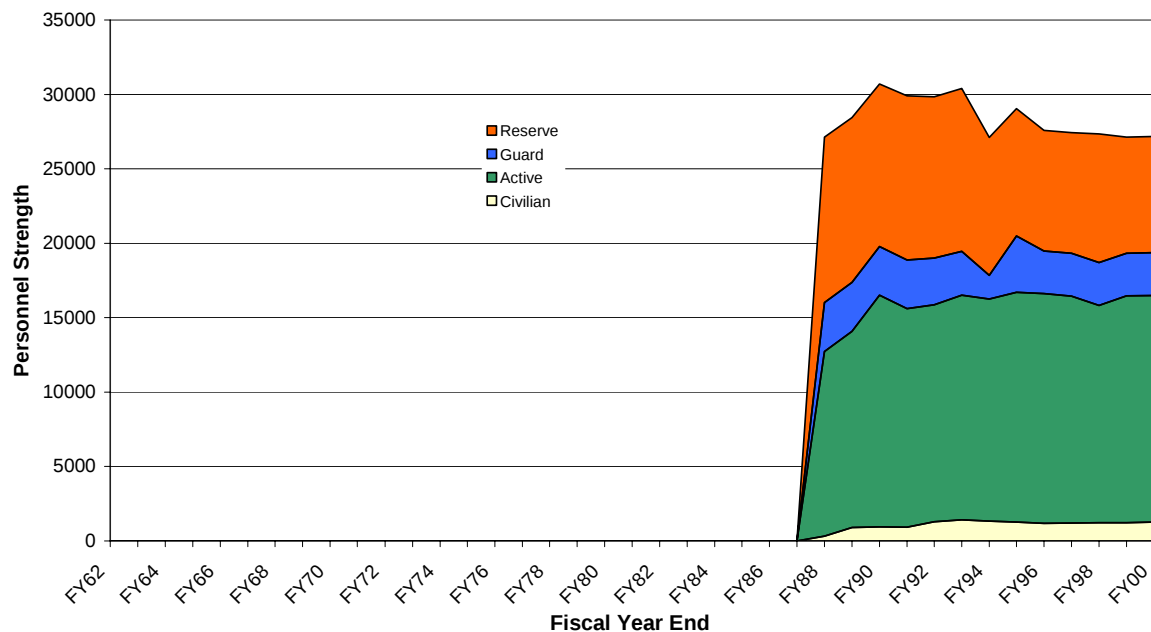


Figure III-5. Army Land Forces Composition

Prior to FY88, Army Special Operations Forces were included in Land Forces with no program visibility. In FY88 the U.S. Special Operations Command was established and Program 11 of the FYDP was created for all Special Operations Forces. At that time, the Army units and activities listed in figure III-6 were transferred into this DMC category. As the listing shows, this category includes not only the combat units and activities, shown in italics, but also many overhead and support activities. It is not possible at this level of detail to break out the output part of Army SOF from the overhead part. Pending clarification at a lower level of detail, it is assumed that 1,500 civilians and 2,000 active military personnel are overhead instead of output. This category, less 3,500 personnel, is added to the first four categories of Land Forces to define the Expeditionary Army.



125 Special Operations Forces

Ongoing Operational Activities

Psychological Operations Units

Civil Affairs Units

Special Forces Activities

SOF Aviation Activities

SOF Ranger Activities

SOF Training

SOF Aircrew Training

JCS Directed and Coordinated Exercises

USSOCOM

SOF Language Training

SOF Base Operations and Support

SOF Minor Construction and RPMA

USAF Special Warfare Training Center

Force Related Training

Deployment Exercises

SOF Operational Enhancements

Special Ops Technology Development

Special Tactical Systems Development

SOF Intelligence Systems Development

SOF Medical Technology Development

Support to SOF

Support to SOFCOM

Note: Italics indicate combat units and activities.

Figure III-6. Army Special Operations Forces

Figure 7 shows the Expeditionary Army, which consists of the Expeditionary Forces part of the Land Forces and the assumed combat part of the Special Operations Forces.

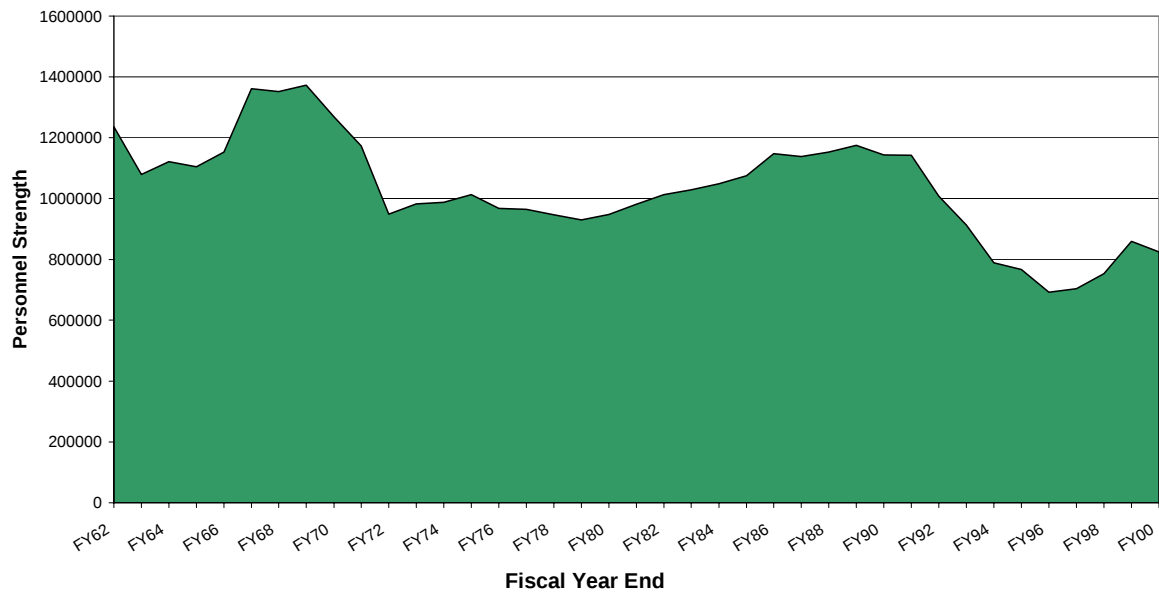
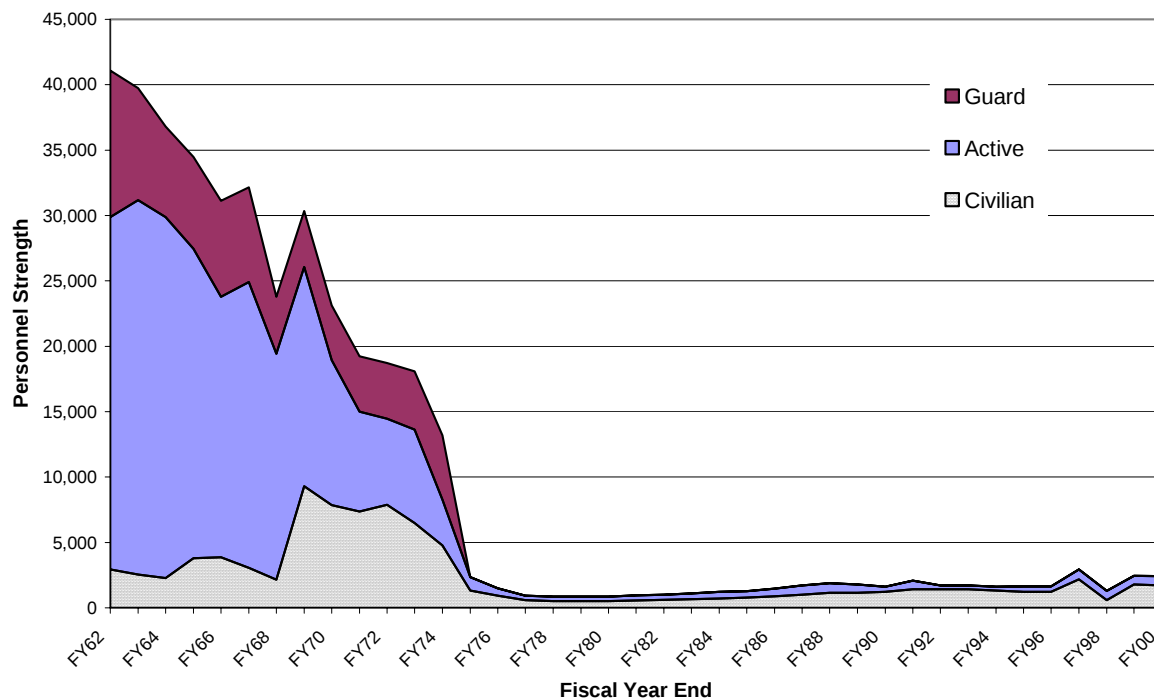


Figure III-7. Expeditionary Army

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IV. STRATEGIC FORCES AND OTHER GENERAL PURPOSE FORCES

This section discusses the personnel distribution for the Strategic Forces and each of the subcategories of General Purpose Forces other than the Land Forces. Figure IV-1 shows Army participation in the Strategic Forces, which are provided mostly by the Air Force and Navy. At the start of this period, the Army had considerable Active component and Guard personnel providing surface-to-air missile defense of the United States against an attack by enemy aircraft. These missile units were disbanded in the late 1970s. Since then, the Army's participation has been small and limited to representation on the staffs of joint headquarters and activities charged with operating DoD's strategic force programs. Transfers and outsourcing do not affect this category

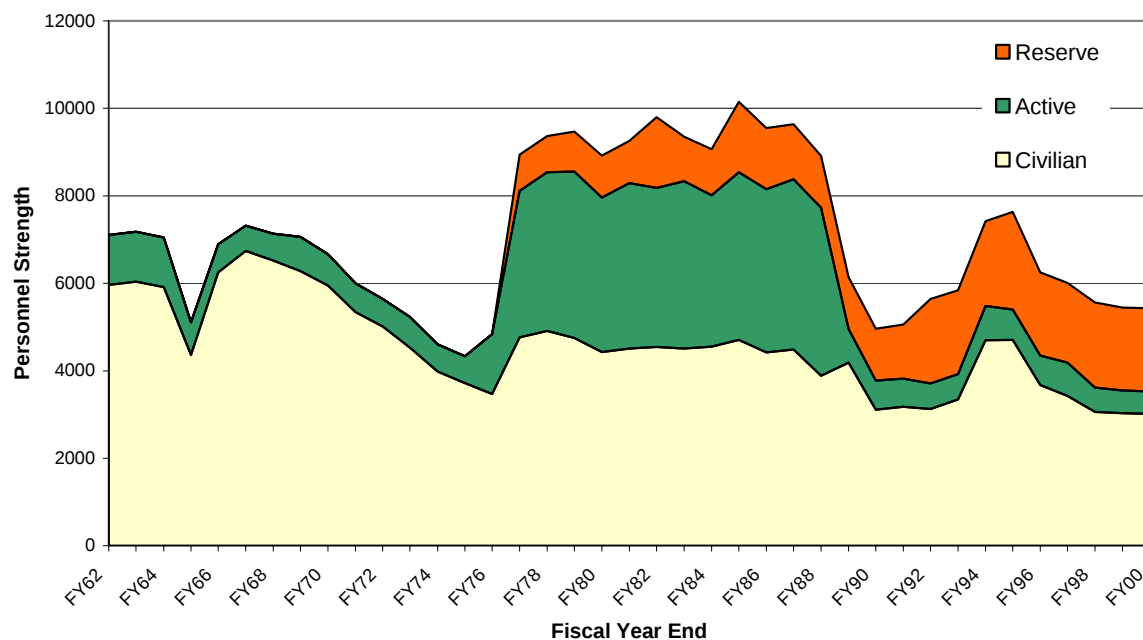


- 111 Strategic Offensive Forces**
Operation of Kwajalein Atoll
- 112 Strategic Defensive Forces**
Anti-Satellite Weapon Program
Support to SDIO
NORAD Headquarters
US Space Command Headquarters

- US Army Space Command Headquarters
SAFEGUARD Program (H)
NIKE Units (H)
- 113 Strategic C3**
ANCC and CINC airborne command posts
NMCS and MEECN
Special Programs

Figure IV-1. Army Strategic Forces

From FY62 through FY76, the Army's contribution to Mobility Forces consisted of several thousand civilians and about 600 active military personnel involved in traffic management in CONUS (figure IV-2). Starting in FY77 there was increased emphasis on deployment capability. Active military personnel increased to a level of around 3,000 to provide units to operate ports and assist in deployment of combat forces. The Army Reserve was assigned a major mission in providing additional transportation terminal units and other port operating and management capability. In FY89, active military personnel assigned to mobility forces were reduced to about 600; the Army Reserve level was maintained. The Army Reserve strength for FY1999 and FY2000 has been adjusted arbitrarily to show a straight-line program. The Army's Military Traffic Management Command has become an element of the U.S. Transportation Command.



