CBO PAPER

THE DRAWDOWN OF THE MILITARY OFFICER CORPS

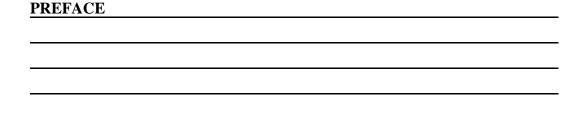
November 1999



CONGRESSIONAL BUDGET OFFICE SECOND AND D STREETS, S.W. WASHINGTON, D.C. 20515

NOTE

Numbers in the text and tables of this paper may not add up to totals because of rounding.



The Department of Defense reduced the number of officers on active duty by 23 percent between 1989 and 1996 as part of the post-Cold War drawdown of military personnel. To achieve that reduction, the services' personnel managers cut the number of new officers entering active duty and increased the separation rate for those already on active duty. The managers faced a difficult challenge: to bring in enough new officers to maintain a combat-ready force in the future and yet keep faith with personnel already in uniform.

This analysis by the Congressional Budget Office (CBO) examines the different approaches the military services used in reducing the officer corps, including the role played by special incentives for voluntary separation. It documents the changes in officer accessions, separations, and promotions that took place during the drawdown and examines the effects of downsizing on the occupational mix and grade distribution of the officer corps. This paper was prepared at the request of the Subcommittee on Personnel of the Senate Committee on Armed Services. In keeping with CBO's mandate to provide objective and nonpartisan analysis, the paper contains no recommendations.

Marvin M. Smith of CBO's National Security Division prepared the paper under the general supervision of Christopher Jehn and Deborah Clay-Mendez. The author gratefully acknowledges the assistance of John Cadigan, Evan Christman, and Delia Welsh of CBO. The author also wishes to thank Sean O'Keefe, a consultant to CBO, and representatives from the military services for their thoughtful comments. Sherry Snyder and Liz Williams edited the manuscript, and Chris Spoor proofread it. Kathryn Quattrone prepared the figures, Judith Cromwell typed the manuscript, and Laurie Brown prepared the electronic versions for CBO's World Wide Web site (www.cbo.gov).

Dan L. Crippen Director

November 1999

CONTE	INTS	
I	INTRODUCTION AND SUMMARY	1
	The Drawdown and Its Effects on the Officer Corps 2 Implications of the Drawdown for Future Policies 3	
II	THE MILITARY OFFICER PERSONNEL SYSTEM AND THE SERVICES' PLANS FOR DOWNSIZING	5
	Overview of the Personnel System 5 Efforts to Increase the System's Flexibility 10 The Downsizing Plans of the Services 12	
III	HOW THE SERVICES ACCOMPLISHED THE DRAWDOWN	17
	The Role of Reduced Accessions 17 The Role of Increased Separations 19	
IV	THE EFFECT OF THE DRAWDOWN ON THE OFFICER CORPS	25
	The Seniority of the Officer Corps 25 The Ratio of Enlisted to Officer Personnel 31 The Occupational Mix of the Officer Corps 32	
APPEN	DIXES	
A	Actual and Predicted Number of Officers by Years of Service	37
В	The Distribution of Officers by Pay Grade	41
C	Opportunity for and Timing of Promotions to Field-Grade Positions	45
D	Occupational Composition of the Officer Corps	51

TA	٩ВІ	LES

1.	Rank and Pay Grade of Commissioned Military Officers	6
2.	DOPMA Guidelines for the Officer Promotion System	8
3.	Drawdown of the Officer Corps, by Service, Fiscal Years 1989-2003	13
4.	Officer Separations in Fiscal Years 1990 and 1991-1996, by Reason for Separation and Years of Service	20
5.	Actual and Predicted Number of Officers Remaining on Active Duty from Fiscal Year 1989 Through 1996, by Years of Service in 1996	23
6.	Distribution of Officers by Years of Service, Fiscal Years 1987 and 1997	26
7.	Change in the Number and Distribution of Commissioned Officers, by Pay Grade, Between Fiscal Years 1989 and 1996	28
8.	Number of Field-Grade Officers in Fiscal Years 1989 and 1996 Compared with DOPMA Ceilings	30
9.	Ratio of Enlisted to Officer Personnel, by Service, Fiscal Years 1989-1996	32
10.	Percentage Change in the Share of Officers in Selected Combat and Support Occupations Between Fiscal Years 1989 and 1996	34
A-1.	Actual and Predicted Number of Officers Remaining on Active Duty from Fiscal Year 1989 Through 1996, by Years of Service in 1996, Using Higher Average Retention Rates	38
	Using Higher Average Retention Rates	30

CONTENTS	vii

A-2.	Actual and Predicted Number of Officers Remaining on Active Duty from Fiscal Year 1989 Through 1996, by Years of Service in 1996, Using Lower Average Retention Rates	39
B-1.	Distribution of Officers by Pay Grade, Fiscal Years 1989 and 1996	42
C-1.	Opportunity for and Timing of Promotions to Field-Grade Positions, Fiscal Years 1989-1996	48
D-1.	Distribution of Officers by Occupation, Fiscal Years 1989 and 1996	52
FIGURES		
1.	Officer Separations in Fiscal Year 1990, by Reason for Separation	9
2.	Officer Separations in Fiscal Year 1990, by Years of Service Within Category of Separation	10
3.	Planned and Actual Officer Inventory, Fiscal Years 1989-2003	14
4.	Percentage Reductions in Officer Accessions from the Fiscal Year 1989 Level Compared with the Original and Current Goals for Reductions in Inventory	18
5.	Share of Officers in Combat and Support Positions, by Service, Fiscal Years 1989 and 1996	33
C-1.	Officer Promotion Points Relative to DOPMA Guidelines	46
C-2.	Opportunities for Promotion to Field-Grade Positions	50
BOXES		
1.	The Officer Promotion System	7

INTRODUCTION AND SUMMARY

The Department of Defense (DoD) reduced the number of officers on active duty by about 23 percent between 1989 and 1996 as part of the post-Cold War drawdown in U.S. military forces. To achieve that cut, DoD officials restricted the number of new officers entering the force each year, encouraged officers who were already in the force to leave voluntarily, and forced some officers to leave active duty involuntarily. In their efforts to balance those three approaches, senior personnel managers faced several challenges. One was to bring in enough new officers, or accessions, each year to ensure that the department would have a vigorous, combat-ready force in the future. Another was to protect, to the extent possible, officers already in the force who had built careers and financial plans based on the expectation of continued military service. Still another challenge was to distribute the cuts in a way that maintained a desirable occupational mix within the officer corps.

This Congressional Budget Office (CBO) paper examines how DoD accomplished that drawdown. It also looks at the effects the drawdown had on the composition of the officer corps in terms of occupation, rank (pay grade), and years of service. The analysis covers 1989 through 1996, the period during which most of the post-Cold War drawdown was completed.

The number of officers on active duty and their composition are determined by the interactions of demand (as reflected in the services' stated personnel requirements) and supply (the available inventory of officers). On the demand side, national security strategy and available defense budgets shape the number and type of units in the U.S. military. The individual services, in turn, determine their personnel requirements for each type of unit. Together, those requirements define a "force profile" with specific numbers of officers in various pay grades and occupational skills.

To adjust the supply of officers to match the required force profile, the services use a variety of personnel management tools, including changes in the flow of new officers into the corps, financial incentives, and promotions. This paper focuses on those supply-side policies and how they may have been constrained by the provisions of the Defense Officer Personnel Management Act of 1980 (DOPMA) and by the services' desire to keep faith with the career expectations of officers on active duty. It does not examine either the extent to which the post-Cold War officer corps matches the required force profile or the effects of the drawdown on the required force profile, although both are potentially useful issues for study.

CBO finds that the services were relatively successful in protecting the careers of officers who were already in the force when the drawdown began. The effort to protect those officers, however, was accompanied by an increase in the average years of service within the officer corps, an increase in the percentage of officers in the highest ranks, and a decrease in the ratio of enlisted to officer personnel. In addition, the drawdown raised the proportion of the officer corps with medical specialties and lowered the share with combat skills.

THE DRAWDOWN AND ITS EFFECTS ON THE OFFICER CORPS

The Army, Air Force, and Navy protected officers already in the force by relying heavily on reduced accessions, rather than increased separations, to draw down their officer corps. For example, the Army reduced its officer corps by 26,000, or 25 percent, between 1989 and 1996. However, increased separations among officers who were already in the force when the drawdown began accounted for only about one-fifth of that reduction.

The large role played by cuts in accessions meant that there was little overall change in separation rates among officers during the drawdown. In 1990, before the effects of the drawdown were felt, about 10 percent of the officer corps separated. Between 1991 and 1996, the separation rate averaged 11 percent. Separation rates actually fell for officers in some services and for those at particular points in their career. In the Navy, for example, an officer who was on active duty in 1989 was more likely to still be on active duty in 1996 than would have been expected on the basis of retention patterns before the drawdown.

The large cuts in accessions also led to an officer corps that was more senior in terms of both years of service and rank. In the military as a whole, the share of officers with less than 8 years of service fell from 38 percent in 1987 to 33 percent in 1997. The decline was most pronounced in the Navy, where the share of officers with less than 8 years of service fell from 42 percent to 32 percent.

During the drawdown, the Congress granted DoD special tools—the voluntary separation incentive (VSI), special separation benefit (SSB), and temporary early retirement authority—designed to encourage officers to leave the force voluntarily. Without those tools, the officer corps would have become even more senior. Yet the VSI and SSB were less effective than might appear solely on the basis of the number of officers taking those incentives. Historic retention patterns suggest that just over 50 percent of VSI and SSB recipients would have left active duty even without those incentives.

In addition to increasing the seniority of the officer corps, the drawdown appears to have increased the percentage of officers in the force with medical skills

and reduced the percentage with combat skills. It also reduced the ratio of enlisted to officer personnel in every service except the Marine Corps. In the military as a whole, that ratio fell from 6.4 to 1 in 1989 to 5.7 to 1 in 1996.

The services argue that their inventories of medical officers and their mix of enlisted and officer personnel are driven by their requirements for personnel in wartime. Yet the fact that medical officers do not count toward legislated ceilings on the number of senior officers, and the fact that reductions in the officer corps pose greater difficulties for personnel managers than reductions in the enlisted ranks do, may have contributed to those trends. This analysis did not evaluate the desirability of those shifts in the composition of the military.

IMPLICATIONS OF THE DRAWDOWN FOR FUTURE POLICIES

The effects of the latest drawdown on the officer corps will continue to be felt for a number of years. Today's officer corps is relatively senior, and the services may need to assign more experienced officers to positions normally filled by officers with less experience. But in the future, as the small cohorts that entered military service during the drawdown progress through their careers, the services could have a shortage of experienced officers. Although across-the-board pay raises could help alleviate such shortages, DoD and the Congress may also wish to consider less costly tools, such as bonuses targeted toward the small cohorts or programs that would provide officers in the reserve component with opportunities to join the active component.

