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# FORCE STRUCTURE

## Army's Efforts to Improve Efficiency of Institutional Forces Have Produced Few Results



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**National Security and  
International Affairs Division**

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February 26, 1998

The Honorable Strom Thurmond  
Chairman  
The Honorable Carl Levin  
Ranking Minority Member  
Committee on Armed Services  
United States Senate

The Honorable Floyd D. Spence  
Chairman  
The Honorable Ike Skelton  
Ranking Minority Member  
Committee on National Security  
House of Representatives

The Fiscal Year 1996 National Defense Authorization Act requires that we annually assess the Army's efforts to streamline infrastructure activities and eliminate the inefficient use of personnel assigned to these activities.<sup>1</sup> The Army refers to personnel assigned to infrastructure activities as Tables of Distribution and Allowances (TDA), or institutional personnel. We fulfilled this mandate by assessing the extent to which the Army has (1) taken corrective action to resolve its material weakness in determining institutional personnel requirements and (2) identified opportunities to reduce personnel and realize savings through its Force XXI Institutional Redesign effort. We are also providing our views on whether these initiatives are producing the results necessary for the Army to improve the efficiency of its institutional workforce. Our scope and methodology are discussed in appendix I.

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## Background

Institutional personnel are generally nondeployable military and civilians who support Army infrastructure activities, such as training, doctrine development, base operations, supply, and maintenance. One major exception is in the medical area, since some personnel assigned to institutional positions are expected to deploy in wartime. A significant amount of the Army's personnel and budget are devoted to institutional functions. For example, the Army's Program Objective Memorandum for fiscal year 1998 included about 132,000 active Army and about 247,000 civilian institutional positions. These positions represented about

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<sup>1</sup>The act requires that we report our findings and conclusions to Congress by March 1 of each year from 1997 to 2002. Our first report issued under this legislative mandate was *Force Structure: Army Support Forces Can Meet Two-Conflict Strategy With Some Risks* (GAO/NSIAD-97-66, Feb. 28, 1997).

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27 percent of the total active Army and 100 percent of Army civilians. Funding for institutional personnel totals about \$18 billion per year.

Army institutional functions have received increasing scrutiny in recent years because the Army has been unable to (1) support personnel requirements based on workload and (2) ensure that these functions are carried out in the most efficient and cost-effective manner. In addition, the Army continues to rely on its active personnel to perform institutional functions despite shortfalls in operational forces. The Army Audit Agency reported in 1992 and 1994 that the Army did not know its workload and thus could neither justify personnel needs and budgets nor improve productivity and efficiency.<sup>2</sup> Our February 1997 report recommended that the Secretary of the Army report to the Secretary of Defense, as a material weakness under the Federal Managers' Financial Integrity Act, the Army's long-standing problem with determining institutional personnel requirements without an analysis of the workload. The Army agreed with the recommendation and prepared a plan, as required by the act, to resolve the weakness. The plan was approved by the Assistant Secretary of the Army for Manpower and Reserve Affairs in October 1997. All corrective actions detailed in this plan are to be completed by December 1999.

In January 1995, the Army began an effort to reengineer institutional processes and redesign organizational structures so that the institutional Army would effectively and efficiently develop, generate, deploy, and sustain operational forces. The Army's reengineering principles include eliminating unnecessary layering of functions and reducing the number of major headquarter commands. The Army stated that savings in active Army institutional positions are to be reinvested in the operational forces. The redesign effort, referred to as Force XXI Institutional Redesign, is to be conducted in three phases, with each phase examining different functions. Phase I was completed in March 1996, and phases II and III are expected to be completed in March 1998 and March 2000, respectively. In May 1997, the Secretary of Defense announced the results of the Quadrennial Defense Review, which included reducing 33,700 civilian Army positions and some active Army positions.<sup>3</sup> According to Army officials, these reductions would be in addition to the 13,000 positions

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<sup>2</sup>Managing Workload, Organizations And Staffing, Army Audit Agency (HQ 94-751, June 23, 1994) and Management Of Army Workload Of Tables Of Distribution And Allowances Organizations, Army Audit Agency (HQ 92-T2, Jan. 21, 1992).

<sup>3</sup>DOD stated in January 1998 that, under the Quadrennial Defense Review, Army civilians would be reduced by 26,000 by fiscal year 2003 and 33,700 by fiscal year 2005.

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already programmed between fiscal years 1998 and 2003 or those resulting from phase I redesign efforts.

In September 1997, the Deputy Secretary of Defense introduced DOD's strategic plan to implement the Government Performance and Results Act. The plan contains six overall goals, including to ". . . fundamentally reengineer the Department and achieve a 21st Century infrastructure by reducing costs and eliminating unnecessary expenditures while maintaining required military capabilities." Army plans, such as the Force XXI Institutional Redesign effort, are to be linked to the overall goals in the strategic plan.

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## Results in Brief

The Army developed a corrective action plan to resolve its material weakness in determining institutional personnel requirements but may have difficulty achieving the plan's completion date. Two critical subplans have not been developed, one that implements a new costing system and another that develops a new computer-based methodology—the Army Workload Performance System. Without specific steps and milestones for both of these efforts, the Army lacks the tools it needs to ensure that the plan will be completed by December 1999. Milestones for both efforts have slipped from original estimates, and in the case of the computer-based methodology, the Army has missed some of its interim goals. In addition, a plan initiative to ensure that major commands use a 12-step methodology to analyze workload may not be implemented on time unless more personnel are assigned to the office responsible for this effort. Currently, personnel requirements programs at some major commands do not meet Army 12-step criteria. Until the costing system, computer-based methodology, and 12-step methodology are fully developed and integrated, the Army cannot be sure that it has the most efficient and cost-effective workforce (active military, reserve, civilian, or contractor) and that its institutional personnel requirements are based on workload, as regulations require.

The Army's institutional redesign effort has not resulted in a reduction in major command headquarters, and the dollar and position savings identified are overstated. One redesign initiative resulted in the redesignation of a major command as a subcommand. However, the Army also created a new command, resulting in no net decrease in the number of commands. Also, the Army transferred a command but did not reorganize it to achieve efficiencies; therefore, this effort produced virtually no decrease in the command's 9,000 positions. Further, the Army

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anticipated \$1.7 billion in savings from phase I efforts, but that amount will be at least \$405 million less because significant implementation costs for some initiatives were not included in the Army's fiscal year 1998-2003 Program Objective Memorandum. Finally, the Army transferred about 2,800 active Army positions from institutional to operational forces based on two initiatives, but these initiatives did not produce the anticipated savings, and personnel cuts had to be made elsewhere. Even though the Army has appointed an executive agent for redesign assessments, no single office systematically manages and monitors redesign results. Thus, the Army does not know the status of specific initiatives, dollar savings, implementation costs, or progress in reducing institutional positions. Shortfalls in dollars and spaces add risk that the Army may not be able to provide adequate resources for all of its programs.