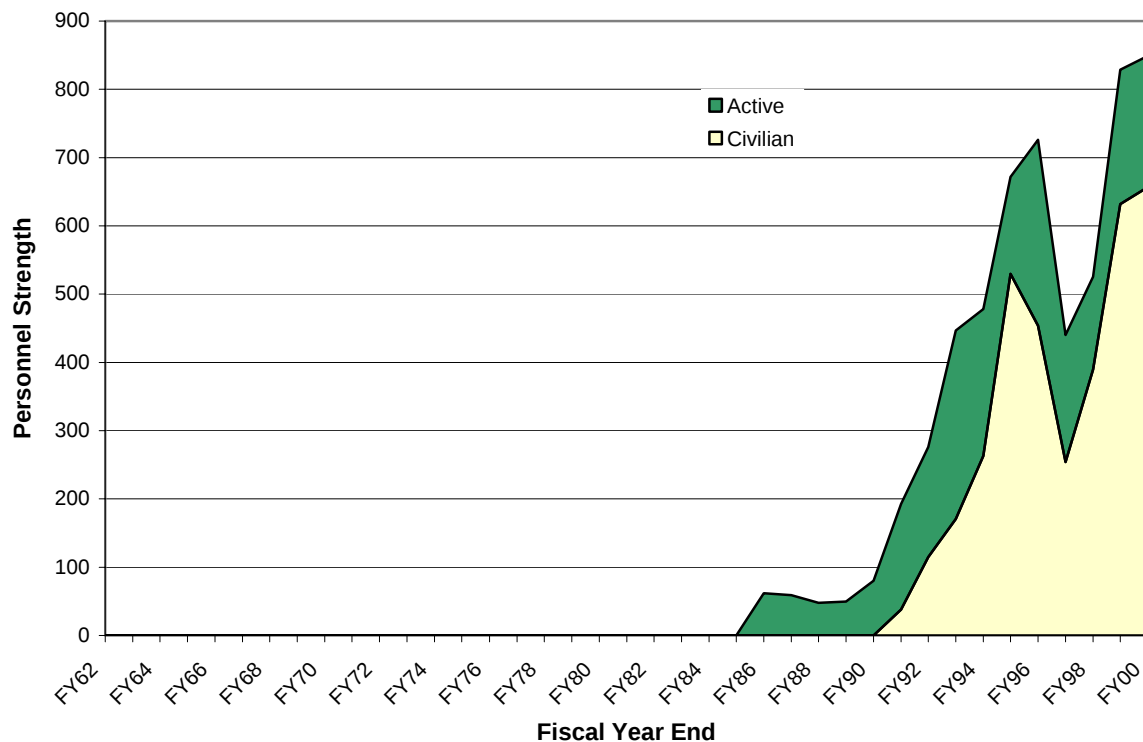
124 Mobility Forces
 Joint Deployment Agency
 Port Terminal Operations
 Army Strategic Mobility Program
 POMCUS
 Defense Freight Railway Interchange (IF)
 Traffic Management Headquarters
 USTRANSCOM Headquarters

Figure IV-2. Army Mobility Forces

Figure IV-3 depicts the composition of the Other Mission Forces category of the Army. This provisional category includes the three DMC categories shown. Personnel were allocated to these programs starting in FY91 in response to the new mission of counterdrug support, increased emphasis on chemical and biological defense, and the goal of Army participation in theater missile defense. For FY00, the total personnel allotted

these categories was as follows: General Purpose Support, 74 active military; Theater Missile Defense, 59 active military; Counterdrug Support, 875 personnel (118 military, 657 civilians).

With the exception of the Special Operations Forces category (which contains embedded overhead) the Major Force Missions other than Land Forces are straightforward. Each category contributes to the accomplishment of DoD and Joint missions that help the Army indirectly (as in deployment). They do not, however, constitute Army overhead and are not part of the Institutional Army.



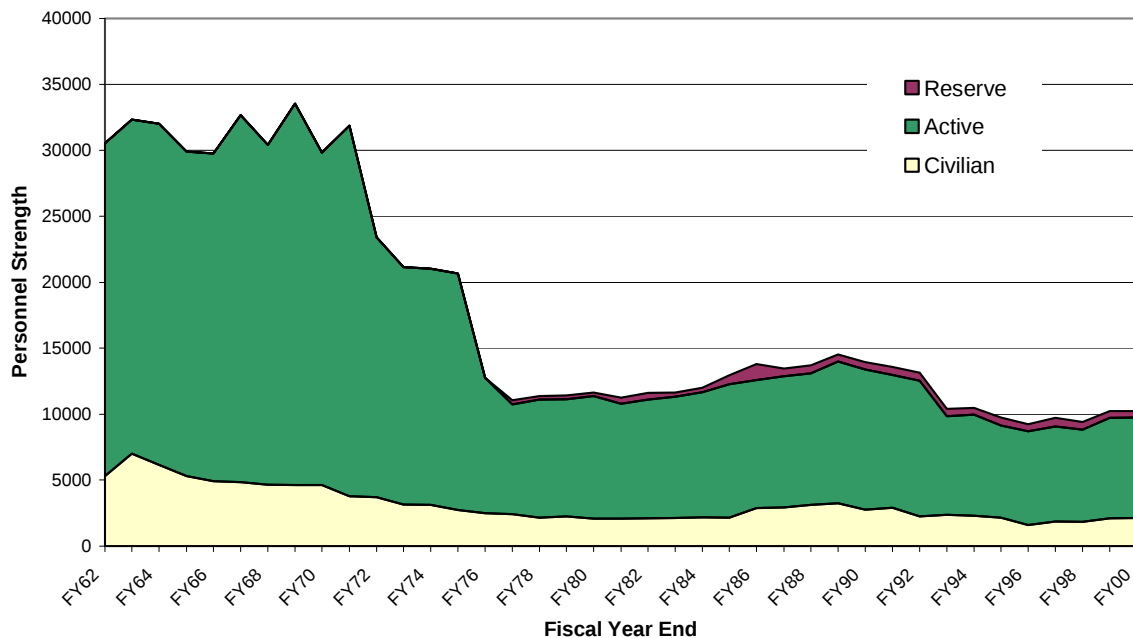
- 126 General Purpose Support**
 - Support to Joint Tactical C3 Agency
 - Chemical and Biological Defense Program
- 127 Theater Missile Defense**
 - Joint Tactical Missile Defense Program
- 128 Counterdrug Support**
 - Counterdrug OPTEMPO
 - Communications Support to ODD Counternarcotics Program
 - Counterdrug RDT&E Projects
 - Counterdrug Demand Reduction Activities
 - Support to CINC Counternarcotics Programs
 - Counterdrug Support

Figure IV-3. Army Other Mission Forces

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V. DOD-WIDE MISSIONS

This section presents the categories that support all of DoD. Some of these categories provide output. Others constitute support, either for the Army (as part of the Institutional Army) or for other elements of DoD. Figure V-1 depicts Army units, activities, and personnel supporting the National Foreign Intelligence Program, the General Defense Intelligence Programs, and other DoD-wide intelligence programs. Starting in FY75 the number of active military personnel in the Intelligence category decreased significantly. From that point the effort was consistent with about 10,000 military personnel and 2,500 civilians until FY93, when additional reductions resulted in a level of about 7,500 active military personnel and about 2,000 civilians. The Army Reserve makes a small contribution to this category.



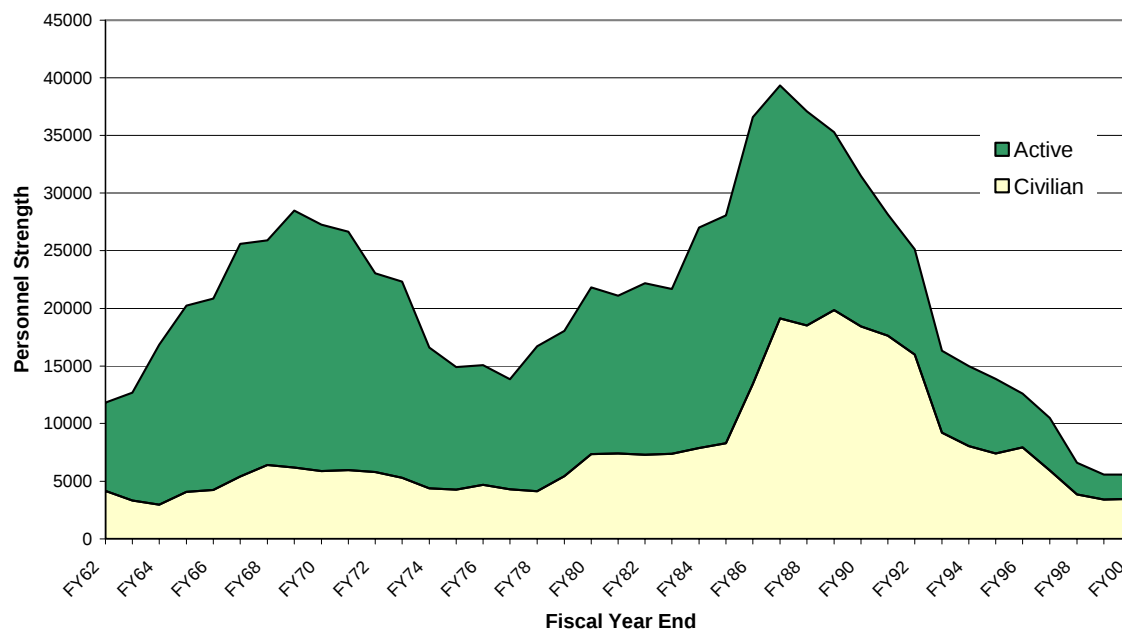
211 DoD-wide Intelligence

Cryptologic Activities
 Cryptologic Communications
 RMPW Cryptologic
 Cryptologic Management Headquarters
 Cryptologic Base Operations
 Consolidated Cryptologic Program
 Army Intelligence Agencies
 Armed Forces Medical Intelligence Center
 HUMINT
 Technical Reconnaissance and Surveillance
 General Defense Intelligence Program (GDIP)
 GDIP Activities, EUCOM, PACOM, REDCOM,
 LANTCOM

SOCOM GDIP Activities
 GDOP Management Headquarters
 Special Activities
 Foreign Counterintelligence Activities
 Foreign Counterintelligence Headquarters
 Special Support to CIOP
 Defense Airborne Reconnaissance Program
 Tactical Surveillance System
 Support to DIA, NSA, DSPO/ARSP, NDA Tac
 Cryptology Program
 Intelligence Support Activities

Figure V-1. DoD-wide Intelligence

Figure V-2 shows Army personnel involved in operation, support, and development of DoD-wide communications systems. Starting in FY78 there was a significant buildup of communications personnel for Cold War operations that culminated in FY86. Thereafter, there was a precipitous decrease in Army personnel in this category. Starting in FY98, the number of personnel in this category stabilized at the lowest levels in the entire 39-year period. This category merits detailed examination to determine the extent to which this decrease is the result of increased efficiency, transfers to the Defense Information Systems Agency, and outsourcing.



212 (Defense-Wide) Communications

Tactical Air Traffic Control
Strategic Army Communications System
Alaska Communications System
Long-Haul Communications (DCS)
Defense Message System
Inter-Service/Agency Auto Message Processing
Exchange
Information Systems Security Program
EUCOM C3 System
Visual Information Activities
Tactical Support-Maintenance of Tactical
Equipment
Communications Security
National Science Center for Comm and Electronics
Environmental Compliance

RPMA Minor Construction Communications
Base Operations Communications
Communications Headquarters
Support to DISA
Support to DISA Industrial Fund
SATCOM Ground Environment
WMCCS
WIS Headquarters
WMCCS Information System (WIS)
Information Management
Centrally Managed Sustaining Base
Service Acquisition Executive Chartered Program
Auto Acquisition Management and Support
Info System Selection Acquisition Activities

Figure V-2. Army DoD-wide Communications

Figure V-3 shows personnel for General Research and Development (Category 22) and Nuclear Weapons Support (Category 233). These include a wide variety of research and development projects, some of which are listed in figure V-3. All or part of the recent decrease in the number of personnel assigned to this category may be due to the redefinition of budget activities that occurred in FY93, when R&D Budget Activity 07 was included in Field Research & Development, Category 1218.

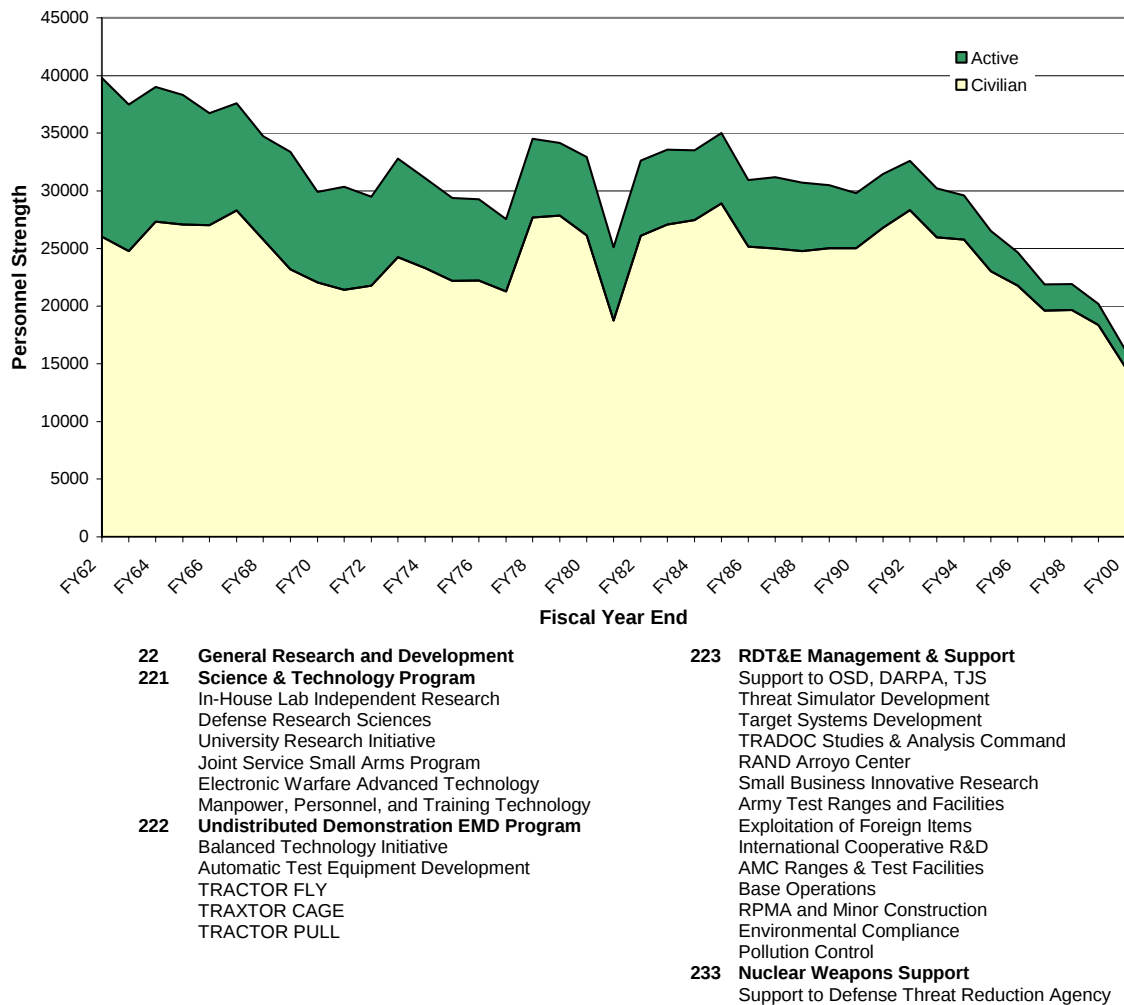
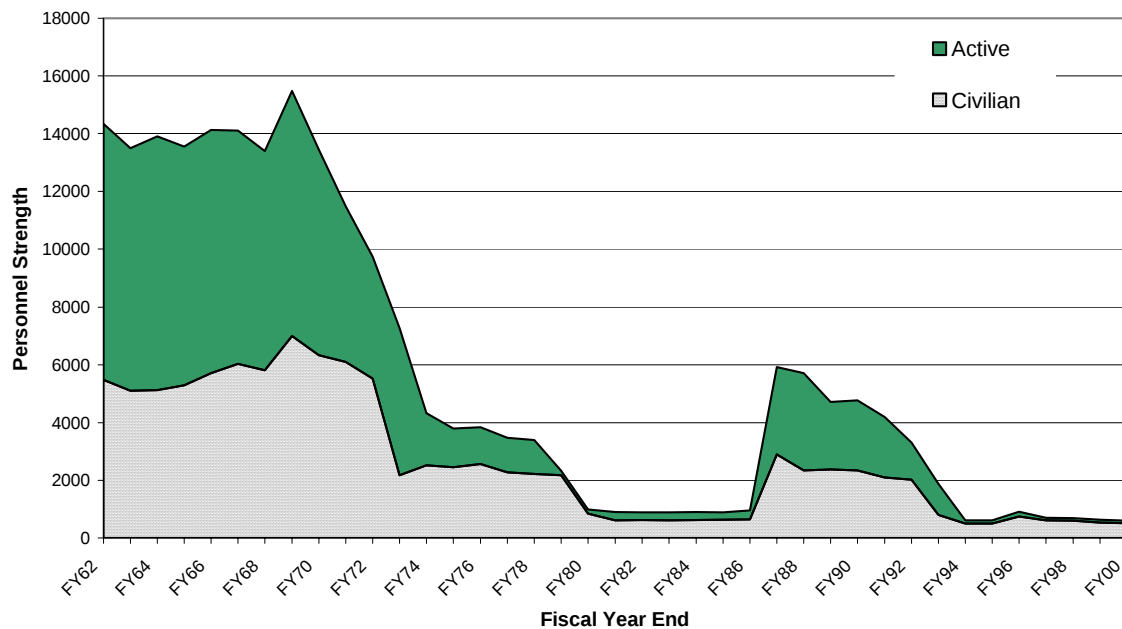


