Chapter 1

INTRODUCTION

This is the 29th annual Department of Defense (DoD) report on social representation in the U.S. Military Services. In response to a mandate by the Senate Committee on Armed Services (Report 93-884, May 1974), the Directorate for Accession Policy, Office of the Under Secretary of Defense (Personnel and Readiness) has provided annual data addressing the quality and representativeness of military personnel since fiscal year (FY) 1975. Except where otherwise noted, data are provided by Defense Manpower Data Center (DMDC). Due to differences in data flow and definitions, values provided will not always match official figures reported by the Directorate for Information Operations and Reports, other Department of Defense agencies, or the military services.

Originally, the report was limited to an assessment of the active duty enlisted force. In keeping with an increased emphasis and reliance on a Total Force, Accession Policy has expanded this effort to include statistics not only for enlisted personnel but also for officers and reservists. In addition to presenting data on each of the Military Services, since FY 1998, data on the U.S. Coast Guard (USCG) have been provided. Although an armed force, the Coast Guard is part of the Department of Homeland Security (as of March 1, 2003) except in times of war and national emergency when it reports to the Department of the Navy.
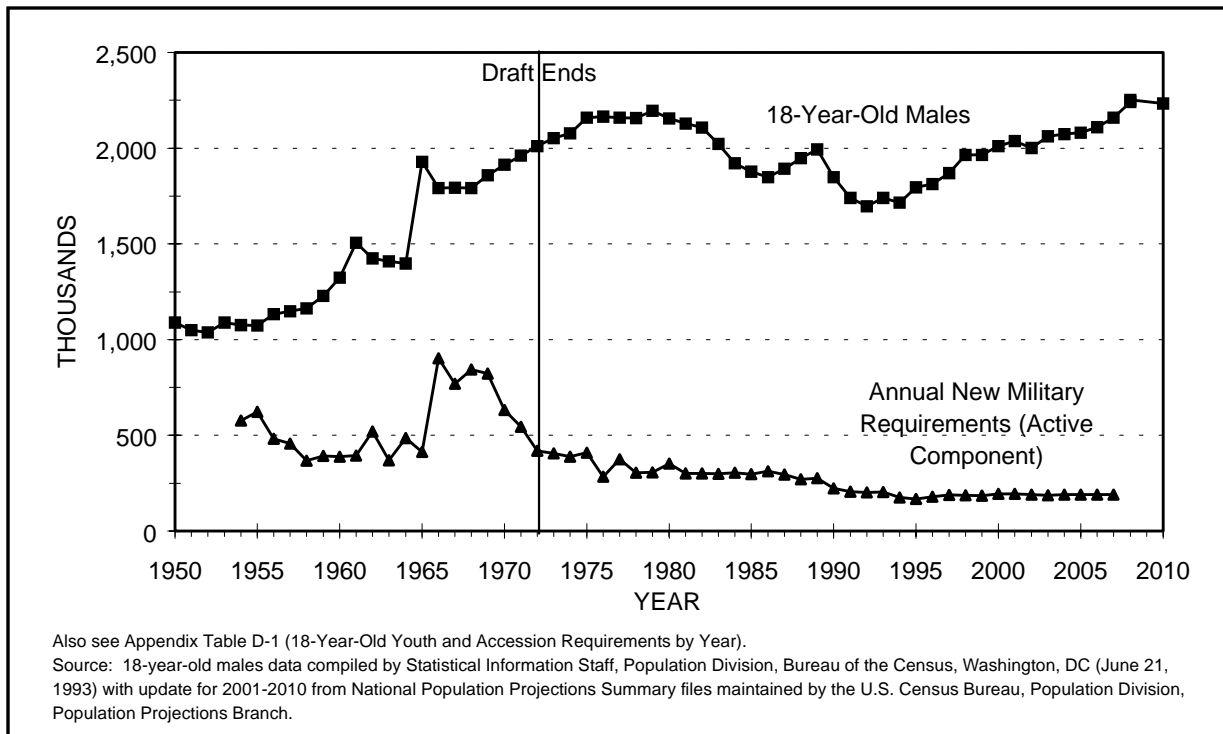
This report presents a broad array of characteristics—beyond routine demographics (e.g., age, gender, race/ethnicity) of the nation's largest and most diverse employer. Estimates of cognitive ability (e.g., education, reading grade level, Armed Forces Qualification Test [AFQT] scores) and service characteristics (e.g., years of service and pay grade) also are used to describe the force. Further, historical data are included to aid in analyzing trends to render the statistics more interpretable. Thus, recruit quality, representation rates, and the like can be viewed within the context of the preceding decades. These data are invaluable to military personnel policymakers and analysts as well as others interested in monitoring the characteristics of people serving in the Military Services.

The aim of the *Population Representation* report is to disseminate facts regarding the demographics and other characteristics of applicants, new recruits, and enlisted and officer members of the Active Forces and Reserve Components. Aptitude, education levels, age, race/ethnicity, and gender are among the mainstay statistics that shed light on the formidable task of recruiting and maintaining the force. Years of military service and pay grade provide measures of the degree of personnel experience as well as career progress that are particularly informative when examined by gender and race/ethnicity. Representation levels may change only slightly from year to year but monitoring racial/ethnic and gender participation together with additional relevant factors maintains needed attention on the characteristics and quality levels of the men and women who defend our country.

The chapters that follow provide a narrative description with selected tables and graphs, as well as a detailed set of technical appendices addressing many of the traits and characteristics of current military personnel. This chapter sets the tone and provides some interpretive guidance with regard to the comprehensive contents of the *Population Representation* report.

Fiscal Year 2002: Military Opportunities and Combat Experiences

Offering entry-level positions, with paid training and numerous benefits, the Armed Services is one of the largest employers in our nation. In FY 2002, nearly 182,000 non-prior service (NPS) applicants were accepted into the enlisted ranks and close to 22,000 new officers joined the officer corps of the Active Components. In addition, about 73,000 NPS enlistees began serving their country in the Selected Reserve during FY 2002. That's almost 277,000 job openings annually. At the close of FY 2002, the Total Force stood at just under 1.4 million active duty members and just over 874,000 Selected Reservists. (Data for the past half century are shown in Figure 1.1, with some projections for the future.)

Also see Appendix Table D-1 (18-Year-Old Youth and Accession Requirements by Year).
Source: 18-year-old males data compiled by Statistical Information Staff, Population Division, Bureau of the Census, Washington, DC (June 21, 1993) with update for 2001-2010 from National Population Projections Summary files maintained by the U.S. Census Bureau, Population Division, Population Projections Branch.

Figure 1.1. The population of 18-year-old males and Active Component non-prior service (NPS) recruiting requirements for fiscal years 1950–2010 (projected).

The military provides numerous employment opportunities to today's youth. Members of the Services receive training and work experience in a multitude of occupational specialties – from infantry to maintenance and repair to medical to equipment operator to administrator. Servicemembers manage, operate, maintain, and coordinate the use of complicated weapon systems gaining critical technical and leadership experience as they progress through the ranks. With close to 300,000 new jobs each year, the military provides training and experience in a diverse array of technical specialties.

The Armed Forces is host to one of the most diverse workforces in our country, not solely in terms of the numerous types of jobs or missions available. Men and women from various racial and ethnic groups, of different social standing, and from all geographic areas have equal opportunity to seek a military career, provided they meet the basic entry requirements of the Services. Diversity in the forces is now a fact. The Services enlist and commission men and

women from many walks of life, who perform together as a cohesive team to accomplish their missions as they admirably serve to defend our nation.

Serving in the military is not without sacrifice or burden. Servicemembers contribute to national defense in a variety of ways, through warfighting, peacekeeping, humanitarian, and other missions. No single group should bear the brunt of the burden, particularly during times of war, nor profit from the benefits of training, experience, and prestige. Thus, it is important for the Services to strive for a representative force.

With respect to race/ethnicity, the Armed Forces maintain a fairly representative workforce. Blacks continue their historically strong military presence in the enlisted ranks (22 percent), at levels higher than population proportions (13 percent). However, the proportion of Black accessions in FY 2002—less than 16 percent—is significantly less than in FY 2001 when nearly 20 percent of all NPS enlisted accessions were Black. Despite the decrease in Black recruits, this minority group continues to be overrepresented among new Servicemembers compared to the comparable civilian population.

Recruiting is affected by a variety of interacting factors, such as, but not limited to, economic and military conditions. Further, racial/ethnic, as well as gender, groups react in different ways to changes in the various issues impacting the recruiting environment. For example, recent increases in combat missions, such as Operations Enduring Freedom and Iraqi Freedom (collectively the Global War on Terror), following the terrorist attacks of September 11, 2001 have had an impact, if only temporary, on propensity to join the military.[1] DoD Youth Poll 4 indicates that propensity to enlist following the terrorist attacks increased for Whites and males.[2] With this increase in propensity, the Services experienced an increase in White enlistment proportion (both male and female) with a concomitant decrease in Black enlistment proportion.

There is evidence that war tends to polarize youth's likelihood to consider the military.[3] That is, individuals who were previously likely to join the military are even more likely to join during war. On the other hand, individuals who were previously unlikely to join the military are even less likely to consider the military when the nation is sending men and women to combat. However, there seem to be differential effects by race/ethnicity.

Future effects on propensity and recruiting will depend on the outcomes of the continuing combat and peacekeeping missions, such as the duration of the missions, the number of casualties, and the perceived success of the war. Continued monitoring of propensity among race/ethnic groups and representation within the ranks is important to maintaining a diverse force.

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[1] Burger, E.C., *The Impact of September 11 on Military Enlisted Recruiting* (Fort Knox, KY: U.S. Army Accessions Command, Center for Accessions Research, 2003).

[2] Wirthlin Worldwide, *Fall 2002 DoD Youth Poll (Wave 4)* (December 2002).

[3] Defense Market Research Executive Notes, *War in Iraq: Public Opinion and How it Could Affect Recruiting* (Arlington, VA: Defense Manpower Data Center, 2003).

Blacks have achieved representation parity in the officer corps. Hispanics remain underrepresented but are making gains within the enlisted ranks and officer corps. Hispanic representation is important to monitor in light of increasing Hispanic population proportions and related issues of citizenship, English language proficiency, and high school graduation rates.

Unlike racial and ethnic minorities, the role of women in the military is still unsettled if not controversial. Although women comprise half of the youth population, in FY 2002, they made up only 17 and 19 percent of enlisted and officer accessions, respectively. However, these figures are close to all-time highs in the representation of women entering the military. Before the All Volunteer Force, in FY 1964, less than 1 percent of enlisted accessions were women. Women climbed to 5 percent in 1973 and shortly thereafter, they topped 10 percent. Today, that figure has almost doubled, even in the face of a more streamlined force.

Although much progress has been achieved with regard to gender equity, much work remains. The representation of women has increased and many previously closed positions have been opened to women. The military continues to consider current and future roles for women in uniform.

Data Sources

The primary sources for this report are computerized data files on military personnel maintained by the Defense Manpower Data Center (DMDC). Due to differences in data flow and definitions, values provided will not always match official figures reported by the Directorate for Information Operations and Reports, other Department of Defense agencies, or the military services.

The Bureau of Labor Statistics (BLS) provides the bulk of the comparison data on the national population. Though the data sources have remained constant, refinements have been made over the years, most of them in regard to the civilian comparisons. Starting with the report for FY 1994, Census data were adjusted to provide a more accurate comparison for military *applicants and accessions* (yearly average rather than last month of the fiscal year). Age comparisons for prior-service enlisted accessions to the Selected Reserve were also adjusted, from the 18- to 44-year-old civilian labor force to the 20- to 39-year-old civilian labor force. Comparisons for Selected Reserve enlisted members were changed from 18- to 44-year-old civilians to 18- to 49-year-olds. Starting with data for FY 1995, a further age refinement was introduced for comparisons with the officer corps. Previously the comparison group for Active Component officers comprised civilian workforce college graduates who were 21 and older. This was adjusted by establishing an upper bound at age 49, making the more precise comparison, college graduates aged 21 to 49 who are in the workforce.