Overall, the Army's efforts to establish workload-based requirements and redesign institutional functions have produced few results. Army personnel trend data from 1992 to 2003 show that the Army has not been successful in reducing the proportion of institutional to operating forces within the active Army. In addition, the Army does not currently have a workload basis for allocating its personnel resources among institutional organizations and ensuring that the highest priority functions are funded first. As a result, the Army may not have the analysis it needs to efficiently allocate many of the institutional positions that are programmed to be eliminated by fiscal year 2003 or additional reductions mandated by the Quadrennial Defense Review. Further, the Army's lack of progress in identifying efficiencies means that some active Army personnel are not available to fill shortages among operational forces, including deployable support forces, which have historically been underresourced. Without senior leadership attention, the Army's current initiatives may not achieve meaningful and measurable change.

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## The Army May Have Difficulty Achieving Material Weakness Plan's Completion Date

The Army has made some progress by developing a material weakness plan, but it may have difficulty achieving the plan's December 1999 completion date for the following three reasons. First, Army commands are not fully implementing the required 12-step methodology, and the Army has acknowledged that staffing levels for oversight reviews to ensure compliance are insufficient. Second, as of October 1997, critical subplans outlining how the Army intends to meet its milestones had not been developed for the costing system and the computer-based methodology. The Army's progress in implementing the computer-based methodology during its initial pilot test has been slower than the Army has

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estimated. Last, milestones for critical portions of the plan have slipped from original estimates, even though the plan's overall completion date has remained the same. Delays in implementing the plan's corrective actions could result in further reductions of institutional personnel without the benefits of workload analysis and assessments of risks and tradeoffs.

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### Army Institutional Workforce Requirements Are Not Based on Workload

Army regulations require that the institutional workforce be based on workload. However, our February 1997 report concluded that the Army cannot identify and prioritize its institutional workload and therefore does not have an analytical basis for assigning institutional personnel or assurance that it has the minimum workforce for accomplishing institutional missions. The material weakness plan acknowledges this problem, stating that “. . .managers at all levels do not have the information needed to improve work performance, improve organizational efficiency, and determine and support staffing needs, manpower budgets, and personnel reductions.”

The Army's plan contains some logical steps to correct this material weakness,<sup>4</sup> including the Army's two near-term solutions to identifying the number of institutional positions based on an analysis of the workload. These solutions are a computer system for depots and arsenals, called the Army Workload Performance System (AWPS), and the 12-step methodology analysis for major commands. AWPS was developed to integrate workload and workforce information so depot managers can project the workforce needed to accomplish various levels of workload. The 12-step methodology was developed to link personnel to workload, reduce the cost of accomplishing work, and help managers make choices as they balance personnel and workload. The Army plans to integrate the workload and workforce information provided by the 12-step methodology and AWPS with the Civilian Manpower Integrated Costing System. According to Army officials, the Army will not be able to successfully link workload and workforce to the budget without the integration of these

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<sup>4</sup>The plan's corrective actions include linking the civilian workforce to the budget; updating the Army's personnel regulation to establish a new workload-based methodology as the Army standard (draft Army Regulation 570-4); certifying major commands' requirements processes; performing quality assurance reviews of commands' requirements determination studies; and implementing a new computer system at Army depots, arsenals, and ammunition plants.

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three elements.<sup>5</sup> For this reason, our review primarily focused on these initiatives.

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### Commands Are Not Fully Implementing the 12-Step Method

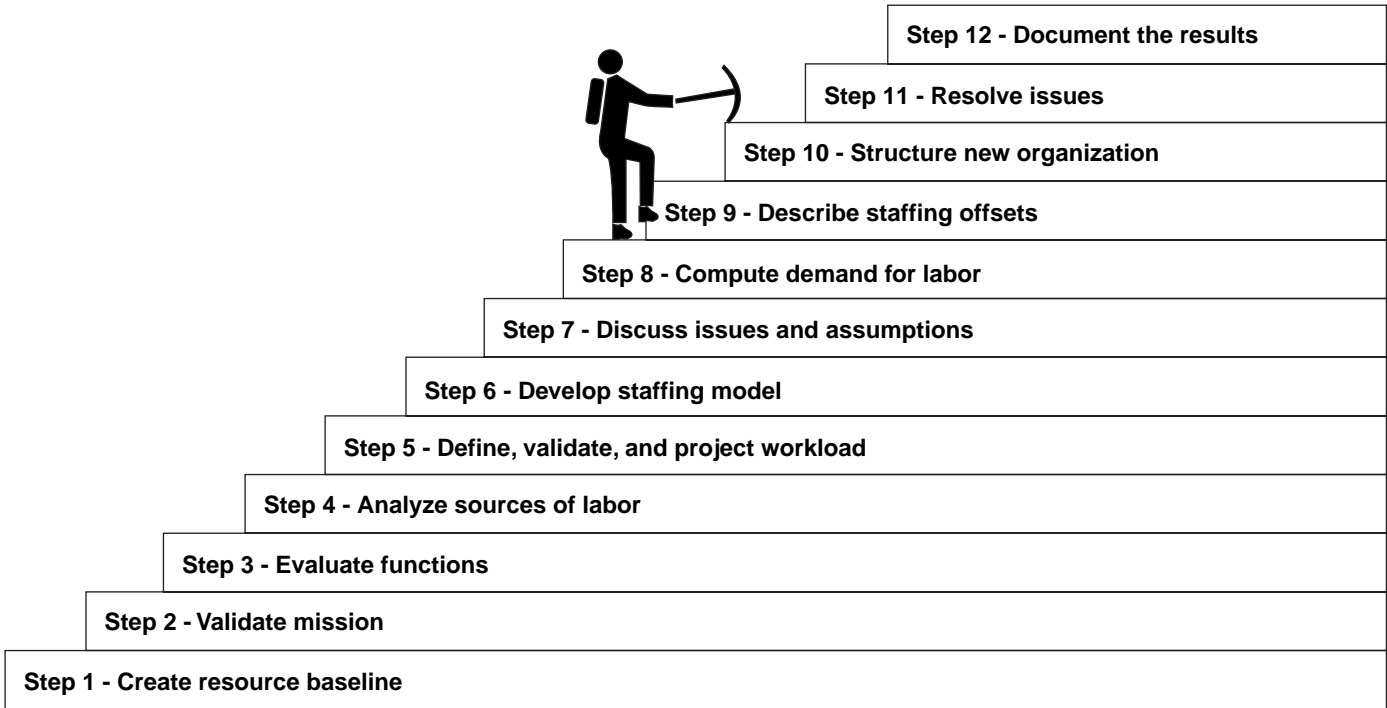
Although the Army established the 12-step methodology in April 1996 as the standard process for determining institutional requirements, commands' requirements programs fall short of what the Army expects. (See app. II for a list of Army major commands.) The 12-step method includes analyses of missions and functions, opportunities to improve processes, workload drivers, workforce options (including civilian versus military and contracting versus in-house), and organizational structure. Figure 1 shows the components of the 12-step method. Even though Army commands will continue to have some flexibility in creating their own requirements program, they will be required to perform all of the analyses included in the 12-step method. According to draft Army Regulation 570-4, although specific processes for determining requirements can vary, all processes must be approved by Army headquarters and have a common conceptual framework that consists of the 12-step analyses.

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<sup>5</sup>In the long term, the Army would like to integrate its institutional forces into its requirements process for operational forces, known as Total Army Analysis. Our February 1997 report discusses the Total Army Analysis process.



Figure 1: 12-Step Methodology



Source: Army.

