The weapon system acquisition process has been the subject of discussion and criticism for many years. The public and Congress have seriously questioned the Department of Defense's (DOD) ability to effectively manage its acquisition programs. On November 5, 1990, the Defense Acquisition Workforce Improvement Act (10 U.S.C. 1701) was enacted to professionalize DOD's acquisition work force. The act establishes experience, training, education, and other qualification requirements for these employees. These requirements and other provisions are to take effect over a 3-year period, with some in effect beginning October 1, 1991.

The act permits DOD officials to waive specific qualification requirements pertaining to program managers and other acquisition personnel. It also requires that, through 1998, we annually review and report on DOD's compliance with the act's waiver provisions. This is our first report required by the act. In addition, as requested by the House Armed Services Committee, we identify difficulties facing DOD as it implements the act.

Background

In 1986 the President's Blue Ribbon Commission on Defense Management (the Packard Commission) described the DOD acquisition work force as "undertrained, underpaid, and inexperienced." In July 1989, DOD's Defense Management Review found many of the same problems as the Packard Commission and recommended a series of specific management initiatives to improve the acquisition process and more effectively manage DOD's resources.1

Concerned that DOD's reform efforts did not focus enough on the qualifications and professionalism of DOD's acquisition work force, Congress

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1 On the basis of the Packard Commission findings, the President directed the Secretary of Defense to review DOD's management and develop a plan to fully implement the Commission's recommendations. In response, the Secretary established the Defense Management Review in February 1989.
enacted the Defense Acquisition Workforce Improvement Act on November 5, 1990. The act establishes a management and career development structure with specific education, training, experience, and other qualification requirements for the acquisition work force. This work force comprises 11 existing career areas.

The act establishes (1) contracting officer qualification requirements, (2) acquisition corps membership selection and eligibility requirements, (3) program and deputy program manager assignment and other qualification requirements for major and significant nonmajor acquisition programs, and (4) requirements for acquisition personnel assigned to critical acquisition positions—those senior acquisition positions with greater responsibility.

**Results in Brief**

Many of the act's requirements containing waiver provisions were not in effect during the period of our review, which ended on December 31, 1991. In effect, however, were qualification requirements for program managers (appointed after October 1, 1991) of major and significant nonmajor acquisition programs. Tenure requirements for program and deputy program managers of major programs were also in effect. Only a few program manager appointments to major programs had been made between October 1, and December 31, 1991, and none of these appointments required a waiver from the act's requirements.

DOD will face a number of difficulties as it implements the act. First, service officials state that the process of identifying acquisition positions and evaluating the individual qualifications of each member of the work force is time-consuming and may delay implementation of key act provisions. Second, the funding necessary to implement the act could be significant. Third, the requirement to significantly increase the number of civilians in critical positions is controversial with the services and may encounter some resistance.

**No Waivers Were Needed for the Requirements in Effect Through December 1991**

Effective October 1, 1991, the act required that newly appointed program managers of major and significant nonmajor defense acquisition programs complete the program management course (or an equivalent course) at the Defense Systems Management College;

- agree to a tenure requirement that they remain in their position until the completion of the first major milestone closest in time to the date they had
served 4 years, and sign a written agreement to remain on active duty or in federal service, as applicable, during this period; and

- possess acquisition experience: at least 8 years for major defense programs (of which 2 are in a systems program office or similar organization), and at least 6 years for significant nonmajor programs.

Effective October 1, 1991, newly appointed deputy program managers of major defense acquisition programs must also comply with the tenure requirement. The act does not establish an effective date for deputy program managers to comply with similar education and experience requirements now in effect for program managers. However, DOD interprets the act to require waivers for deputy program managers appointed as of October 1, 1992.

Waivers

The service secretaries (or their service acquisition executives) may waive requirements on a case-by-case basis. Such waivers may be granted if unusual circumstances justify the waiver or if the service secretary determines that an individual's qualifications obviate the need for meeting the education, training, and experience requirements. Program managers appointed before October 1, 1991, do not need waivers to be exempt from the act's requirements.

Waivers for program managers

Between October and December 31, 1991, DOD appointed five managers to major or significant nonmajor programs. According to DOD documents, all of these managers met the qualification requirements and, accordingly, did not require a waiver. Also, according to DOD officials, all five appointees signed (or will sign) written tenure agreements, as required by the act. As of December 31, 1991, there had been no waivers to the tenure requirements. Because of the limited time frame of our review, we did not review personnel files to independently verify each appointee's qualifications.

DOD expects that few program managers will require waivers to the act's experience, training, education, and tenure provisions because many of these requirements existed in previous law. For example, since 1987 the law has required that program managers take the Program Manager Course at the Defense Systems Management College. Moreover, since 1989, the law also required 8 years of acquisition experience, 2 of which must be in a procurement command. With respect to tenure requirements, since 1984 program managers of major acquisition programs have been

1Under the act, the service acquisition executives can delegate their waiver authority.
required to remain in their position until the completion of a major milestone or for at least 4 years. According to DOD officials, 70 percent of the program managers appointed before the act became effective already met these requirements.