In addition, beginning with the FY 1995 *Population Representation* report, DMDC provided edited, rather than raw, data on applicants for enlistment. In FY 1997, prior service accession data for the Active Components were added. U.S. Coast Guard representation statistics were included for the first time in FY 1998. A refinement to the age range of the civilian comparison group for Active Component prior service enlisted accessions was made in FY 1999. The age range was extended from 18-24 year-olds to 17-35 year-olds, to better reflect the older composition of recruits with previous military experience. Some file format changes at DMDC during FYs 1999 and 2000 introduced some coding changes to more accurately reflect the

characteristics of interest. As a result, there are some noticeable differences across years in the historical data. A brief description of the data sources for FY 2002 follows:

Subject	Data Source
<u>Active Components</u>	
Applicants to Enlisted Military	DMDC U.S. Military Entrance Processing Command (USMEPCOM) Edit Files, October 2001 through September 2002.
Enlisted Accessions	DMDC USMEPCOM Edit Files, October 2001 through September 2002.
Enlisted Force	DMDC Active and Loss Edit File, September 2002.
Officer Accessions	DMDC Officer Gain Files, October 2001 through September 2002.
Officer Corps	DMDC Officer Master and Loss Edit File, September 2002.
Operation Desert Storm Data	DMDC Active and Loss Edit File and Officer Master and Loss Edit File, June 30, 1990.
Operation Enduring Freedom Data	DMDC Active and Loss Edit File and Officer Master and Loss Edit File, September 30, 2001.
<u>Reserve Components</u>	
Selected Reserve Enlisted and Officer Accessions	DMDC Reserve Components Common Personnel Data System (RCCPDS), October 2001 through September 2002.
Selected Reserve Enlisted Force and Officer Corps	DMDC Reserve Components Common Personnel Data System (RCCPDS), September 2002.

Civilian Comparisons

Civilian Comparison Groups for Applicants, Accessions, and Active and Reserve Members	Bureau of Labor Statistics Current Population Survey Files, October 2001 through September 2002.
Civilian Comparisons for Military Entrance Test Data	*Profile of American Youth* (Washington, DC: Office of the Assistant Secretary of Defense [Manpower, Reserve Affairs, and Logistics], March 1982).

Chapter 2

ACTIVE COMPONENT ENLISTED APPLICANTS AND ACCESSIONS

The Services are one of the largest employers in the United States, enlisting nearly 182,000 young men and women in the Active Components in FY 2002. Recruiting a quality force is as important as ever, perhaps more important, given the decreasing number of men and women in the military and the increasing sophistication of weapons and methods for fighting modern wars. Service missions have changed to include peacekeeping and humanitarian efforts, requiring additional skills from today's men and women in uniform.

With the prospering economy of the past few years, recruiters have experienced the greatest challenges to signing up new recruits since the advent of the All Volunteer Force. Although access to post-high school opportunities has expanded in recent years, research suggests that the Service recruiting campaigns are having an impact on the youth of our country. Among today's youth, the military is perceived as providing opportunities, furthering education, helping individuals grow and mature, and contributing to the country.[1]

As an increasing proportion of youth have college aspirations today, the military finds recruiting qualified personnel competitive. Most high school seniors report that they plan to go to college (82 percent respond that they definitely or probably will graduate from a 4-year college).[2] Nearly 62 percent of the graduates of the high school class of 2001 actually enrolled in college in the Fall after their senior year, compared to about half of high school graduates 20 years ago.[3] By 2001, 58 percent of all 25- to 29-year-olds had completed some college and 29 percent had at least a bachelor's degree.[4] The desire to participate in post-secondary education is important to monitor as propensity of college-bound youth is lower than for those not planning to attend college.[5] Despite increasing competition with colleges and universities, the hard work of military recruiters and innovative incentive programs helped the Services meet their overall FY 2002 active enlisted accession requirements. All Active Components met their goals for enlisted accessions. Rising unemployment rates during 2002 may have contributed to recruiting success.[6] Programs designed to attract college-bound youth, such as the Army's "College First"

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[1] Sellman, W.S., *Reinventing DoD Corporate Marketing*, briefing presented to the International Workshop on Military Recruitment and Retention in the 21st Century, The Hague, Netherlands, April 2001.

[2] U.S. Department of Education, *The Condition of Education 2001* (NCES 2001-072) (Washington, DC: National Center for Education Statistics, 2001), Table 19-1.

[3] U.S. Department of Education, *The Digest of Education Statistics 2002* (NCES 2003-060) (Washington, DC: National Center for Education Statistics, 2003), Table 183.

[4] U.S. Department of Education, *The Condition of Education 2002* (NCES 2002-025) (Washington, DC: National Center for Education Statistics, 2002), Indicator 25.

[5] Segal, D.R., Bachman, J.G., Freedman-Doan, P., and O'Malley, P.M., "Propensity to Serve in the U.S. Military: Temporal Trends and Subgroup Differences," *Armed Forces & Society, 25* (1999), pp. 407–427.

[6] Labor force statistics extracted from the *Current Population Survey*, Bureau of Labor Statistics. (Seasonally adjusted unemployment rate in the civilian labor force.) URL: http://www.dol.gov.

program that compensates recruits while they attend college during time in the Delayed Entry Program or in the Selected Reserve, helped the Services attract a high-quality accession cohort (high school graduates with above average aptitude) in FY 2002.[7] This chapter introduces the Active Components enlistment process, followed by demographic characteristics of enlisted applicants and recruits.

The Recruiting Process

Initial contacts between military recruiters and youth interested in military service are exploratory. In most cases, youth seek information from recruiters in more than one Service. Once they select a Service and take the Armed Services Vocational Aptitude Battery (ASVAB), youth may wait before deciding to proceed with enlistment processing.

In addition to providing information to the prospective enlistee, recruiters determine an applicant's eligibility for military service. They ask questions regarding age, citizenship, education, involvement with the law, use of drugs, and physical and medical conditions that could preclude enlistment. Most prospects take an aptitude screening test at a recruiting office. Estimates are that 10 to 20 percent of prospects do not continue beyond this point.[8]

The Armed Services Vocational Aptitude Battery. Prospects who meet initial qualifications take the ASVAB, the first formal step in the process of applying to enlist in the Armed Forces. The ASVAB is a battery of tests used by DoD to determine enlistment eligibility and qualifications for military occupations. It consists of 10 tests (or 11 tests if taking the computer-adaptive test at a MEPS), four of which comprise the Armed Forces Qualification Test (AFQT): Arithmetic Reasoning, Mathematics Knowledge, Word Knowledge, and Paragraph Comprehension. The AFQT, a general measure of trainability and predictor of on-the-job performance, is the primary index of recruit aptitude.

AFQT scores, expressed on a percentile scale, reflect an applicant's standing relative to the national population of men and women 18–23 years of age.[9] The scores are grouped into five categories based on the percentile score ranges shown in Table 2.1. Persons who score in Categories I and II tend to be above average in trainability; those in Category III, average; those in Category IV, below average; and those in Category V, markedly below average. By law, Category V applicants and those in Category IV who have not graduated from high school are not eligible for enlistment. Over and above these legal restrictions, each Service prescribes its

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[7]   Rutherford, G., *Recruiting from the College-Oriented Market* – information paper (Washington, DC: Office of the Assistant Secretary of Defense, July 6, 2001); Defense Manpower Data Center, *Enlistment Supply in the 1990s: A Study of the Navy College Fund and Other Enlistment Incentive Programs* (DMDC Report 2000-015) (Arlington, VA: Defense Manpower Data Center, 2001).

[8]   Waters, B.K., Laurence, J.H., and Camara, W.J., *Personnel Enlistment and Classification Procedures in the U.S. Military* (Washington, DC: National Academy Press, 1987), p. 12.

[9]   The score scale is based on a 1980 study, the Profile of American Youth, conducted by DoD in cooperation with the Department of Labor (DoL). Participants were drawn from a nationally representative sample of young men and women selected for an ongoing DoL study, the National Longitudinal Survey of Youth Labor Force Behavior. An effort is currently underway to update the Profile of American Youth study.

own aptitude and education criteria for eligibility. Each Service uses combinations of ASVAB test scores to determine an applicant's aptitude and eligibility for different military occupations.

| Table 2.1. Armed Forces Qualification Test (AFQT) Categories and Corresponding Percentile Score Ranges ||
AFQT Category	Percentile Score Range
I	93–99
II	65–92
IIIA	50–64
IIIB	31–49
IV	10–30
V	1–9

Educational Credentials. DoD implemented a three-tier classification of education credentials in 1987. The three tiers are:

- Tier 1—Regular high school graduates, adult diploma holders, and non-graduates with at least 15 hours of college credit.

- Tier 2—Alternative credential holders, including those with a General Education Development (GED) certificate of high school equivalency.

- Tier 3—Those with no education credential.

The system was developed after research indicated a strong relationship between education credentials and successful completion of the first term of military service.[10] Research shows that education attainment of youth predicts first-term military attrition.[11] In conjunction with the National Academy of Sciences, the Defense Department developed a mathematical model that links recruit quality and recruiting resources to job performance.[12] The model was then used to establish the recruit quality benchmarks now in effect. Service programs are required to ensure that a minimum of 90 percent of non-prior service (NPS) recruits are high school diploma graduates. At least 60 percent of recruits must be drawn from AFQT Categories

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[10] See Flyer, E.S., *Factors Relating to Discharge for Unsuitability Among 1956 Airman Accessions to the Air Force* (Lackland AFB, TX: Personnel Research Laboratory, December 1959); and Elster, R.E. and Flyer, E.S., *A Study of the Relationship Between Educational Credentials and Military Performance Criteria* (Monterey, CA: Naval Postgraduate School, July 1981).

[11] For attrition by education credential, see Department of Defense, *Educational Enlistment Standards: Recruiting Equity for GED Certificates*, Report to Congress (Washington, DC: Office of the Assistant Secretary of Defense [Force Management Policy], April 1996) and Laurence, J.H., *Does Education Credential Still Predict Attrition?*, paper presented as part of Symposium, Everything Old is New Again—Current Research Issues in Accession Policy, at the 105th Annual Convention of the American Psychological Association, Chicago, August 1997.

[12] Department of Defense, *Review of Minimum Active Enlisted Recruit Quality Benchmarks: Do They Remain Valid?* Report to Congress (Washington, DC: Office of the Assistant Secretary of Defense [Force Management Policy], March 2000).

I–IIIA; no more than 4 percent of the recruits can come from Category IV. This DoD policy does not prohibit the Services from setting their own targets above these benchmarks. These benchmarks were set by examining the relationship between costs associated with recruiting, training, attrition, and retention using as a standard the performance level obtained by the reference cohort of 1990, the cohort that served in Operations Desert Shield and Desert Storm. Thus, these benchmarks reflect the recruit quality levels necessary to minimize personnel and training costs while maintaining Desert Shield/Desert Storm cohort performance.[13]

The Services have different standards for individuals in each tier. Generally, Tier 3 applicants must have higher AFQT test scores than Tier 2 applicants, who must have higher test scores than Tier 1 individuals. The Air Force and Marine Corps follow these differential standards, requiring different minimum test scores for each tier. The other Services apply the standards slightly differently. The Army and Navy require applicants with alternative credentials (Tier 2) and those with no credentials (Tier 3) to meet the same AFQT standards, which are more stringent than those for high school graduates (Tier 1).

There has been a proliferation of alternative credential programs, particularly home schooling, in recent years. According to the latest estimate, in 1999 an estimated 850,000 students were being home schooled, more than double the approximately 345,000 in 1994.[14] To address such programs, the Department of Defense initiated a pilot study in FY 1999—The Alternative Educational Credential Pilot Program. The goals of the project are: (1) to assess the interest in enlistment of home school graduates and participants earning GED certificates through the National Guard Youth ChalleNGe program, and (2) to evaluate the performance of the alternative credential holders in these programs who do enlist. At the conclusion of the study, the results will be used to provide a recommendation on permanent tier status of home school graduates and ChalleNGe GED applicants.[15]

Physical Examinations. If an applicant achieves qualifying ASVAB scores and wants to continue the application process, he or she is scheduled for a physical examination and background review at one of the 65 Military Entrance Processing Stations (MEPS). The examination assesses physical fitness for military service. It includes measurement of blood pressure, pulse, visual acuity, and hearing; blood testing and urinalysis; drug and HIV testing; and medical history. Some Services also require tests of strength and endurance. If a correctable or temporary medical problem is detected, the applicant may be required to get treatment before

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[13] Sellman, W.S., *Public Policy Implications for Military Entrance Standards,* Keynote Address presented at the 39th Annual Conference of the International Military Testing Association, Sydney, Australia, October 1998.

[14] U.S. Department of Education, *Home Schooling in the United States: 1999* (NCES 2001-033) (Washington, DC: National Center for Education Statistics, 2001); and U.S. Department of Education, *Issues Related to Estimating the Home-Schooled Population in the United States With National Household Survey Data* (NCES 2000-311) (Washington, DC: National Center for Educational Statistics, 2000), Table 1.

[15] Statement of Honorable Alphonso Maldon, Jr., Assistant Secretary of Defense (Force Management Policy) before the Personnel Subcommittee, Senate Committee on Armed Services on *Military Recruiting and Retention*, February 24, 2000.

proceeding. Other applicants may require a Service waiver of some disqualifying medical conditions before being allowed to enlist.