Currently, the Army has no formal review process for determining whether major commands are using the 12-step methodology. Our review of requirements programs at three major commands (Army Materiel Command, Training and Doctrine Command, and Forces Command) found that the programs differ substantially in coverage and content and do not include all of the 12-step analyses.

The Army Materiel Command’s review did not systematically analyze labor sources (steps 4 and 9), such as examining the potential for contracting out various functions. Also, the Command did not perform efficiency reviews (step 3) because it assumed that the organization had already become efficient as a result of downsizing. Further, the Command did not consider customer satisfaction (step 7) as an element of timeliness and

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quality of services or examine best practice approaches (step 3).<sup>6</sup> Even though these steps were not performed, the Command reported that it had validated 79,941 personnel of its 80,542 assigned end strength—more than 99 percent.

The Training and Doctrine Command's process examines similar functions across installations to look for best practices and analyzes whether a particular installation is structured efficiently. However, the process does not include a decrement list (step 7), which contains options of how a command may perform its mission by merging, eliminating, or transferring functions if it receives fewer positions than expected.

The Forces Command's process examines functions at each installation. When this examination is completed, Command officials stated that they would compare functions across installations. As of November 1997, the Command had completed reviews at 3 of 11 installations and had not compared similar functions across the installations to perform the best practice analyses required in step 3. According to Command officials, Forces Command plans to examine best practices at the conclusion of its individual installation reviews in September 1998.

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### Insufficient Staff Could Delay Required Reviews of 12-Step Approach and Limit Army's Management Oversight

The material weakness plan establishes procedures for the Office of the Assistant Secretary of the Army for Manpower and Reserve Affairs to review commands' requirements programs to ensure that they include the 12-step analyses. The Army's plan to review commands' compliance with the 12-step method may be delayed if Manpower and Reserve Affairs does not receive sufficient staff to conduct oversight reviews. According to a Manpower and Reserve Affairs official, the office is to (1) certify commands' requirements programs and their compliance with the 12 steps, (2) conduct quality assurance reviews of commands' requirements studies, and (3) assist major commands by conducting 12-step reviews on a contract basis. According to the plan, certification reviews are scheduled to start in March 1998, and quality assurance reviews are scheduled to begin in June 1998. To successfully accomplish these tasks within the plan's time frames, a Manpower and Reserve Affairs official estimated that at least 35 additional staff would be needed. However, the material weakness plan states that only nine staff would be hired. The Assistant Secretary stated that executing the plan would require more resources. The lack of staff could delay both the certification and quality assurance

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<sup>6</sup>Efficiency reviews and best practice approaches are designed to improve processes and structure efficient organizations for accomplishing missions.

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reviews and prevent the Army from realizing the full benefits of this approach.

Staff from the Office of the Assistant Secretary of the Army for Manpower and Reserve Affairs cited their review of air traffic control operations as an example of how the Army expects to benefit from proper application of the 12-step methodology. At the beginning of the study, these institutional positions totaled 2,238 at multiple locations. The study used the 12-step method to develop a workforce model and recommended centralizing all tactical personnel in a single battalion stationed at the Army's Aviation School at Fort Rucker, Alabama. The study concluded that this consolidation could save 226 military positions, which the Army could transfer to meet other requirements, and \$5.5 million annually in stationing and operating costs.

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### Subplan for Implementing AWPS Has Not Been Developed

AWPS is the Army's second solution for determining workload-based institutional requirements, identifying opportunities to achieve depot efficiencies, and linking workload, personnel, and dollars. AWPS consists of three modules—performance measurement control, workload forecasting, and workforce forecasting—to determine workload-based personnel requirements at the depots, arsenals, and ammunition plants. The performance measurement control module compares actual to planned cost and schedule performance, thereby allowing users to identify problem areas. This module can identify the work centers contributing to the most significant cost and schedule variances. The workload forecasting module stores project data, labor expenditures, performance data, and scheduling information by work center. This module allows managers to compare workload levels to available direct labor and analyze changes in forecasted workload. This comparison can reveal mismatches or overloads before firm commitments are made to customers. Finally, the workforce forecasting module contains information on employee skills and leave and attrition rates. This information provides shop and depot managers with an accurate picture of the overall number of employees and the number that are available in each work center. Analyzing the workforce by skill groups allows depot commanders to plan for the amount of work that can be handled and to consider overtime, contracting, or reassigning workers among different work centers.

The Army has been developing AWPS since February 1996. The established goals for AWPS are (1) having all three modules operational at all five

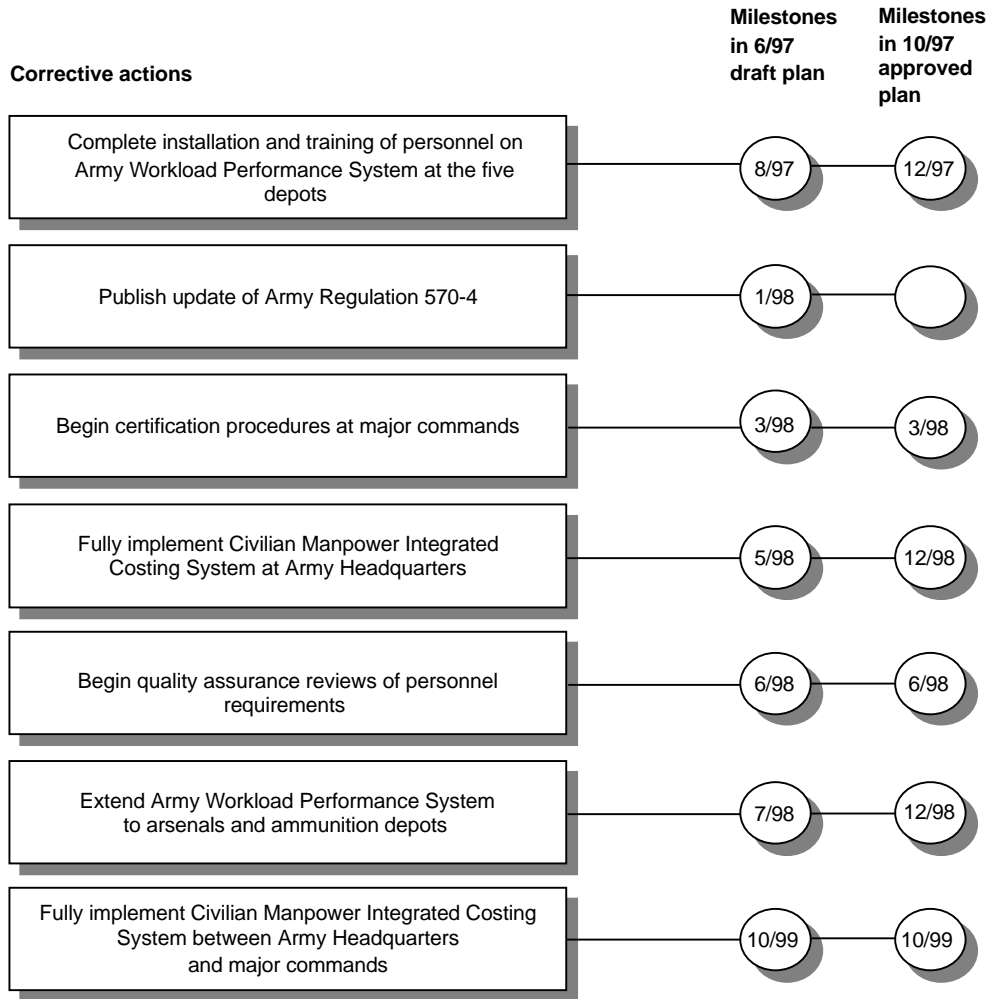
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depots by January 1998;<sup>7</sup> (2) operating a supplementary module (i.e., resource schedule and control) for supporting personnel assignments to projects by fiscal year 2000; and (3) having all modules on line and operational at depots, arsenals, and ammunition facilities by fiscal year 2000. However, as of December 1997, the Office of the Assistant Secretary of the Army for Manpower and Reserve Affairs had not written the subplan for implementing AWPS or identified the specific steps or milestones needed to achieve the goals. Instead, the Army has set short-term, interim steps as AWPS progresses. For example, in August 1997, the Army established specific steps for correcting data errors between August 1997 and January 1998. Without a detailed implementation schedule, however, the Army lacks the tools it needs to ensure that it can meet the milestones in the material weakness plan. For example, the Army's milestone for implementing AWPS at arsenals and ammunition facilities has already changed from July to December 1998. Figure 2 shows the difference in milestones between the June 1997 draft plan and the October 1997 approved plan.