Overall, this analysis suggests that the personnel system for officers, which operates under DOPMA, does not easily accommodate the kind of major drawdown that took place between 1989 and 1996. Because such drawdowns are rare, that lack of flexibility by itself might not justify making significant changes in the officer personnel system. Nonetheless, if the Congress was to undertake a major overhaul of the officer personnel system, one goal of that reform might be to give the services greater flexibility in accommodating drawdowns.¹

^{1.} For a discussion of suggested changes to DOPMA and their possible effects on promotion equity and grade control, see Bernard Rostker and others, *The Defense Officer Personnel Management Act of 1980: A Retrospective Assessment* (Santa Monica, Calif.: RAND, 1993), pp. 44-68.

THE MILITARY OFFICER PERSONNEL SYSTEM

AND THE SERVICES' PLANS FOR DOWNSIZING

The military officer personnel system offers a relatively generous retirement package of pay and benefits to officers who complete 20 years of active duty, but it offers nothing comparable to those who leave with fewer years of service. That system is designed to foster stability in the career progression of officers. Some of the features that do so, however, have hindered personnel managers' efforts to reduce the size of the post-Cold War officer corps. Thus, during the drawdown, the Congress provided the Department of Defense with additional authorities to increase the flexibility of the system.

OVERVIEW OF THE PERSONNEL SYSTEM

Commissioned officers in the U.S. military serve in one of 10 pay grades, with the most junior grade designated O-1 and the most senior O-10 (see Table 1). Officers' pay grades indicate their pay and status and generally correspond to their level of authority or rank. DoD's management of officers in grades O-4 through O-6, the so-called field grades, is subject to special provisions under the Defense Officer Personnel Management Act of 1980 (Public Law 96-513). DOPMA is designed to bring stability and interservice equity to the management of the officer corps. It contains various laws and guidelines that govern the administration of commissioned officers on active duty. Although DOPMA covers all officers, its most detailed provisions pertain to officers in the field grades.

DOPMA sets guidelines governing the promotion opportunity of officers—the proportion of those competing for a higher grade who are in fact promoted. It also sets guidelines governing promotion points—the number of years and months of service at which officers may typically expect promotions (see Box 1). For example, the guidelines indicate that the promotion opportunity for officers seeking advancement to grade O-5 (the pay grade corresponding to lieutenant colonel in the Army, Marine Corps, and Air Force and to commander in the Navy) should be about 70 percent, and the promotion point should be between 15 and 17 years of service (see Table 2 on page 8). The services try to manage promotion opportunity and timing within the limits set by DOPMA.

^{1.} This analysis also includes warrant officers in the total number of commissioned officers. Warrant officers, whose ranks range from W-1 to W-4 or W01 to CW5, provide the military with specialized technical expertise and supervisory skills.

TABLE 1. RANK AND PAY GRADE OF COMMISSIONED MILITARY OFFICERS

	Army, Air Force, and Marine Corps	Rank Navy	– Pay Grade
Company-Grade	Second lieutenant	Ensign	O-1
Officers	First lieutenant	Lieutenant junior grade	O-2
	Captain	Lieutenant	O-3
Field-Grade	Major	Lieutenant commander	O-4
Officers	Lieutenant colonel	Commander	O-5
	Colonel	Captain	O-6
General and	Brigadier general	Rear admiral (Lower half)	O-7
Flag Officers	Major general	Rear admiral (Upper half)	O-8
-	Lieutenant general	Vice admiral	O-9
	General	Admiral	O-10

In addition to regulating promotion opportunity and timing, DOPMA provides for an "up-or-out" promotion system that further standardizes career patterns. Under that system, officers who are not promoted to O-2, O-3, or O-4 after being reviewed for promotion for the second time must leave the military. To complete 20 years of service and become eligible for retirement, officers must attain the pay grade of O-4.² To remain beyond 20 years, they must advance even farther. Officers in pay grades O-5 and O-6 may complete 28 and 30 years of service, respectively.

DOPMA limits the ability of personnel managers to force officers to leave active duty before they reach those tenure points, although officers may be dismissed for disciplinary reasons at any point in their career. In addition, officers who have at least 20 years of service and are therefore eligible for retirement may be subject to selective early retirement (SER) and forced to retire before completing the DOPMA career pattern for their pay grade. That provision allows personnel managers some flexibility in dealing with officers who are eligible for retirement during a drawdown.

^{2.} The service secretaries, however, have the authority to permit an officer in pay grade O-4 to remain on active duty until completing 24 years of service.

BOX 1. THE OFFICER PROMOTION SYSTEM

A cohort of officers consists of all officers commissioned in a particular year. Officers move through their careers competing for promotion against other members of their cohort.

Officers are generally considered for promotion to the next grade by a promotion board in accordance with the guidelines on promotion points in the Defense Officer Personnel Management Act of 1980. For example, according to those guidelines, the standard career progression for a typical (or so-called duecourse) officer would be a promotion to O-4 at 10 years of service, O-5 at 16 years, and O-6 at 22 years. When officers are promoted at those promotion points, their promotions are said to be in the *primary zone* of the promotion system. The majority of officers receive their promotions in the primary zone. A small number of officers who show outstanding leadership potential may be promoted a year earlier (for example, at 9 years of service for promotion to O-4). Their promotions are referred to as *below-the-zone* promotions. Officers who are passed over for promotion in the primary zone can be reconsidered for promotion a year later (for example, at 11 years of service for promotion to O-4). Those promotions are referred to as being *above the zone*.

Each cohort is considered for promotion to the next grade at least three times: namely, below the zone, in the primary zone, and above the zone. A promotion board typically promotes a small number of officers below the zone, the majority of officers in the primary zone, and a small number above the zone. The promotion opportunity to a particular pay grade is computed by adding the number of officers selected for promotion from below, in, and above the primary zone and then dividing that sum by the total number of officers considered for promotion in the primary zone.

Under DOPMA, an SER board established by each of the services can review officers in grades O-5 and O-6 for early retirement once every five years. Officers in pay grade O-5 may be reviewed after they have twice failed to be promoted; officers in pay grade O-6, after they have been in that grade for four years. Those selected for early retirement by the SER boards must retire even if they have not served in their current pay grade long enough to be eligible for retirement benefits based on that grade. The services try to limit their use of selective early retirement because of the perception that it breaks faith with loyal officers and imposes financial losses on those selected for retirement.

TABLE 2. DOPMA GUIDELINES FOR THE OFFICER PROMOTION SYSTEM

Officer Pay Grade	Opportunity for Promotion (Percentage promoted to grade)	Timing of Promotion (Years of service)
O-1 and O-2	100 if Fully Qualified	1.5
O-3	95	3.5 to 4
O-4	80	10 <u>+</u> 1
O-5	70	16 <u>+</u> 1
O-6	50	22 ± 1

SOURCE: Congressional Budget Office using data from the Defense Officer Personnel Management Act of 1980, 10 U.S.C. 513, 94 Stat. 2835.

NOTE: DOPMA = Defense Officer Personnel Management Act.

Even in years in which the number of officers is stable, the up-or-out system—together with disciplinary actions—results in some involuntary separations. Yet the vast majority of officers who leave active duty do so voluntarily. Of the officers who left in 1990, 62 percent did so voluntarily; 26 percent left because of special circumstances (including family hardship), which DoD categorizes as "for the convenience of the government"; 9 percent left involuntarily (either because they failed to be promoted as required by the up-or-out system or because of disciplinary problems); and 3 percent left as a result of medical conditions that precluded further service (see Figure 1).³

Because many officers base their career and financial plans on remaining in the military for at least 20 years, the services prefer that officers who leave active duty during a drawdown do so voluntarily. But few officers with more than 9 years of service leave voluntarily before becoming eligible for retirement.⁴ The majority of voluntary separations take place either among relatively junior officers or those with 21 or more years of service. Officers with 9 through 20 years of service accounted for only 13 percent of voluntary separations in 1990 but for 70 percent of involuntary separations (see Figure 2).

^{3.} Those are DoD's categories for separations. However, one could argue that some separations categorized as being for the convenience of the government might otherwise be involuntary.

^{4.} Two notable exceptions exist. Some military pilots who are eligible for a continuation bonus separate after fulfilling their bonus commitment at 14 years of service. Similarly, many military doctors leave active duty once they have completed their commitment.

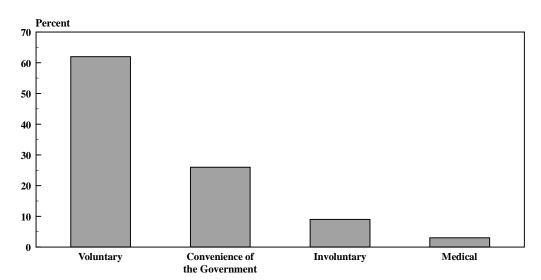


FIGURE 1. OFFICER SEPARATIONS IN FISCAL YEAR 1990, BY REASON FOR SEPARATION

Limits placed by DOPMA on the number of field-grade officers in each service compound the difficulties that personnel managers face in a drawdown. Under DOPMA, the total number of officers in each military service, adjusted to exclude general and flag officers (grades O-7 through O-10) and medical/dental officers, determines the maximum number of field-grade officers that the service is allowed. As a result, large cuts in officer accessions during a drawdown can reduce the number of field-grade positions allowed and make it mathematically impossible for a service to meet DOPMA's guidelines for promotion opportunities and timing without violating the ceilings on the number of field-grade officers. Moreover, cuts in promotion opportunities or delays in the timing of promotions can cause morale problems and eventually affect military readiness.

In short, the officer personnel system—in which many officers expect to stay for a full career—is not designed to accommodate the kind of drawdown that the end of the Cold War required. Managing the officer corps when its size is increasing is relatively easy. During buildups, accessions increase the size of the officer corps and raise the number of field-grade officers allowed under DOPMA. Managers can therefore meet DOPMA guidelines on promotion opportunity and timing without breaching the limits on the number of field-grade officers. During drawdowns, however, DOPMA provides personnel managers with very few options. According to one analysis,

Medical

Percent 100 1 to 8 Years 9 to 20 Years 21 or More Years 90 of Service of Service 80 70 60 50 40 30 20 10

FIGURE 2. OFFICER SEPARATIONS IN FISCAL YEAR 1990, BY YEARS OF SERVICE WITHIN CATEGORY OF SEPARATION

SOURCE: Congressional Budget Office based on data from the Department of Defense.