Figure V-3. Army General Research and Development

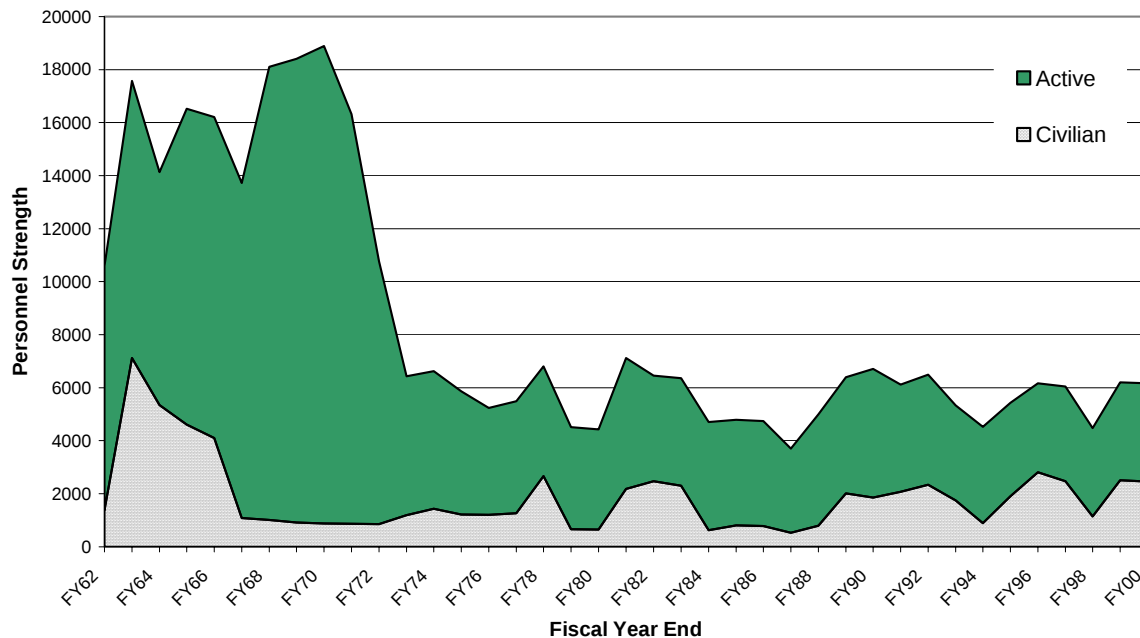
At the beginning of the 39-year period of interest, the Army devoted 14,000 personnel to mapping, charting, and geodesy—as it was known in those days (figure V-4). The number of personnel in this function decreased significantly after the Vietnam War and resurged during the Cold War buildup. The rapid reduction after FY90 most likely reflects the transfer of this function to the Defense Mapping Agency (now the National Imagery and Mapping Agency—NIMA). Currently the Army’s personnel in this category provide Army representation in Joint development projects and some personnel for NIMA.



- 231 **Geophysical Sciences**
 NAVSTAR Global Positioning System
 Support to DIMA
 Terrain Information Development
 Integrated Meteorological Support System
 Positioning Systems Development
 RPMA
 Base Communications

Figure V-4. Army Geophysical Activities

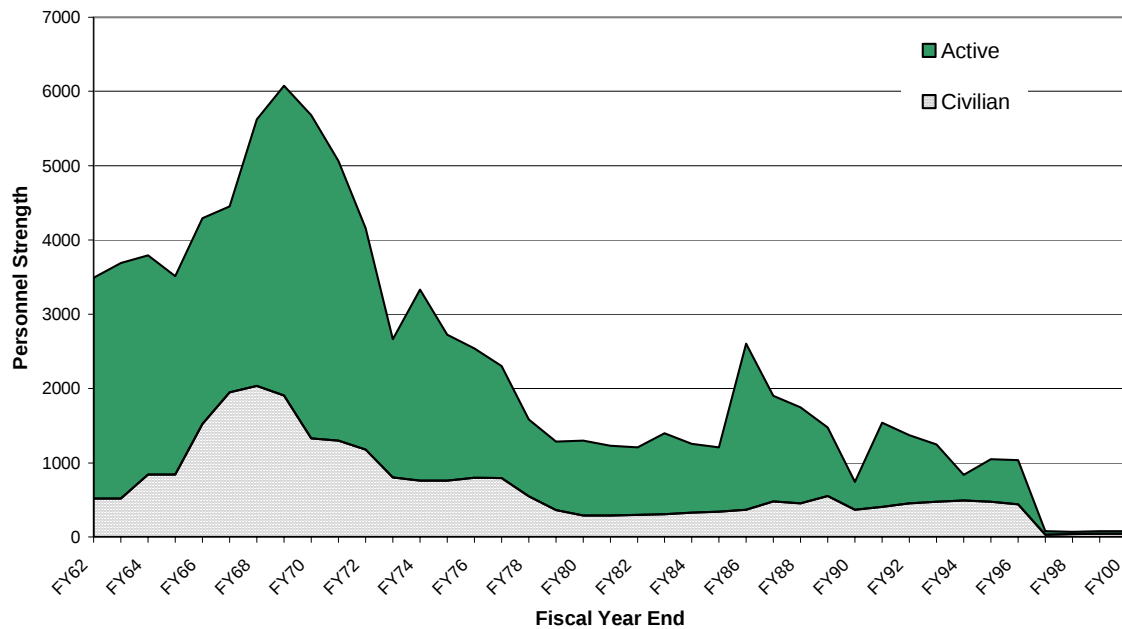
Figure V-5 shows Army personnel used to provide support for a variety of international activities. The erratic ups and downs of the strengths in this category may reflect changes in high-level and congressional support for these programs. Overall, the number of active military personnel and civilian employees in this category has remained fairly stable. The National Guard plays an important role in the Partnership for Peace program, but it does so only on a temporary basis and is included in the category for its primary mission.



234 **International Support**
 Arms Control Implementation
 Support to OSIA
 Support to DSSA
 Support to Other Nations
 Technology Security Functions
 Foreign Military Sales Support
 Support for Foreign Military Financing
 Partnership for Peace Activities
 On-Site Inspection Agency

Figure V-5. Army International Support

The Army started the 39-year period of interest with several thousand personnel devoted to the Security and Investigative Functions category (figure V-6). The steady decline after the end of the Vietnam War was due in part to a decline in workload and possibly transfers of the responsibility to OSD. Following a modest strength increase for the Cold War buildup, the number of personnel was reduced to about 50, and the function was transferred in its entirety to the Defense Security Service in FY97.



235 Security & Investigative Functions
 Security/Investigative Activities
 SSIA Headquarters

Figure V-6. Army Security and Investigative Functions

Figure V-7 shows the aggregate Army personnel in the six subcategories of the Defense-wide Missions Category. The number of Army personnel in this major missions category peaked for the Vietnam War, declined in the post-Vietnam retrenchment, resurged (but not to the same levels) for the Cold War buildup, and then declined to a new low after the end of the Cold War. The post-Cold War reductions include a mix of actual reductions, transfers to Defense Agencies, and outsourcing. Three of the subcategories (Intelligence, Communications, and International Support) provide support outside the Army and are not really part of the Institutional Army. The other three subcategories (Research and Development, Geophysical Activities, and Security and Investigative Services) are part of the Institutional Army. The Research and Development category could benefit from additional analysis to determine whether the overall level of effort has declined.

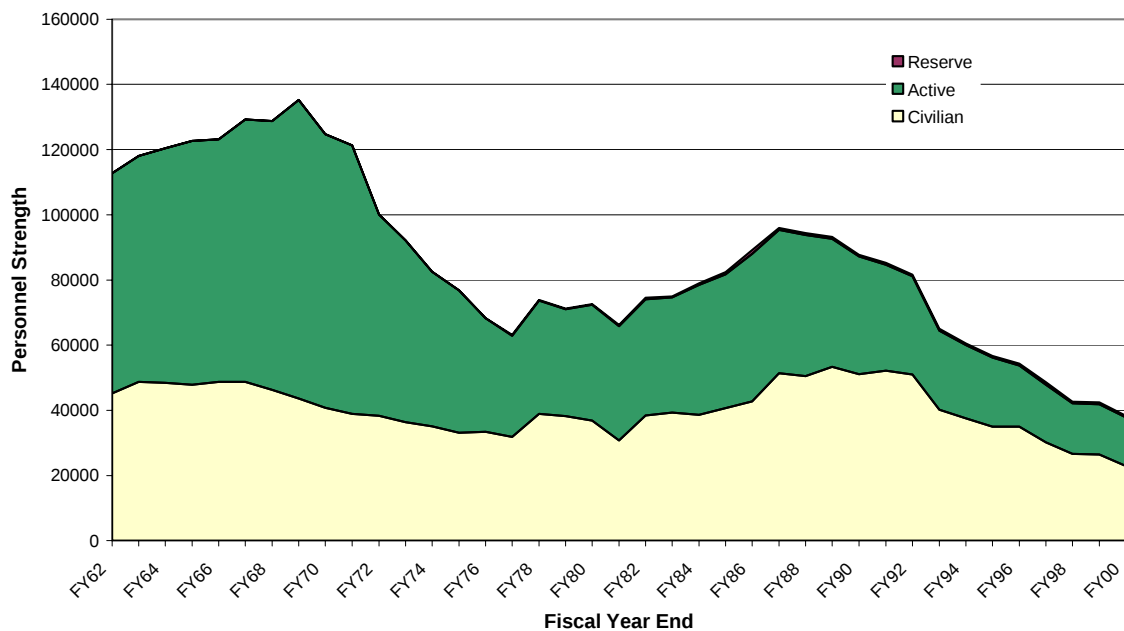


Figure V-7. Army Defense-wide Missions

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VI. DEFENSE-WIDE SUPPORT

This section presents the allocation of Army personnel in the seven Defense Mission Categories that provide Defense-wide support. It also presents the numbers of individuals (non-unit personnel) recorded in the FYDP over the past 39 years. Except for personnel assigned to non-DoD agencies or non-Army activities within DoD, these categories constitute the bulk of the Institutional Army.

As shown in figure VI-1, supply operations are accomplished primarily by civilian employees with a small number of active military personnel to manage the enterprise and represent the military viewpoint. This category has declined in strength over the past 39 years, except for a noticeable expansion during the Cold War buildup. Since the end of the Cold War, the number of Army personnel in this category has declined a great deal, largely because of the centralization of wholesale supply activities into the Defense Logistics Agency, Defense Commissary Agency, Defense Contract Management Command, and the General Services Administration. It is also possible that some of this work has been outsourced. This category needs additional analysis to determine the effects on total Army overhead of the reduction in this part of the Institutional Army.