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<sup>7</sup>The five depots are Corpus Christi Army Depot in Texas, Anniston Army Depot in Alabama, Red River Army Depot in Texas, Letterkenny Army Depot in Pennsylvania, and Tobyhanna Army Depot in Pennsylvania.

**Figure 2: Milestones in the June 1997 Draft Plan and October 1997 Approved Plan**



Note: The October 1997 approved plan contains no publication date for Army Regulation 570-4.

### Implementation of AWPS Has Been More Difficult Than Estimated

Implementation of AWPS at Corpus Christi Army Depot and other locations has been more difficult than the Army originally estimated. For example, in response to our February 1997 report, DOD reported that AWPS had been successfully tested at Corpus Christi Army Depot. Also, the Army expected the system to be operational at all five depots by March 1997. However,

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according to Industrial Operations Command officials,<sup>8</sup> the Army must still test and validate two of the three modules at Corpus Christi and correct data errors from feeder systems.<sup>9</sup> Our review showed that, even though AWPS equipment and software had been installed at all five depots, none of the three modules is being fully used at any location, including Corpus Christi.

Army Materiel Command officials cited problems that could affect the Army's ability to implement AWPS at the depots by December 1997. First, the performance measurement control module has been undergoing testing and validation since March 1997 and was planned to be fully operational by December 1997, assuming that the data errors would be corrected. As of August 1997, the Corpus Christi Army Depot was correcting data errors and therefore was not using this module to manage any depot work, not even work at the shop floor level as the Army had originally claimed. The other two modules are planned to be operational by February 1998, assuming that the data errors are corrected. An unresolved problem in the workload forecasting module is how to program work that will be started in one fiscal year and completed during the following fiscal year. The amount of repair work assumed affects management decisions on planning and scheduling the work and the workforce needed.

Second, the Army states in its material weakness plan that AWPS training at the five depots was to be completed by December 1997. However, as of November 1997, AWPS users were not fully trained, and some training requirements were not yet defined. Army officials stated that training on the performance measurement control module has been completed at the five depots. However, Corpus Christi Army Depot officials stated in August 1997 that 257 staff members at the depot have been trained. The depot employs approximately 1,500 personnel. Although not all 1,500 personnel need further training, depot and Industrial Operations Command officials agreed that additional training is required to teach shop floor supervisors and depot managers how to interpret AWPS data and how to use it to identify work areas needing improvement. Command officials stated that training for the workforce forecasting module was to be completed by December 1997, but training requirements for the workload forecasting module have not yet been defined.

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<sup>8</sup>The Industrial Operations Command is the headquarters command for all Army maintenance depots, arsenals, and ammunition plants. It is a major subordinate command of the Army Materiel Command.

<sup>9</sup>AWPS uses data from three feeder systems: the Standard Depot System, Army Time Attendance and Personnel System, and Headquarters Accumulation System.

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Last, Industrial Operations Command officials told us that AWPS is still an evolving concept and that corporate-level system requirements are not yet defined. For example, no final decision has been made concerning whether this Command and the Army Materiel Command will install the Decision Support System, which would enable commands to examine data from subordinate units and help identify processes that could be reengineered to improve performance. In December 1997, Army officials decided to add a material module to monitor ordering and delivery of repair parts.

According to Army officials, the Army could realize benefits once AWPS is operational and system users are trained. In July 1997, the Assistant Secretary of the Army for Manpower and Reserve Affairs stated that all depots and arsenals using AWPS will be able to match workload requirements and personnel projections. Thus, any personnel reductions will be based on the knowledge of work that will not be performed. AWPS could also be used for setting performance goals, such as reducing repair costs and cycle times, but Army officials stated that they have no intentions of using AWPS for this purpose.

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### Costing System Subplan Has Not Been Developed

The Civilian Manpower Integrated Costing System will be the Army's distributed, integrated database for costing institutional personnel requirements and linking workload and workforce to the budget. Army officials expect this system to provide funding information for various workload and workforce levels that the 12-step method and AWPS project. However, the subplan detailing the specific steps and milestones for implementing the system has not been developed. Without the subplan, the Army has no mechanism to measure its progress; therefore, managers will not know whether intervention is necessary to meet milestones. The system is essential for the Army to effectively prioritize work to be funded and clearly identify work remaining unfunded.

The material weakness plan includes an October 1999 milestone for implementing the Civilian Manpower Integrated Costing System at Army headquarters and major commands and using the system to base institutional budgets on workload analyses. The plan only includes one interim step, and the milestone for this action has slipped. For example, the milestone for implementing the system at Army headquarters changed from May to December 1998. Also, monitoring progress is essential because offices other than Manpower and Reserve Affairs are involved. According to Manpower and Reserve Affairs officials, the Financial

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Management and Comptroller's office is developing part of the system. The officials also stated that successful implementation will require compatible equipment at major commands and training the command's personnel how to use the system. However, milestones for these events are not identified.

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### Delayed Implementation Could Hamper Downsizing Decisions

Delays in implementing the material weakness plan's corrective actions could hamper the Army's efforts to efficiently allocate its institutional resources. The Army's workload analysis methods (12-step and AWPS) could enhance future decisions affecting institutional force structure. The 12-step methodology includes an analysis to structure organizations efficiently and assess whether positions should be filled by military, civilian, or contractor personnel. Such information could be useful to managers in deciding how to allocate reductions with the least effect on accomplishing institutional missions. The Army programmed reductions of 6,200 institutional positions during fiscal year 1998 and another 7,000 positions between fiscal year 1999 and 2003. The Quadrennial Defense Review mandates further reductions of 33,700 civilian positions and some active Army positions. Delayed implementation may result in these planned reductions being made without the benefit of workload analysis and assessments of risks and tradeoffs.

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### Institutional Redesign Has Not Lived Up to Its Potential for Reengineering the Institutional Force

Force XXI Institutional Redesign is the Army's effort to reengineer its processes and streamline its organizational structure. It includes consolidating major commands and realigning their missions to more efficiently perform institutional functions. The Army defines reengineering as a ". . . fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance." The Army Vice Chief of Staff is responsible for reengineering Army processes and organizations. The Deputy Chief of Staff for Operations and Plans is the executive agent for redesign assessments and is responsible for performing day-to-day support functions. Other Army headquarters offices are responsible for conducting the assessments and implementing approved initiatives.