Convenience of

the Government

Voluntary

[d]uring periods of decline DOPMA provides personnel managers with fewer tools to draw down the force, tools that take longer to produce an effect, or tools that are arduous to implement. In fact, as provided in law, many of the provisions of DOPMA either directly impede management action during periods of force reduction or result in situations that seem inconsistent with the goals and guidelines established for the management of officers as provided in DOPMA.⁵

Involuntary

EFFORTS TO INCREASE THE SYSTEM'S FLEXIBILITY

After enactment of DOPMA, the Congress took two steps to ease the constraints that the law placed on the services' ability to reduce their officer corps. It granted the services the authority to conduct a reduction in force (RIF) of officers with regular commissions in pay grades O-3 and O-4 during the five-year drawdown beginning in 1990.⁶ It also relaxed requirements for the number of years that officers had to serve in a pay grade before being eligible to receive retirement benefits based on that

^{5.} Bernard Rostker and others, *The Defense Officer Personnel Management Act of 1980: A Retrospective Assessment* (Santa Monica, Calif.: RAND, 1993), p. 19.

^{6.} U.S. House of Representatives, *National Defense Authorization Act for Fiscal Year 1991*, conference report to accompany H.R. 4739, Report 101-923 (October 23, 1990), pp. 78-81. The services already had RIF authority for officers holding reserve commissions.

grade. That change allowed officers in grades O-5 and O-6 with 20 years of active-duty service to retire at their current pay grade after having served for a minimum of 2 (rather than 3) years in that grade and a minimum of 8 (rather than 10) years as a commissioned officer. The change was designed both to encourage voluntary separations and to reduce the potential financial impact of involuntary separations.

Although the Congress as a whole gave the services the authority to conduct RIFs, the Senate and House Appropriations Committees took different positions on the issue. The Senate Appropriations Committee, despite some reservations about the use of involuntary separations in an all-volunteer military force, concluded that a balanced force reduction should be accomplished using all available options, including involuntary separations. In contrast, the House Appropriations Committee opposed involuntary separations, noting that "reductions should be accomplished from attrition, reduced accessions, and early-out opportunities, and not through involuntary separations." The Senate Armed Services Committee concurred with the House Appropriations Committee and raised a related concern—that personnel managers were reluctant to separate career officers who were not vested in the 20-year retirement system and who would therefore have to leave without adequate separation benefits.

The National Defense Authorization Act for Fiscal Years 1992 and 1993 reduced the services' need for RIFs by granting them temporary authority to provide special separation incentives to officers with 6 to 20 years of service. ¹⁰ Under the voluntary separation incentive program, the services could offer eligible officers who voluntarily left active duty an annual payment equal to their years of service at separation multiplied by 2.5 percent of their basic pay. The payment would be made for a period equal to twice the number of years the officer had served. An alternative program, known as the special separation benefit program, offered a lump-sum payment and other benefits such as transitional medical care, preseparation counseling, employment assistance, commissary and exchange privileges, and relocation assistance. The lump-sum payment was 15 percent of the officer's final monthly basic pay multiplied by the number of years served.

^{7.} Senate Committee on Appropriations, *Department of Defense Appropriations Bill*, 1992, Report 102-154 (September 20, 1991), p. 9.

^{8.} House Committee on Appropriations, *Department of Defense Appropriations Bill*, 1992, Report 102-95 (June 4, 1991), p. 57.

^{9.} Senate Committee on Armed Services, *National Defense Authorization Act for Fiscal Years 1992 and 1993*, Report 102-113 (July 19, 1991), p. 199.

^{10.} U.S. House of Representatives, *National Defense Authorization Act for Fiscal Years 1992 and 1993*, conference report to accompany H.R. 2100, Report 102-311 (November 13, 1991), pp. 110-114.

As anticipated, the VSI and SSB programs provided the services' personnel managers with additional flexibility in shaping the officer corps. Managers could not only offer incentives to encourage voluntary separations but also limit those incentives to officers in selected career fields or years of service.

Although VSI and SSB proved attractive to many junior officers, they were much less attractive to officers with only a few years to serve until retirement. In 1993, to help the services reduce the number of more senior officers, the Congress granted the services temporary authority to offer military personnel the option of retiring after only 15 years of service (known as temporary early retirement authority or TERA). To be eligible for that early-retirement option, an officer had to have served at least 15 but less than 20 years on active duty. Officers who chose that option would receive retirement benefits similar to those offered to other military retirees, although the amount of their retirement pay would be reduced depending on how far they were from completing 20 years of service.

THE DOWNSIZING PLANS OF THE SERVICES

The special incentives—VSI, SSB, and TERA—were not available to the services in 1990 when they submitted their initial downsizing plans (covering the 1991-1995 period) to the Secretary of Defense. The services were therefore limited in how they could balance cuts in accessions with increased separations of officers already in the force.

The Army's and Air Force's initial plans called for reducing their officer corps by 26 percent and 20 percent, respectively (see Table 3). The Army hoped to reduce the number of officers by means of selective early retirements, the voluntary early release of officers who had not yet completed their initial period of obligated service, and some cuts in accessions. The Army had followed a similar approach when it reduced its officer corps in 1987.¹² The Air Force planned to rely heavily on the separation provisions in the promotion system and on SER boards. Although Air Force managers had relied on large cuts in accessions to reduce the number of officers in 1987, they did not plan to repeat that strategy.¹³

^{11.} The early-retirement option was authorized initially in U.S. House of Representatives, *National Defense Authorization Act for Fiscal Year 1993*, conference report to accompany H.R. 5006, Report 102-966 (October 1, 1992), p. 397. The Congress recently reauthorized TERA, VSI, and SSB through September 30, 2001.

^{12.} For a description of the approach to downsizing the officer corps in the mid-1980s, see Congressional Budget Office, *Reducing the Size of the Military Officer Corps: Effects on Promotions and Accessions*, CBO Staff Working Paper (February 1988), p. 22.

^{13.} Ibid.

TABLE 3.	DRAWDOWN OF THE OFFICER CORPS, BY SERVICE,
	FISCAL YEARS 1989-2003

	Number of Officers		Percentage Cut from Base			e	
Service	Base, 1989	Planned, 1995	Actual, 1995	Planned, 1995	Actual, 1995	Actual, 1997	Planned, 2003
Army	106,877	78,790	82,539	26.3	22.8	25.8	27.2
Air Force	103,697	82,667	78,444	20.3	24.4	28.7	33.3
Navy	72,153	65,196	58,788	9.6	18.5	22.1	26.3
Marine Corps	20,099	17,413	17,831	13.4	11.3	11.3	11.1

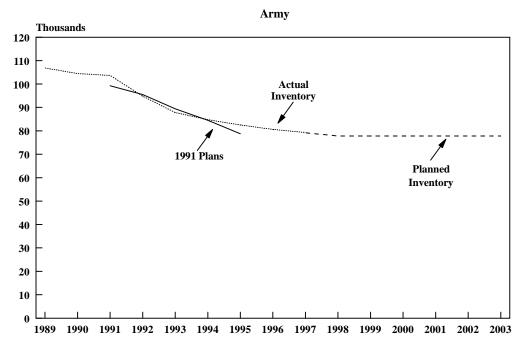
The Navy's and Marine Corps's initial plans called for more modest cuts in their officer corps—10 percent and 13 percent, respectively. The Navy planned to achieve its reductions using SER, cuts in accessions, and the up-or-out provisions of the promotion system. The Marine Corps planned to rely on SER and on a provision in DOPMA that allows the separation of officers holding reserve commissions.¹⁴

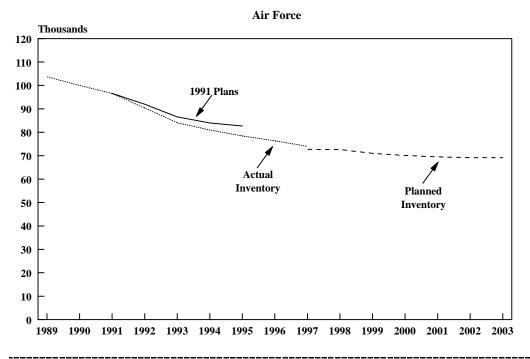
As the ultimate shape and size of the post-Cold War military gradually became clearer, the Navy and Air Force revised their plans to accommodate larger reductions. By 1995, the Navy's officer corps was about 6,000 below the level initially planned for that year, and the Air Force's officer corps was about 4,000 below the level initially planned (see Table 3 and Figure 3).

By 1995, each service had cut its officer corps by a significant percentage. The Army reduced its officer corps by 23 percent between 1989 and 1995, the Air Force by 24 percent, the Navy by 19 percent, and the Marine Corps by 11 percent. Two years later, as of 1997, the total cut in the officer corps since 1989 was 26 percent for the Army, 29 percent for the Air Force, 22 percent for the Navy, and 11 percent for the Marine Corps. Moreover, although the major drawdown in the officer

^{14.} Under DOPMA, officers holding a reserve commission must receive a regular commission (a process known as augmentation) by their 11th year of service or before they attain the grade of O-4 in order to remain on active duty. Thus, the services can pare their officer corps by not augmenting officers holding reserve commissions. Before 1996, graduates of the service academies started active duty with regular commissions. Other officers, including most graduates of the Reserve Officers Training Corps, came on active duty with reserve commissions. Since 1996, academy graduates have also started active duty with a reserve commission.

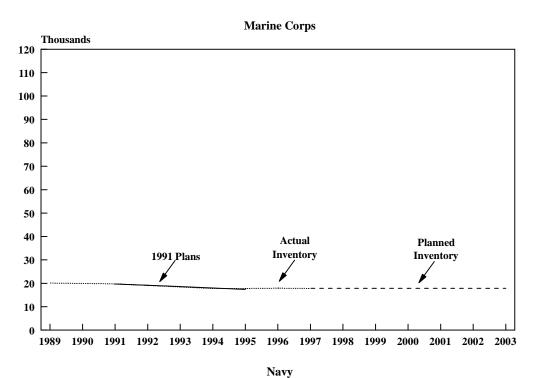
FIGURE 3. PLANNED AND ACTUAL OFFICER INVENTORY, FISCAL YEARS 1989-2003

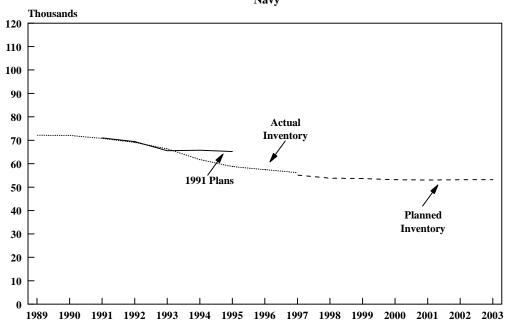




(Continued)

FIGURE 3. CONTINUED





SOURCE: Congressional Budget Office based on data from the Department of Defense.

corps has been accomplished, all services except the Marine Corps plan to make additional cuts before 2003 (see Table 3).