Moral Character Standards. Each applicant must meet rigorous moral character standards. In addition to the initial screening by the recruiter, an interview covering each applicant's background is conducted at the MEPS. For some individuals, a financial credit check and/or a computerized search for a criminal record is conducted. Some types of criminal activity are clearly disqualifying; other cases require a waiver, wherein the Service examines the applicant's circumstances and makes an individual determination of qualification. Moreover, applicants with existing financial problems are not likely to overcome those difficulties on junior enlisted pay. Consequently, credit histories may be considered as part of the enlistment decision.

Occupational Area Counseling. If the applicant's ASVAB scores, educational credentials, physical fitness, and moral character qualify for entry, he or she meets with a Service classification counselor at the MEPS to discuss options for enlistment. Up to this point, the applicant has made no commitment. The counselor has the record of the applicant's qualifications and computerized information on available Service training/skill openings, schedules, and enlistment incentives.

A recruit can sign up for a specific skill or for a broad occupational area (such as the mechanical or electronics areas). In the Army, most recruits (95 percent) entered for specific skill training; the others were placed in a military occupational specialty during basic training. Approximately 70 percent of Air Force recruits entered for a specific skill, while the rest signed up for an occupational area and were classified into a specific skill while in basic training. In the Navy, approximately 77 percent of recruits enlisted for a specific skill, while the rest went directly to the fleet after basic training, 20 percent classified in airman, fireman, or seaman programs and 3 percent entered school 12-18 months later. Approximately 97 percent of Marine Corps enlistees entered with a guaranteed occupational area and were assigned a specific skill within that area after recruit training; the rest enlisted with either a specific job guarantee or assignment to a job after recruit training.

Normally, an applicant will be shown a number of occupations. In general, the higher the individual's test scores, the more choices he or she will have. While the process differs by Service, specific skills and occupational groupings are arranged similarly to an airline reservation system, with the "seat" and time of travel (to recruit training) based upon either school or field unit position openings. The counselor discusses the applicant's interests and explains what the Service has to offer. The counselor may suggest incentives to encourage the applicant to choose hard-to-fill occupational specialties. The applicant, however, is free to accept or reject the offer. Many applicants do not decide immediately, but take time to discuss options with family and friends; others decide not to enlist.

The Delayed Entry Program (DEP). When the applicant accepts an offer, he or she signs an enlistment contract. Only a small proportion of new enlistees is sent to a recruit training center from the MEPS within a month of enlistment. Most enter the delayed entry program (DEP), which allows up to a year before the individual reports for duty, with up to a 365-day

extension upon approval by the respective Service Secretary.[16] The DEP controls recruit flow into training "seats" at technical schools. The Services also use the DEP to prepare enlistees for basic training, providing them with supervised exercise programs, if needed.   The DEP acclimates recruits to the military and enhances training performance, which decreases attrition.[17] Average time in the DEP is between three and five months.

Qualified high school students may enlist in the DEP with a reporting date after graduation; their enlistment contract is contingent upon successfully completing high school. Not all DEP enlistees actually enter active duty. By Service, an average of 13 to 21 percent— compared to last year's 6 to 23 percent—of individuals in the DEP changed their minds and asked to be released from their enlistment contracts in FY 2002. The Services consider enlistment in the DEP a serious commitment, but they do not require youth to enter military service against their will during peacetime.

Characteristics of Active Component Non-Prior Service Applicants

In FY 2002, nearly 381,000 individuals applied to serve in the active enlisted military force (Appendix Table A-1), up from approximately 370,000 in FY 2001. Applicants are those individuals who express an interest in joining one of the military services by visiting a recruiter and then following through with their intentions by completing background paperwork and submitting to a physical and/or taking the ASVAB. Not all applicants are eligible to enlist, for example certain medical conditions disqualify an applicant from serving in the military. Some applicants change their mind regarding enlistment before completing the process. Thus, not all applicants join one of the Services (those that do join are called accessions, see page 2-7 for a discussion of Active Component accessions). The distribution of FY 2002 Active Component NPS applicants by race/ethnicity and gender is shown in Table 2.2.

Seventy-eight percent of the applicants were male, of whom 66 percent were White, 16 percent Black, 12 percent Hispanic, and 7 percent "Other."[18]   For female applicants, approximately 54 percent were White, 26 percent Black, 13 percent Hispanic, and 8 percent "Other." A smaller proportion of Whites, whether male or female, applied for the Army and Navy, compared to the Marine Corps and Air Force.

Additional statistics on applicant characteristics (e.g., age, education levels, AFQT scores, and marital status, by gender and race/ethnicity) are contained in Appendix A. See Tables A-1 through A-8.

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[16]   10 U.S.C. 513, as amended October 1999.

[17]   Gilmore, G., *Recruit Attrition Rates Fall Across the Services* (Washington, DC: American Forces Press Service, August 13, 2001).

[18]   Includes Native Americans, Asians, and Pacific Islanders.

Table 2.2. Race/Ethnicity and Gender of FY 2002 Active Component NPS Applicants,* by Service (Percent)					
	Army	Navy	Marine Corps	Air Force	DoD
MALES					
White	66.2	57.4	68.8	72.4	65.6
Black	16.2	19.9	10.8	15.1	16.0
Hispanic	12.0	12.3	14.1	6.9	11.6
Other	5.7	10.5	6.3	5.6	6.9
Total	100.0	100.0	100.0	100.0	100.0
FEMALES					
White	50.2	49.9	61.4	63.0	53.7
Black	29.4	26.3	15.4	23.0	26.4
Hispanic	13.7	13.7	15.6	7.7	12.5
Other	6.7	10.1	7.6	6.2	7.5
Total	100.0	100.0	100.0	100.0	100.0
TOTAL					
Male	76.2	77.2	91.3	71.1	77.8
Female	23.8	22.8	8.7	28.9	22.2

Columns may not add to total due to rounding.
* Applicant data reported for FY 2002 are based on the DMDC edit version of the USMEPCOM file, which has been "cleaned" by the edit process. FY 2002 applicant data are consistent with Information Delivery System (IDS) data.
Also see Appendix Tables A-3 (Race/Ethnicity by Service and Gender) and A-4 (Ethnicity by Service).

## Characteristics of Active Component Accessions

During FY 2002, 181,510 Active Component non-prior service recruits (individuals who had not previously served in the military) and 12,890 prior service recruits (individuals with military experience) shipped to recruit training centers (Table 2.3). This does not include individuals who entered the DEP in FY 2002 but had not been sent to basic training by September 30, 2002, nor does it include Reserve Component recruits (see Chapter 5 for Reserve Component enlisted accession data).

In the Active Components, approximately 93 percent of accessions have never served in the military before. The nearly 13,000 prior service accessions representing approximately 6 percent of Active Component enlistees in FY 2002 is larger than last year's cohort of less than 12,000 and the FY 2000 cohort of less than 10,000. Prior service accessions are older and more likely to be married than their NPS counterparts. Prior service recruits more closely resemble the Active Component enlisted force—in terms of age and marital status—from which most of them came. In terms of other characteristics, they are similar to their non-prior service counterparts. Additional statistics on prior service accession characteristics (e.g., race/ethnicity, education levels, and AFQT scores) are contained in Appendix B, Tables B-13 through B-22. The remainder of this section examines a number of sociodemographic characteristics of FY 2002 NPS recruits, and compares them with the 18- to 24-year-old civilian non-institutionalized U.S. population.

Table 2.3. FY 2002 Active Component Non-Prior Service (NPS) and Prior Service Enlisted Accessions				
	Enlisted Accessions			
Service	Prior Service	Non-Prior Service	Total	NPS Percent of Service Total
Army	7,885	69,591	77,476	89.9
Navy	2,167	43,500	45,667	95.3
Marine Corps	665	31,972	32,637	98.0
Air Force	2,173	36,447	38,620	94.4
DoD Total	12,890	181,510	194,400	93.4
Also see Appendix Tables B-13 through B-22 (Prior Service Accessions).				

The proportion of accessions to applicants over FYs 1976–2002 is tracked in Figure 2.1. This ratio provides an index of the recruiting market. In the earlier years, recruiters sent far more applicants to MEPSs for processing to achieve recruiting objectives. In FY 1981, more than 800,000 applicants were processed through MEPSs to access approximately 301,000 new recruits a 38 percent accession-to-applicant ratio. In the early 1980s, the Services implemented a series of management initiatives designed to emphasize quality and reduce overhead costs. Recruiting management objectives and award systems were changed to emphasize types of applicants (e.g., high school diploma graduates, Category IIIA and higher) in contrast to achieving purely numerical goals; enlistment screening tests were devised to estimate ASVAB performance prior to sending an individual to a test site.

Also see Appendix Table D-2 (Accessions and Applicants by Fiscal Year).
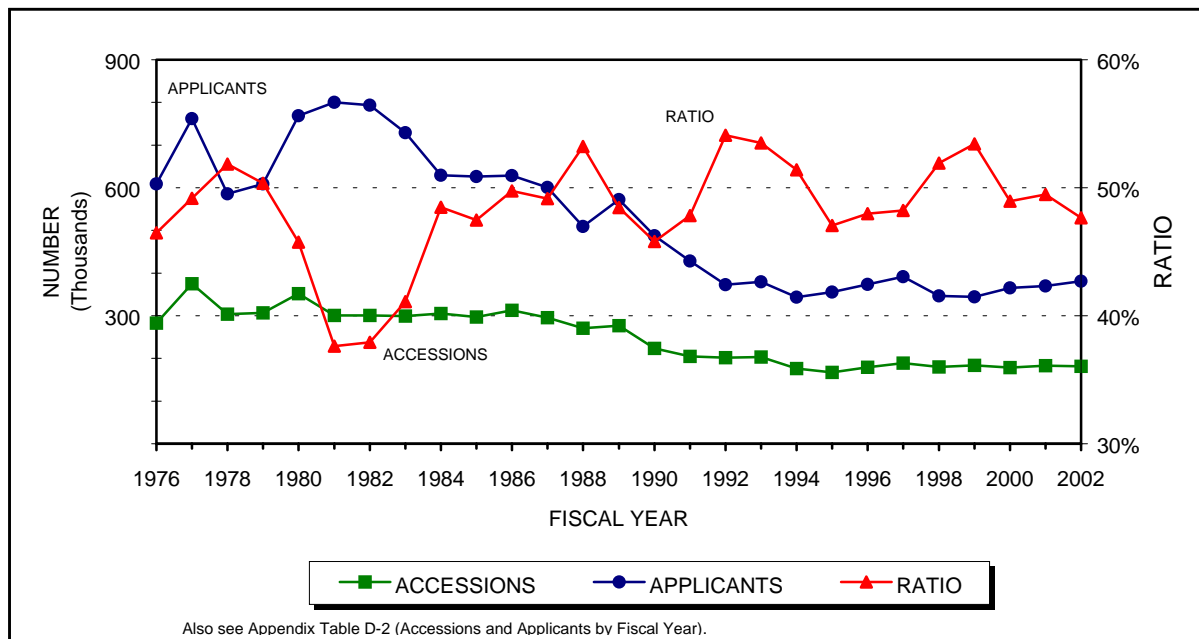
Figure 2.1. Number of accessions and applicants with ratio of accessions to applicants, FYs 1976–2002.

Over the last decade, recruiters have expended great effort in screening prospects. For most years, progressively fewer prospects were sent to MEPSs. In FY 2002, approximately 381,000 applicants were processed through MEPSs to access nearly 182,000 new recruits, less than a 48 percent ratio of accessions to applicants, dropping slightly from the nearly 50 percent ratio in FY 2001.

Age. By law, Active Component recruits must be between 17 and 35 years old; 17-year-olds must have parental permission to enlist.[19] Within the 17–35 age range, the Services have different age ceilings. The Army and Navy accept applicants up to age 35; the Air Force accepts recruits prior to their 28th birthday, and the Marine Corps age limit is 29. The age distribution of FY 2002 active duty NPS accessions is shown in Table 2.4.

Table 2.4. Age of FY 2002 Active Component NPS Accessions, by Service, and Civilians 17–35 Years Old							
	Percent						
Age	Army	Navy	Marine Corps	Air Force	DoD	17- to 35-Year-Old Civilians	Number of Accessions per 1,000 Civilians
17	5.6	5.0	6.8	4.4	5.4	5.7	2.5
18	26.9	33.5	42.1	32.3	32.2	5.4	15.5
19	18.9	21.2	23.5	23.0	21.1	5.8	9.5
20	12.0	11.9	10.2	13.6	12.0	5.5	5.7
21	8.7	8.2	5.9	9.0	8.1	5.4	3.9
22	6.5	5.5	3.7	6.2	5.7	5.3	2.8
23	5.2	3.9	2.5	4.0	4.2	5.1	2.1
24	3.9	2.8	1.8	2.7	3.0	5.1	1.5
>24	12.4	8.1	3.4	4.9	8.3	56.6	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	2.6
Columns may not add to total due to rounding. Also see Appendix Table B-1 (Age by Service and Gender). Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, October 2001 - September 2002.							