Even though redesign efforts began in January 1995, there has been no net decrease in the number of major commands, and two of the redesign studies have been canceled. Also, the dollar and personnel savings estimates are overstated. The Army reported that redesign's phase I initiatives would save \$1.7 billion over 6 years and that implementation



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would cost almost \$27 million. The savings estimates are overstated because they do not include significant implementation costs of at least \$405 million. Also, most of the 4,000 active Army positions that were to be transferred from institutional to operational forces were based on assumptions that may not occur. In addition, since no single office monitors the results of institutional redesign efforts, the Army has no systematic way of knowing the status of savings, implementation costs, or institutional position transfers.

The Army's redesign document, draft Pamphlet 100xx,<sup>10</sup> states that it is intended to provide a vision for redesigning the institutional force and serve as the foundation for institutional doctrine. The pamphlet states general goals of improving institutional force efficiencies but, other than proposing models for reducing the number of major command headquarters, does not cite specific, measurable performance goals. However, the Government Performance and Results Act requires federal agencies to identify strategic goals and develop performance measures to gauge progress toward achieving each goal. The pamphlet is consistent with this principle, stating that "clear performance measures should be identified to gauge organizational progress."

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**Redesign Effort Has Not Resulted in Major Organizational Changes or Efficiencies**

The Army's institutional redesign effort has not reduced the number of major commands, even though redesign documents state that the Army will strive to do so. The redesign pamphlet introduces organizational models that would reduce the Army's current 15-major command structure to 8 or 3 major commands. For example, the three-command structure would manage the Army's core capabilities of developing the force, generating and projecting the force, and sustaining the force. Army headquarters would retain responsibility for directing and resourcing capabilities. During redesign phase I, the Army redesignated a major command—the Information Systems Command—as a subcommand of Forces Command. The Army also created a new major command—the Space and Missile Defense Command. Thus, there has been no net decrease in the number of major commands.

Some redesign transfer of functions from Army headquarters to major commands have not yet resulted in significant efficiencies. For example, the Recruiting Command transferred intact from Army headquarters to the Training and Doctrine Command in October 1997 as a major subordinate

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<sup>10</sup>Pamphlet 100xx has been in draft since June 1995 and, according to Army officials, has been undergoing final editing since April 1997.

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command. However, there has only been a decrease of less than one-half of 1 percent in the Recruiting Command's institutional positions. According to Army data, the Recruiting Command had 9,256 positions in fiscal year 1997, and the Army projects 9,210 positions in fiscal year 1998. The Army plans to merge the Recruiting Command with the Training and Doctrine Command's Cadet Command in October 1999, a move that the Army expects will result in organizational efficiencies and fewer institutional positions. The Army plans to conduct a business process reengineering study to determine the most effective and efficient organization which is expected to result in fewer organizational layers.

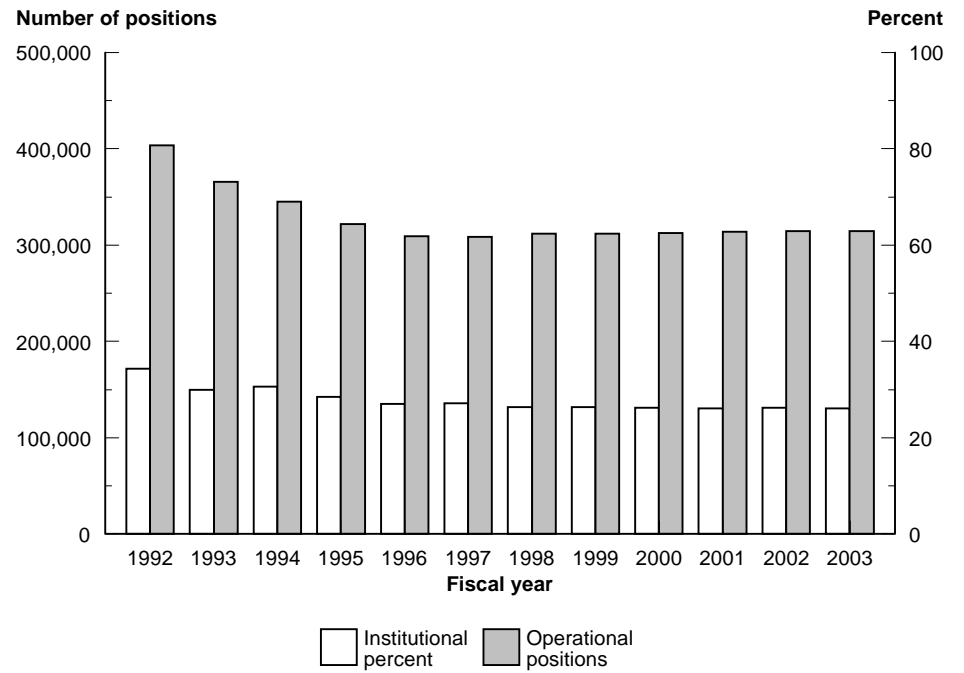
The Army initially planned to examine the following seven areas during phase II of the redesign effort: installation management; unit, joint, and interservice training; security and law enforcement; financial management; medical and health; intelligence; and supply, services, and materiel. However, officials from the Deputy Chief of Staff for Operations and Plans told us that the financial management and supply, services, and materiel assessments have been canceled. According to these officials, the Financial Management and Comptroller's office has chosen to use internal efforts to identify financial management efficiencies, rather than complete an institutional redesign assessment, because the Assistant Secretary of the Army for Financial Management and Comptroller reports to the Secretary of the Army and not the Army Vice Chief of Staff. Further, the officials said that the Army Materiel Command will not complete the supply, services, and materiel assessment because the Command was responding to the mandated Quadrennial Defense Review reductions.

Pamphlet 100xx encourages outsourcing institutional functions. A recent Defense Science Board study and the Quadrennial Defense Review also concluded that some institutional functions should be contracted. If the Army reduced its reliance on active military institutional personnel, more military personnel would be available for operational units, including deployable support units, which have historically experienced shortfalls.<sup>11</sup> Although the number of Army institutional positions has decreased since 1992, Army data show that the proportion of active Army institutional to operational forces has remained at about 29 percent and is projected to remain at this level through fiscal year 2003, as shown in figure 3.

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<sup>11</sup>Force Structure: Army Support Forces Can Meet Two-Conflict Strategy With Some Risks (GAO/NSIAD-97-66, Feb. 28, 1997) and Peace Operations: Heavy Use of Key Capabilities May Affect Response to Regional Conflicts (GAO/NSIAD-95-51, Mar. 8, 1995).

**Figure 3: Active Army Institutional Positions as a Percent of Operational Forces**



Source: Army force structure database as of the fiscal year 1997 President's budget.

In addition, the proportion of all active Army institutional positions to the total number of institutional positions is projected to increase slightly, from 34.2 percent in 1992 to 35.8 percent in 2003. Table 1 compares the number of military and civilian institutional positions in fiscal years 1992 and 2003.