CHAPTER III

HOW THE SERVICES ACCOMPLISHED

THE DRAWDOWN

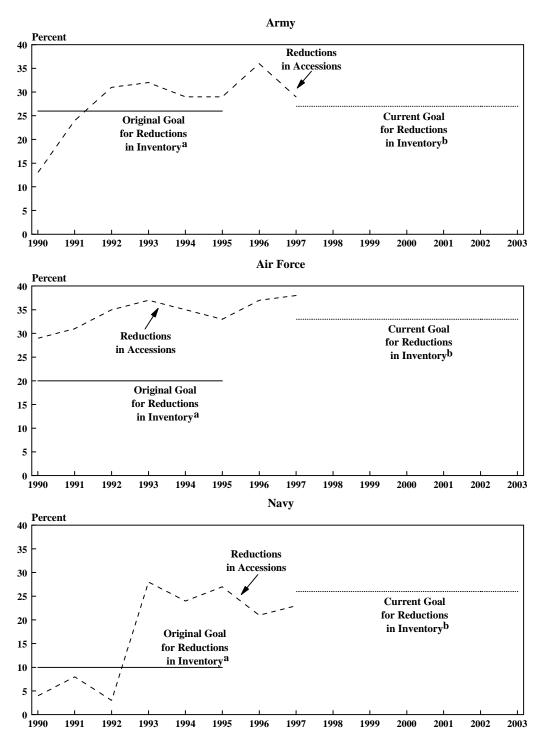
As the drawdown progressed and the planned reduction in the size of the officer corps increased, it became unclear whether the services were willing or able to separate enough senior officers to maintain a balanced force profile. To alleviate that problem, the Congress temporarily relaxed some of the provisions of the Defense Officer Personnel Management Act of 1980. It also gave the services additional personnel management tools—including the voluntary separation incentive, the special separation benefit, and temporary early retirement authority—to encourage voluntary separations.

THE ROLE OF REDUCED ACCESSIONS

To achieve rapid cuts in the total number of officers and still protect the careers of those already in the force, the Army, Air Force, and Navy cut their accessions during much of the drawdown by a greater percentage than they had originally expected to cut the size of their officer corps (see Figure 4). That pattern was most apparent in the Air Force and Navy. In 1993, for example, the two services had reduced accessions by 37 percent and 27 percent, respectively, from the 1989 level compared with the originally planned cuts of 20 percent and 10 percent.

That pattern could have made it very difficult for the Air Force and Navy to meet their future requirements for officers. Subsequent reductions in the planned size of U.S. post-Cold War forces, however, allowed those services to further reduce the planned size of their future officer corps. The Air Force now anticipates an officer corps in 2003 that is 33 percent below the 1989 level; the Navy, 26 percent below the 1989 level. Whether the Air Force is bringing in enough new officers to support its revised plans is still unclear, but accession levels for Army and Navy officers now appear to be roughly consistent with those services' long-term plans (see Figure 4).

FIGURE 4. PERCENTAGE REDUCTIONS IN OFFICER ACCESSIONS FROM THE FISCAL YEAR 1989 LEVEL COMPARED WITH THE ORIGINAL AND CURRENT GOALS FOR REDUCTIONS IN INVENTORY



- a. Based on 1991 plan for inventory in 1995.
- b. Based on 1997 plan for inventory in 2003.

THE ROLE OF INCREASED SEPARATIONS

Although cuts in accessions accounted for most of the decline in the officer corps, the services also increased the rate of separations among officers already in the force. Yet even with VSI, SSB, and TERA, average separation rates during the drawdown were not dramatically different from those before it. In 1990, before the effects of the drawdown were felt, about 10 percent of the officer corps left active duty (see Table 4). During the 1991-1996 downsizing of the officer corps, the average annual separation rate was 11 percent—just 1 percentage point, or roughly 10 percent, higher than the rate in 1990.

The Effect of the Voluntary Separation Incentive and the Special Separation Benefit

Even though overall separation rates did not change dramatically during the drawdown, many officers in midcareer—those with 9 to 14 years of service—were attracted to the VSI and SSB programs. Between 1991 and 1996, an average of 3.4 percent of midcareer officers took those incentives each year. Of the 16,000 officers who participated in the program, over 11,000 were in midcareer.

Those numbers, however, overstate the effectiveness of the separation incentives because more than half of the officers who took them might have left active duty even without them. In 1990, about 7.6 percent of midcareer officers left active duty compared with an annual average of 9.2 percent during the drawdown. VSI and SSB appear to have increased the annual average separation rate for the 1991-1996 period by 1.6 percentage points, assuming that the separation rate in 1990 was typical of what the rate would have been for that period without special incentives or other changes in the services' retention policies. Therefore, only 47 percent (1.6 divided by 3.4) of midcareer officers who took advantage of VSI or SSB would have stayed in the military if the services had continued their predrawdown retention policies.

The 53 percent of VSI and SSB recipients who would have left under the services' normal policies include many who would have left voluntarily and others who would have left for the convenience of the government or involuntarily. Perhaps because of VSI and SSB, the percentage of the officer corps separating from active duty for the latter two reasons was lower during the drawdown than it was in 1990

Because VSI and SSB did not become available until 1992, this average understates the percentage of
officers who took the incentives in the years in which they were available.

TABLE 4. OFFICER SEPARATIONS IN FISCAL YEARS 1990 AND 1991-1996, BY REASON FOR SEPARATION AND YEARS OF SERVICE

			Years of Serv	vice	
Reason for Separation	1 to 8	9 to 14	15 to 20	21 or More	Total
	-	ions in 1990 umber			
Voluntary Convenience of the Government Involuntary Medical	5,677 5,255 675 354	1,791 1,394 1,445 	311 118 246 107	8,585 75 37 183	16,364 6,842 2,403 816
Total	11,961	4,802	782	8,880	26,425
Total Officer Inventory	124,897	63,085	53,866	34,338	276,186
	Separation	Rate (Percen	t)		
Voluntary Convenience of the Government Involuntary Medical	4.5 4.2 0.5 0.3	2.8 2.2 2.3 0.3	0.6 0.2 0.5 0.2	25.0 0.2 0.1 0.5	5.9 2.5 0.9 0.3
Total	9.6	7.6	1.5	25.9	9.6
	-	is in 1991-19 9 umber	06		
Voluntary Convenience of the Government Involuntary Medical VSI/SSB TERA	22,566 22,007 3,460 1,976 2,522	7,618 5,832 5,312 1,005 11,423 24	2,003 811 872 574 2,211 7,523	54,532 492 103 998 0	86,719 29,142 9,747 4,553 16,156 7,554
Total	52,538	31,214	13,994	56,125	153,871
Total Officer Inventory	617,977	338,353	295,476	179,515	1,431,321
Avere	age Annual Se	paration Rate	(Percent)		
Voluntary Convenience of the Government Involuntary Medical VSI/SSB TERA	3.7 3.6 0.6 0.3 0.4	2.3 1.7 1.6 0.3 3.4	0.7 0.3 0.3 0.2 0.7 2.5	30.4 0.3 0.1 0.6 0	6.1 2.0 0.7 0.3 1.1 0.5
Total	8.5	9.2	4.7	31.3	10.8

NOTE: VSI = voluntary separation incentive; SSB = special separation benefit; TERA = temporary early retirement authority.

(see Table 4). Although that might suggest that the Department of Defense was very successful in avoiding involuntary separations, some officers may have felt forced to take the "voluntary" VSI or SSB payments in order to avoid an involuntary separation.

Although VSI and SSB may not have had a dramatic impact on separation rates, those programs resulted in an additional 5,400 voluntary separations among midcareer officers between 1991 and 1996, according to the Congressional Budget Office's estimates. Yet the cost of inducing those 5,400 officers to leave voluntarily was high. For instance, the average SSB (lump-sum) payment to a captain (pay grade O-3) was \$58,200 in the Army and \$50,900 in the Air Force.² And the average cost of each additional separation may have been twice those amounts because about half of the payments went to officers who would have left anyway. If DoD had relied instead on involuntary reductions in force to meet its targets for the number of officers on active duty, each additional separation at the O-3 level would have entailed a RIF payment of about \$26,300.³

The Effect of Temporary Early Retirement Authority

Beginning in 1993, the services offered an early-retirement program to many officers with 15 to 20 years of service. Unlike VSI or SSB, which were most attractive to officers with fewer years of service, TERA was specifically designed to induce voluntary separations among officers nearing retirement. From 1991 to 1996, about 2,200 of those officers took advantage of VSI or SSB, and more than three times as many—7,500 officers—took the early-retirement incentive.⁴

The percentage of officers with 15 to 20 years of service who left the military increased sharply, from 1.5 percent in 1990 to an annual average of 4.7 percent from 1991 to 1996 (see Table 4). The increase in the separation rate almost matches the percentage of officers who took advantage of the new incentive programs. That suggests that virtually all of the officers with 15 to 20 years of service who took advantage of VSI, SSB, or TERA would have stayed in the military without those programs.

^{2.} The average annual VSI payment to an O-3 in the Air Force with 11 years of service was \$9,700 for 22 years. In the Army, that payment was \$10,600. Unless one performs a present-value calculation, the SSB lump-sum and VSI annual payments are not comparable.

^{3.} Each additional separation achieved by passing over O-3 officers for promotion would have cost about \$40,000.

^{4.} Although TERA was not available in the first year that VSI and SSB were offered, CBO did not try to distinguish between the period in which only VSI and SSB were available and the period in which all three tools were available.

The Effect of Separation Policies on Different Officer Cohorts

How successful were personnel managers in protecting the careers of officers who were already in the force when the drawdown began? Average separation rates during the drawdown were not markedly different from previous rates. But because separation rates for officers with different years of service varied during the drawdown, officers in particular cohorts could have suffered disproportionately. For example, policies that affected the retention of officers with 3 years of service in 1993 and ones that affected the retention of officers with 6 years of service in 1996 would both be felt by the same cohort of officers.