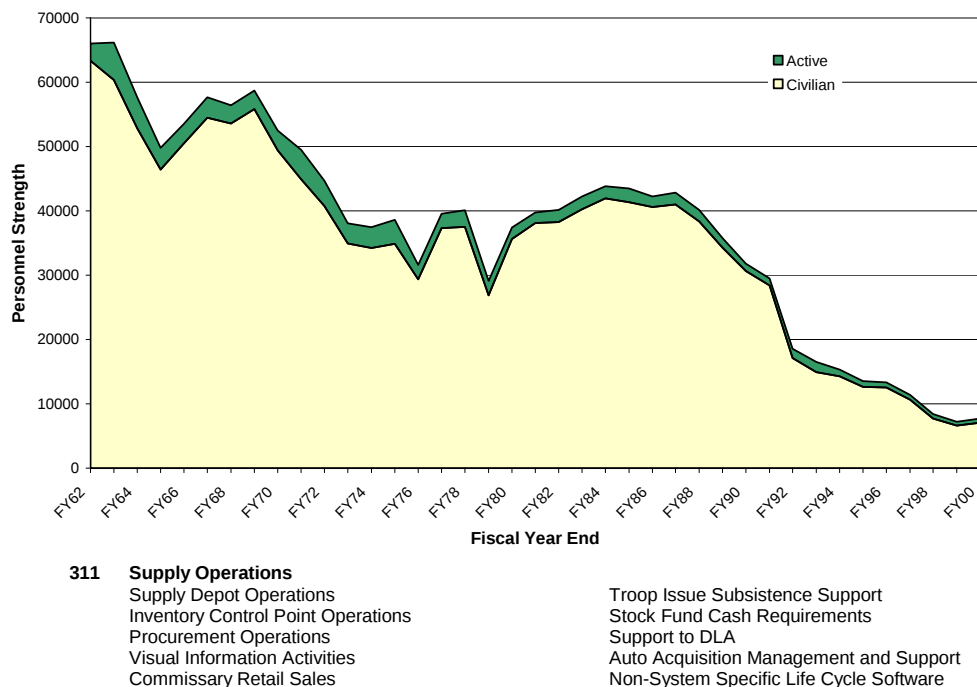
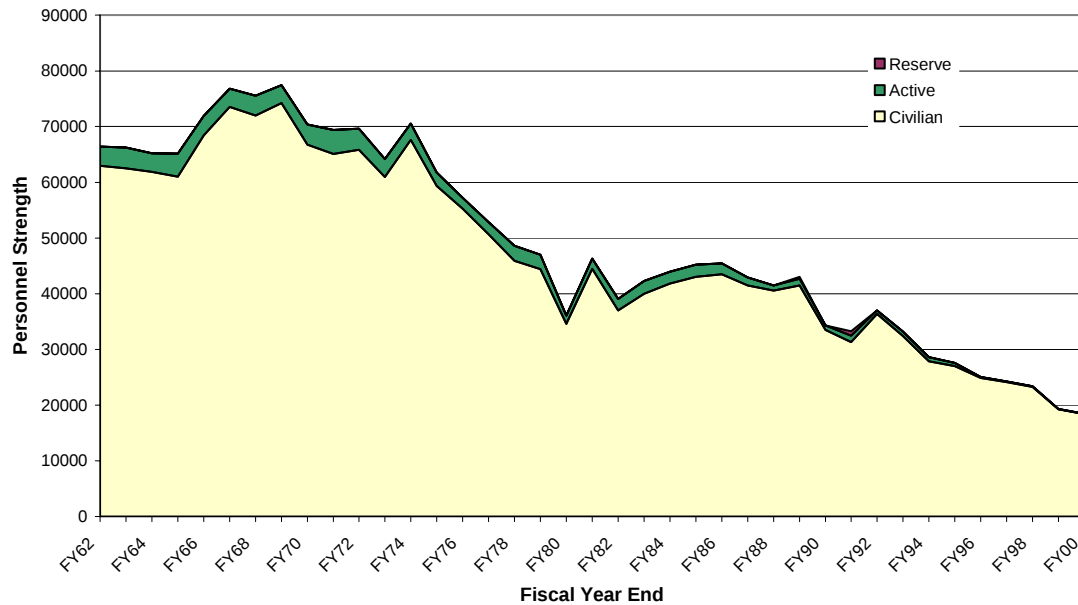


Figure VI-1. Army Supply Operations

Figure VI-2 shows that the Maintenance Operations Category also declined over the 39-year period, with a small but noticeable increase for the Cold War buildup. The post-Vietnam reduction was most likely a real reduction in output capability. The post-Cold War reduction is most likely due to a significant increase in outsourcing for maintenance services. As with supply operations, maintenance operations are accomplished by civilian employees, with a small number of military personnel for management purposes.



312 Maintenance Operations
 Depot Maintenance
 Missile Facilities
 Maintenance Support Activities
 Information Management Automation
 Maintenance Activities

Figure VI-2. Army Maintenance Operations

The Other Logistics Support category includes a variety of logistical activities, excluding supply operations and maintenance operations but including the operation of logistical facilities and support of the largely civilian work force. After a significant increase for the Cold War buildup, there was a modest reduction as shown in Figure VI-3. However, the number of personnel in this category has remained about the same for the past 5 years.

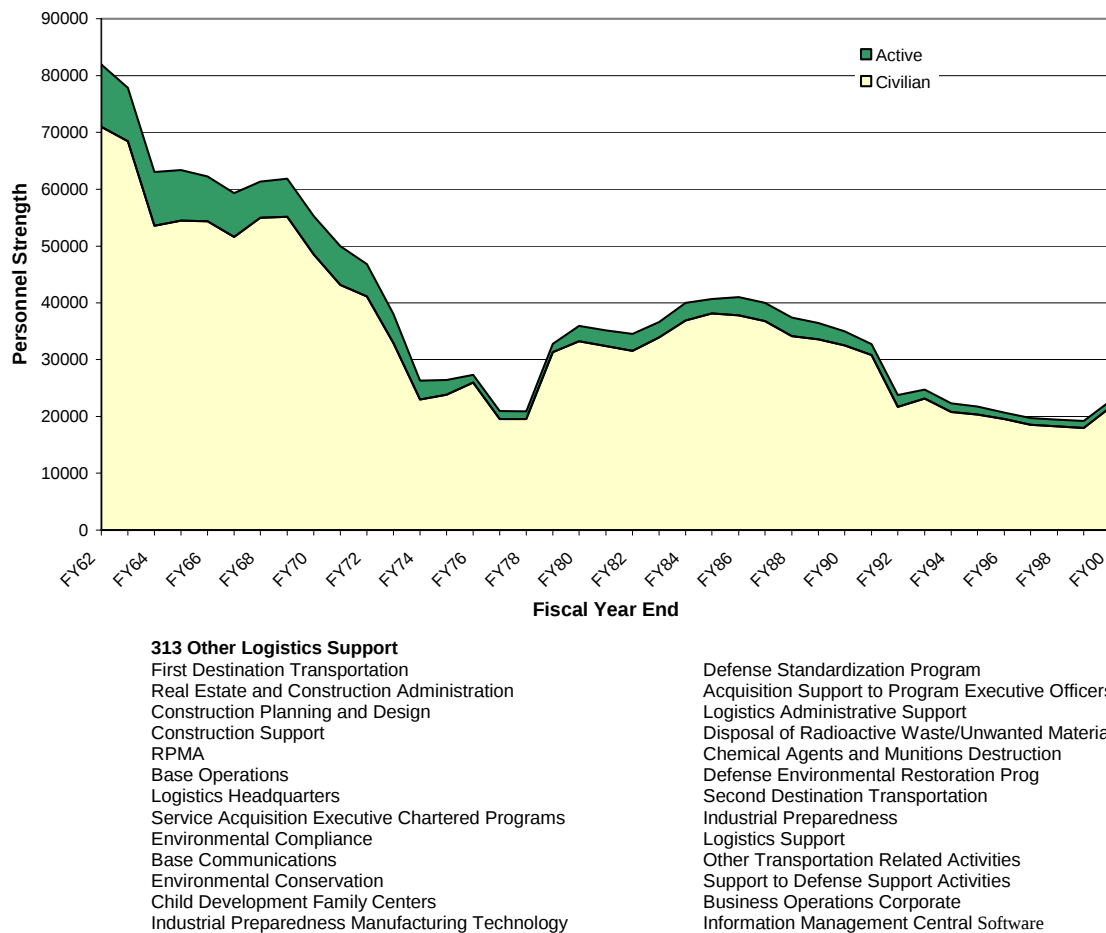


Figure VI-3. Army Other Logistics Support

The three logistical categories—supply, maintenance, and other logistics support—constitute that part of the Institutional Army responsible for the procurement, storage, distribution, maintenance, and disposal of materiel.

The Personnel Acquisition category includes those activities devoted to recruiting and processing new enlisted personnel and officers (figure VI-4). It includes both pre-commissioning programs for officers and it includes personnel involved in operating facilities engaged in these activities. Most of the people engaged in this work are military personnel—primarily recruiters. The appearance of large numbers of Guard and Reserve personnel (all of whom are full-time) indicates a major change in the way that recruiting was carried out for the Reserve component. Prior to FY79, recruiting was done by part-time personnel in Guard and Reserve units. In FY80, both of these components started using full-time recruiting specialists to sustain their strength in an all-volunteer force. These strength levels have remained stable in the past 20 years, with slight fluctuations in accordance with the perceived difficulty of attaining recruiting goals.

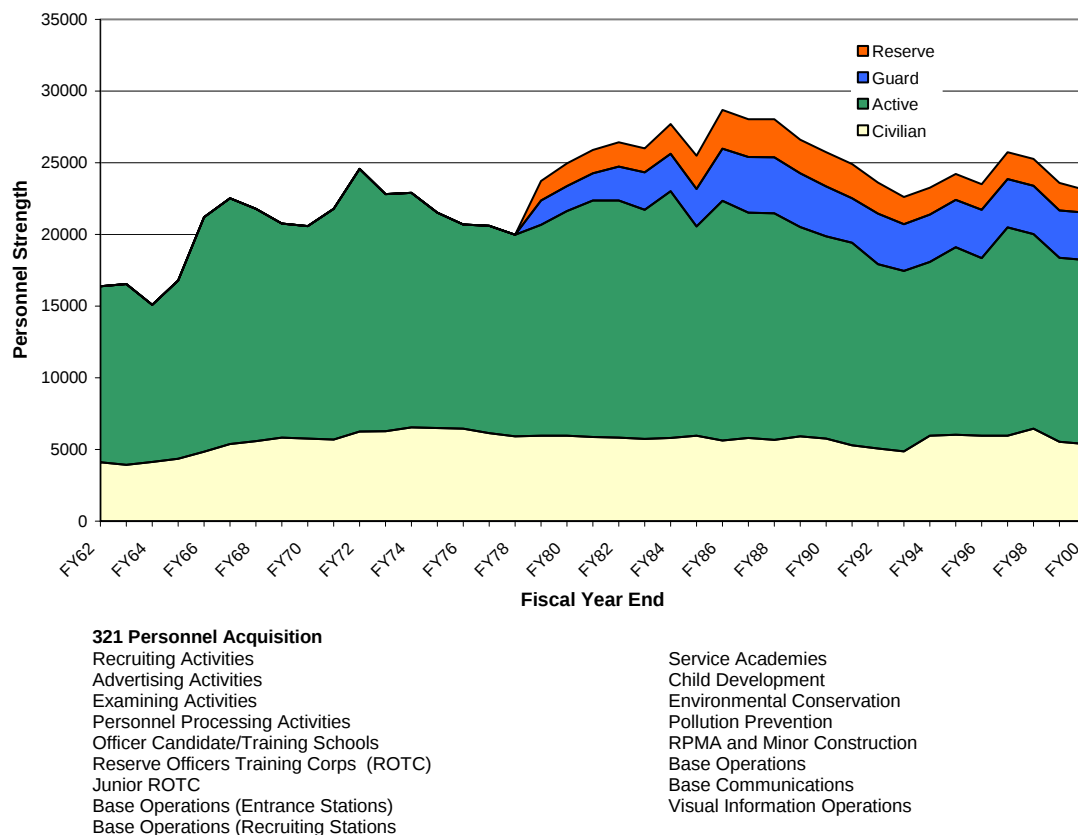
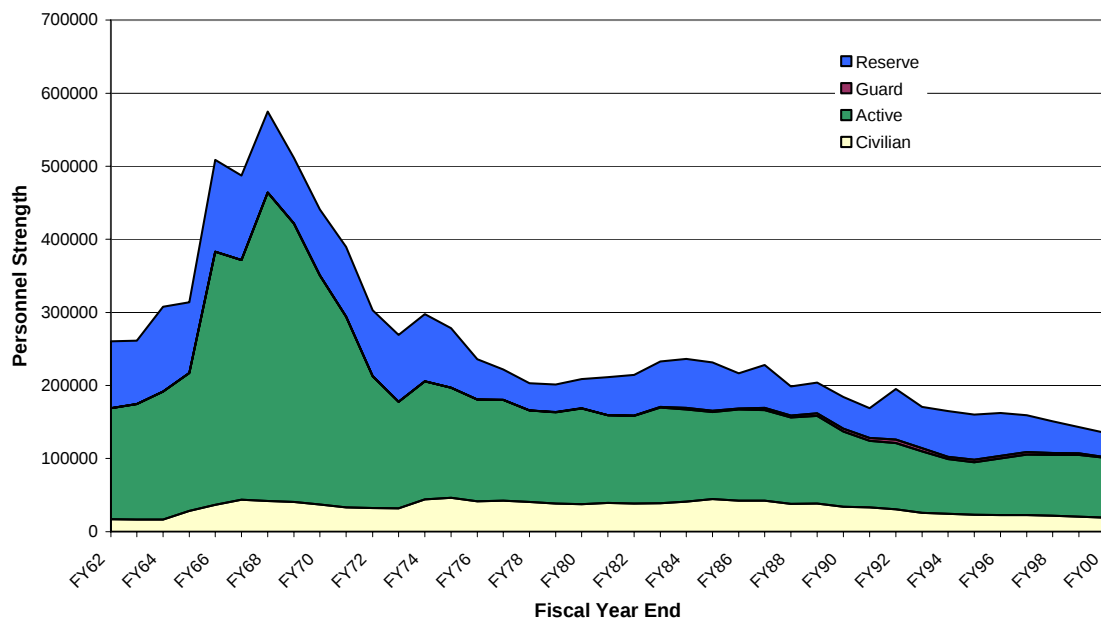


Figure VI-4. Army Personnel Acquisition

Figure VI-5 shows the Army's training establishment. There was a significant increase in trainers for the Vietnam War when it was necessary to train large numbers of new recruits to support the 1-year tour policy and a 2-year initial term of service (which was often shorter). When the All-Volunteer Force was initiated in FY73, military strengths declined, enlistments were longer, and fewer recruits required initial training. The result has been a relatively stable number of personnel in the Training category for the past 25 years. The Army Reserve has allocated a large number of personnel to this activity intended during the Cold War to augment the training establishment during a full mobilization and after the Cold War to augment an integrated Army school system and support field exercises and command and staff training. Recent small reductions in trainers may be due partly to efficiencies enabled by new technology, such as distance learning.



322 Training

Recruit Training Units
General Skill Training
Professional Military Education
Other Professional Education
Acquisition Training
Integrated Recruit & Skill Training Units
Support of the Training Establishment
Training Developments
Visual Information Activities
Training Support to Units
Off-Duty & Voluntary Education Prog
Veterans Educational Assistance Prog
Army Career Alumni Program
Individual Ready Reserve

Civilian Training
Undergraduate Pilot Training
Other Flight Training
Air Traffic Control Training
Air Traffic Control Management
General Intelligence Skill Training
Crypto-/SIGINT-Related Skill Training
Armed Forces Health Professional Scholarships
Other Health Acquisition Programs
Health Care Education & Training
JMMC
Support to USUHS
Base Operations and Management Tng

Figure VI-5. Army Training

The Medical Activities Category, depicted in figure VI-6, provides healthcare services to active duty and reserve military personnel and their dependents. It also serves retired military personnel and their dependents on a space available basis. This category has not changed much over the past 39 years despite significant fluctuations in active duty military strength—the primary workload for hospitals and clinics. Expansions in military strength were accommodated by providing less service to dependents and retirees, and the response to reductions in military strength was to provide more service to dependents and retirees. Since the end of the Cold War, concerted efforts have been made to use contractors and subsidized health care insurance plans to enable reductions in the number of civilian employees and military personnel in this category.