**Table 1: Number of Active Army and Civilian Institutional Positions in Fiscal Years 1992 and 2003**

Category	Fiscal year 1992		Fiscal year 2003	
	Total institutional positions	Percent of total	Total institutional positions	Percent of total
Active Army	171,539	34.2	130,644	35.8
Civilian	330,157	65.8	234,676	64.2
<b>Total</b>	<b>501,696</b>	<b>100</b>	<b>365,320</b>	<b>100</b>

Note: The active Army category includes positions allocated to major commands, headquarters, and joint and defense agencies. Positions for transients, trainees, holdees, and students are not included.

Source: Army force structure database as of the fiscal year 1997 President's budget.

## Dollar and Position Savings Are Not Occurring as Expected

Phase I savings estimates are overstated because significant costs are not included in the Army's 1998-2003 Program Objective Memorandum and savings estimates are not definitive. Specifically, the memorandum included savings of \$1.7 billion and almost \$27 million in implementation costs resulting from 107 institutional redesign initiatives.<sup>12</sup> However, at least \$405 million in implementation costs were not included in the memorandum.

The Army Program Analysis and Evaluation Office is to develop the service's Program Objective Memorandum. According to an official from this office, limited cost data were included in the memorandum because the offices responsible for the initiatives did not provide cost data in a timely manner. For example, the Army Program Analysis and Evaluation Office did not include \$69 million in implementation costs for five logistics initiatives. In addition, the Army Program Analysis and Evaluation Office did not include implementation costs for the Senior Reserve Officer's Training Corps initiative. This initiative proposed replacing the Senior Reserve Officer's Training Corps active duty institutional personnel with a combination of active, reserve, or contracted former military personnel. The Reserve Officer's Training Corps program is in place at 300 colleges and enables students to graduate with a degree and receive an officer's commission.

<sup>12</sup>Phase I produced a total of 144 initiatives. The remaining 37 initiatives are expected to be implemented later. The initiatives submitted to the Vice Chief of Staff for approval contained estimates of dollar and position savings, both civilian and military. Army officials noted that the initiatives may also result in increased effectiveness. However, the officials did not provide any measures of performance for increased effectiveness.

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In February 1996, the Deputy Chief of Staff for Operations and Plans initially estimated that the Senior Reserve Officer Training Corps initiative would cost \$336 million over a 4-year period for contracting retired personnel to replace all 2,100 active Army personnel in the corps. However, the Army's Program Objective Memorandum did not include any of the implementation costs associated with the hiring of contractor personnel to conduct the Senior Reserve Officer's Training Corps program. The Army's memorandum only included implementation cost of \$2 million for RAND to study the concept of hiring contractor personnel. Once implemented, the initiative is expected to require a recurring operations and maintenance cost of \$40,000 per contractor per year.<sup>13</sup> For example, if all 2,100 active Army personnel were replaced by contractors—in general, retired officers—the Army would incur a cost of \$84 million per year.

Additionally, the \$1.7 billion savings estimate is not definitive because two offices disagree on the savings anticipated. The Deputy Chief of Staff for Logistics is responsible for five logistics initiatives, which represent 40 percent of the \$1.7 billion phase I savings. The Army Program Analysis and Evaluation Office and the Office of the Deputy Chief of Staff for Logistics identified savings that varied from \$12 million to \$57 million per initiative, as shown in table 2, even though the net difference amounted to approximately \$13 million. According to the Army Program Analysis and Evaluation Office, the savings are also included in the 1998-2003 Future Years Defense Program, but specific initiatives and groupings (such as logistics-related initiatives) cannot be tracked because they are combined with other Army efforts.

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<sup>13</sup>Since the contractors are retired officers, this cost represents the difference between the contractor's active duty and retirement salary.

**Table 2: Differences in Phase I Implementation Cost and Savings Data Between Army Program Analysis and Evaluation and Deputy Chief of Staff for Logistics Offices**

Dollars in millions				
Initiative	Costs		Savings	
	PA&E	DCSLOG	PA&E	DCSLOG
Single stock fund	0	\$10	\$429.7	\$380
Standard Army retail supply system	0	9.9	27.6	85
Velocity management/order ship time	0	4	116.5	71.5
Integrated sustainment maintenance	0	45	103.6	142
Materiel management privatization	0	0	0.3	12
<b>Total</b>	<b>0</b>	<b>\$68.9</b>	<b>\$677.7</b>	<b>\$690.5</b>

Note: PA&E—Program Analysis and Evaluation and DCSLOG—Deputy Chief of Staff for Logistics.

Source: Army Program Analysis and Evaluation and Deputy Chief of Staff for Logistics offices.

According to the Principal Deputy Assistant Secretary of the Army for Financial Management and Comptroller, the burden is on the major command to identify a “substitute bill payer” if redesign savings cannot be achieved, since the savings have already been included in the fiscal year 1998-2003 Program Objective Memorandum. Officials from the Army Program Analysis and Evaluation and Deputy Chief of Staff for Operations and Plans offices concurred. For example, the fiscal year 1998-2003 memorandum claimed savings of approximately \$430 million for the single stock fund initiative. This effort is based on the belief that a single stock fund eliminates duplicative materiel and financial management functions. However, the Army Materiel Command, as the proponent for this initiative, claims that fiscal year 1998 projected savings of \$30 million will not be realized because of problems in implementing changes to financial systems. The Principal Deputy Assistant Secretary for Financial Management and Comptroller told us that \$30 million in savings will be realized in fiscal year 1998—either from this initiative or elsewhere.

Phase I projected that 3,914 active Army positions could be transferred from institutional to operational forces, but most of these transfers were based on assumptions that may not occur. Our February 1997 report stated that many of the active Army space transfers were based on initiatives that have not been fully tested or approved; therefore, the savings were not assured. As a result, we recommended that the Secretary of the Army closely monitor the military positions the Army planned to save from the

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redesign initiatives and have a contingency plan in place in the event the personnel savings do not materialize. DOD concurred with this recommendation.

Officials from the Deputy Chief of Staff for Operations and Plans stated that the 3,914 spaces were transferred from institutional to operational forces, but most of the spaces did not come from the phase I redesign initiatives. Two initiatives, which account for 2,850, or 73 percent, of the 3,914 active Army spaces, will not produce the projected number of spaces. For example, the Senior Reserve Officer's Training Corps initiative was expected to transfer 2,100 positions. However, RAND currently estimates the initiative will yield between 800 and 1,050 spaces because the Army decided not to contract out all 2,100 spaces and is testing a combination of active, reserve, and contract personnel.

Additionally, the transfer of positions is also based on reducing attrition.<sup>14</sup> The Army assumed reduced attrition would free 750 training and recruiting institutional positions. If personnel stay in the Army, then it would not need to recruit and train replacements. However, the Training and Doctrine Command currently projects an increase in initial entry training requirements from fiscal years 1998 to 1999 rather than a decrease. Army headquarters officials acknowledged that they could not explain how the 750 spaces were calculated, and Command officials said that it was not involved in deriving the 750 spaces.

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## No Office Monitors the Results of Redesign Efforts

Even though the Deputy Chief of Staff for Operations and Plans is the executive agent for redesign assessments, there is no single office that systematically manages and monitors redesign results. Therefore, at any given time, the Office of Operations and Plans does not know the status of specific initiatives, dollar savings, implementation costs, or progress in reducing institutional positions. In addition, any differences in projected costs and savings have not been reconciled between the Army Program Analysis and Evaluation and the Army offices responsible for specific initiatives.