To estimate the effect of the drawdown on officers who were in the military at the start of the drawdown, CBO compared the retention patterns for their cohorts with the pattern for a typical cohort before the drawdown. For example, CBO determined the number of officers in the fourth year of service in 1989 who stayed through the drawdown to reach their 11th year of service in 1996. It then compared that number with what would be predicted if that cohort had, at each year of service, been subject to the average predrawdown retention rates prevailing between 1985 and 1989 (see Table 5). In general, that cohort-based analysis provides additional support for the view that personnel managers were successful in protecting the careers of officers who were in the force when the drawdown began.⁵

Officers in all services just beginning their careers in 1989—the cohorts with 1 to 4 years of service at that time—fared exceptionally well throughout the drawdown.⁶ Just over 6,700, or about 20 percent, more of the officers in those cohorts were still in the force seven years later (in years of service 8 to 11 in 1996) than would have been predicted on the basis of the services' predrawdown retention patterns. Personnel managers may have encouraged higher retention among those cohorts to compensate for the shortages of junior officers stemming from cuts in accessions during the drawdown. In the Navy, some of the more senior cohorts also fared well throughout the drawdown. Retention was higher than predicted for Navy officers with 12 to 19 years of service in 1996.

^{5.} To test how sensitive this analysis is to the choice of predrawdown retention rates, CBO conducted two similar analyses. The first used predrawdown averages based on the two years between 1985 and 1989 with the highest retention rates; the second used an average based on the two years with the lowest retention rates (see Tables A-1 and A-2). In both cases, conclusions about the effects of the drawdown on the different cohorts remained generally the same.

^{6.} Officers in those cohorts may suffer in the future, however, if the services' failure to pare those cohorts lowers their opportunity for promotion to pay grade O-4.

TABLE 5. ACTUAL AND PREDICTED NUMBER OF OFFICERS REMAINING ON ACTIVE DUTY FROM FISCAL YEAR 1989 THROUGH 1996, BY YEARS OF SERVICE IN 1996

		Years of Service				
	8 to 11	12 to 15	16 to 19	20 or More	Total, 8 or More	
		Ar	rmy			
Actual Predicted Difference	12,995 <u>11,914</u> 1,081	9,705 <u>11,161</u> -1,456	9,044 <u>11,409</u> -2,365	10,099 12,434 -2,335	41,843 46,918 -5,075	
		Air l	Force			
Actual Predicted Difference	14,527 12,913 1,614	12,204 13,355 -1,151	10,554 <u>13,162</u> -2,608	12,496 <u>15,250</u> -2,754	49,781 <u>54,680</u> -4,899	
		Na	avy			
Actual Predicted Difference	10,361 <u>6,978</u> 3,383	8,234 7,233 1,001	7,692 <u>7,192</u> 500	9,495 <u>11,427</u> -1,932	35,782 32,830 2,952	
		Marin	e Corps			
Actual Predicted Difference	2,726 2,070 656	1,928 <u>1,998</u> -70	1,766 2,006 -240	2,939 3,142 -203	9,359 <u>9,216</u> 143	
		All Se	ervices			
Actual Predicted Difference	40,609 33,875 6,734	32,071 <u>33,747</u> -1,676	29,056 33,769 -4,713	35,029 <u>42,253</u> -7,224	136,765 <u>143,644</u> -6,879	

NOTE: Predicted figures were obtained by applying the average of 1985-1989 retention rates for each year of service to the 1989 officer corps base.

The drawdown did reduce retention among officers with more than 4 years of service in every service except the Navy. In the military as a whole, the number of officers with 5 to 8 years of service in 1989 who were still on active duty in 1996 was almost 1,700, or about 5 percent, less than what would have been predicted on the basis of predrawdown retention patterns. The cohorts with 9 to 12 years of service in 1989 all reached at least 16 years of service and became eligible for early retirement before 1996. About 4,700, or 14 percent, fewer of those officers remained in the force in 1996 than would have been predicted.

The drawdown had the greatest impact on officers who became eligible for regular retirement during the drawdown period (those with 20 or more years of service in 1996). The number of those officers who were on active duty in 1996 was about 7,200, or 17 percent, less than would have been predicted on the basis of predrawdown retention patterns.

In the Army, Air Force, and Marine Corps, the drawdown reduced average retention among all but the most junior cohorts. Yet in two services—the Navy and Marine Corps—the effects of decreased retention among more senior cohorts were outweighed by increased retention among cohorts that were beginning their careers in 1989. On average, officers in those services in 1989 were more likely to still be on active duty in 1996 than would have been predicted on the basis of predrawdown retention rates. The Navy and Marine Corps relied on cuts in accessions (or, possibly, lower retention among officers who entered the military after 1989) not just to reduce the size of the officer corps but also to make up for higher retention among those who were already in the force.

In the Army and Air Force, increased separations among the senior cohorts more than offset the increased retention among junior cohorts. Nonetheless, for DoD as a whole, the increase in separations among cohorts that were already in the force in 1989 appears relatively modest compared with the overall size of the drawdown.

Cuts in accessions were the driving force in the drawdown. DoD reduced its total officer corps by about 70,400 between 1989 and 1996. If the department had simply maintained its predrawdown retention rates for all of the cohorts that were in the force in 1989, it would still have reduced its officer corps by about 63,500.

THE EFFECT OF THE DRAWDOWN

ON THE OFFICER CORPS

Did the services succeed in maintaining a balanced force profile despite the limits imposed by the officer personnel system and their desire to protect loyal officers? A definitive answer to that question is beyond the scope of this paper. Yet trends in the composition of the officer corps—by years of service, pay grade, and occupation—as well as changes in the ratio of enlisted personnel to officers raise questions about whether the current force is appropriately balanced.

THE SENIORITY OF THE OFFICER CORPS

Cuts in officer accessions allowed personnel managers to reduce the size of the officer corps while keeping faith with the vast majority of officers who were already in the force and committed to a military career. That approach, however, affected the composition of the officer corps, which became more senior both in years of service and pay grade.

The Composition of the Officer Corps by Years of Service

In the military as a whole, the share of officers near the beginning of their careers—those with less than 8 years of service—fell from 38 percent in 1987 to 33 percent in 1997 (see Table 6). That decline was balanced by increases in the percentage of midcareer and late-career officers: the share of officers with 8 to 14 years of service rose from 27 percent to 30 percent, and the share with 15 or more years rose from 35 percent to 37 percent. The shift toward greater seniority was most pronounced in the Navy. The share of Navy officers with less than 8 years of service fell from 42 percent to 32 percent over that period.

The Marine Corps is the only service that did not experience a decline in the percentage of officers with less than 8 years of service. In that service, the rise in seniority took the form of an increase in the percentage of officers with 15 or more years of service that was offset by a decline in the percentage of midcareer officers.

In the near term, the increase in seniority provides the Department of Defense with a more experienced officer corps. Yet over the next decade, the large cohorts of officers remaining from the Cold War force will retire and be replaced by new entrants. To continue to have adequate numbers of experienced leaders, DoD may

TABLE 6. DISTRIBUTION OF OFFICERS BY YEARS OF SERVICE, FISCAL YEARS 1987 AND 1997 (In percent)

Years of Service	1987	1997
	Army	
Less Than 8	38	33
8 to 14	28	31
15 or More	<u>34</u>	<u>35</u>
Total	100	100
	Air Force	
Less Than 8	37	33
8 to 14	27	32
15 or More	<u>36</u>	<u>36</u>
Total	100	100
	Navy	
Less Than 8	42	32
8 to 14	23	29
15 or More	<u>35</u>	<u>39</u>
Total	100	100
	Marine Corps	
Less Than 8	39	39
8 to 14	29	24
15 or More	<u>32</u>	<u>37</u>
Total	100	100
	All Services	
Less Than 8	38	33
8 to 14	27	30
15 or More	<u>35</u>	<u>37</u>
Total	100	100

have to seek exceptionally high retention rates among the small cohorts of officers that entered the force during the drawdown.

The Composition of the Officer Corps by Pay Grade

The guidelines that the Defense Officer Personnel Management Act of 1980 provides for promotion opportunity and timing create a strong correlation between years of service and pay grade. Thus, as the average years of service increased, so did the average pay grade. The share of officers in the field grades (O-4 to O-6) rose from 35.4 percent in 1989 to 38.7 percent in 1996, an increase of 9 percent (see Table 7). The share of officers in the company grades (O-1 to O-3) fell from 64.2 percent to 60.9 percent. (Appendix B shows the percentage of officers in each pay grade.)

Changes in the general and flag grades (O-7 to O-10) during the drawdown varied by service. The percentage of those officers did not change in the Navy but increased by more than 10 percent in both the Air Force and the Marine Corps (see Table 7). The increases in the Air Force and Marine Corps reflected the Congress's decision not to reduce the number of general officers in those services by the same percentage as their total officer corps. In the case of the Marine Corps, the Congress left the limit on the number of general officers at its predrawdown level.

Although seniority may bring valuable experience, the shift toward an older, higher-ranking officer corps also means that the Department of Defense pays more than it otherwise would for a force of the current size. DoD's personnel costs in 1996 would have been \$200 million lower if the department had kept the distribution by years of service and pay grade the same as it was in 1989, before the drawdown.

A shift to a more senior officer corps may also cause other problems. It may make it difficult for the department to fill positions that do not call for senior officers, including some positions for Air Force pilots. In addition, because of the constraints DOPMA places on the number of field-grade officers, a very senior force can harm morale by limiting the services' ability to promote officers into the field grades.

The Constraints DOPMA Places on Field-Grade Officers

DOPMA limits the number of field-grade officers in each service. Those limits, however, are designed so that as the size of the officer corps in a particular service falls, the proportion of the officers in that service who are permitted to be in the field grades rises. Thus, DOPMA automatically accommodates some upward shift in the pay-grade distribution during a drawdown. Nonetheless, in the 1995 and 1996 defense authorization acts, the Congress allowed an even greater increase in the proportion of field-grade officers during the drawdown than DOPMA would have

TABLE 7. CHANGE IN THE NUMBER AND DISTRIBUTION OF COMMISSIONED OFFICERS, BY PAY GRADE, BETWEEN FISCAL YEARS 1989 AND 1996

	N	umber of Offic	cers	Perce	ntage of Offic	er Corps
Pay Grade	1989	1996	Percentage Change	1989	1996	Percentage Change
			Army			
Company Field General	59,447 32,046	42,359 26,304	-28.7 -17.9	64.7 34.9	61.4 38.1	-5.0 9.4
and Flag	407	308	-24.3	0.4	0.4	2.3
Total	91,900	68,971	-24.9	100	100	0
			Air Force			
Company Field General	65,933 37,433	45,698 30,416	-30.7 -18.7	63.6 36.1	59.8 39.8	-5.9 10.3
and Flag	333	<u>275</u>	-17.4	0.3	0.4	12.5
Total	103,699	76,389	-26.4	100	100	0
			Navy			
Company Field General	43,872 25,347	33,610 21,788	-23.4 -14.0	63.1 36.5	60.4 39.2	-4.3 7.4
and Flag	<u>256</u>	204	-20.3	0.4	0.4	0
Total	69,475	55,602	-20.0	100	100	0
			Marine Corps	3		
Company Field General	12,903 5,493	10,536 5,424	-18.3 -1.3	69.9 29.7	65.7 33.8	-5.9 13.7
and Flag	70	68	-2.9	0.4	0.4	10.5
Total	18,466	16,028	-13.2	100	100	0
			All Services			
Company Field General	182,155 100,319	132,203 83,932	-27.4 -16.3	64.2 35.4	60.9 38.7	-5.1 9.3
and Flag	1,066	<u>855</u>	-19.8	0.4	0.4	2.6
Total	283,540	216,990	-23.5	100	100	0

permitted. The Congress granted temporary relief for grades O-4 and O-5 in the Marine Corps and for all field grades in the Air Force and Navy.¹ In the 1997 act, the Congress made much of that relief permanent.²

Several factors played a role in the Congress's decision to grant relief from those ceilings. The Goldwater-Nichols Defense Reorganization Act of 1986 and the Defense Acquisition Workforce Improvement Act of 1990 led to the creation of new joint-service assignments and requirements for professional military education. The Navy and Marine Corps, in particular, may have needed additional officers in pay grades O-4 and O-5 to meet those requirements. Concern about the services' ability to maintain adequate opportunities for promotion during the drawdown without temporary relief also played a role. With the relief, the services were generally able to keep promotion opportunity and timing at or above the goals set by DOPMA. (See Appendix C for more details about the opportunity for and timing of promotions to field-grade positions.)