Waivers for deputy program managers

Between October 1, 1991, and December 31, 1991, one deputy program manager was appointed to a major acquisition program. He signed the required tenure agreement, so as of December 31, 1991, there were no waivers to the tenure requirements for deputy program managers.

The services had no estimate of waivers needed in the future for program and deputy program managers. However, service officials believe that more waivers may be necessary once provisions regarding other acquisition positions take effect in 1992 and 1993.

DOD Will Encounter Difficulties As It Implements the Act

Identification of Acquisition Work Force Is Difficult for Services

By October 1, 1991, DOD was required to publish guidance on the designation of acquisition work force and critical acquisition positions. DOD complied with this requirement and, as required by the act, has begun (1) to identify individual positions to be included in the work force and (2) accumulate information on work force personnel. However, this process is proving to be time-consuming. The service commands must individually review each job position to determine whether the duties of that position fall in acquisition areas. For example, a budget analyst position may be considered to be an acquisition position in a program office. In addition, the services must identify the qualifications, assignments, tenure, and other information for persons in acquisition work force positions. Preliminary estimates indicate that each service will have 30,000 or more positions in its acquisition work force. The services expect to complete their review by April 1992.

Once the work force has been designated, the services can determine which personnel should be included in the acquisition corps and which, within the corps, should be designated to critical acquisition positions. The act requires that by October 1, 1992, each service (1) develop a
management information system that identifies each member of the acquisition corps and (2) publish a list of critical acquisition positions. Navy officials expressed concern that delays in identifying the work force might prevent them from meeting the act's October 1992 deadline.

Funding Required to Implement the Act Is Uncertain

The act states that each year the Under Secretary of Defense for Acquisition shall recommend to the Secretary of Defense the funding levels needed to implement the act's education and training programs. It also requires the Secretary to establish separate funding levels and justifications for such programs in DOD's budget submission.

Programs mentioned in the act include

- Defense Acquisition University training,
- intern programs,
- cooperative education,
- scholarships,
- tuition reimbursement, and
- student loan reimbursement.

The act also specifies funding requirements for special pay and bonuses and reimbursement for relocation expenses, but it does not require separate funding levels for these expenses.

DOD's acquisition training budget for fiscal year 1992 is about $18.8 million. According to DOD officials this will provide for about 22,000 class positions. This training budget, however, only covers part of the cost for the Defense Acquisition University and the acquisition scholarship program. Other acquisition program costs are funded by the services.

DOD has not determined the funding requirement for fiscal year 1993 and beyond. DOD officials told us that fiscal year 1993 costs would be much higher because all fiscal year 1992 costs had not been fully identified and included. Fiscal year 1992 costs only included the cost of scholarships, student travel expenses, a small student administrative fee, and Defense Acquisition University course development costs. In fiscal year 1993 all costs for DOD's acquisition training will be identified and included in a separate budget.

According to DOD officials, accurately estimating funding requirements for future years is difficult because the services have not identified members of
their acquisition work force or training needs. In addition, the services have not determined how to integrate service-funded programs, such as tuition reimbursement and intern programs, with acquisition work force requirements.

Also uncertain is the cost to develop the act's reporting system. Section 1761 of Title 10 U.S.C. requires the military departments and defense agencies to establish a management information system capable of providing standardized information on persons serving in acquisition positions. The current plans are to modify an existing DOD data system, at a cost of about $200,000, to report the act's required information. DOD, however, may later expand this system to permit budget estimating and other capabilities, the costs of which are unknown. In addition, the services are, in total, spending an estimated $7 to $8 million to modify their systems to provide DOD the information it needs and to interface the service systems with the DOD system. This estimate, however, does not include validation of the data, which could be needed.

Views Differ on Civilianizing Acquisition Work Force Positions

The act calls for a substantial increase in the proportion of civilians serving in critical acquisition positions, including division head positions, in fiscal years 1991 through 1996. The act, however, does not define "substantial increase"; nor is there a clear indication of the desired proportion of military to civilian personnel. The act also states that the Secretary of Defense shall ensure that no requirement or preference for military personnel is used in considering persons for acquisition positions, except for certain necessary and compelling reasons. These provisions of the act are controversial to some military officials who believe the military will be eliminated from many critical acquisition positions. They believe it will be difficult for new military entering the acquisition work force to plan a career in the acquisition corps when the number of civilians is increasing in critical acquisition positions. They also believe that this increase means fewer critical acquisition positions will be available to the military.