The Assistant Secretary of the Army for Financial Management and Comptroller is responsible for quarterly Army performance reviews. These reviews are for the Secretary of the Army, Army Chief of Staff, and function chiefs to discuss problem areas. However, the Office of the Assistant Secretary states that institutional redesign initiatives are

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<sup>14</sup>Attrition is defined as a soldier leaving the Army before his or her term of enlistment expires.

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monitored and discussed only if their implementation or savings become jeopardized. A Financial Management and Comptroller written statement explains that none of the redesign initiatives have been designated as topics to be monitored during the quarterly reviews, including the Senior Reserve Officer's Training Corps, which accounts for one-half the projected position transfers and \$336 million in unaccounted for implementation costs. A Financial Management and Comptroller official told us that some quarterly reviews were canceled and never rescheduled and that monitoring institutional redesign results would require an investment of too many resources.

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### Redesign Lacks Specific Performance Goals

Pamphlet 100xx discusses the need to achieve efficiencies in performing institutional functions. For example, the pamphlet states that it is necessary to demonstrate that cost savings and/or operational efficiencies will result from implementing redesign initiatives. However, beyond this overarching guidance, the Army has not set specific, measurable, performance goals and assessed the Army's progress in achieving them (e.g., program outcome evaluations). More recently, DOD guidance to the military services for implementing the Government Performance and Results Act states that the services should identify performance measures that demonstrate how the services' plans, such as Army Force XXI, achieve the goals of DOD's strategic plan.

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### Conclusions

A sound, analytically based methodology would help the Army to ensure that its institutional force is efficiently organized and comprises the minimum number of personnel. Such a methodology is essential for the Army to make data-based decisions on how to allocate resources among institutional organizations, have assurance the highest priority functions are funded, and be aware of the risks in not funding some institutional functions. The use of workload-based criteria in implementing the programmed downsizing of 13,000 positions and Quadrennial Defense Review reductions could help the Army minimize effects on its ability to perform institutional functions and may help introduce more efficient organizations and processes. A smaller institutional force may also generate savings the Army could apply to its modernization programs or its operational forces.

Although the Army has a plan to correct this material weakness, the plan is incomplete, and the Army may have difficulty accomplishing the corrective actions within established time frames. The plan provides a



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mechanism to ensure compliance with the Army's methodology for determining institutional requirements. However, if the plan's certification and quality assurance milestones are extended due to insufficient resources, the Army will be making reductions without knowing if commands are performing the analyses required to make sound decisions about staffing levels and reduce the cost of accomplishing institutional functions.

The Army's plan is to simultaneously develop workload approaches (12-step method and AWPS) and a system to calculate the cost for institutional positions. Until all three efforts are completed and integrated, the Army cannot be assured that it has the minimum essential institutional force, and the Army's planning, programming, budgeting, and execution system for institutional functions will not be based on workload. If key subplans remain undeveloped, the Army has no method for assessing its progress toward meeting the plan's current completion date of December 1999. As a result, further reductions or retention of institutional personnel may result without the benefits of workload analysis and assessments of risks and tradeoffs.

Army oversight is necessary to ensure that Force XXI institutional redesign results are achieved. To date, the Army has not identified specific, measurable redesign goals, even though its own guidance acknowledges the importance of doing so. Army documents include general goals for improving institutional efficiency but, other than reducing the number of major commands, do not specify measures to achieve efficiencies. Without measurable performance goals, it may be difficult for the Army to know when its vision for the institutional force, as stated in Pamphlet 100xx, is achieved. Further, savings will be less than projected. In fact, the Army may not know the source of the savings because no single office monitors the status of redesign initiatives or their implementation costs.

The Force XXI redesign concept includes proposals to reduce the number of major commands and realign their functions. Since the 12-step methodology includes analyses of how to structure and staff organizations efficiently, the Army could coordinate implementing major command realignments with the 12-step analysis techniques. Such coordination could result in institutional efficiencies, which would provide the Army an opportunity to transfer military institutional personnel to fill shortfalls in support forces. This transfer would increase the proportion of Army

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resources devoted to missions and decrease the proportion devoted to infrastructure.

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## Recommendations

To improve the Army's ability to accurately project institutional requirements, allocate institutional personnel, and make informed, analysis-based decisions on risks and tradeoffs, we recommend that the Secretary of the Army complete subplans of the material weakness plan, modify milestones to accurately reflect available resources to accomplish corrective actions, and closely monitor results.

To improve the Army's ability to accurately project institutional requirements derived from AWPS, we recommend that the Secretary of the Army direct the Assistant Secretary for Manpower and Reserve Affairs to develop a long-range master plan to implement AWPS, including milestones and definitions of corporate-level requirements.

To improve the Army's ability to make informed, analysis-based decisions on benefits, risks, and tradeoffs in realigning major command organizations and functions, we recommend that the Secretary of the Army require that workload-based analyses, such as the 12-step methodology, be used to demonstrate the benefits, risks, and tradeoffs of Force XXI institutional redesign decisions.

To improve the Army's ability to oversee reforms for increasing the effectiveness and efficiency of its institutional force, we recommend that the Secretary of the Army assign a single office the responsibility to provide management and oversight of the institutional redesign process to include identifying clear, specific, and measurable performance goals; publishing these goals in a final version of Pamphlet 100xx; monitoring savings and implementation costs; and periodically reporting results achieved along with the stated goals and projections of the initiatives' savings and implementation costs.

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## Agency Comments

In written comments on a draft of this report, DOD generally concurred with the report and all recommendations. DOD also stated that it will request that the Army take appropriate action to implement our recommendations. DOD's comments are reprinted in their entirety in appendix III.

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We are providing copies of this report to the Secretaries of Defense and the Army, other appropriate congressional committees, and the Director of the Office of Management and Budget. We will also provide copies to other interested parties on request.

Please contact me at (202) 512-3504 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix IV.

Sincerely yours,

A handwritten signature in cursive script that reads "Richard Davis".

Richard Davis  
Director, National Security  
Analysis

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## Abbreviations

AWPS	Army Workload Performance System
DOD	Department of Defense
TDA	Tables of Distribution and Allowances

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# Scope and Methodology

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To determine the extent to which the Army addressed its historical weakness in determining institutional requirements, we compared the June 1997 draft material weakness plan to the October 1997 approved plan to identify changes in milestones, progress in subplans' development, and the intent to administer and monitor the plan. We also examined Army and Department of Defense (DOD) guidance and regulations regarding implementation of workload-based systems and processes, such as the 12-step method and the Army Workload and Performance System (AWPS).

We obtained documentation and interviewed knowledgeable Army officials from Army Headquarters, Office of the Assistant Secretary of the Army for Manpower and Reserve Affairs, and the Deputy Chief of Staff for Operations and Plans—Directorate of Force Programs, Washington, D.C.; and the Industrial Operations Command, Rock Island, Illinois. We observed pilot testing of AWPS at the Corpus Christi Army Depot, Texas. We also analyzed documents and held discussions regarding AWPS system implementation, status of training, management of depot workload, systems requirements, and the lack of updated project schedules.