The extent to which the Congress granted relief varied by service. The Air Force, Navy, and Marine Corps were each close to their DOPMA ceilings in 1989, just before the drawdown, and—without early relief—would have needed to separate more officers in the field grades or cut back more on promotions (see Table 8).³ The Army managed the drawdown from 1989 through 1996 without any temporary relief, even though it reduced its officer corps by 25 percent during that period.

The Congress granted the Marine Corps temporary relief from inventory limits for grades O-4 and O-5 in U.S. House of Representatives, *National Defense Authorization Act for Fiscal Year 1995*, conference report to accompany S. 2182, Report 103-701 (August 12, 1994), p. 84. The Air Force and the Navy received similar relief in U.S. House of Representatives, *National Defense Authorization Act for Fiscal Year 1996*, conference report to accompany S. 1124, Report 104-450 (January 22, 1996), pp. 105-106.

^{2.} In U.S. House of Representatives, *National Defense Authorization Act for Fiscal Year 1997*, conference report to accompany H.R. 3230, Report 104-724 (July 30, 1996), pp. 86-89, the Congress made permanent increases in the ceilings that DOPMA places on the number of field-grade officers (except grade O-6) in the Army, Air Force, and Marine Corps.

^{3.} Although the Army did not receive temporary relief from the DOPMA ceilings in 1995 or 1996, it benefited from the permanent increases that the Congress granted in the 1997 authorization act.

TABLE 8. NUMBER OF FIELD-GRADE OFFICERS IN FISCAL YEARS 1989 AND 1996 COMPARED WITH DOPMA CEILINGS

-			
	O-4	O-5	O-6
	1989		
Army			
Actual	14,997	9,685	3,306
Ceiling	14,970	<u>9,847</u>	3,979
Difference	27	-162	-673
Air Force			
Actual	17,889	11,618	4,625
Ceiling	17,887 17,887	11,641	
Difference	<u>17,887</u> 2	-23	<u>4,761</u> -136
Difference	2	-23	-130
Navy			
Actual	11,863	6,858	3,150
Ceiling	<u>11,810</u>	7,039	<u>3,115</u>
Difference	53	-181	35
Marine Corps			
Actual	3,165	1,633	626
Ceiling	3,142	<u>1,596</u>	<u>637</u>
Difference	23	37	<u>-11</u>
	1996		
	(Without 1		
Army			
Actual	11,782	7,936	2,890
Ceiling	11,973	8,162	3,185
Difference	-191	-226	-295
Difference	171	220	273
Air Force			
Actual	14,331	9,378	3,378
Ceiling	<u>13,653</u>	<u>9,491</u>	<u>3,422</u>
Difference	678	-113	-44
Navy			
Actual	9,652	6,190	2,663
Ceiling	9,739	<u>6,065</u>	<u>2,641</u>
Difference	-87	125	22
Marine Corps			
Actual	3,165	1,633	626
Ceiling	2,827	1,501	617
Difference	338	132	9
2	220	102	,

TABLE 8. CONTINUED

	O-4	O-5	O-6
	1996 (With re		
Air Force			
Actual	14,331	9,378	3,378
Ceiling	<u>15,566</u>	<u>9,876</u>	<u>3,609</u>
Difference	-1,235	-498	-231
Navy			
Actual	9,652	6,190	2,663
Ceiling	<u>11,924</u>	<u>7,390</u>	<u>3,234</u>
Difference	-2,272	-1,200	-571
Marine Corps			
Actual	3,165	1,633	629
Ceiling	<u>3,157</u>	<u>1,634</u>	<u>n.a.</u>
Difference	8	-1	n.a.

NOTES: The Navy and Air Force received temporary relief from the DOPMA ceilings for all field grades in 1996; the Marine Corps received relief only for grades O-4 and O-5. The Army did not receive any relief at that time.

DOPMA = Defense Officer Personnel Management Act of 1980; n.a. = not applicable.

THE RATIO OF ENLISTED TO OFFICER PERSONNEL

Although the number of officers fell in each of the services during the drawdown, only the Marine Corps reduced its officer corps by as large a percentage as its enlisted force. As a result, it was the only service in which the ratio of enlisted to officer personnel did not decline (see Table 9). The Army's ratio experienced the greatest decline, from 6.2 in 1989 to 5.0 in 1996, a drop of 19 percent. The ratios in the Air Force and Navy fell by 11 percent and 14 percent, respectively.

The services have argued that decreases in the enlisted-to-officer ratio could reflect changing requirements for personnel. For example, a new weapon system may need fewer crew members to operate it without changing the number of officers needed to lead the units that use the system. Or the service may have new require-

TABLE 9. RATIO OF ENLISTED TO OFFICER PERSONNEL, BY SERVICE, FISCAL YEARS 1989-1996

	Army	Air Force	Navy	Marine Corps	All Services
1989	6.2	4.5	7.2	8.8	6.0
1990	6.0	4.3	7.0	8.9	5.8
1991	5.8	4.2	7.0	8.8	5.8
1992	5.4	4.2	6.8	8.6	5.6
1993	5.5	4.2	6.6	8.7	5.6
1994	5.3	4.2	6.5	8.8	5.5
1995	5.1	4.1	6.3	8.8	5.3
1996	5.0	4.0	6.2	8.8	5.3
Percentage Decline,					
1989-1996	19	11	14	0	12

ments for officers in joint-service assignments and in research, development, or contracting activities.⁴ The services argue that they maintain the officer corps at the size needed to provide leadership and management in peace and war without needlessly raising costs or providing excessive supervision.

Another possibility, however, is that the ratio of enlisted to officer personnel fell not because of a change in requirements but because the services found it easier to separate enlisted personnel than officers. That would appear to explain why the ratio shifted when it did. In the past, the Congress has questioned decreases in the services' ratio of enlisted to officer personnel. For example, in 1987 the Congress mandated cuts in the size of the active-duty officer corps despite the services' arguments that declines in that ratio were justified by changing requirements.⁵

THE OCCUPATIONAL MIX OF THE OFFICER CORPS

In addition to raising the seniority of the officer corps and increasing the ratio of enlisted to officer personnel, the drawdown reduced the percentage of officers whose

^{4.} Department of Defense, Defense Officer Requirements Study (March 1988), pp. 32-36.

^{5.} U.S. House of Representatives, *National Defense Authorization Act for Fiscal Year 1987*, conference report to accompany S. 2638, Report 99-661 (November 14, 1986).

Percent 100 ■ Combat □ Support 90 80 Marine Corps 70 All Air Force Army Services 60 Navv 50 40 30 20 10 1989 1996 1989 1996 1996 1989 1996

FIGURE 5. SHARE OF OFFICERS IN COMBAT AND SUPPORT POSITIONS, BY SERVICE, FISCAL YEARS 1989 AND 1996

primary training is for combat and increased the percentage whose primary training is for support occupations (see Figure 5). Between 1989 and 1996, the share of combat officers fell from 59 percent to 56 percent of the officer corps, while the share specializing in support occupations rose from 41 percent to 44 percent. One group in the support occupations—health care specialists—accounted for all of that increase. The percentage of the officer corps with support specialties other than health care—a group that includes officers with scientific, legal, administrative, and material management skills—did not change between 1989 and 1996. (Appendix D provides additional information about the occupational composition of the officer corps.)

Combat Occupations

DoD includes officers with tactical and engineering skills in its combat classification. (Other combat officers include general officers and those in the intelligence field.) The tactical skill group—a group that includes combat arms officers in the Army, pilots and aircraft crew members in the Air Force, surface warfare officers in the Navy, and infantry officers in the Marine Corps—is the largest of the combat categories and accounted for most of the decline in combat officers between 1989 and 1996.

The percentage of military officers whose primary training was for a tactical occupation fell from 41.6 percent to 38.5 percent of the officer corps (see Table 10).

TABLE 10. PERCENTAGE CHANGE IN THE SHARE OF OFFICERS IN SELECTED COMBAT AND SUPPORT OCCUPATIONS BETWEEN FISCAL YEARS 1989 AND 1996

	Share (P	ercent)	Percentage Change,
Occupation	1989	1996	1989-1996
	Army		
Combat			
Tactical	43.5	39.5	-9.1
Engineer	10.3	9.7	-5.0
Other	6.6	7.1	8.2
Subtotal	60.4	56.3	-6.5
Support			
Health	19.2	22.0	14.6
Other	21.6	21.7	0.2
Subtotal	40.8	43.7	9.9
Total	100.0	100.0	n.a.
	Air For	ce	
Combat	20.2	24.7	0.6
Tactical	38.3 17.1	34.7 15.2	-9.6
Engineer Other	4.3	5.7	-11.1 32.4
Subtotal	<u>4.3</u> 59.7	<u>55.7</u> 55.5	-7.0
	27.1		
Support		40.4	• • •
Health	14.1	18.2	28.4
Other	<u>26.2</u>	<u>26.3</u>	0.5
Subtotal	40.3	44.5	10.3
Total	100.0	100.0	n.a.
Combat	Navy		
Combat Tactical	41.2	38.6	-6.2
Engineer	8.9	9.0	-0.9
Other	3.4	4.2	25.4
Subtotal	53.5	51.8	-3.1
Cummont			
Support Health	16.2	20.4	26.0
Other	30.4	27.8 27.8	-8.5
Subtotal	46.6	48.2	3.5
Suototui	10.0	10.2	3.3
Total	100.0	100.0	n.a.