The average age of enlisted accessions is 19.6 years, ranging from 18.7 for the Marine Corps to 20.2 for the Army. Roughly 86 percent of new recruits are 18- to 24-year-olds, compared to about 38 percent of the comparable civilian population. The Marine Corps enlists the greatest percentage of 17- and 18-year-old recruits (49 percent) and the smallest percentage of those over age 21 (11 percent). The Army has the greatest proportion of recruits older than age 21 (28 percent) and the smallest proportion of 17- and 18-year-old recruits (33 percent). The right column of Table 2.4 shows the numerical rate at which civilian youth in each age group enlisted in the Armed Services in FY 2002. For example, an average of 15.5 of every 1,000 18-year-olds and 1.5 of every 1,000 24-year-olds enlisted in FY 2002.

Race/Ethnicity. Significant racial/ethnic differences exist among the Services, as shown in Table 2.5. Approximately 34 and 40 percent of Army and Navy accessions, respectively, are

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minorities, as compared to 29 percent of Marine Corps recruits and 28 percent of Air Force recruits. Overall, the Services' FY 2002 NPS enlisted accessions include 33 percent minorities.

Table 2.5. Race/Ethnicity and Gender of FY 2002 Active Component NPS Accessions, by Service, and Civilians 18–24 Years Old (Percent)					
	Army	Navy	Marine Corps	Air Force	DoD
MALES					
White	69.6	61.6	71.4	74.7	69.0
Black	14.6	17.1	9.7	13.6	14.0
Hispanic	11.2	12.1	13.6	6.9	11.1
Other	4.6	9.2	5.3	4.9	5.9
Total	100.0	100.0	100.0	100.0	100.0
FEMALES					
White	53.0	55.2	63.5	63.9	57.3
Black	28.3	21.2	13.7	21.9	23.8
Hispanic	13.3	13.7	16.0	8.3	12.2
Other	5.4	9.9	6.8	5.9	6.7
Total	100.0	100.0	100.0	100.0	100.0
TOTAL					
Male	81.5	82.6	93.2	76.0	82.7
Female	18.5	17.4	6.8	24.0	17.3
White	66.5	60.5	70.8	72.1	67.0
Black	17.1	17.8	10.0	15.5	15.7
Hispanic	11.6	12.4	13.8	7.3	11.3
Other	4.8	9.3	5.4	5.1	6.0
NON-INSTITUTIONALIZED CIVILIANS 18–24 YEARS OLD					
White	Black	Hispanic	Other	Total	Male	Female
65.1	14.2	15.6	5.1	100.0	49.8	50.2
Columns may not add to total due to rounding. Also see Appendix Tables B-3 (Race/Ethnicity by Service and Gender) and B-4 (Ethnicity by Service). Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, October 2001 – September 2002.						

In FY 2002, the percentage of minority recruits (33 percent) was somewhat smaller than the 37 percent in FYs 1999-2001, the largest proportions of minority accessions since the inception of the All Volunteer Force. The Services experienced a slight increase in the proportion of Whites (from 63 percent in FY 2001 to 67 percent in FY 2002) and a corresponding decrease in the proportion of Blacks (from 20 percent in FY 2001 to 16 percent in FY 2002). The percentages of Hispanic and "Other" accessions remained stable.

Minority accession proportions must be examined in conjunction with the civilian population. Minority accession proportions in FY 2002 more closely represented the comparable civilian population of 18-24 year-olds than in previous years. In FY 2002, Whites and Blacks were slightly overrepresented (each by about 2 percentage points) and those of "Other"

race/ethnicity were equally represented. Hispanics were somewhat underrepresented, by about 4 percentage points. Compared to FY 2001 and earlier, Blacks were less overrepresented in FY 2002. Whites went from slightly underrepresented (since FY 1996) to slightly overrepresented in FY 2002. Hispanics remained somewhat underrepresented. For additional data, see Table D-4 for NPS accession data by race/ethnicity with civilian comparison groups for FYs 1973-2002.

Figure 2.2 illustrates the racial/ethnic distribution of enlisted accessions for the 30-year period, FYs 1973–2002.[20] Understanding the racial/ethnic profiles requires some explanation of events during the years up to 1985, before describing the current situation. The percentage of minority enlisted accessions increased, with some fluctuations, during the years following the end of conscription. The number of Black accessions peaked in FY 1979. Hispanic accessions also peaked in FY 1979 (ignoring aberrant data for FY 1976). Accessions of "Other" minorities, a very small proportion of new recruits, have generally shown a gradual increase from less than 1 percent in FY 1973 to 6 percent in FY 2002. The increase of minorities coincided with a miscalibration of the ASVAB, and consequent drop in the aptitude of accessions, both Whites and minorities, beginning in January 1976. The miscalibration led to erroneous enlistment of many low-scoring applicants. Thus, representation of minorities, particularly Blacks (whose test scores, on average, are generally lower than those of Whites), increased during the miscalibration period. The error was corrected by September 1980.[21]

Revised AFQT and education standards in the early 1980s limited the high minority representation levels of the late 1970s.[22] Further, youth unemployment increased sharply in the early 1980s, making the military a very attractive employer with substantial benefits during a period of competitive job seeking.[23] By FY 1983, the proportion of Black recruits had returned to approximately the same level as before the test scoring error (18 percent Blacks in FY 1975). By the mid-1980s, as unemployment levels diminished, a gradual increase in Black accessions had resumed. Not until FY 1987 did Hispanic recruit levels return to FY 1975 proportions. Higher high school dropout rates among Hispanics (27 percent), compared to Whites and Blacks (7 and 11 percent, respectively), confound the recruitment of qualified Hispanic applicants.[24] The Services have accessed a greater proportion of Hispanics each year since FY 1985, when

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[20]   See Appendix Tables D-5 (White Accessions), D-6 (Black Accessions), D-7 (Hispanic Accessions), and D-8 ("Other" Accessions) by Service and Fiscal Year.

[21]   Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics), *A Report to the House Committee on Armed Services: Aptitude Testing of Recruits* (Washington, DC, 1980).

[22]   Congressional Budget Office, *Social Representation in the U. S. Military* (Washington, DC, 1989), p. 54.

[23]   Bureau of Labor Statistics. *Employment Status of the Civilian Noninstitutional Population, 1940 to Date*. URL: ftp://ftp.bls.gov/pub/special.requests/lf/aat1.txt.

[24]   See U.S. Department of Education, *The Digest of Education Statistics 2002* (NCES 2003-060) (Washington, DC: National Center for Education Statistics, 2002), Table 108; U.S. Department of Education, *Dropout Rates in the United States: 2000* (NCES 2002-114) (Washington, DC: National Center for Education Statistics, 2001), Table A; and U.S. Department of Education, *Status and Trends in Education of Hispanics* (NCES 2003-008) (Washington, DC: National Center for Education Statistics, 2003, pp. 40-41).

less than 4 percent of enlistees were Hispanic. Today, more than 11 percent of enlistees are Hispanic.
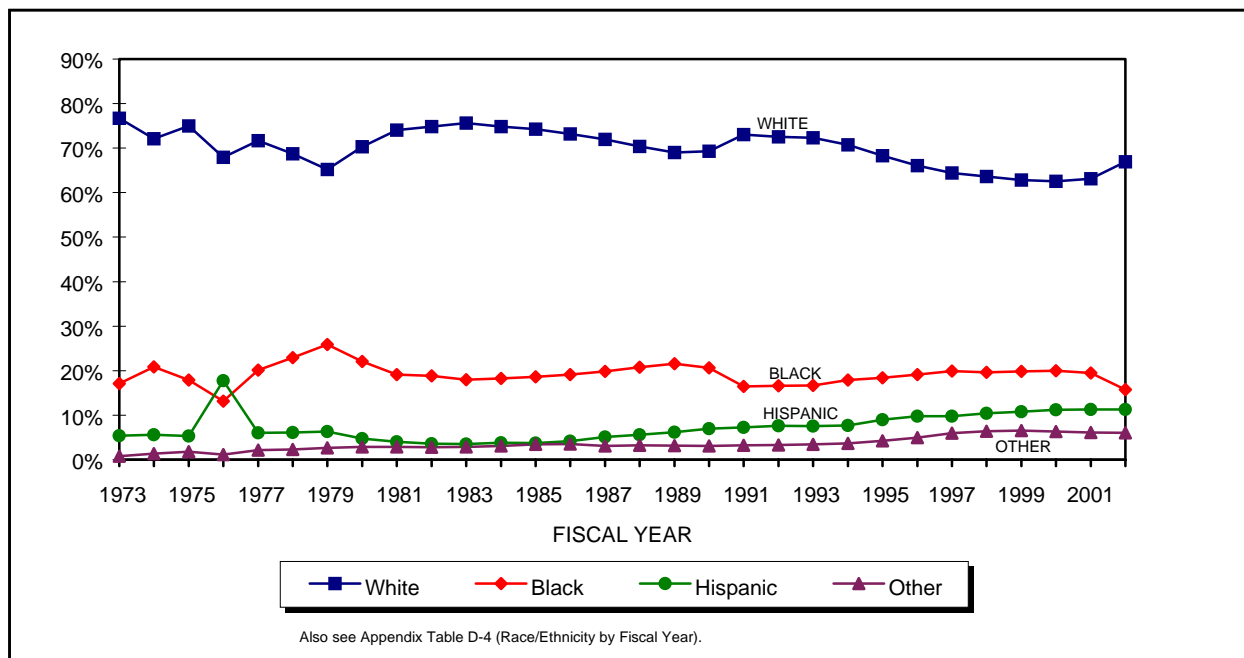
Figure 2.2. Race/ethnicity of Active Component NPS accessions, FYs 1973–2002.

Blacks. In FY 2002, Blacks comprised nearly 16 percent of enlisted recruits, approximately 2 percentage points more than in the civilian population (14 percent). The Navy surpassed the Army in FY 2002 with nearly 18 percent Black accessions (17 percent in the Army). In the aftermath of Operations Desert Shield and Desert Storm and in the midst of the drawdown (FY 1991), a period of relatively high youth unemployment, there were lower proportions of Black recruits than in previous years. From FY 1992 to FY 2001 there were slight increases in Black accession rates most years, nearly reaching pre-drawdown levels of 21 percent Black accessions. In FY 2002, all Services experienced lower Black proportions in their accessions. This reduction and the corresponding increase in White accessions narrowed the representation gap between the military Services and the civilian population. Some view this demographic shift as the result of differing responses to the September 11th terrorist attacks,[25] while others view it as more linked to the prevailing economic conditions during FY 2002. While the root causes may never be completely isolated, it is clear that the effect is an FY 2002 accession cohort that more closely reflects society than in previous years.

While Black men comprise approximately 14 percent of DoD male recruits, Black women make up almost 24 percent of female recruits (Table 2-5 and Appendix Table B-3). Black women in FY 2002 comprised 28 percent of Army female recruits, 21 percent of Navy female recruits, 14 percent of Marine Corps female recruits, and 22 percent of Air Force female

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[25] Burger, E.C., *The Impact of September 11 on Military Enlisted Recruiting* (Fort Knox, KY: U.S. Army Accessions Command, Center for Accessions Research, 2003).

recruits. In comparison, the proportion of Black men ranged from 10 percent of Marine Corps male recruits to 17 percent of Navy male recruits.

Hispanics. As the proportion of Hispanics has been increasing in the civilian population, so has the proportion of enlisted Hispanics. However, Hispanics were underrepresented among enlisted accessions in FY 2002, 11 percent of recruits compared to nearly 16 percent of civilian 18- to 24-year-olds. The Marine Corps had the highest proportion of Hispanic accessions (14 percent) in FY 2002, followed by the Navy, Army, and Air Force (12, 12, and 7 percent, respectively).

The proportion of Hispanic accessions has increased over the years (Appendix Table D-7). In FY 1983, less than 4 percent of new recruits were Hispanic. Today, more than 11 percent of enlisted accessions are Hispanic. One factor influencing the representation of Hispanics in the military is high school graduation rates; Hispanics are less likely to earn a high school diploma than those in other racial/ethnic groups.[26] In FY 2002, 60 percent of 18- to 24-year-old Hispanics completed high school (Tier 1) or earned an alternative credential (Tier 2) compared to 75 percent of Blacks and 84 percent of Whites.