We obtained relevant documentation on existing requirements determination processes at Forces Command, Fort McPherson, Georgia; the Army Training and Doctrine Command, Fort Monroe, Virginia; the Army Materiel Command, Alexandria, Virginia; and the Management Engineering Activity, Huntsville, Alabama, which performed the Army Materiel Command's requirements assessments. The three major commands account for 43 percent of the civilian institutional workforce and 47 percent of the military institutional workforce. We compared each of the command's processes with the 12-step method to identify compliance and program differences. We also assessed the use of the requirements determination processes in budget formulation and execution at Army Headquarters and the major commands.

To assess the extent to which the Army's streamlining initiatives identified opportunities to reduce Army personnel devoted to institutional functions and realize savings, we reviewed streamlining guidance and interviewed knowledgeable officials from the Office of the Assistant Secretary of the Army for Manpower and Reserve Affairs; the Directorate of Force Programs within the Deputy Chief of Staff for Operations and Plans; the Assistant Secretary of the Army for Financial Management and Comptroller; the Deputy Chief of Staff for Logistics; Forces Command; Training and Doctrine Command; and Army Materiel Command. During discussions with the officials, we obtained documentation describing each

initiative, estimated implementation costs, and dollar and personnel savings for the 107 fiscal year 1998-2003 institutional redesign initiatives. We also obtained documentation and discussed military position transfers from institutional to operational forces. However, our assessment focused on those initiatives that represented the largest percentage of the phase I redesign savings.

Officials from the Army's Office of Program Analysis and Evaluation provided documentation of the dollar savings included in the 1998-2003 Program Objective Memorandum and validated our analysis of those numbers. The Office of the Assistant Secretary of the Army for Manpower and Reserve Affairs validated the personnel savings.

To identify the distribution of active Army and civilian institutional personnel and analyze institutional trends, we obtained the number of institutional positions from fiscal years 1992 to 2003 from the Army Force Management and Support Agency's Structure and Manpower Allocation System database. We did not conduct a full reliability assessment because the data used in the report are for background and context and are not vital to audit results. However, Army officials explained the imbedded system edits they rely on to detect data errors and protect data integrity. Additionally, we independently corroborated the numbers at two commands. On the basis of our comparisons and the description of the database's system edits, we were satisfied that these data are the best available and that they accurately support our statements on institutional composition and trends.

We conducted our review from April to December 1997 in accordance with generally accepted government auditing standards.

# Army Major Commands

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- Army Materiel Command
- Training and Doctrine Command
- Forces Command
- Medical Command
- Corps of Engineers
- Space and Missile Defense Command
- Special Operations Command
- Military Traffic Management Command
- Criminal Investigations Command
- Intelligence and Security Command
- Military District of Washington
- U.S. Army, Europe
- U.S. Army, Pacific
- Eighth U.S. Army
- U.S. Army, South



# Comments From the Department of Defense



OFFICE OF THE UNDER SECRETARY OF DEFENSE  
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JAN 23 1998

PERSONNEL AND  
READINESS

Mr. Richard Davis  
Director, National Security Analysis  
National Security and International Affairs Division  
U.S. General Accounting Office  
Washington, DC 20548

Dear Mr. Davis:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "FORCE STRUCTURE: Army Efforts to Improve Efficiency of Institutional Forces Have Produced Few Results," dated December 23, 1997, (GAO Code 701112/OSD Case1512). The DoD generally concurs with the report. Specific comments related to each recommendation are attached. Technical and additional Army written comments were separately provided to GAO staff; however, they do not represent an official DoD position.

The Department appreciates the opportunity to comment on the GAO draft report and requests the reprinting of the DoD response to the draft as Appendix II of the final report. My point of contact on this matter is Ms. Nina Richman-Loo. She can be reached at 614-5133/614-1243 (fax), or electronically at [richmann@pr.osd.mil](mailto:richmann@pr.osd.mil).

Sincerely,

Jeanne B. Fites  
Deputy Under Secretary of Defense  
(Program Integration)

Enclosure  
As stated



GAO DRAFT REPORT DATED DECEMBER 23, 1997  
(GAO CODE 701112) OSD CASE 1512

“FORCE STRUCTURE: ARMY EFFORTS TO IMPROVE EFFICIENCY OF  
INSTITUTIONAL FORCES HAVE PRODUCED FEW RESULTS”

DEPARTMENT OF DEFENSE COMMENTS TO  
THE GAO RECOMMENDATIONS

Now on p. 24.

**RECOMMENDATION 1:** To improve the Army’s ability to accurately project Institutional requirements, allocate Institutional personnel, and make informed analysis-based decisions on risks and tradeoffs, the GAO recommended that the Secretary of the Army complete subplans of the material weakness plan, modify the milestones to accurately reflect available resources to accomplish corrective actions, and closely monitor results. (page 32/GAO Draft Report)

**DOD RESPONSE:** Concur. The Office, Under Secretary of Defense for Personnel and Readiness will request that the Secretary of the Army ensure that subplans of the material weakness plan are completed, that milestones are modified to accurately reflect available resources to accomplish corrective actions, and closely monitor results.

Now on p. 24.

**RECOMMENDATION 2:** To improve the Army’s ability to accurately project Institutional requirements derived from its workload-based computer system (the Army Workload Performance System, or AWPS), the GAO recommended that the Secretary of the Army direct the Assistant Secretary for Manpower and Reserve Affairs to develop a long range master plan to implement AWPS, including milestones and definitions of corporate level requirements. (page 32/Draft GAO Report)

**DOD RESPONSE:** Concur. The Office, Under Secretary of Defense for Personnel and Readiness will request that the Assistant Secretary of the Army for Manpower and Reserve Affairs develop a long range master plan to implement AWPS, including milestones and corporate-level requirements.

Now on p. 24.

**RECOMMENDATION 3:** To improve the Army’s ability to make informed, analysis-based decisions on benefits, and tradeoffs in realigning major command organizations and functions, the GAO recommended that the Secretary of the Army require that workload-based analysis, such as the 12 Step approach, be used to demonstrate the benefits, risks, and tradeoffs of Force XXI Institutional Redesign decisions. (page 32/Draft GAO Report)

**DOD RESPONSE:** Concur. The Office, Under Secretary of Defense for Personnel and Readiness will request that the Secretary of the Army take appropriate action to ensure that workload-based analyses, such as the 12 step approach, be used to demonstrate the benefits, risks, and tradeoffs of Force XXI Institutional Redesign decisions.

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**Appendix III**  
**Comments From the Department of Defense**

Now on p. 24.

**RECOMMENDATION 4:** To improve the Army's ability to oversee reforms for increasing Table of Distribution and Allowances (TDA) effectiveness and efficiency, the GAO recommended that the Secretary of the Army assign a single office the responsibility to provide management and oversight of the Institutional Redesign process to include identifying clear, specific, and measurable performance goals; publishing those goals in a final Pamphlet 100xx; monitoring savings and implementation costs; and periodically reporting results achieved compared with stated goals and projections of the initiatives' savings and implementation costs. (page 32/Draft GAO Report)

**DOD RESPONSE:** Concur. The Office, Under Secretary of Defense for Personnel and Readiness will request that the Army take steps to ensure that savings and implementation costs associated with the Infrastructure Redesign process are captured and compared to measurable performance goals.

# Major Contributors to This Report

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