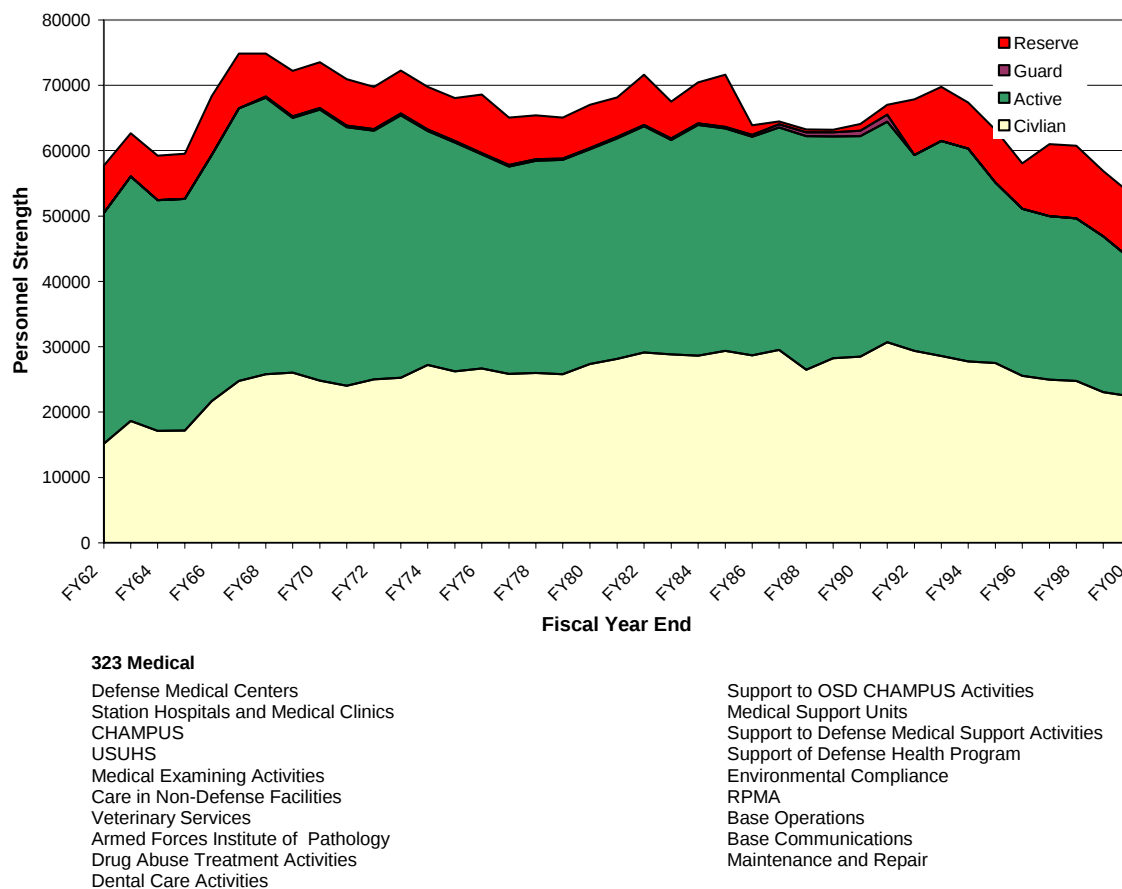
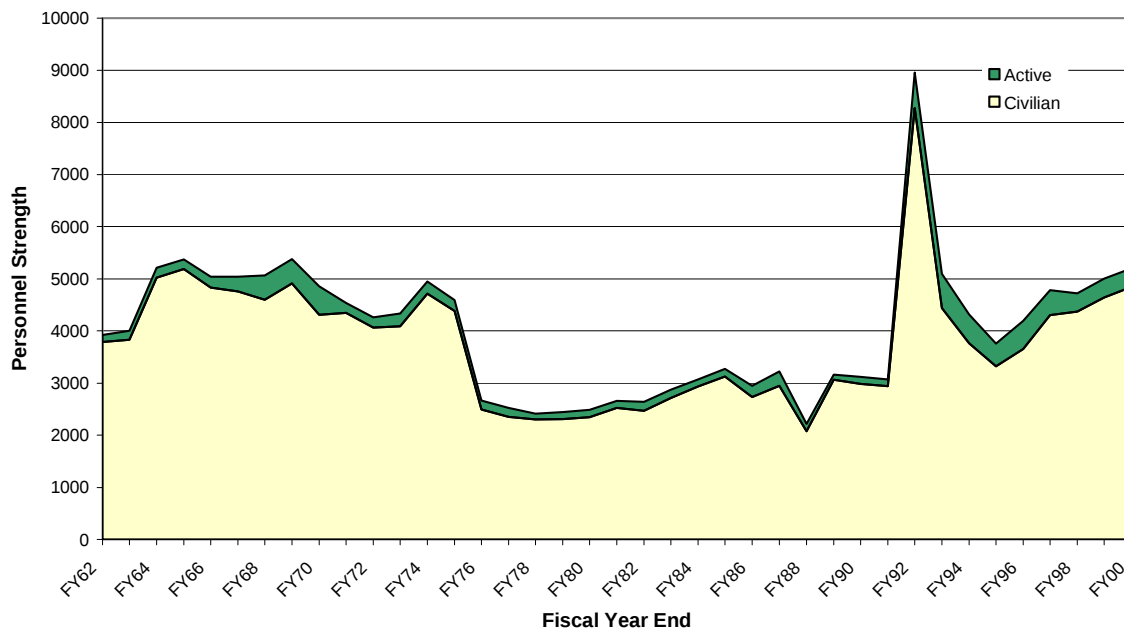


Figure VI-6. Army Medical Activities

Two anomalies in this chart need to be explained. Guard military support for this category started at a level of about 250 military personnel in FY68 and continued at that level until FY87, when it increased to about 500. Guard strength peaked at about 1,000 in FY91 and then went to zero thereafter. The Army Reserve had from 6,500 to 7,500 personnel in this category from FY62 until FY86. The number then decreased to about

1,000 until FY92, when it increased back to the earlier level. There may have been accounting changes that removed these personnel from an overhead account.

Other Personnel Support includes a large number of activities that in some way provide support to military personnel, civilian employees, and military dependents (figure VI-7). The discontinuous 1-year increase shown for FY92 is likely to be an erroneous data entry. Since the end of the Cold War, the number of personnel in this category has increased above previous levels (including during the Vietnam War era) primarily because of increased emphasis on family support.



326 Other Personnel Support

Family Housing
Overseas Dependents Education
Auto Acquisition Management & Support
Information Mgt Central Software Design
Non-System Specific Life Cycle Software
Acquisition Support to Program Executive Officers
Correctional Facilities
Youth Development Program
Army Personnel Management & Support Activities

American Forces Information Service
Army Pictorial Center
Child Development
Family Centers
Support to OSD
Homeowners Assistance Program
Visual Information Activities
Information Management
Other General Personnel Activities

Figure VI-7. Army Other Personnel Support

Figure VI-8 shows the number of Army personnel working for non-DoD agencies in the Federal Government. From FY77 to FY85 about 400 Reserve component personnel were assigned to the Selective Service System and the Federal Emergency Management Agency as liaison personnel. This number was reduced to about 200 from FY86 to FY91, when Reserve participation ceased to be shown in this category. This may be the result of an accounting change or a program reduction. A handful of civilian employees were in this category from FY77 to FY95. Active military strength has fluctuated and for the past 10 years has stabilized at about 100 personnel. These personnel conducting non-Army activities are not part of the Institutional Army.

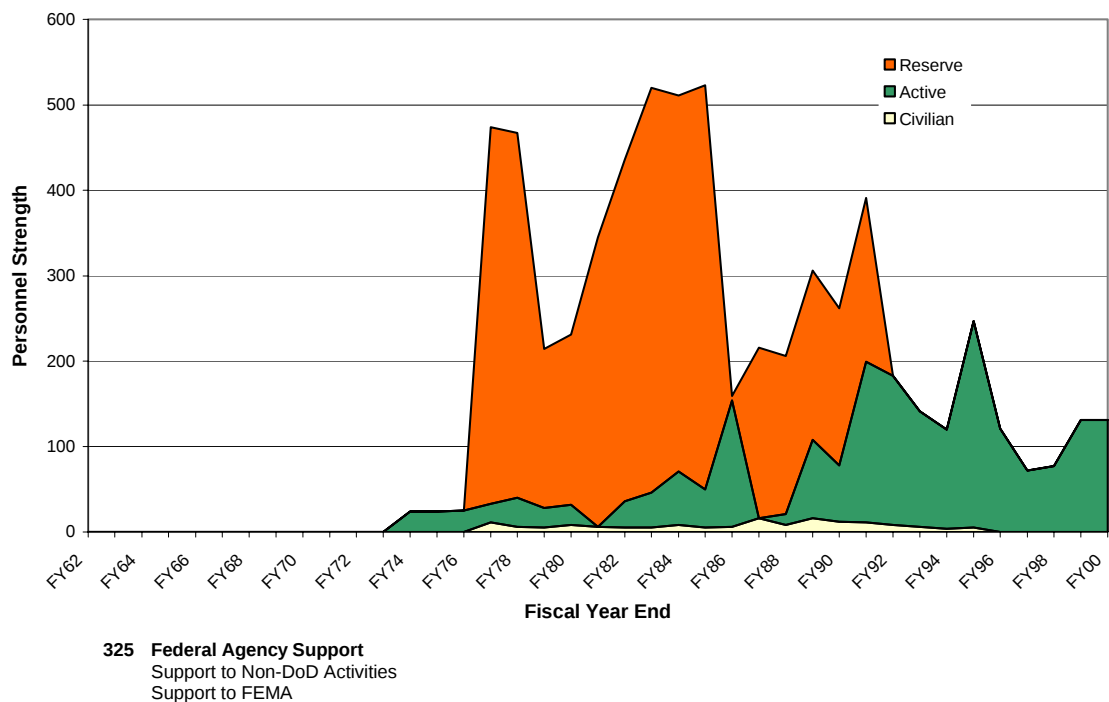


Figure VI-8. Army Federal Agency Support

The Departmental category includes the Army personnel devoted to management of the Army as well as to the Office of the Secretary of Defense, Defense Agencies, and a large number of joint and defense activities. Also included are a number of miscellaneous activities that provide a variety of support services to the management headquarters. As shown in figure VI-9, the number of active military personnel and civilians in this category has steadily declined, despite increases and decreases in the strength of the Army. There are also two obvious discontinuities stemming from accounting changes. The Army National Guard had many personnel in the Departmental category until FY94, when they were reclassified into the Land Forces. In what may be another accounting change, the Army Reserve had from 4,000 to 7,000 personnel in this category until FY99, when the number was reduced to about a thousand and then zeroed out in FY00. Additional work is needed to determine exactly how many people the Army uses for management purposes in its major headquarters and the plethora of staff support and field operating agencies that support the headquarters.

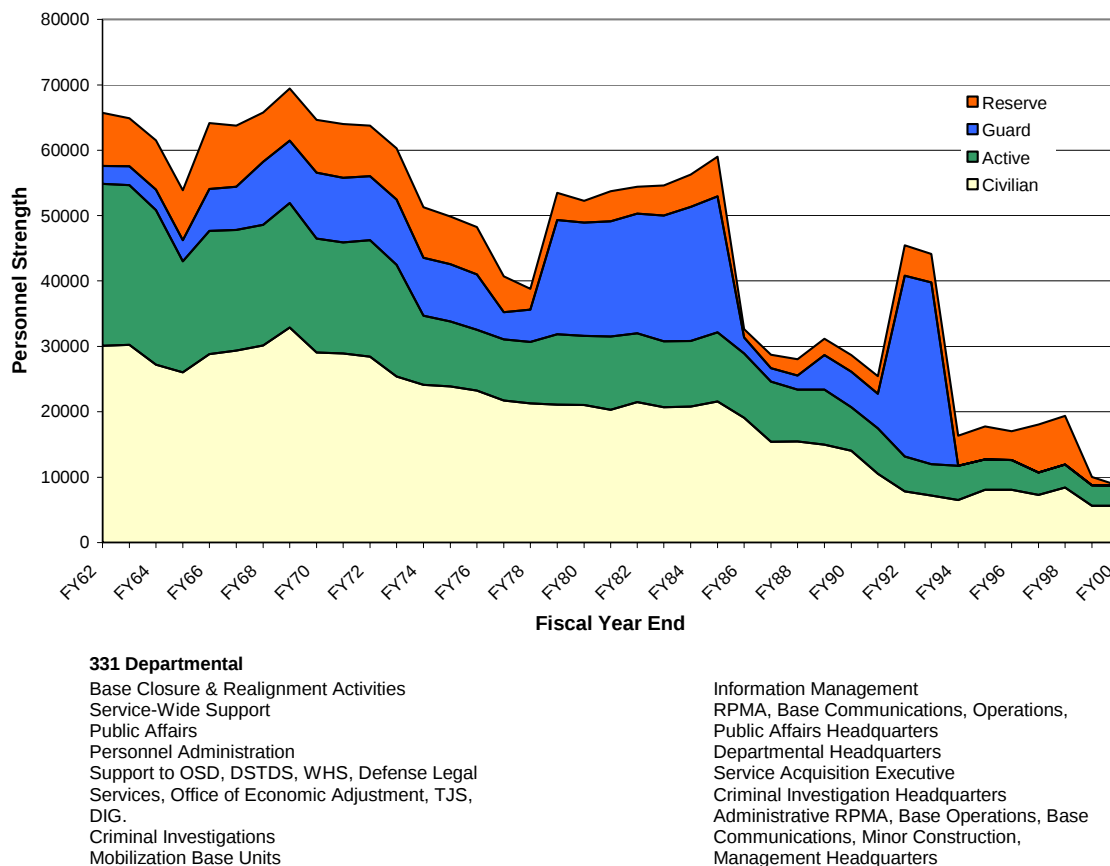


Figure VI-9. Army Departmental

Figure VI-10 shows the official records of Army individuals—or non-unit personnel. According to DoD policy, the individuals accounts should include the following:

- Trainees who have yet to complete initial entry training
- Students assigned to student detachments at military and civil schools
- Transients en route from one unit to another and unable to be present for duty at either
- Patients under long-term care in hospitals or rehabilitation centers
- Prisoners serving sentences at confinement facilities
- Holdees assigned to holding detachments for a variety of reasons