"Other" minorities. Members of "Other" racial minorities (e.g., Native Americans, Asians, and Pacific Islanders) are 6 percent; they are slightly overrepresented in the Services. The proportion of "Other" minorities ranges from nearly 5 to 9 percent in the Services, with the Navy having the largest percentage. In the civilian population, 5 percent of 18- to 24-year-olds are "Other" racial minorities, an increase of more than 2 percentage points since FY 1981.

Gender. Figure 2.3 illustrates the trend in the proportion of female recruits since the start of the All Volunteer Force. Appendix Table D-9 shows the number and proportion of NPS female accessions by Service in FY 1964 and FYs 1970 through 2002. The Air Force traditionally has the largest proportion of women recruits and the Marine Corps the smallest, in part a result of the number of positions open to women in these Services.

The proportion of NPS women accessing into the Services, 17 percent in FY 2002, is not comparable to female representation in the civilian population (50 percent). One reason for the difference is the lower inclination of women than men to apply for and enter the military.[27] The gender-integration policy, in effect for eight years, contributed to a continued gradual increase in the number and percentage of women enlisting in the Services.[28] However, the increase in enlistment of women has leveled off during the last three years, likely a result of the relatively

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[26]   See Appendix Table B-8; U.S. Department of Education, *Status and Trends in the Education of Hispanics* (NCES 2003-008) (Washington, DC: National Center for Education Statistics, 2003), p. 42-43; U.S. Department of Education, *Dropout Rates in the United States: 2000* (NCES 2002-114) (Washington, DC: National Center for Education Statistics, 2001), pp. 18-19; and previous *Population Representation* reports.

[27]   The Department of Defense Youth Polls indicate that young women are approximately one-half less inclined to join the military than young men.

[28]   Memorandum from William Perry, Secretary of Defense, Subject: Application of the Definition of Direct Ground Combat and Assignment Rule, July 28, 1994.

low level of propensity as well as other factors influencing enlistment decisions, such as economic conditions.
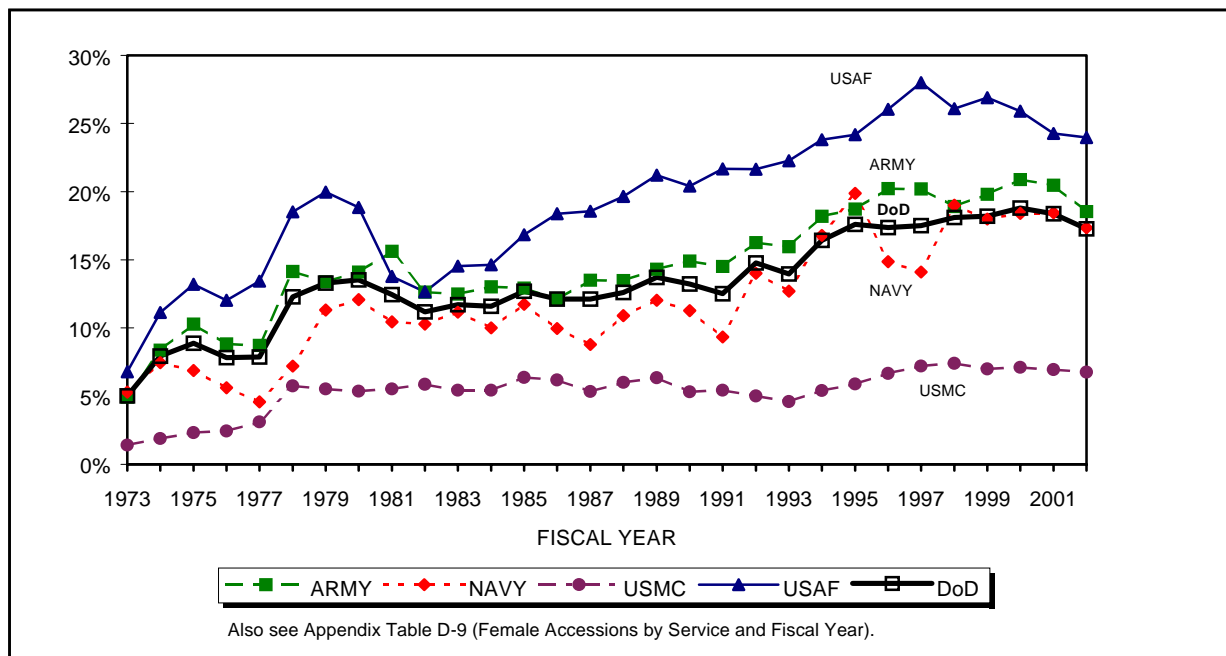
Figure 2.3. Women as a percentage of Active Component NPS accessions, FYs 1973–2002.

Under a gender-neutral recruiting program since FY 1990, the Air Force leads the Services in the proportion of female accessions. The Air Force had increased its proportion of female recruits, from 20 percent in FY 1990 to 27 percent in FY 1999, followed by slight decreases in the last three years to 24 percent in FY 2002 (see Table D-9). When the Navy adopted a gender-neutral recruiting policy in FY 1994, the proportion of women accessions in the Navy increased 3 percentage points (from 17 percent in FY 1994 to 20 percent in FY 1995). However, the Navy dropped its gender-neutral recruiting policy because of constrained berthing facilities on Navy vessels. The Navy's decision to rescind gender-neutral recruiting may have been a factor in the 6-percentage-point drop of female accessions from FY 1995 to FY 1997 (from 20 to 14 percent).[29]   However, the Navy was able to recruit a significantly larger proportion of women—17 to 19 percent—each year since FY 1997. The Services experienced a slight drop in female accessions from FY 2001 (18 percent) to FY 2002 (17 percent).

Marital Status. In FY 2002, 9 percent of male and 12 percent of female recruits were married, compared to 50 and 36 percent of male and female enlisted members, respectively. Civilians are more likely to be married than accessions (14 versus 9 percent). Within the Services, Army recruits are most likely to be married (14 percent) and Marine Corps recruits are least likely (3 percent).

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[29]   Born, D.H., *Women in the Military-Trends 1990 to 1996* (Washington, DC: Office of the Assistant Secretary of Defense [Force Management Policy/Accession Policy]).

Table 2.6 compares marriage rates of accessions with 18- to 24-year-old civilians in the labor force. The majority of accessions are high school graduates. The military is often their first full-time job and thus, very few are married.

Table 2.6. FY 2002 Active Component NPS Accessions Who Are Married, by Gender and Service, and Civilians 18–24 Years Old (Percent)						
Gender	Army	Navy	Marine Corps	Air Force	DoD	18- to 24-Year-Old Civilians
Males	13.0	5.9	2.8	9.2	8.6	9.4
Females	17.0	6.7	5.3	9.2	11.5	17.6
Total	13.8	6.0	3.0	9.2	9.1	13.5
Also see Appendix Table B-2 (Marital Status by Age and Gender). Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, October 2001 – September 2002.						
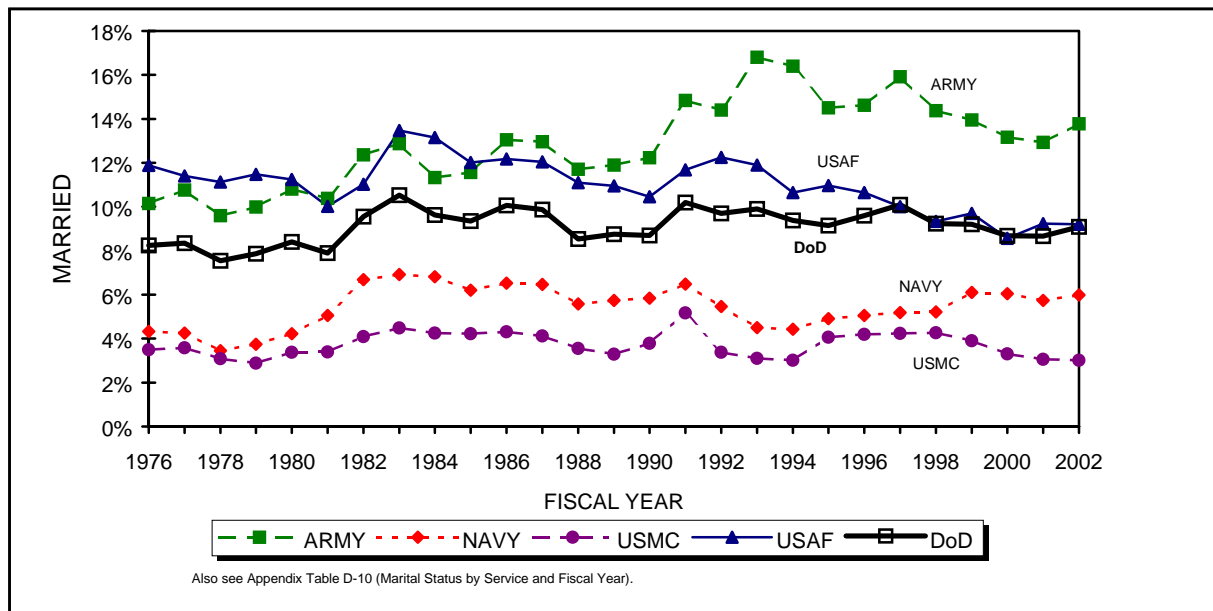
Figure 2.4. Marital status trends of Active Component NPS accessions, by Service, FYs 1976–2002.

Research shows that marriage is important to a member's long-term career and can enhance individual readiness.[30] This is true if the member is in a strong marriage to a supportive but independent spouse. However, combining marriage and a military career can create challenges for younger Servicemembers as well as for the Service. Entering into marriage just prior to or soon after enlisting can place extra burdens on the recruit, the family, and the military, particularly when frequent or unexpected deployments separate the "new" family. Thus, marital status trends of accessions are important characteristics to monitor.

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[30]   Office of the Assistant Secretary of Defense (Personnel and Readiness), *Family Status and Initial Term of Service, Volume I – Summary* (Washington, DC: Office of the Assistant Secretary of Defense [Personnel and Readiness], December 1993).

Education. More than 40 years of research indicates that enlistees who are high school graduates are much more likely than non-graduates to complete their first term of enlistment (80 percent versus 50 percent).[31] In the late 1960s and early 1970s, the Services gave high school graduates, including those with alternative education credentials, higher priority for enlistment. In the mid- to late 1970s, the Army, Navy, and Air Force classified GED holders and high school graduates differently because evidence showed that persons with GED certification experienced higher first-term attrition. Today, in all Services, applicants with GEDs need higher AFQT scores to enlist than do high school diploma graduates. In fact, the Services strive to meet a 90 percent Tier 1 benchmark established by the Department of Defense.

Additional research indicates that those with other alternative credentials, such as adult education and correspondence school diplomas, also have attrition rates greater than regular high school graduates.[32] In 1987, DoD implemented a three-tier classification of education credentials. Table 2.7 shows the percentage of FY 2002 active duty NPS accessions by education tier. Ninety-two percent of recruits possessed high school diplomas and/or some college education (Tier 1); 7 percent held alternative high school credentials (Tier 2); and 1 percent had not completed high school (Tier 3). It should be noted that entry-level enlisted occupations are generally comparable to civilian jobs not requiring college education. Moreover, since nearly 37 percent of NPS accessions are age 18 or younger, they have not yet had as much opportunity for college as have individuals in the 18-24 year-old civilian population.

Although 99 percent of FY 2002 accessions were in Tiers 1 and 2, only 79 percent of 18- to 24-year-old civilians were high school graduates or possessed a GED certificate. Differences among Services in FY 2002 high school graduate accessions were small, ranging from 99 percent (Air Force) to 86 percent (Army). The Army had the highest proportion of recruits with Tier 2 credentials (14 percent); the Air Force had the lowest (1 percent). In FY 2002, the Army and Air Force did not enlist any applicants without education credentials; the Navy and Marine Corps accepted very few recruits with no high school credentials (3 percent and less than 1 percent, respectively).

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[31]   See Flyer, E.S., *Factors Relating to Discharge for Unsuitability Among 1956 Airman Accessions to the Air Force* (Lackland AFB, TX: Personnel Research Laboratory, December 1959); Elster, R.E. and Flyer, E.S., *A Study of the Relationship Between Educational Credentials and Military Performance Criteria* (Monterey, CA: Naval Postgraduate School, July 1981); and Lindsley, D.H., *Recruiting of Women*, presented to 1995 Committee on Women in the NATO Forces Conference, June 2, 1995.