Table 1 shows, by service, the mix of civilians and military in the program and deputy program manager positions in major and significant nonmajor programs.
Table 1: Comparison of Civilians (Civ.) and Military (Mil.) Program Manager and Deputy Program Manager Positions

<table>
<thead>
<tr>
<th>Position</th>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
<th>DOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program managers</td>
<td>43</td>
<td>0</td>
<td>49</td>
<td>9</td>
</tr>
<tr>
<td>Deputy program managers</td>
<td>2</td>
<td>41</td>
<td>14</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>41</td>
<td>63</td>
<td>53</td>
</tr>
<tr>
<td>Significant nonmajor programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program managers</td>
<td>19</td>
<td>1</td>
<td>54</td>
<td>8</td>
</tr>
<tr>
<td>Deputy program managers</td>
<td>1</td>
<td>17</td>
<td>10</td>
<td>53</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>18</td>
<td>64</td>
<td>61</td>
</tr>
</tbody>
</table>

*Not available*

In the Army, Navy, and Air Force, most program managers are military, while most deputy program managers in the Navy and Army are civilian. Air Force officials could not provide comparable data for its deputy program managers. Although DOD could not determine the precise military and civilian mix in the service acquisition work forces, DOD staff stated that the work forces were primarily civilian, with a greater percentage of military personnel in critical acquisition positions than in the total acquisition work force.

There are different views on the need for military-only positions. We reported in May 1986, that the prevailing view among selected program office personnel, acquisition management personnel, and outside experts, was that the best qualified personnel—military or civilian—should be selected to fill program manager positions. This view was also recently expressed by DOD policy officials responsible for implementing the act. Some civilians and military we interviewed believed military program managers of weapon systems were uniquely qualified because they had more leadership experience, were experienced in using weaponry, were more understanding of the military users' needs, and could better communicate with the weapons users.

We agree that military experience and perspective is a valuable input to weapons acquisition management. However, we do not believe that this input necessarily dictates a military program manager. We believe that, in

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2DOD Acquisition: Strengthening Capabilities of Key Personnel in Systems Acquisition (GAO/NSIAD-86-45, May 1986)
the case of civilian program managers, the military experience and input can be adequately provided through deputy program manager and other key program office positions.

<table>
<thead>
<tr>
<th>Grade Level Criteria Will Lead to an Unmanageable Critical Acquisition Work Force</th>
</tr>
</thead>
</table>

DOD and service officials believe that if the act's criteria is used, the number of critical positions will be too large and costly to manage. The act requires the Secretary of Defense to designate critical acquisition positions, which would require special training, education, and experience requirements. The act states that critical positions must include positions that are filled by (1) civilians at the grade of GS-14 and above, (2) military at the grade of lieutenant colonel or commander and above, (3) program executive officers, and (4) program and deputy program managers of major and significant nonmajor programs. The DOD policy staff believes the act should be amended to allow the services to exclude those civilian or military personnel whose positions are not critical to an acquisition.

The Navy and the Air Force would like to raise the grades of critical acquisition positions to (1) GS-15 and above for civilians and (2) captain and colonel and above for military. They believe the number of critical positions, using the lower grade levels, would be too large to properly manage because staff in these positions require special education, training, and experience under the act. A higher grade structure would reduce the number of critical positions to manage and the added cost of training and education.

Scope and Methodology

Our review covered the Departments of the Army, Navy, and Air Force; the Office of Secretary of Defense; and the other DOD agencies. We interviewed officials from these organizations located in Arlington, Virginia. We also visited Army Materiel Command staff at Ft. Monmouth, New Jersey, and Warren, Michigan; and Air Force Systems Command staff at Wright-Patterson Air Force Base, Ohio.

Although no waivers were granted, we reviewed criteria found in the act; DOD Instruction 5000.52, Defense Acquisition Education, Training, and Career Development Program, dated October 25, 1991; and the Under Secretary of Defense's October 1, 1991, policy memorandum, "Requirements and Qualifications for Program and Deputy Program Managers."

We met with DOD officials and examined documents to identify program and deputy program manager appointments between October 1, and
December 31, 1991, that would be subject to the act's provisions. For those identified, we examined through documents and interviews how the services determined that each appointee met the applicable requirements of the act. Time required to gain access to personnel files prevented us from independently verifying each appointee's qualifications within the time frame permitted for this report.

We interviewed Office of the Secretary of Defense, service, and Defense Logistics Agency officials responsible for the act's implementation. We also interviewed service program executive officers, program managers, and deputy program managers to discuss the act's impact on their position. We also obtained information on DOD's, the services', and other DOD agencies' degree of implementation to date. We reviewed copies of DOD guidance issued to implement this act and plans to implement the Defense Acquisition University. We did not review the quality of training provided by the act or determine how this training improved the acquisition process.

This review was conducted between March and December 1991 in accordance with generally accepted government auditing standards.

Due to the limited time frame specified in the act for our report, we did not obtain formal comments from DOD. However, DOD officials reviewed a draft of this report and, where appropriate, we incorporated their comments in this report.

We will send copies of this report to the Secretary of Defense and to other interested parties upon request.

Please contact me at (202) 275-4587 if you or your staff have any questions concerning this report. Other major contributors are listed in appendix I.

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Appendix I

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