TABLE 10. CONTINUED

	Share (Percent) Percentage Change					
Occupation	1989	1996	1989-1996			
	Marine C	orps				
Combat		•				
Tactical	52.4	51.6	-1.5			
Engineer	7.4	5.9	-20.0			
Other	<u>7.1</u>	8.0	12.6			
Subtotal	66.9	65.5	-2.1			
Support						
Health	0	0	0			
Other	33.2	34.6	4.1			
Subtotal	33.2	34.6	4.1			
Total	100.0	100.0	n.a.			
	All Servi	ces				
Combat						
Tactical	41.6	38.5	-7.6			
Engineer	12.2	11.2	-8.6			
Other	5.0	6.0	19.0			
Subtotal	58.8	55.7	-5.5			
Support						
Health	15.3	18.6	21.3			
Other	25.8	25.8	0			
Subtotal	41.1	44.4	7.9			
Total	100.0	100.0	n.a.			

NOTE: n.a. = not applicable.

Although that decline was only about 3 percentage points, it represents a decrease of almost 8 percent in the share of tactical officers. Moreover, that shift occurred—in differing degrees—in each of the four services. In the Army, which had the largest shift, the percentage of tactical officers fell from 43.5 percent to 39.5 percent; in the Air Force, from 38.3 percent to 34.7 percent; in the Navy, from 41.2 percent to 38.6 percent; and in the Marine Corps, from 52.4 percent to 51.6 percent.

The percentage of officers who were engineers also declined between 1989 and 1996, falling from 12.2 percent to 11.2 percent of the total officer corps. In the Air Force, the share fell from 17.1 percent to 15.2 percent. Although that decline is only about 2 percentage points, it represents a drop of about 11 percent in the share of engineers in the Air Force's officer corps.

Support Occupations

Officers with health care skills account for about 40 percent of all support officers. During the drawdown, their numbers fell by a smaller percentage than those of officers in other occupations. As a result, the share of the officer corps with medical skills grew—from 15.3 percent of all officers in 1989 to 18.6 percent in 1996. Although that rise is only about 3 percentage points, it represents an increase of about 21 percent in the share of the officer corps in the medical field. The shift toward health care specialists occurred in all services except the Marine Corps, which relies on the Navy to provide medical support.

Much of the increase in health care professionals may have been intentional. Shortages of medical personnel, relative to wartime requirements, had long posed a problem for the military, and the drawdown presented an opportunity to eliminate any remaining shortfalls. The National Defense Authorization Act for Fiscal Year 1991 specified that DoD could reduce the number of medical personnel below the 1989 level only if the Secretary of Defense certified to the Congress that the reductions would not raise health care costs or limit the department's ability to meet its current or projected needs for such personnel.⁶ Nonetheless, medical personnel now account for what may be a surprisingly large share of the officer corps. For example, about 22 percent of the Army's officers and 30 percent of those in pay grade O-6 (colonels) are medical officers.⁷

The services might argue that the increase in the proportion of health care specialists, as well as the increase in the proportion of field-grade officers and in the ratio of enlisted to officer personnel, was justified by requirements. It seems likely, however, that the military personnel system—which excludes medical officers from constraints on field-grade positions, provides relatively limited tools for separating senior officers, and makes it easier to cut the ranks of enlisted than officer personnel—also contributed to those trends.

^{6.} U.S. House of Representatives, *National Defense Authorization Act for Fiscal Year 1991*, conference report to accompany H.R. 4739, Report 101-923 (October 23, 1990), pp. 102-103.

^{7.} Since 1996, the Army and Air Force have exceeded their requirements for medical personnel. As a result, medical officers in those services may now be subject to reductions.

APPENDIX A

ACTUAL AND PREDICTED NUMBER OF

OFFICERS BY YEARS OF SERVICE

The Congressional Budget Office evaluated the sensitivity of using the average annual retention rate between 1985 and 1989 in its cohort-based analysis of how downsizing affected officers who were in the military at the start of the drawdown. Table A-1 shows the results using an average rate based on the two years between 1985 and 1989 with the highest retention rates; Table A-2 uses the average of the two lowest rates.

TABLE A-1. ACTUAL AND PREDICTED NUMBER OF OFFICERS REMAINING ON ACTIVE DUTY FROM FISCAL YEAR 1989 THROUGH 1996, BY YEARS OF SERVICE IN 1996, USING HIGHER AVERAGE RETENTION RATES

			Years of Service	ce	
	8 to 11	12 to 15	16 to 19	20 or More	Total, 8 or More
		Ar	my		
Actual	12,995	9,705	9,044	10,099	41,843
Predicted Difference	12,503 492	<u>11,932</u> -2,227	<u>11,960</u> -2,916	<u>13,382</u> -3,283	<u>49,777</u> -7,934
		Air I	Force		
Actual	14,527	12,204	10,554	12,496	49,781
Predicted Difference	14,020 507	14,562 -2,358	13,678 -3,124	16,803 -4,307	<u>59,063</u> -9,282
		Na	nvy		
Actual	10,361	8,234	7,692	9,495	35,782
Predicted Difference	7,419 2,942	7,749 485	$\frac{7,464}{228}$	12,228 -2,733	34,860 922
		Marine	e Corps		
Actual	2,726	1,928	1,766	2,939	9,359
Predicted Difference	2,389 337	2,263 -335	2,198 -432	3,587 -648	10,437 -1,078
		All Se	ervices		
Actual	40,609	32,071	29,056	35,029	136,765
Predicted Difference	36,331 4,278	<u>36,506</u> -4,435	35,300 -6,244	<u>46,000</u> -10,971	<u>154,137</u> -17,372

NOTE: Predicted figures were obtained by applying the average retention rates for the two highest years between 1985 and 1989 to the 1989 officer corps base.

TABLE A-2. ACTUAL AND PREDICTED NUMBER OF OFFICERS REMAINING ON ACTIVE DUTY FROM FISCAL YEAR 1989 THROUGH 1996, BY YEARS OF SERVICE IN 1996, USING LOWER AVERAGE RETENTION RATES

			Years of Service	ee.	
	8 to 11	12 to 15	16 to 19	20 or More	Total, 8 or More
		Ar	my		
Actual	12,995	9,705	9,044	10,099	41,843
Predicted	<u>11,370</u>	10,444	10,872	11,573	44,259
Difference	1,625	-739	-1,828	-1,474	-2,416
		Air l	Force		
Actual	14,527	12,204	10,554	12,496	49,781
Predicted	11,798	12,108	12,608	13,930	50,444
Difference	2,729	96	-2,054	-1,434	-663
		Na	nvy		
Actual	10,361	8,234	7,692	9,495	35,782
Predicted	<u>6,548</u>	<u>6,731</u>	<u>6,898</u>	10,648	30,825
Difference	3,813	1,503	794	-1,153	4,957
		Marine	e Corps		
Actual	2,726	1,928	1,766	2,939	9,359
Predicted	1,746	1,787	1,872	2,778	8,183
Difference	980	141	-106	161	1,176
		All Se	ervices		
Actual	40,609	32,071	29,056	35,029	136,765
Predicted	31,462	31,070	32,250	38,929	133,711
Difference	9,147	1,001	-3,194	-3,900	3,054

NOTE: Predicted figures were obtained by applying the average retention rates for the two lowest years between 1985 and 1989 for each year of service to the 1989 officer corps base.

APPENDIX B	
THE DISTRIBUTION OF OFFICERS	
BY PAY GRADE	

This appendix provides detailed information on the composition of the officer corps by pay grade. Table B-1 shows the percentage of officers by pay grade for each service for 1989 and 1996.

TABLE B-1. DISTRIBUTION OF OFFICERS BY PAY GRADE, FISCAL YEARS 1989 AND 1996 (In percent)

Pay Grade	1989	1996
	Army	
O-1	13.0	14.0
O-2	15.1	12.5
O-3	36.7	34.9
O-4	18.6	19.7
O-5	11.6	13.1
O-6	4.7	5.3
O-7	0.2	0.2
O-8	0.2	0.2
O-9	0.1	0.1
O-10	a	a
	Air Force	
O-1	9.6	9.4
O-2	12.3	9.8
O-3	41.7	40.6
O-4	19.0	21.0
O-5	12.0	13.6
O-6	5.1	5.3
O-7	0.2	0.2
O-8	0.1	0.1
0-9	a	0.1
O-10	a	a

TABLE B-1. CONTINUED

Pay Grade	1989	1996
	Navy	
) -1	13.7	11.8
)-2	16.1	11.4
)-3	33.4	37.3
)-4	19.7	20.1
)-5	11.2	13.0
)-6	5.6	6.1
)-7	0.2	0.2
)-8	0.1	0.1
)-9	a	0.1
) -10	a	a
	Marine Corps	
) -1	14.1	15.1
)-2	22.3	16.8
)-3	33.5	33.8
)-4	17.5	19.8
)-5	8.8	10.2
)-6	3.5	3.9
)-7	0.2	0.2
)-8	0.1	0.1
) -9	a	0.1
) -10	a	a

a. Less than 0.1 percent.

OPPORTUNITY FOR AND TIMING OF

PROMOTIONS TO FIELD-GRADE POSITIONS

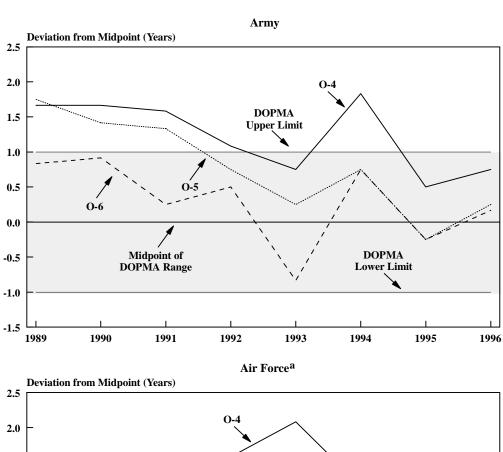
The services had varying degrees of success in reducing their officer corps without violating the guidelines for promotion opportunity and timing established in the Defense Officer Personnel Management Act of 1980 (DOPMA). For the most part, the Army met both DOPMA's limits on the number of field-grade officers and its guidelines for promotion opportunity and timing for officers. The Congress aided the personnel managers in charge of downsizing efforts in the Air Force, Navy, and Marine Corps, however, by granting them temporary relief from the constraints imposed by those guidelines.