[32]   Laurence, J.H., *Military Enlistment Policy and Educational Credentials: Evaluation and Improvement* (Alexandria, VA: Human Resources Research Organization, 1987); Laurence, J.H., Ramsberger, P.F., and Arabian, J.M., *Education Credential Tier Evaluation* (Alexandria, VA: Human Resources Research Organization, 1996); and Laurence, J.H., *Does Education Credential Still Predict Attrition?*, paper presented as part of Symposium, Everything Old is New Again – Current Research Issues in Accession Policy, at the 105th Annual Convention of the American Psychological Association, Chicago, August 1997.

Table 2.7 Levels of Education of FY 2002 Active Component NPS Accessions, by Service, and Civilians 18–24 Years Old (Percent)						
Education Level[1]	Army	Navy	Marine Corps	Air Force	DoD	18- to 24-Year-Old Civilians*
Tier 1: Regular High School Graduate or Higher	86.4 (91.4**)	91.9	97.4	98.6	91.9 (94.0**)	
Tier 2: GED, Alternative Credentials	13.6	4.6	2.8	1.4	7.2	79.4
Tier 3: No Credentials	0.0	3.4	0.2	0.0	0.8	20.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
College Experience (Part of Tier 1)[2]	10.6	6.4	1.9	12.7	8.5	46.7

Columns may not add to total due to rounding.
* Civilian numbers and percentages combine Tiers 1 and 2 as civilian data include GED certificates with high school graduate rates.
** Tier 1 data calculated excluding GED+ participants from total accessions. GED+ is an experimental program enlisting up to 4,000 active duty Army applicants with a GED or no credential who have met special screening criteria for enlistment.
[1] Service data from OUSD(P&R)(MPP)/Accession Policy have been reviewed and updated by the Services for official submission. Data presented in this table may differ slightly from the data shown in appendix tables that are taken from DMDC's USMEPCOM Edit File.
[2] College experience data from the Services are defined as those individuals with the following credentials: associate degree, professional nursing diploma, baccalaureate, master's, post master's, doctorate, first-professional, or completed one semester of college.
Also see Appendix Tables B-7 (Education by Service and Gender) and B-8 (Education by Service and Race/Ethnicity).
Source: Service data are from OUSD(MPP)/Accession Policy—submitted in accordance with DoD Instruction 7730.56. USMC college experience data are from DMDC's USMEPCOM Edit File. Civilian data are from Bureau of Labor Statistics Current Population Survey File, October 2001 – September 2002.

During FY 2000, the Army established the experimental GED+ program, in efforts to identify non-high school diploma graduates who would have low attrition rates. The Army allows up to 4,000 Active Component and 2,000 Reserve Component applicants who have earned a GED certificate or have no education credential to enlist without counting against the 90 percent Tier 1 benchmark for NPS enlisted accessions. To qualify for the GED+ program, recruits must have left high school for a non-disciplinary reason, be too old to return to high school, have no moral character problems, and score high on a test of motivation to enlist.[33]

The proportion of accessions with high school diplomas by Service for FYs 1973 through 2002 is shown in Figure 2.5. During most of the first decade of the volunteer military (FYs 1973–1982), the Services differed significantly in the proportion of high school diploma graduates. In addition, there were significant variations across years. Across Services, the proportion of accessions with high school diplomas fell from 75 percent in FY 1978 to 66 percent in FY 1980. The drop was most pronounced in the Army, declining from 73 to 52 percent over that period.

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[33]   Rutherford, G., *Hispanic Population Projections, Enlistment Propensity and the FY 2001 Recruiting Results* – information paper (Washington, DC: Office of the Assistant Secretary of Defense, 2001).

During the mid-1970s, the Services operated with reduced recruiting budgets. At the same time, there were highly publicized reports of smaller military benefits and significant gaps in pay compared to the civilian sector. Media articles cited the hemorrhage of talent from the Services due to loss of benefits, and the percentage of Servicemembers eligible for food stamps.

Because of lower education levels of new recruits, lower test scores, and increasing minority representation during this period, debates began on whether to replace the volunteer force with a form of national service or a return to the draft.[34] The Executive and Legislative branches of government funded major initiatives to reinvigorate the volunteer military, enhance recruiting programs, and improve Servicemembers' quality of life. Military pay and benefits and
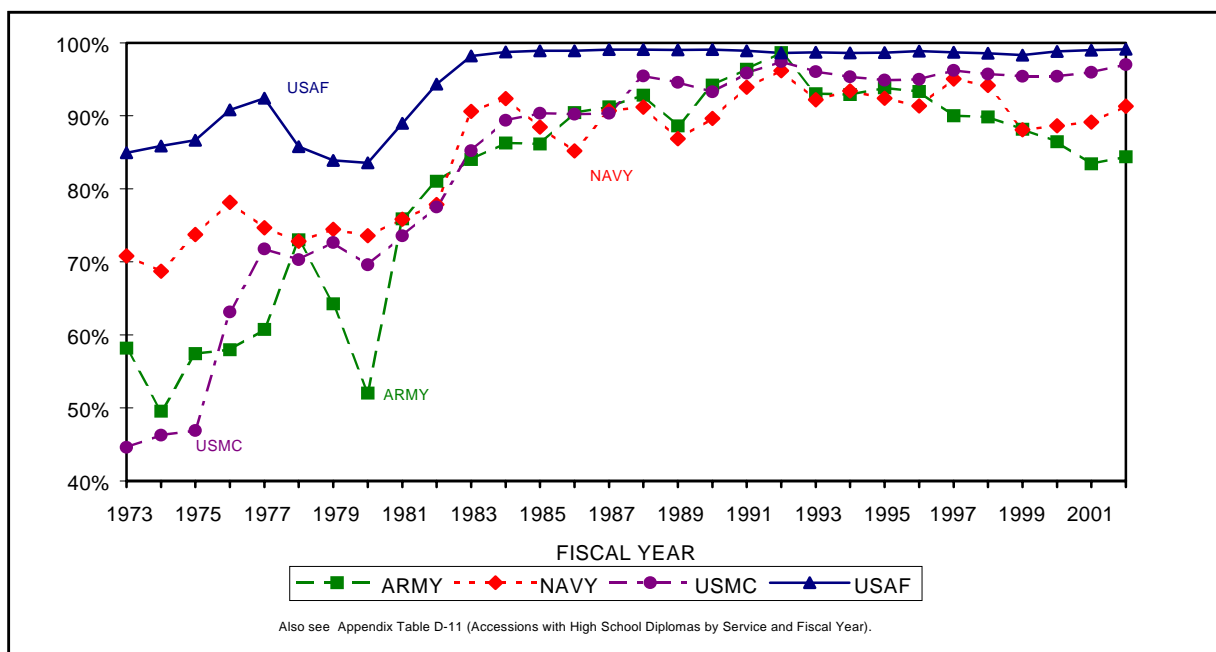
Figure 2.5. Active Component NPS accessions with high school diplomas, FYs 1973–2002.

recruiting resources were increased substantially in 1981, resulting in a rapid increase in the quality of accessions. The proportion of high school graduate recruits jumped from 66 percent in FY 1980 to 83 percent in FY 1982. Further incentives, such as the Montgomery GI Bill and the Army, Navy, and Marine Corps College Funds, and Service emphasis on improving the quality of life for Servicemembers and their families led to improved recruiting. The proportion of high school graduates climbed to a peak of 98 percent in FY 1992. From that peak, the proportion gradually declined to 91 percent in FY 2001. In FY 2002, the Services recruited accessions with slightly higher educational credentials (92 percent; the FY 2002 number is from Service data as described in Table 2.7 rather than the DMDC data sources used in Appendix Table D-11.)

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34   In December 1976, the Department of Defense released a report, *The All Volunteer Force: Current Status and Prospects*, that listed seven alternatives to the all volunteer military. On June 20, 1978, the Senate Subcommittee on Manpower and Personnel of the Committee on Armed Services conducted an extensive hearing, *Status of the All-Volunteer Armed Force*, on the problems of a volunteer force and the need to examine alternatives to the all volunteer military.

Figure 2.6 compares FY 2002 accessions with civilians of similar age on the percentage of high school graduates (Tier 1) and those with alternative credentials (Tier 2), by gender and race/ethnicity. Although nearly all military recruits are in Tiers 1 and 2, the same is not true of 18- to 24-year-old civilians. Some dramatic differences in education level, by race/ethnicity, are evident in Figure 2.6. Only 74 percent of Black civilians and 60 percent of Hispanic civilians have high school diplomas or alternative credentials. Given these percentages and the 90 percent Tier 1 requirement, the Services' minority recruiting pool is limited. Thus, the race/ethnicity representation comparisons should be interpreted with these data in mind.

Source: Civilian data from Bureau of Labor Statistics Current Population Survey, October 2001 - September 2002.
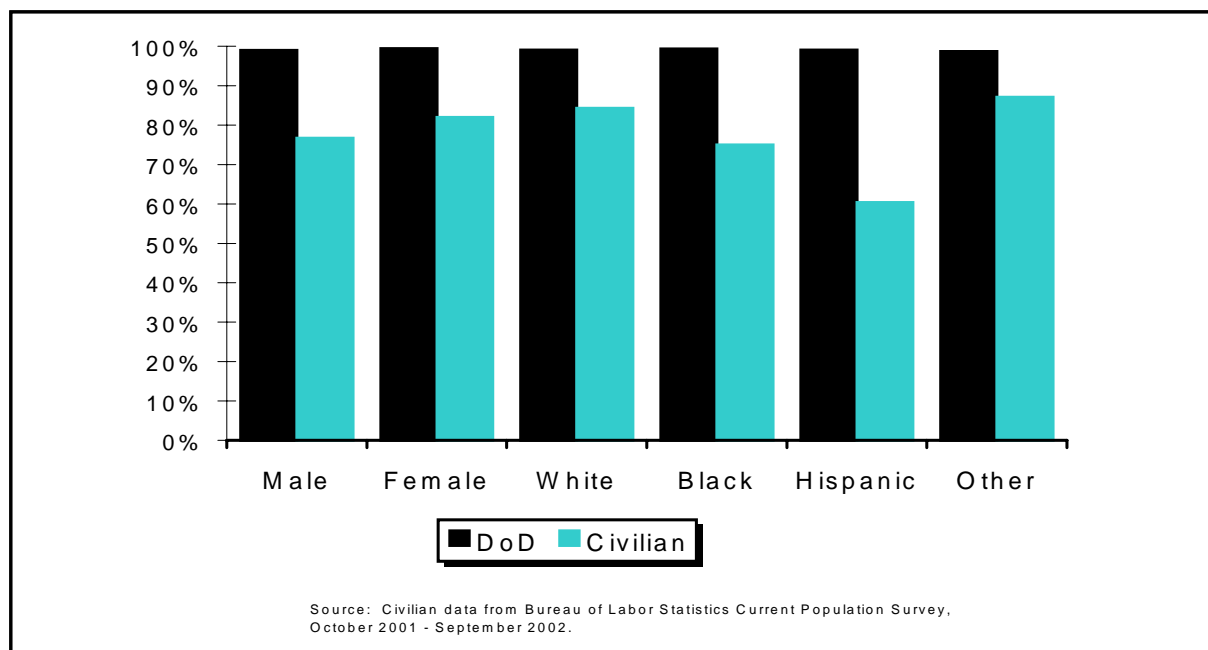
Figure 2.6. FY 2002 accessions and 18- to 24-year-old civilians who earned high school diplomas (Tier 1) or alternative credentials (Tier 2), by gender and race/ethnicity.

AFQT. AFQT scores are the primary measure of recruit potential. Figure 2.7 indicates the percentage of NPS recruits who scored at or above the 50th percentile (Categories I–IIIA) since FY 1973. Numerical data are in Appendix D, Table D-12. The drop in Category I–IIIA recruits after FY 1976 was due primarily to the miscalibration of the ASVAB.[35] In FY 1976, when new versions of the ASVAB were introduced, an error in calibrating the score scales made the new versions "easier" than the old versions (i.e., applicants received test scores higher than their actual ability). In FY 1980, an independent study of the calibration was made and the test was correctly calibrated. Then, Congress added legal provisions stipulating that no more than 20 percent of accessions could be in Category IV and that such accessions had to be high school

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[35]   See two documents: Sims, W.H. and Truss, A.R., *A Reexamination of the Normalization of Armed Services Vocational Aptitude Battery (ASVAB) Forms 6, 7, 6E, and 7E* (Alexandria, VA: Center for Naval Analyses, September 1980); and Laurence, J.H. and Ramsberger, P.F., *Low-Aptitude Men in the Military: Who Profits, Who Pays?* (New York: Praeger, 1991).

diploma graduates.[36] However, as previously stated, Defense Department guidance decreases this limit even further, allowing no more than 4 percent of recruits to come from Category IV.