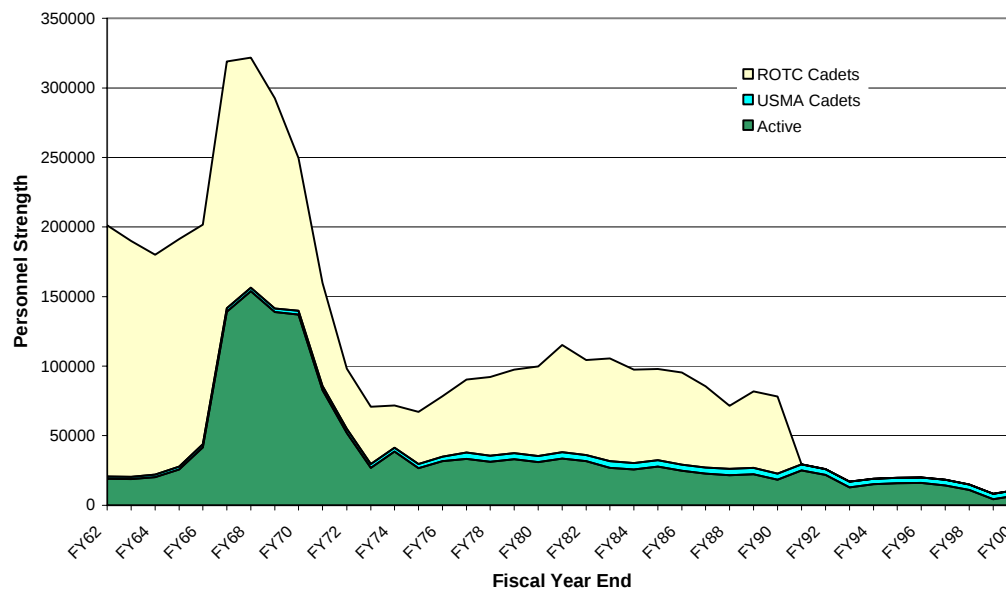


Figure VI-10. Army Individuals

Proper accounting for non-unit individuals is important to determine the number of trained, deployment-eligible soldiers in the Active, Guard, and Reserve components. Mixing trainers and students (workload) with trainers and teachers (work force) makes it difficult to gauge the adequacy of the training establishment. Counting both deployable and non-deployable personnel in unit strengths overstates the combat readiness of the units. Yet, the FYDP records identify and isolate only three kinds of individuals. ROTC cadets constitute workload but are not reported after FY91. USMA Cadets are reported throughout the period at about 4,000 personnel. Active component individuals accounts are reported but apparently do not include trainees or all of the students. Untrained Guard and Reserve soldiers are reported with their units and are not differentiated from trained soldiers.

Figure VI-11 shows the Army's Defense-wide support personnel over the past 39 years. From a high point during the Vietnam War, the number of people in this part of the Army's overhead has declined significantly. Even during the Cold War buildup the increase in this major mission category was modest compared with that in the major mission forces. Some of this reduction is illusory because of the transfers of Guard and Reserve personnel from this category to the Land Forces. Some of it is due to transfers of missions and personnel to Defense Agencies. Some of it is due to outsourcing. Some of it represents real increases in efficiency. Additional analyses conducted on a detailed level for selected subcategories will help to find the reasons for the decrease.

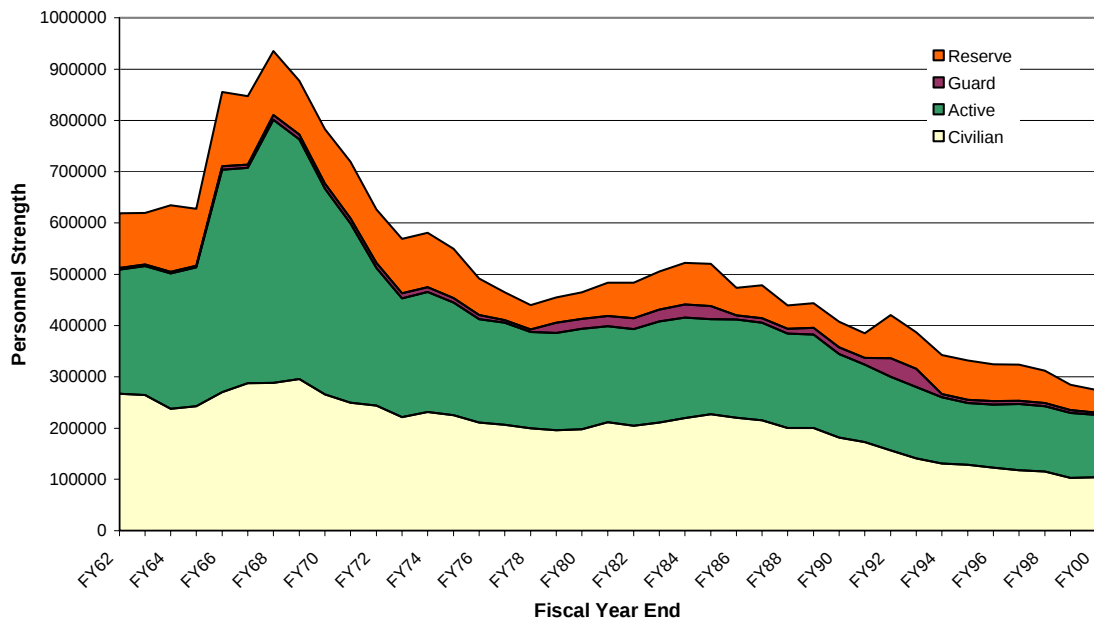


Figure VI-11. Army Defense-wide Support

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VII. COMPARISONS AND OBSERVATIONS

This section reexamines the details of the Army's personnel distribution, makes some comparisons, and then makes some observations on the output to overhead balance within the Army.

There are no major discontinuities or expansions of overhead or support. The trends in both aggregate personnel strengths and the DMC subcategories show that overhead has diminished both in real numbers and as a portion of total strength more or less steadily over the past 39 years. It is possible that the Army has indeed been able to reduce overhead, but there are other possible explanations for the apparent reduction in overhead personnel. These include accounting changes within the Army, transfers within DoD, and substitution of contractor personnel for military members or civilian employees. It is not possible to reach general conclusions on Army overhead, but it is possible to examine particular DMC subcategories to determine if there have indeed been reductions in overhead commensurate with reductions in workload.

Several accounting changes, all concerned with the distribution of overhead personnel, have been made. Within DoD, functions formerly performed by the Services have been transferred to the Defense Agencies. The data on these transfers are available, and comparisons can be made to allow some judgments on whether the Army's reductions are "real" or merely the effect of transfers out. That is, it is possible to determine in specific cases whether the Army has too many personnel in a particular support category compared with what it should have after the transfers were effected.

Outsourcing poses a particular problem because there are almost no data on the number of people used by contractors to perform the work done previously by a particular number of military personnel or civilian employees. Indeed, one of the reasons that outsourcing is in favor is the belief that private firms would use fewer people to perform a given amount of work because the profit motive inspires increased efficiency. It is difficult, therefore, to make direct comparisons of the numbers of military personnel and civilian employees that would have been retained if there had been no outsourcing. (The Army is moving now to obtain such data for future service contracts.) In order to estimate the impact of previous contracts on Army overhead, it is necessary to use

financial data (carefully) to identify the total costs of specific functions and then relate that in some way to personnel costs.

A. THE EXPEDITIONARY ARMY RATIO

A measure of overall Army overhead can be calculated by taking the ratio of the strength of the Expeditionary Army to the Total Army strength. The Expeditionary Army was defined in section III (figure III-6) as the sum of the first four categories of Land Forces and the Special Operations Forces (less an arbitrary adjustment for embedded overhead). Figure VIII-1 shows the result of this calculation.

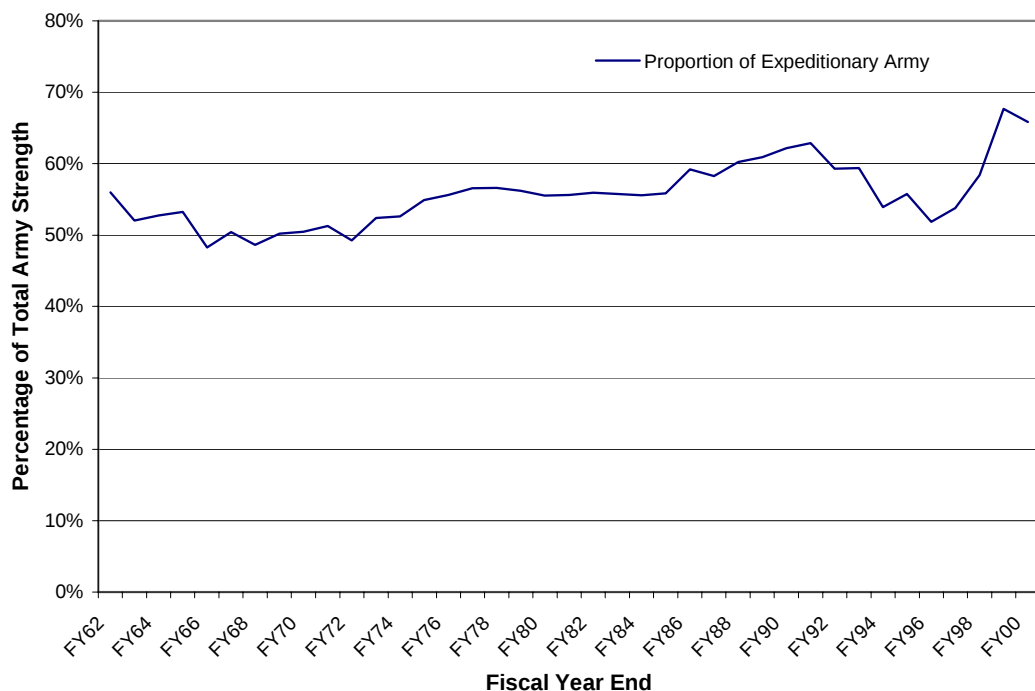


Figure VII-1. Proportion of Expeditionary Army

Figure VII-1 indicates that the Army has been able to put more than half of its total personnel strength into the Expeditionary Army over the past 39 years and that it was programmed to have two-thirds of its strength in the Expeditionary Army at the end of FY2000. There has been a distinct trend toward a greater proportion of the Army in the Expeditionary Army. The Army had the greatest relative overhead during the Vietnam War buildup, when it had large numbers of short-term recruits in basic training and a 1-year rotation policy in the theater. During the Cold War buildup, the Army's relative overhead decreased, primarily because it had a larger number of part-time personnel (guardsmen and reservists) who demanded less support in peacetime than

Active component personnel. Overhead went up initially during the post-Cold War drawdown but has decreased in the past few years.

Figure VII-2 shows the Expeditionary Army Ratio for the military personnel and civilian employees of the Active component only. While this measure addresses only part of the Army, it covers the part that has most of the overhead. National Guard units are based in armories and train on ranges and facilities paid for in part by the states. Army Reserve units are based in Reserve centers and use active Army facilities for most of their training. The overhead needed to support the military personnel and families of full-time military is more than that required for part-time guardsmen and reservists who receive substantial support from their civilian employers and communities. Thus, it is useful to examine how Active component military strength has related to the strength of the Active component part of the Expeditionary Army.

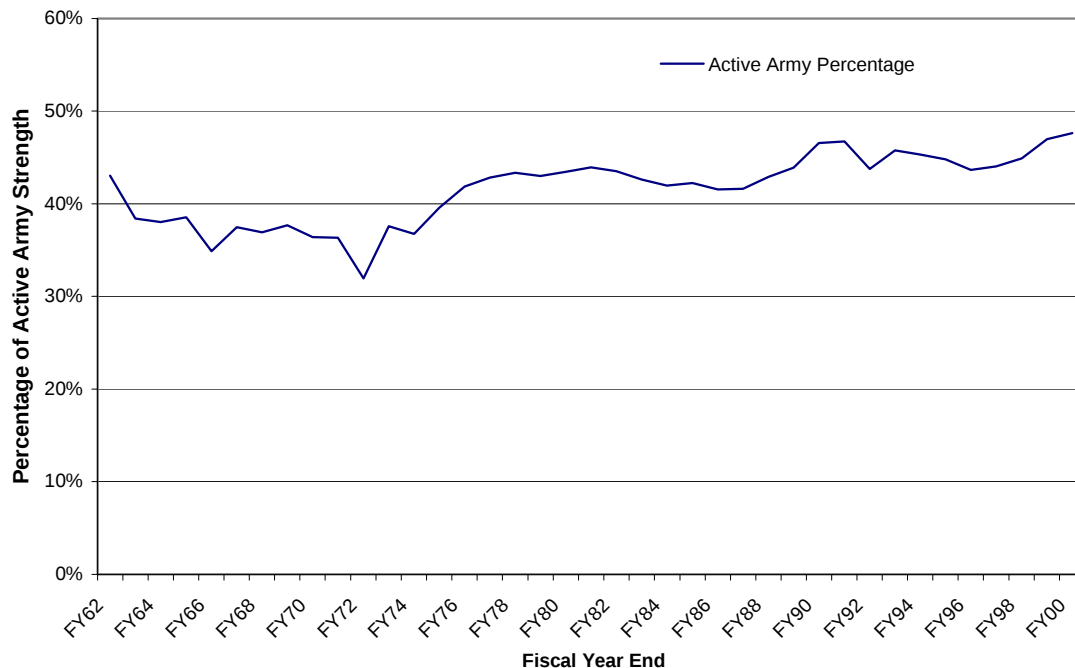


Figure VII-2. Active Component Proportion of the Expeditionary Army

The Active Army's proportion of the Expeditionary Army in Figure VII-2 shows a definite downturn during the Vietnam War and a consistent upward trend from FY73 on. This indicates that the Active Army has improved over the past 25 years in terms of obtaining deployable combat potential from its total active personnel strength. While these findings need to be checked as explained below, the indications are that the Army has done a reasonably good job in keeping its overhead in balance with its ability to project combat potential.

B. CATEGORIES FOR ADDITIONAL EXAMINATION

One of the purposes of this analysis is to select support categories that warrant additional and more detailed analysis. Two additional steps are required beyond this one to determine whether a particular support category has grown excessively compared with workload over the past 39 years—or the past 10 years. One step is to adjust for the effects of transfers within DoD. The second step is to adjust for the effects of outsourcing some of the work. Making these two adjustments for the overall strength could be done but would not provide a clear answer because some categories could increase, others could decrease, and the aggregate result would conceal the real trends in support personnel. The technique adopted for the additional analyses is to examine several DMC support categories individually.