At the start of the drawdown, the timing of promotions to grades O-4 and O-5 for Army officers was slower than the guidelines recommended in DOPMA, but it picked up in the 1990s (see Figure C-1). In 1993, 1995, and 1996, the timing of promotions for Army officers to grades O-4, O-5, and O-6 was within DOPMA's guidelines. In addition, opportunities for promotion to all field grades exceeded or nearly met DOPMA's guidelines between 1993 and 1996 (see Figure C-2 on page 50). Part of the Army's success can be explained by the fact that it was below DOPMA's limits on the number of field-grade officers at the start of the drawdown. (For more details on field-grade promotion opportunities and points, see Table C-1.)

In contrast, both the Air Force and the Marine Corps were close to their DOPMA ceilings in 1989, which limited the options of their personnel managers. To stay within the act's limits for field-grade officers while reducing its officer corps, the Air Force held no promotion boards for grade O-4 in 1989 and 1992 or for grade O-6 in 1995. The Marine Corps controlled the number of field-grade officers throughout much of the drawdown by holding promotion opportunities for grades O-4 and O-5 below DOPMA's guidelines.

The Navy, which was somewhat below DOPMA's ceilings for grade O-5 at the start of the drawdown, was the only service that did not violate the act's guidelines for promotion timing for any grade during the drawdown. Moreover, the Navy was able to keep promotion opportunities for grades O-5 and O-6 at or near DOPMA's mandated levels, although promotion opportunity to grade O-4 was depressed during most of the drawdown.

FIGURE C-1. OFFICER PROMOTION POINTS RELATIVE TO DOPMA GUIDELINES



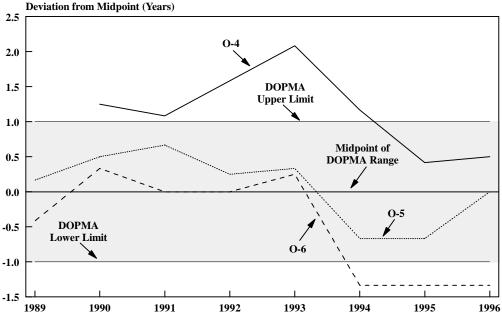
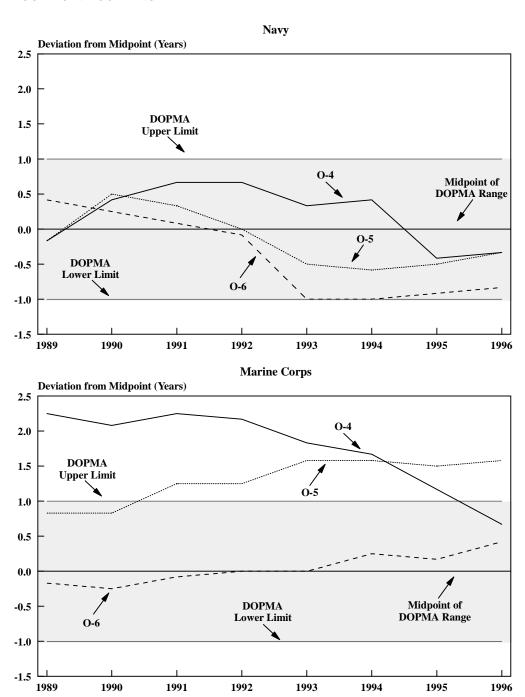


FIGURE C-1. CONTINUED



SOURCE: Congressional Budget Office based on data from the Department of Defense.

NOTES: Promotion points in the shaded area are consistent with guidelines in the Defense Officer Personnel Management Act (DOPMA). Those guidelines permit promotion points that range from one year above to one year below the midpoint specified by DOPMA. The DOPMA midpoints for O-4, O-5, O-6 are 10, 16, and 22 years of service, respectively.

a. The Air Force did not hold promotion boards for O-6 in 1995 or for O-4 in 1989 and 1992.

TABLE C-1. OPPORTUNITY FOR AND TIMING OF PROMOTIONS TO FIELD-GRADE POSITIONS, FISCAL YEARS 1989-1996

	O-	4	O	-5	O-	-6
	Promotion	Promotion	Promotion	Promotion	Promotion	Promotion
Fiscal	Opportunity ^a	Point ^b	Opportunity ^a	Point ^b	Opportunity ^a	Point ^b
Year	(Percent)	(Yrs., mos.)	(Percent)	(Yrs., mos.)	(Percent)	(Yrs., mos.)
			Army			
1000	22.0	44.0	52. 0	15.0	40.4	22.10
1989	82.0	11,8	73.9	17,9	49.4	22,10
1990	77.8	11,8	74.0	17,5	45.2	22,11
1991	76.9	11,7	72.3	17,4	49.2	22,4
1992	69.9	11,0	71.1	16,9	52.8	22,6
1993	82.5	10,9	71.3	16,3	52.8	21,2
1994	85.4	11,10	70.5	16,9	50.4	22,9
1995	83.0	10,6	72.4	15,9	53.8	21,9
1996	83.7	10,9	68.4	16,4	53.0	22,2
			Air Force			
1989	c	c	78.0	16,2	62.4	21,7
1990	89.3	11,3	73.7	16,6	55.3	22,4
1991	81.9	11,1	75.5	16,8	57.0	22,0
1992	c	c	75.8	16,3	51.5	22,0
1993	80.5	12,1	70.2	16,4	50.4	22,3
1994	82.6	11,2	70.0	15,4	51.6	20,8
1995	82.7	10,5	70.7	15,4	c	c
1996	82.6	10,6	69.9	16,0	51.6	20,8

TABLE C-1. CONTINUED

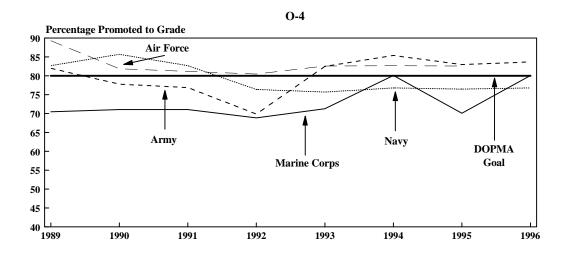
	O-4		O-5		O-6	
	Promotion	Promotion	Promotion	Promotion	Promotion	Promotion
Fiscal	Opportunity ^a	Point ^b	Opportunity ^a	Point ^b	Opportunity ^a	Point ^b
Year	(Percent)	(Yrs., mos.)	(Percent)	(Yrs., mos.)	(Percent)	(Yrs., mos.)
			Navy			
1989	82.7	9,10	71.8	15,11	55.4	22,5
1990	85.7	10,5	72.0	16,6	55.6	22,3
1991	82.7	10,8	72.5	16,4	55.1	22,1
1992	76.4	10,8	70.3	16,0	55.3	21,11
1993	75.7	10,4	68.0	15,6	54.2	21,0
1994	76.8	10,5	70.8	15,5	53.0	21,0
1995	76.5	9,7	70.7	15,6	53.1	21,1
1996	76.8	9,8	70.8	15,8	52.9	21,2
		1	Marine Corps	s		
1989	70.5	12,3	65.6	16,10	48.3	21,10
1990	71.1	12,1	65.3	16,10	51.2	21,9
1991	71.1	12,3	65.1	17,3	48.4	21,11
1992	68.9	12,2	63.3	17,3	49.7	22,0
1993	71.3	11,10	60.5	17,7	45.0	22,0
1994	80.1	11,8	69.7	17,7	45.9	22,3
1995	70.1	11,2	59.0	17,6	46.6	22,2
1996	80.1	10,8	69.6	17,7	45.8	22,5

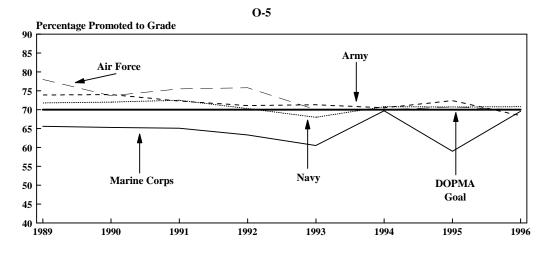
a. A measure of the probability that an officer who seeks promotion will be promoted.

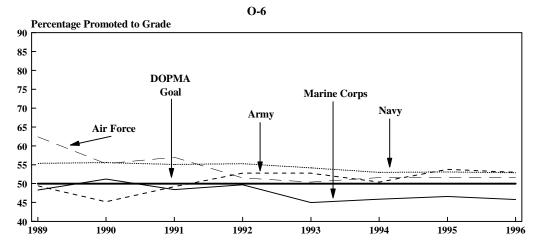
b. The number of years and months of service at which officers typically may expect promotions.

c. No promotion board convened.

FIGURE C-2. OPPORTUNITIES FOR PROMOTION TO FIELD-GRADE POSITIONS







SOURCE: Congressional Budget Office based on data from the Department of Defense.

NOTE: DOPMA = Defense Officer Personnel Management Act of 1980.

APPENDIX D	
OCCUPATIONAL COMPOSITION OF THE OFFICER CORPS	

Table D-1 shows the percentage of officers in each service by occupation in fiscal years 1989 and 1996.

TABLE D-1. DISTRIBUTION OF OFFICERS BY OCCUPATION, FISCAL YEARS 1989 AND 1996 (In percent)

Occupation	1989	1996
	Army	
Combat		
General	0.4	0.5
Tactical	43.5	39.5
Intelligence	6.1	6.7
Engineer	10.3	9.7
Support		
Science	3.7	4.0
Health	19.2	22.0
Administration	6.7	5.9
Supply	9.6	10.1
Nonoccupation	0	0
Unknown	0.5	<u>1.7</u>
Total	100.0	100.0
	Air Force	
Combat		
General	0.3	0.4
Tactical	38.3	35.4
Intelligence	4.0	4.6
Engineer	17.1	15.2
Support		
Scientist	6.4	6.9
Health	14.1	18.2
Administration	8.7	8.0
Supply	7.9	8.7
Nonoccupation	3.2	2.8
Unknown	0	0
Total	100.0	100.0

TABLE D-1. CONTINUED

Occupation	1989	1996	
	Navy		
Combat			
General	0.4	0.4	
Tactical	41.2	38.6	
Intelligence	3.0	3.9	
Engineer	8.9	9.0	
Support			
Scientist	3.8	4.0	
Health	16.2	20.4	
Administration	5.7	5.0	
Supply	6.8	5.7	
Nonoccupation	14.0	11.7	
Unknown	0.1	1.4	
Total	100.0	100.0	
	Marine Corps		
Combat			
General	3.8	4.3	
Tactical	52.4	51.6	
Intelligence	3.3	3.6	
Engineer	7.4	5.9	
Support			
Scientist	3.0	2.6	
Health	0	0	
Administration	7.0	6.9	
Supply	11.3	11.5	
Nonoccupation	11.9	13.4	
Unknown	0	0.1	
Total	100.0	100.0	