Figure 2.7 shows FY 1977 as the low point and FY 1992 as the high point in accessing recruits in Categories I to IIIA. In FY 1977, 34 percent of accessions scored in the top half of the AFQT distribution. Only 13 percent of Blacks, 19 percent of Hispanics, and 20 percent of "Others" scored in Categories I–IIIA.[37] Fifteen years later, in FY 1992, most minority accessions achieved scores in the I–IIIA range (Blacks - 56 percent, Hispanics - 67 percent, "Others" - 67 percent). Hispanics have shown the most marked increase, with a 48-percentage-point gain in Category I to IIIA accessions from FY 1977 to FY 1992.
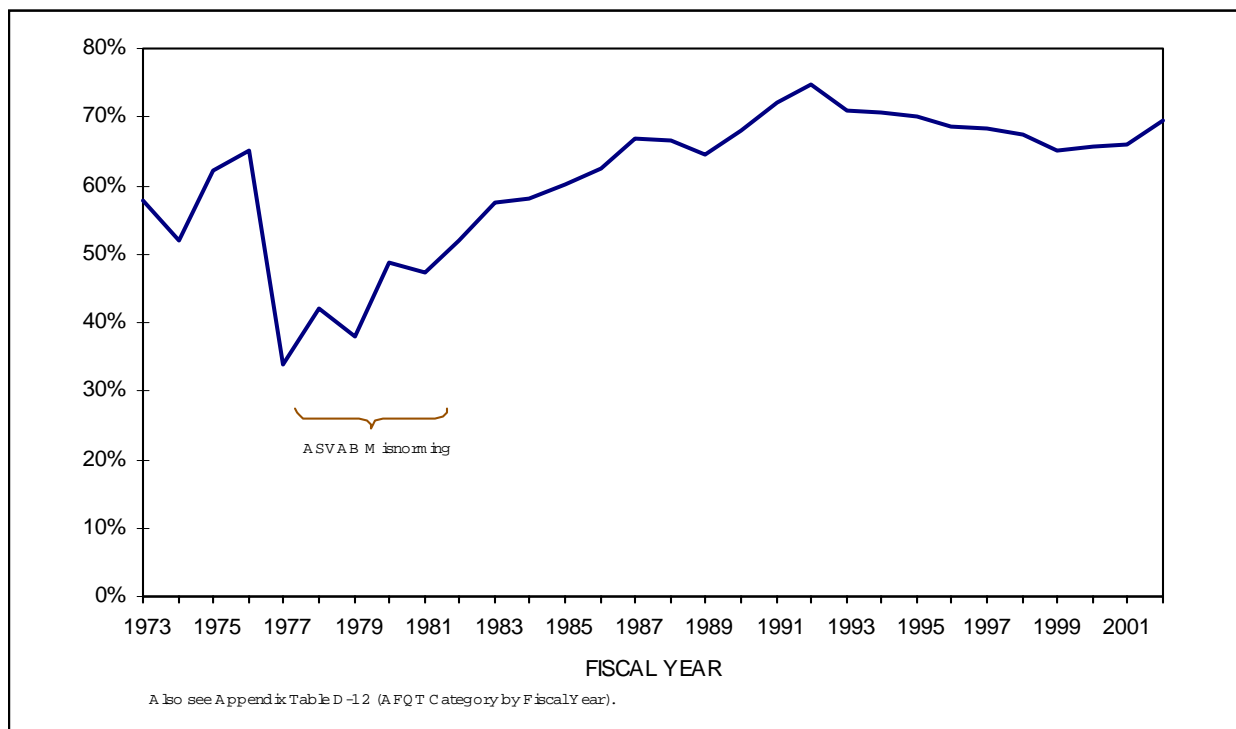
Figure 2.7. Percentage of NPS accessions in AFQT categories I–IIIA, FYs 1973–2002.

A graphic view of the increasing trend in AFQT performance of accessions from FY 1973 through FY 1992 is provided in Figure 2.8. The more significant gains were in Categories I to IIIA, where the percentages increased from 47 percent in FY 1981 to 75 percent in FY 1992. Conversely, there has been a decline in the percentage of Category IIIB accessions. Most dramatic has been the decrease in accessions who score in Category IV—from 33 percent in FY 1979 to one percent or less since FY 1991. There was a gradual decline in the percentage of accessions in Categories I to IIIA from FY 1992 to FY 1999, from 75 to 65 percent. During FY 2002, recruit quality increased slightly to 69 percent in Categories I-IIIA.

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36   10 U.S.C. 520.

37   Data from Defense Manpower Data Center.
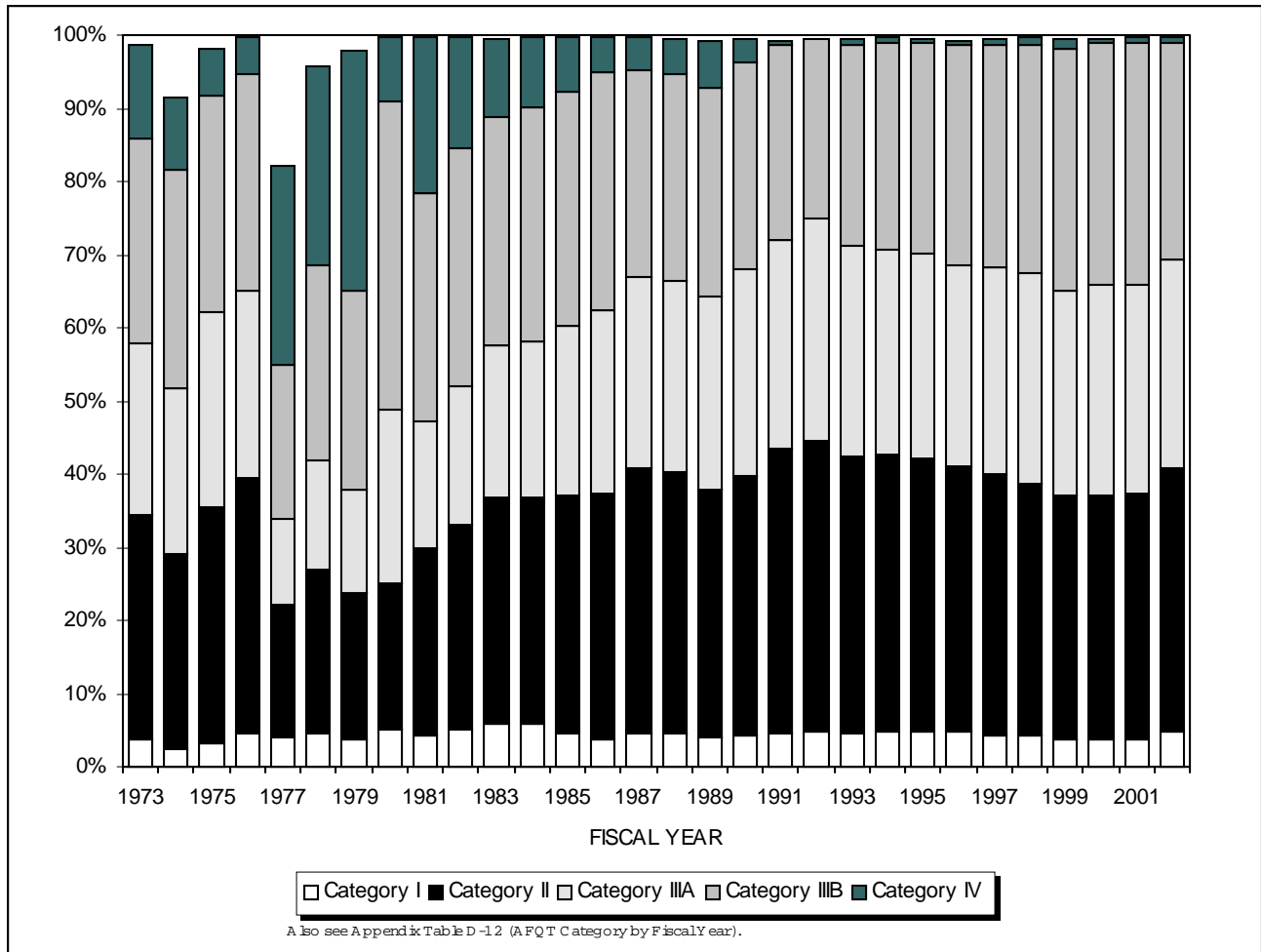
Figure 2.8. Percentage of NPS accessions in AFQT categories I–IV, FYs 1973–2002.

The percentages of FY 2002 active duty NPS accessions in each AFQT category are shown in Table 2.8. The percentage of recruits in Categories I and II was slightly higher than their civilian counterparts (males - 42 percent; females - 36 percent). Category III accessions greatly exceeded civilian proportions (males - 57 versus 30 percent; females - 67 versus 37 percent), while the percentage of recruits in Category IV was much lower than in the civilian population (males - 1 percent versus 20 percent; females - 1 percent versus 22 percent). The low percentage of Category IV recruits is, in part, a result of DoD limits of 4 percent Category IV recruits, with even lower Service limits. Ten percent of civilian males and 9 percent of civilian females scored in Category V; DoD allows no Category V recruits.

In FY 2002, 69 percent of recruits scored at or above the 50th percentile on the AFQT (Categories I–IIIA). Air Force recruits scored higher than those of the other three Services. Seventy-five percent of Air Force recruits scored in Categories I–IIIA, compared to 70 percent of Army, 67 percent of Marine Corps, and 65 percent of Navy recruits.

Table 2.8. AFQT Scores of FY 2002 Active Component NPS Accessions, by Gender and Service (Percent)					
AFQT Category[1]	Army	Navy	Marine Corps	Air Force	DoD
MALES					
I	5.8	5.2	3.7	5.8	5.3
II	35.6	34.0	35.1	43.6	36.6
IIIA	29.8	26.0	27.6	28.3	28.2
IIIB	27.4	34.8	32.9	22.2	29.3
IV	1.4	0.0	0.6	0.1	0.7
V	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0
FEMALES					
I	3.1	3.0	3.4	2.9	3.0
II	29.8	32.4	35.4	35.1	32.2
IIIA	30.6	30.3	34.4	32.8	31.4
IIIB	35.2	34.4	26.7	29.2	32.8
IV	1.3	0.0	0.0	*	0.5
V	0.0	0.0	*	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
*Less than one-tenth of one percent.
[1] Service data from OUSD(P&R)(MPP)/Accession Policy have been reviewed and updated by the Services for official submission. Data presented in this table may differ slightly from the data shown in appendix tables that are taken from DMDC's USMEPCOM Edit File. Also see Appendix Tables B-5 (AFQT by Service and Gender) and B-6 (AFQT by Service and Race/Ethnicity).
Source: Service data from OUSD(P&R)(MPP)/Accession Policy—submitted in accordance with DoD Instruction 7730.56. The 1980 civilian comparison group distribution for the total population (males and females) is 7 percent in Category I, 28 percent in Category II, 15 percent in Category IIIA, 19 percent in Category IIIB, 21 percent in Category IV, and 10 percent in Category V. Civilian data from *Profile of American Youth* (Washington, DC: Office of the Assistant Secretary of Defense [Manpower, Reserve Affairs, and Logistics], March 1982).