It is necessary to adjust for internal transfers to show how the personnel devoted to a support category would appear if the transfer had not been made. In the Supply Operations category, for example, the number of Army civilians has decreased from over 80,000 in FY62 to fewer than 10,000 at the end of FY2000. This decrease in the number of personnel devoted to supply operations can be attributed to reduced workload, increased productivity, outsourcing, or transfers of functions out of the Army. There was in this case a large transfer of supply workload from the Army to the Defense Logistics Agency. It makes sense to find out the extent to which the apparent reductions in Army personnel are real reductions.

Similarly, it is necessary to adjust for outsourcing to show how many in-house personnel would have been required to accomplish the same workload. For example, the number of Army civilians in the Maintenance Operations category has decreased from over 70,000 in the 1960s to about 20,000 at the end of FY2000. Some of the workload in that category has been transferred to contractors, and it is necessary to find out how much of the apparent reductions in Army personnel devoted to maintenance are real reductions.

The Defense Mission Categories selected for additional analysis include the following:

- Land Forces Operational Support
- Special Operations Forces
- Supply Operations
- Maintenance Operations
- Personnel Acquisition

- Training
- Departmental and Land Forces BOS & Management Headquarters
- General Research and Development & Field Research & Development

C. SUMMARY OF RESULTS TO DATE

The results of this analysis of the Army by DMC have failed to show undue increases in Army overhead. The general trend for military and civilian personnel strengths suggests that the Army has been able over the past 39 years to reduce the proportion of its personnel devoted to support activities. A comparison of 20-year trends in the balance between personnel in TOE units and personnel in TDA units fails to show an undue increase in TDA unit strength. A comparison of the number of military and civilian personnel required since FY1962 to produce and support a combat battalion shows that by this measure the Army has become more efficient than it was in the 1960s.¹

This paper indicates that over the past 40 years, the Army has been able to devote a larger proportion of its total military and civilian personnel to the Expeditionary Army and a smaller proportion to the support functions. There is no firm evidence, however, that the Army has grown more efficient overall, and it is still possible that the number of personnel used for certain support functions is excessive to the need. Additional analysis, as explained above, will be done to examine that possibility.

¹ See John Brinkerhoff, *Army TOE and TDA Personnel FY1979–FY1999*, IDA Document D-2460, August 2000, and *Army Combat Potential FY1962–FY2000*, IDA Document D-2498, January 2001.

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Appendix

ARMY PERSONNEL BY DEFENSE MANPOWER CATEGORY, FY1962–FY2000

Major Mission Forces										
Land Forces										
Divisions										
FY62	FY63	FY64	FY65	FY66	FY67	FY68	FY69	FY70	FY71	FY72
249222	226417	230154	222058	230902	235977	259061	270882	95064	192584	164141
178632	181113	193087	191746	213108	208870	116468	116496	122895	120631	116165
44463	40032	45431	40822	0	0	0	0	0	0	0
705	649	610	566	0	0	0	2161	3062	3661	4342
Non-Divisional Combat										
97322	96497	81366	82697	100774	138162	163469	161164	103876	92751	37465
82273	81956	91961	86184	109339	110021	131978	131928	138843	136449	130900
48980	43978	56046	46275	37280	41527	38610	41552	41161	41536	30676
564	528	835	798	592	611	424	2900	4105	5972	4785
Tactical Support										
264722	170611	160221	170952	184379	285348	281583	264087	401648	181128	128188
53664	53226	54011	56047	70448	70900	88473	88786	94106	92133	88029
95915	85155	98358	105086	127132	138386	125980	134931	134424	135769	126588
42250	18575	21394	15840	15838	50835	50585	58813	43506	34153	7065
Special Mission Forces										
41679	45987	50877	46282	47533	59619	50495	50947	32947	84822	50847
23990	23971	24408	26473	2445	2439	20784	20778	21800	21457	20683
10783	9712	11534	11144	10843	11867	21850	23404	23310	23539	20926
1004	462	863	1812	2042	6064	1555	3345	7839	5959	17738
BOS & Mgt Headquarters										
50245	52184	42408	40124	50434	43717	30530	30759	31766	32389	27278
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
110097	116138	110910	95529	101183	111568	111991	107527	100065	100429	104738
Operational Support										
3174	11198	20307	7576	10753	12182	13901	14253	18045	12221	9595
737	736	728	729	740	745	0	0	0	0	0
6870	6738	6530	6551	5639	6763	5697	5707	5819	4838	4518
481	537	599	556	1285	1175	1583	1486	1029	1011	12523
Field R&D										
0	0	0	0	0	0	0	0	0	39	1
0	0	0	0	0	0	0	0	47	39	0

Major Mission Forces										
Land Forces										
Divisions										
Active										
Guard										
Reserve										
Civilian										
Non-Divisional Combat										
Active										
Guard										
Reserve										
Civilian										
Tactical Support										
Active										
Guard										
Reserve										
Civilian										
Special Mission Forces										
Active										
Guard										
Reserve										
Civilian										
BOS & Mgt Headquarter										
Active										
Guard										
Reserve										
Civilian										
Operational Support										
Active										
Guard										
Reserve										
Civilian										
Field R&D										
Active										
Civilian										

Major Mission Forces												
Land Forces												
Divisions												
Active	245975	248210	261014	239409	245574	243230	235104	216493	178570	168386	162514	
Guard	141479	145182	187509	186750	190212	182425	171554	158370	174499	138219	110730	
Reserve	2731	3576	3686	8505	7084	7751	7469	8178	7925	8348	6804	
Civilian	2886	2802	2808	12	12	20	25	97	130	121	67	
Non-Divisional Combat												
Active	76049	75843	70085	81100	81378	82516	60941	74278	54321	49715	49414	
Guard	131367	133556	108834	105260	102792	113920	112614	124933	108999	91400	88459	
Reserve	29196	33560	39216	45887	45479	49415	50956	44495	35418	30899	36441	
Civilian	3437	3467	3526	420	440	504	400	405	398	326	363	
Tactical Support												
Active	104580	113033	100663	113757	114286	118822	151677	147970	114521	108917	99346	
Guard	88414	89401	98041	104321	106052	103149	103603	109726	102949	95305	32554	
Reserve	136799	137863	180656	165603	165021	162472	130052	148330	144845	139317	109906	
Civilian	15373	16777	17054	18855	16990	17134	21258	20166	17468	13252	10024	
Special Mission Forces												
Active	34505	33564	34689	33923	19435	28818	33474	24574	19229	20896	17778	
Guard	14916	15082	20528	17714	18109	18188	16075	16152	11964	11700	29872	
Reserve	16426	19075	15346	12364	12839	15891	15720	16809	4978	3369	3827	
Civilian	4720	4409	4646	4498	4128	6660	6131	5572	5606	5790	7153	
BOS & Mgt Headquarter												
Active	30230	27606	28984	30673	23288	23048	22593	24033	20310	19173	17758	
Guard	5786	7855	12367	14461	12936	11432	7033	6240	1193	1103	125177	
Reserve	2715	4035	6368	6036	6431	6984	6686	6956	9419	9294	6238	
Civilian	103812	108993	107278	113561	103873	113073	106961	102414	90807	80989	77836	
Operational Support												
Active	15162	15832	12304	13660	14580	7747	7576	7131	5925	4891	4693	
Guard	0	0	0	0	0	0	0	0	0	0	0	
Reserve	4924	4872	6154	5013	4131	3778	3178	4091	3224	3103	2921	
Civilian	7132	8029	7177	7333	9386	4347	4296	4610	4368	4013	3521	
Field R&D												
Active	1668	1841	1428	1118	1507	1168	822	960	809	1346	1071	
Civilian	2156	2408	2128	1001	1813	1429	2910	1637	1799	1996	4104	

Major Mission Forces							
Land Forces							
Divisions							
Active	157452	146008	186461	146798	150655	148254	
Guard	155006	92278	109248	108732	105191	72690	
Reserve	3782	3153	719	229	0	0	
Civilian	48	324	115	34	5615	5007	
Non-Divisional Combat							
Active	45215	33170	7374	37860	36324	36213	
Guard	91898	90871	97380	101221	119950	135793	
Reserve	33230	29864	16024	10885	16636	2130	
Civilian	268	326	158	154	5625	5459	
Tactical Support							
Active	87881	107736	79391	100433	104725	109367	
Guard	15631	24739	24481	71793	97586	127916	
Reserve	96003	92424	100277	115011	177080	141737	
Civilian	9149	15299	9948	6366	16281	16228	
Special Mission Forces							
Active	14670	0	12883	68	0	0	
Guard	23692	29340	28056	28227	0	0	
Reserve	126	1283	253	1229	0	0	
Civilian	6887	443	7176	22	0	0	
BOS & Mgt Headquarter							
Active	17297	17452	11939	11526	9187	9190	
Guard	81219	123733	101831	43385	26013	3974	
Reserve	6916	6261	4133	4742	907	1414	
Civilian	71629	69529	65584	62684	39818	37425	
Operational Support							
Active	4458	4570	9050	10589	9667	9465	
Guard	0	0	0	0	0	0	
Reserve	2769	3124	2840	2822	2947	19122	
Civilian	3611	3816	3658	14036	14486	14636	
Field R&D							
Active	1204	1263	969	931	947	913	
Civilian	4043	4503	4467	7315	7975	7455	

	FY62	FY63	FY64	FY65	FY66	FY67	FY68	FY69	FY70	FY71	FY72
Strategic Forces											
Active	26957	28633	27591	23669	19920	21849	17280	16742	11064	7633	6580
Guard	11200	8572	6908	7008	7321	7257	4329	4282	4185	4239	4263
Civilian	2929	2539	2282	3783	3874	3051	2168	9322	7874	7368	7896
Mobility Forces											
Active	1135	1135	1134	749	644	579	613	781	722	663	628
Reserve	0	0	0	0	0	0	0	0	0	0	0
Civilian	5968	6041	5913	4363	6248	6740	6520	6275	5945	5338	5012
Special Operations Forces											
Active	0	0	0	0	0	0	0	0	0	0	0
Guard	0	0	0	0	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0	0	0	0	0
Other Mission Forces											
Active	0	0	0	0	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0	0	0	0	0
Defense-Wide Missions											
Intelligence											
Active	25220	25322	25853	24585	24854	27823	25755	28922	25197	28096	19681
Reserve	0	0	0	0	0	0	0	0	0	0	0
Civilian	5319	7008	6157	5323	4912	4844	4660	4619	4618	3757	3699
Communications											
Active	7657	9369	13869	16150	16600	20181	19506	22309	21367	20681	17251
Civilian	4166	3320	2987	4065	4229	5412	6405	6180	5876	5962	5786
Research & Development											
Active	13748	12706	11712	11252	9701	9320	8962	10190	7856	8964	7699
Civilian	26040	24777	27313	27066	27014	28276	25775	23197	22061	21396	21791
Geophysical Activities											
Active	8851	8392	8779	8260	8423	8077	7590	8490	7112	5385	4216
Civilian	5484	5106	5121	5294	5708	6030	5806	6992	6333	6095	5527
International Support											
Active	9214	10450	8790	11912	12111	12633	17097	17483	18020	15458	9910
Civilian	1382	7116	5344	4612	4105	1084	1001	914	871	862	851
Security & Investigation											
Active	2975	3173	2951	2675	2768	2506	3589	4172	4353	3764	2981
Civilian	517	517	842	840	1522	1949	2037	1907	1328	1299	1179

	FY73	FY74	FY75	FY76	FY77	FY78	FY79	FY80	FY81	FY82	FY83
Strategic Forces											
Active	7146	3510	1037	578	335	333	344	350	385	387	449
Guard	4436	4903	0	0	0	0	0	0	0	0	0
Civilian	6493	4773	1334	934	598	539	522	532	566	626	663
Mobility Forces											
Active	705	627	612	1370	3351	3630	3812	3536	3781	3645	3821
Reserve	0	0	0	0	828	826	913	956	965	1618	1021
Civilian	4531	3979	3716	3465	4763	4911	4745	4431	4510	4540	4512
Special Operations Forces											
Active	0	0	0	0	0	0	0	0	0	0	0
Guard	0	0	0	0	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0	0	0	0	0
Other Mission Forces											
Active	0	0	0	0	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0	0	0	0	0
Defense-Wide Missions											
Intelligence											
Active	17994	17900	17926	10256	8308	8941	8902	9277	8723	9012	9177
Reserve	0	0	0	0	320	290	281	295	451	496	340
Civilian	3149	3132	2734	2504	2421	2148	2241	2081	2070	2100	2133
Communications											
Active	17016	12210	10631	10391	9554	12609	12634	14466	13657	14868	14299
Civilian	5313	4402	4288	4689	4299	4116	5422	7348	7427	7313	7363
Research & Development											
Active	8550	7810	7168	7052	6264	6847	6286	6784	6360	6523	6466
Civilian	24243	23291	22201	22224	21269	27666	27858	26143	18755	26115	27093
Geophysical Activities											
Active	5097	1801	1341	1276	1206	1172	149	147	286	269	279
Civilian	2177	2526	2451	2560	2270	2222	2184	838	619	627	615
International Support											
Active	5239	5196	4644	4031	4226	4140	3855	3778	4938	3979	4065
Civilian	1189	1427	1217	1207	1262	2663	659	645	2179	2473	2297
Security & Investigation											
Active	1867	2570	1965	1740	1505	1033	925	1005	943	911	1087
Civilian	801	760	761	798	796	549	363	292	287	299	311

	FY84	FY85	FY86	FY87	FY88	FY89	FY90	FY91	FY92	FY93	FY94
Strategic Forces											
Active	511	487	580	722	734	628	412	655	285	286	313
Guard	0	0	0	0	0	0	0	0	0	0	0
Civilian	706	791	903	1015	1155	1163	1214	1423	1417	1430	1315
Mobility Forces											
Active	3459	3833	3738	3888	3842	765	660	649	588	580	783
Reserve	1057	1617	1	1261	1188	1190	1184	1236	1932	1919	1943
Civilian	4556	4704	4414	4488	3883	4187	3114	3174	3121	3340	4696
Special Operations Forces											
Active	0	0	0	1	12415	13183	15568	14694	14582	15090	14932
Guard	0	0	0	0	3276	3276	3276	3276	3149	2954	1584
Reserve	0	0	0	0	11127	11088	10914	11025	10837	10954	9271
Civilian	0	0	0	0	319	899	946	909	1281	1413	1323
Other Mission Forces											
Active	0	0	62	59	48	0	0	155	161	276	215
Civilian	0	0	0	0	0	0	0	38	115	171	263
Defense-Wide Missions											
Intelligence											
Active	9504	10099	9683	9923	9971	10746	10607	10055	10282	7464	7666
Reserve	347	688	1226	590	598	547	570	604	579	569	524
Civilian	2168	2166	2897	2940	3125	3236	2773	2917	2261	2363	2291
Communications											
Active	19124	19766	23190	20209	18567	15413	13037	10520	9145	7139	6922
Civilian	7867	8284	13411	19127	18519	19863	18438	17626	15974	9199	8070
Research & Development											
Active	6037	6088	5779	6175	5941	5490	4794	4671	4269	4245	3830
Civilian	27472	28912	25179	24998	24771	25013	25011	26796	28330	25958	25776
Geophysical Activities											
Active	279	260	313	3031	3364	2345	2421	2096	1282	1064	109
Civilian	626	629	642	2892	2343	2368	2343	2103	2016	807	505
International Support											
Active	4079	3983	3968	3178	4201	4378	4847	4059	4153	3587	3629
Civilian	622	809	779	521	797	2009	1857	2066	2344	1749	896
Security & Investigation											
Active	927	865	2233	1421	1292	922	371	1134	919	772	347
Civilian	330	341	370	480	453	552	370	407	454	476	491

	FY95	FY96	FY97	FY98	FY99	FY00
Strategic Forces						
Active	403	416	747	705	682	688
Guard	0	0	0	0	0	0
Civilian	1252	1228	2186	601	1785	1736
Mobility Forces						
Active	696	674	764	559	517	519
Reserve	2230	1899	1823	1945	0	0
Civilian	4706	3672	3424	3058	3029	3009
Special Operations Forces						
Active	15434	15446	15258	14608	15231	15231
Guard	3788	2870	2891	2870	2870	2870
Reserve	8543	8102	8108	8634	7810	7810
Civilian	1269	1168	1185	1225	1226	1260
Other Mission Forces						
Active	142	272	186	136	197	192
Civilian	530	454	254	390	632	657
Defense-Wide Missions						
Intelligence						
Active	6971	7129	7203	6998	7624	7617
Reserve	610	531	681	558	16	0
Civilian	2163	1588	1854	1842	2087	2124
Communications						
Active	6465	4647	4566	2749	2166	2067
Civilian	7417	7942	5923	3848	3416	3489
Research & Development						
Active	3499	2898	2277	2259	1827	1489
Civilian	23022	21765	19624	19674	18359	14691
Geophysical Activities						
Active	109	178	89	76	97	91
Civilian	506	738	619	608	535	515
International Support						
Active	3526	3354	3578	3325	3702	3700
Civilian	1900	2818	2474	1150	2499	2467
Security & Investigation						
Active	575	597	52	34	31	31
Civilian	474	438	30	37	47	47

Defense-Wide Support	FY62	FY63	FY64	FY65	FY66	FY67	FY68	FY69	FY70	FY71	FY72
Supply Operations											
Active	2688	5816	4831	3384	3056	3172	2875	2861	3121	4568	3936
Civilian	63334	60374	52846	46433	50482	54508	53596	55872	49408	44926	40769
Maintenance Operations											
Active	3440	3696	3366	4157	3457	3219	3596	3208	3586	4317	3784
Reserve	0	0	0	0	0	0	0	0	0	0	0
Civilian	62975	62542	61876	61003	68441	73554	71971	74206	66775	65086	65856
Other Logistics Support											
Active	10995	9470	9416	8911	7916	7694	6338	6734	6775	6809	5704
Civilian	70961	68415	53591	54463	54360	51629	55001	55126	48506	43122	41085
Personnel Acquisition											
Active	12279	12613	10959	12436	16347	17127	16212	14923	14835	16100	18318
Guard	0	0	0	0	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	0	0	0	0	0	0
Civilian	4098	3927	4126	4343	4843	5394	5581	5832	5747	5680	6250
Training											
Active	152550	158163	175619	188975	346658	328025	422300	381144	313344	261178	180271
Guard	0	0	0	0	0	0	0	0	0	0	0
Reserve	91216	86678	115613	96606	125670	115898	110534	89740	90801	94958	90319
Civilian	16678	16484	16388	28309	36497	43536	41810	40619	37045	33256	32425
Medical											
Active	35246	37426	35338	35430	37623	41712	42296	38945	41478	39587	37993
Guard	0	0	0	0	0	0	231	231	242	238	231
Reserve	7250	6633	6745	6882	9015	8351	6567	6967	7019	7102	6506
Civilian	15194	18633	17129	17189	21675	24781	25775	26073	24814	24003	25038
Other Personnel Support											
Active	132	174	188	187	203	288	466	465	545	188	195
Civilian	3790	3829	5025	5187	4834	4755	4598	4914	4313	4346	4064
Individuals											
Active	21690	20912	24432	26957	43081	145450	154354	141241	140371	84916	52762
Guard	0	0	0	0	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0	0	0	0	0
USMA Cadets	1757	1846	1854	2017	2316	2378	2443	2532	2814	2988	2975
ROTC Cadets	180500	169476	158016	163431	157723	177422	165430	150982	109705	73963	43376

Defense-Wide Support	FY73	FY74	FY75	FY76	FY77	FY78	FY79	FY80	FY81	FY82	FY83
Supply Operations											
Active	3121	3233	3710	2258	2253	2585	2203	1771	1622	1890	1975
Civilian	34963	34231	34886	29354	37315	37535	26873	35629	38132	38293	40267
Maintenance Operations											
Active	3207	2950	2369	1990	2226	2702	2548	1505	1814	2083	2296
Reserve	0	0	0	0	0	0	0	0	0	0	0
Civilian	60925	67604	59372	55257	50658	45880	44453	34594	44495	36988	40010
Other Logistics Support											
Active	5101	3311	2617	1391	1466	1348	1456	2683	2729	3002	2688
Civilian	32909	23008	23806	25922	19534	19535	31326	33257	32402	31549	33932
Personnel Acquisition											
Active	16541	16338	15030	14252	14467	14053	14698	15648	16473	16527	15999
Guard	0	0	0	0	0	0	1711	1763	1910	2371	2593
Reserve	0	0	0	0	0	0	1340	1562	1630	1706	1676
Civilian	6269	6549	6486	6431	6136	5920	5963	5966	5880	5824	5729
Training											
Active	145810	161697	150699	139318	137900	125054	125011	131023	119713	119850	131042
Guard	0	0	0	0	0	0	230	361	150	289	467
Reserve	91470	91782	81617	55051	41615	37271	37952	39900	52119	55358	62535
Civilian	31761	44044	46290	41435	42589	40874	38117	37530	39470	38728	38901
Medical											
Active	40153	35775	34960	32738	31703	32507	32792	32826	33736	34565	32805
Guard	277	244	232	208	222	219	218	206	218	223	233
Reserve	6575	6504	6561	8926	7218	6724	6243	6614	6040	7681	5650
Civilian	25261	27226	26279	26680	25880	25973	25793	27354	28149	29145	28817
Other Personnel Support											
Active	246	231	204	176	176	113	133	141	127	174	157
Civilian	4088	4716	4386	2489	2349	2303	2313	2344	2528	2466	2715
Individuals											
Active	27490	39209	27660	32563	33935	35469	39764	38456	41091	41419	35724
Guard	0	0	0	0	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0	0	0	0	0
USMA Cadets	2796	2866	3017	3045	4446	4324	4287	4375	4482	4583	4605
ROTC Cadets	41294	30334	37376	43514	52565	56698	59944	64535	77102	68231	74078

Defense-Wide Support	FY84	FY85	FY86	FY87	FY88	FY89	FY90	FY91	FY92	FY93	FY94
Supply Operations											
Active	1900	2155	1658	1860	1756	1471	1173	1101	1439	1577	1070
Civilian	41964	41371	40589	40967	38369	34295	30631	28409	17127	14914	14277
Maintenance Operations											
Active	2148	2135	1936	1435	888	1208	756	1202	612	773	767
Reserve	0	0	0	0	0	382	0	789	0	0	0
Civilian	41810	43049	43476	41524	40554	41468	33513	31294	36364	32446	27883
Other Logistics Support											
Active	3084	2600	3223	3242	3221	2859	2420	1926	2085	1559	1539
Civilian	36917	38102	37783	36760	34162	33586	32538	30826	21686	23162	20799
Personnel Acquisition											
Active	17215	14610	16722	15697	15801	14600	14099	14134	12876	12591	12097
Guard	2593	2593	3623	3893	3906	3747	3479	3088	3509	3270	0
Reserve	2085	2327	2711	2615	2651	2336	2385	2409	2163	1870	1880
Civilian	5810	5951	5612	5805	5659	5917	5760	5286	5062	4867	5970
Training											
Active	126156	119138	124600	124097	118429	119744	102839	91209	91064	84057	74913
Guard	2289	2117	1705	2840	2815	3378	3790	3917	4533	4287	3248
Reserve	66890	65777	48062	58627	39684	42250	43432	40758	69115	56541	62528
Civilian	41159	44403	42291	42366	37730	38658	34129	32926	30366	25640	24384
Medical											
Active	35269	34011	33386	34054	35754	33907	33788	33717	29907	32890	32578
Guard	247	251	268	446	554	627	801	1112	0	0	0
Reserve	6251	7960	1507	446	420	425	1038	1508	8523	8240	7070
Civilian	28643	29377	28725	29524	26496	28256	28461	30674	29401	28592	27730
Other Personnel Support											
Active	134	153	217	273	141	103	135	129	687	664	549
Civilian	2936	3122	2732	2948	2075	3061	2983	2940	8269	4434	3766
Individuals											
Active	32881	36807	35819	33334	41133	41351	46230	40901	34558	19493	28290
Guard	0	0	0	0	0	0	0	0	-39473	9182	0
Civilian	0	0	0	0	0	0	0	0	0	-74	0
USMA Cadets	4586	4543	4555	4441	4439	4543	4386	4341	4270	4199	4023
ROTC Cadets	66992	65676	66300	58190	45259	54906	55576	0	0	0	0

	FY95	FY96	FY97	FY98	FY99	FY00
Defense-Wide Support						
Supply Operations						
Active	883	813	769	652	652	630
Civilian	12619	12510	10640	7728	6580	7051
Maintenance Operations						
Active	521	186	140	78	55	52
Reserve	0	0	0	0	0	0
Civilian	27025	24853	24115	23300	19251	18398
Other Logistics Support						
Active	1400	1125	1179	1193	1263	1155
Civilian	20350	19547	18525	18268	17946	21642
Personnel Acquisition						
Active	13072	12388	14551	13546	12844	12838
Guard	0	3362	3360	3379	0	0
Reserve	1811	1786	1886	1881	1918	1606
Civilian	6028	5957	5944	6464	5524	5367
Training						
Active	71838	77801	83125	83224	84388	82364
Guard	3161	3132	2875	2874	2353	817
Reserve	61748	58913	50579	42900	2681	33059
Civilian	23245	22711	22649	21739	20358	18811
Medical						
Active	27555	25585	25023	24860	23831	21055
Guard	0	0	0	0	0	0
Reserve	8138	6938	11009	11082	0	609
Civilian	27525	25550	24967	24799	23046	22404
Other Personnel Support						
Active	436	534	481	351	358	357
Civilian	3317	3656	4303	4370	4643	4840
Individuals						
Active	31768	28295	25475	11681	5173	8726
Guard	0	0	0	0	0	0
Civilian	0	0	0	0	0	0
USMA Cadets	3947	3973	4065	4194	4000	4000
ROTC Cadets	0	0	0	0	0	0

	FY62	FY63	FY64	FY65	FY66	FY67	FY68	FY69	FY70	FY71	FY72
Departmental											
Active	24730	24390	23624	16969	18839	18385	18413	19034	17435	16978	17842
Guard	2781	2840	3132	3193	6414	6607	9615	9551	10037	9873	9769
Reserve	8090	7403	7525	7679	10075	9334	7560	7984	8101	8193	7713
Civilian	30091	30276	27211	26037	28817	29386	30154	32854	29072	28914	28403
Federal Agency Support											
Active	0	0	0	0	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0	0	0	0	0

	FY73	FY74	FY75	FY76	FY77	FY78	FY79	FY80	FY81	FY82	FY83
Departmental											
Active	17083	10573	9921	9282	9346	9384	10820	10591	11173	10492	10053
Guard	9934	8836	8755	8451	4150	4957	17439	17292	17643	18317	19230
Reserve	7877	7742	7283	7218	5506	3158	4130	3345	4572	4085	4587
Civilian	25397	24130	23896	23262	21715	21299	21063	21042	20323	21477	20729
Federal Agency Support											
Active	0	24	24	25	22	34	23	24	0	31	41
Reserve	0	0	0	0	441	427	186	199	339	400	474
Civilian	0	0	0	0	11	6	5	8	6	5	5

	FY84	FY85	FY86	FY87	FY88	FY89	FY90	FY91	FY92	FY93	FY94
Departmental											
Active	10026	10587	9870	9201	7933	8416	6710	6990	5323	4776	5209
Guard	20464	20767	2437	2061	2155	5314	5385	5289	27663	27789	0
Reserve	4999	6065	1227	2074	2476	2485	2540	2667	4658	4340	4609
Civilian	20793	21573	19077	15404	15451	14938	14027	10502	7815	7214	6522
Federal Agency Support											
Active	63	45	148	0	13	92	66	188	175	135	116
Reserve	440	473	5	200	185	198	184	192	0	0	0
Civilian	8	5	6	16	8	16	12	11	8	6	4

	FY95	FY96	FY97	FY98	FY99	FY00
Departmental						
Active	4677	4590	3428	3533	3093	3066
Guard	0	0	0	0	0	0
Reserve	5023	4381	7356	7408	1244	0
Civilian	8064	8047	7291	8422	5670	5638
Federal Agency Support						
Active	242	121	72	77	131	131
Reserve	0	0	0	0	0	0
Civilian	5	0	0	0	0	0

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13. ABSTRACT (Maximum 200 words) This report presents Army military personnel (Active, Guard, Reserve) and civilian employees reported in the Future Years Defense Program for the ends of fiscal years 1962 through 2000. Personnel strengths are grouped by Defense Mission Category to illustrate the distribution of personnel among major force missions, Defense-wide missions, and Defense-wide support missions. The purpose of the paper is to identify trends that might indicate an increase in Army overhead relative to output. The strength of the Expeditionary Army, which represents the output of the Army, is defined and quantified. The proportion of total Army strength in the Expeditionary Army is calculated. The trend of this proportion over the past 39 years indicates the Army has become more efficient. The report also provides charts that indicate the personnel distribution by 3-digit Defense Manpower Category. A source table of the data used to prepare the charts is appended.				
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