High Quality. One impact of the defense drawdown was the Services' redesign of a number of career fields with incumbents assuming a more diverse workload and greater responsibilities. The redesign both increased the number of tasks assigned to an individual, and required incumbents to perform new tasks of greater complexity. The Services believe that as the levels of job/task difficulty and importance increase, so will the need to bring in and retain greater proportions of individuals with above-average aptitude.[38] The Services define high-

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[38]   See Sellman, W.S., *Since We Are Reinventing Everything Else, Why Not Occupational Analysis?* Keynote address to the 9th Occupational Analyst Workshop, San Antonio, TX, May 31–June 2, 1995.

quality recruits as high school diploma graduates who also score in the top 50 percent on the AFQT, Categories I through IIIA. Figure 2.9 shows the trends in the proportion of high-quality accessions since FY 1973. In general, sharp increases in high-quality recruits correspond to periods of rising youth unemployment.[39] In FY 2002, the percentage of high-quality recruits ranged from 57 percent in the Army and Navy to 75 percent in the Air Force.
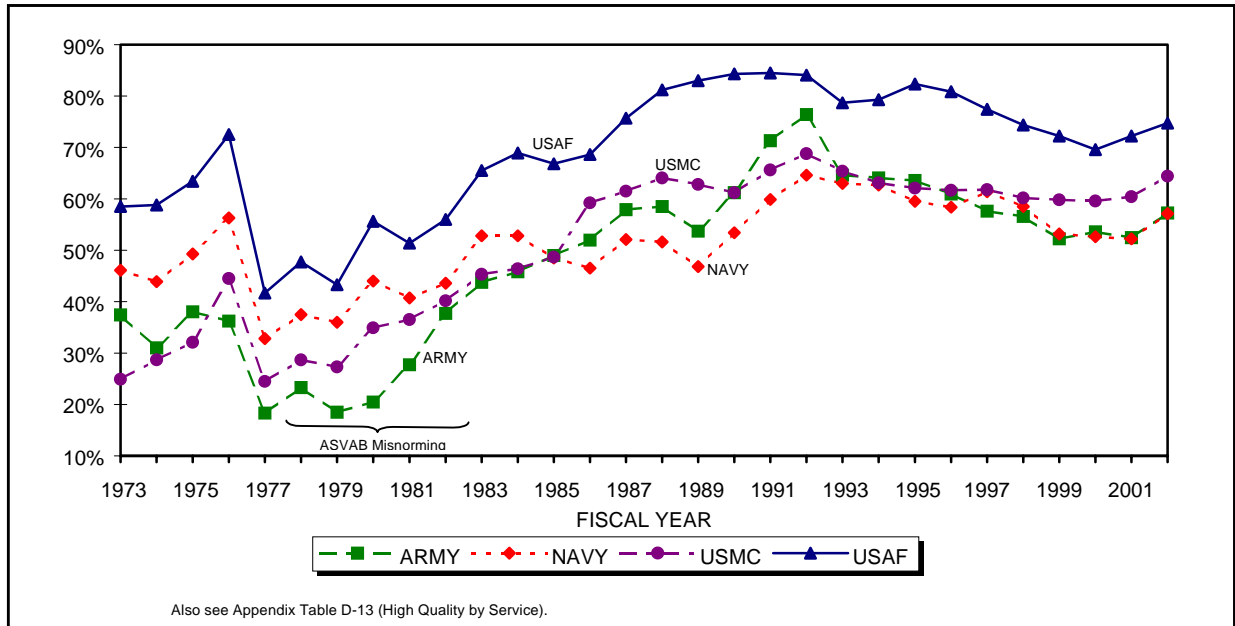
Figure 2.9. Percentage of high-quality NPS accessions, FYs 1973–2002.

Reading Ability. Because reading requirements for many military occupations are substantial, reading ability of recruits is important. The reading grade level (RGL) is estimated by converting the ASVAB verbal composite score to its RGL equivalent.[40] Table 2.9 shows that the mean RGL for FY 2002 recruits was at a level that would be expected of an 11th grade student, compared to 10th grade level for the average FY 1984 accession.

Differences in RGL were relatively small in FY 2002, with mean RGLs ranging from 11.2 for the Navy and Marine Corps to 11.4 for the Army and Air Force. The 1980 nationally representative sample of 18- to 23-year-olds, on whom ASVAB scores are based, read at a mean 10th grade level.

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[39]   Bureau of Labor Statistics. *Employment Status of the Civilian Noninstitutional Population, 1940 to Date*. URL: ftp://ftp.bls.gov/pub/special.requests/lf/aat1.txt.

[40]   See Waters, B.K., Barnes, J.D., Foley, P., Steinhaus, S.D., and Brown, D.C., *Estimating the Reading Skills of Military Applicants: The Development of an ASVAB to RGL Conversion Table* (Alexandria, VA: Human Resources Research Organization, October 1988).

Table 2.9. Mean Reading Grade Level of FY 1984–2002 Active Component NPS Accessions, By Service, and 1980 Civilians 18–23 Years Old						
Fiscal Year	Army	Navy	Marine Corps	Air Force	DoD	1980 Civilian Youth Population
1984	10.0	10.2	9.8	10.5	10.1	
1985	10.6	10.5	10.1	10.8	10.6	
1986	11.2	11.0	11.1	11.4	11.1	
1987	11.2	11.1	11.2	11.6	11.2	
1988	11.2	11.1	11.2	11.5	11.2	
1989	11.1	11.0	11.2	11.4	11.2	
1990	11.2	11.1	11.2	11.7	11.3	
1991	11.4	11.0	11.3	11.7	11.3	
1992	11.5	11.4	11.3	11.7	11.5	10.3
1993	11.5	11.5	11.2	11.8	11.5	
1994	11.4	11.3	11.2	11.7	11.4	
1995	11.3	11.3	11.2	11.7	11.4	
1996	11.3	11.3	11.1	11.7	11.4	
1997	11.2	11.2	11.1	11.6	11.3	
1998	11.2	11.2	11.1	11.5	11.2	
1999	11.0	11.1	11.1	11.2	11.1	
2000	11.1	11.0	11.0	11.2	11.1	
2001	11.1	11.1	11.1	11.3	11.1	
2002	11.4	11.2	11.2	11.4	11.3	

Source: 1980 civilian youth population data from the *Profile of American Youth* (Washington, DC: Office of the Assistant Secretary of Defense [Manpower, Reserve Affairs, and Logistics], March 1982); and Waters, et al., *Estimating the Reading Skills of Military Applicants: The Development of an ASVAB to RGL Conversion Table* (Alexandria, VA: Human Resources Research Organization, October 1988).

Geography. The percentages of recruits from some census regions of the United States have remained fairly stable since the inception of the volunteer force. However, as Figure 2.10 illustrates, substantial shifts have taken place in other regions. The percentage of accessions from the Northeast dropped 8 points from a high of 22 percent in FY 1977 to a low of less than 14 percent in FY 2001. In FY 2002, the proportion of accessions from the Northeast was at 14 percent. The proportion of accessions from the South increased 9 percentage points from 34 percent in FY 1985 to 43 percent in FY 1995. The percent of new recruits from the South has remained stable (approximately 42 percent) since FY 1996.

Changes in geographical representation are related to factors such as shifts in demographic patterns, unemployment, college enrollment, and employment compensation rates, which vary widely across regions of the country.[41] Obviously, no one factor can explain variations in enlistment rates between different sections of the country; they are more likely attributable to a wide array of economic, social, and demographic factors.

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[41]   Kostiuk, P.F., *Geographic Variations in Recruiting Market Conditions* (Alexandria, VA: Center for Naval Analyses, 1989).
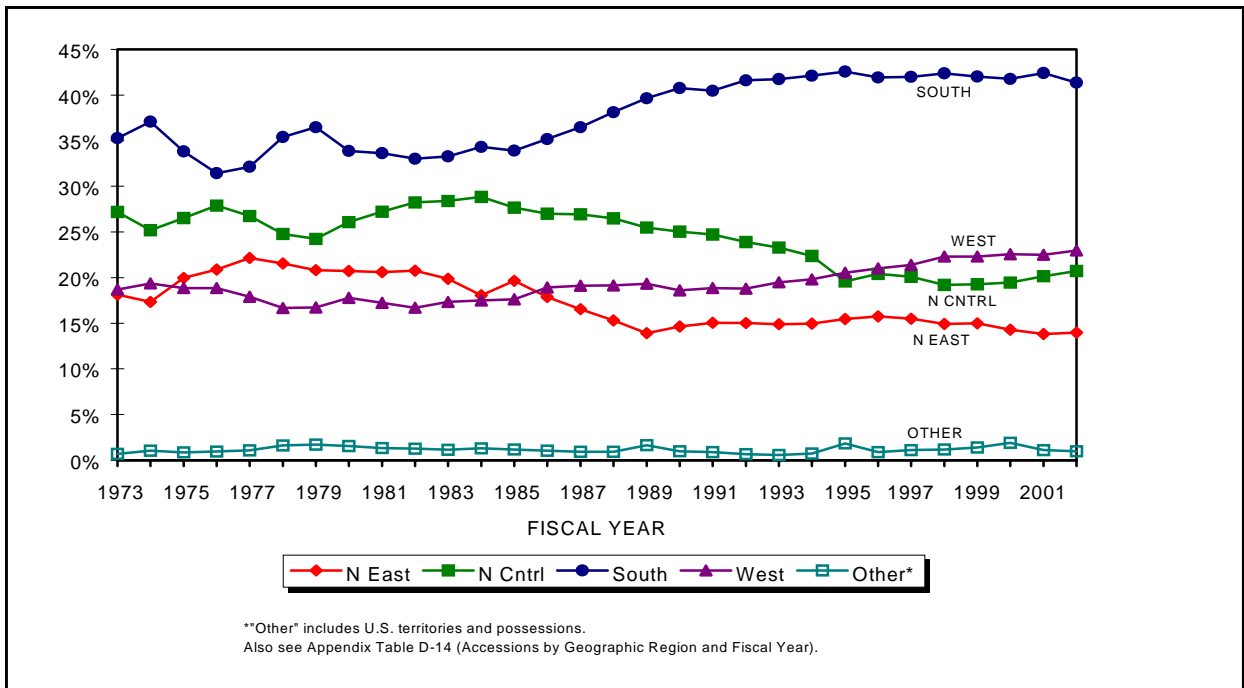
Figure 2.10. NPS accessions by geographic region, FYs 1973–2002.

Table 2.10 presents FY 2002 accession statistics by geographic region, division, and state. The third and fourth columns show percentages of accessions and percentages of the 18- to 24-year-old civilian population, respectively, in each area. The fifth column presents military/civilian representation ratios—the percentage of enlisted accessions divided by the percentage of civilians in each area. A representation ratio of 1.00 means that the area has the same proportion of accessions as of the youth population—for example, 8 percent of all recruits and 8 percent of all youth aged 18–24. A ratio of less than 1.00 means that relatively few youth in an area enlist in the military, while a ratio of more than 1.00 indicates above-average market penetration. The last two columns of the table present the percentages of high-quality accessions (high school graduates in AFQT Categories I–IIIA) and mean AFQT scores for each area.

The South region had the greatest ratio of enlistees (1.2). The West South Central division had the strongest representation (1.3). The Northeast region had a representation ratio of 0.8 and the North Central and West regions had ratios of 0.9.

Slightly more than half of the states had representation ratios of 1.0 or more. These included: Maine and New Hampshire in the Northeast; Ohio, Indiana, South Dakota and Nebraska in the North Central; all states except Utah, Colorado, and California in the West; and all states except Kentucky, Tennessee, Delaware, and the District of Columbia in the South. Among all states, the ratios ranged from a low of 0.5 in the District of Columbia to a high of 2.0 in Montana.

CENSUS REGION CENSUS DIVISION STATE	Area's Contribution of All NPS Accessions	Area's Percent of All NPS Accessions	Area's Percent of All 18- to 24-Year-Olds	Represen-tation Ratio	Percent of Accessions that are High-Quality*	Mean AFQT Percentile Score
Table 2.10. Selected Statistics for FY 2002 NPS Accessions by Region, Division, and State, and Civilians 18–24 Years Old						
NORTHEAST REGION	25,342	14.0	17.0	0.8	62.4	60.7
New England Division	*5,857*	*3.2*	*4.4*	*0.7*	*65.3*	*62.0*
Maine	899	0.5	0.4	1.2	65.5	63.1
New Hampshire	757	0.4	0.4	1.1	71.3	64.6
Vermont	307	0.2	0.2	0.9	72.0	62.6
Massachusetts	2,160	1.2	2.2	0.6	63.0	61.6
Rhode Island	466	0.3	0.3	0.8	64.6	61.5
Connecticut	1,268	0.7	1.0	0.7	64.2	60.6
Middle Atlantic Division	*19,485*	*10.7*	*12.6*	*0.9*	*61.5*	*60.3*
New York	9,368	5.2	6.1	0.8	60.1	59.9
New Jersey	3,701	2.0	2.4	0.8	59.3	58.5
Pennsylvania	6,416	3.5	4.0	0.9	64.7	61.8
NORTH CENTRAL REGION	37,646	20.7	23.4	0.9	65.3	62.1
East North Central Division	*26,443*	*14.6*	*16.0*	*0.9*	*64.8*	*61.8*
Ohio	7,173	4.0	3.8	1.0	65.8	61.8
Indiana	3,767	2.1	2.1	1.0	67.2	63.5
Illinois	6,880	3.8	4.5	0.9	63.0	60.8
Michigan	5,660	3.1	3.8	0.8	62.5	60.9
Wisconsin	2,963	1.6	2.0	0.8	67.6	63.5
West North Central Division	*11,203*	*6.2*	*7.4*	*0.8*	*66.5*	*62.7*
Minnesota	2,137	1.2	1.9	0.6	69.0	64.0
Iowa	1,665	0.9	1.1	0.8	69.8	64.2
Missouri	3,630	2.0	2.1	0.9	63.0	61.0
North Dakota	351	0.2	0.2	0.8	72.7	65.0
South Dakota	600	0.3	0.3	1.3	65.3	63.0
Nebraska	1,172	0.6	0.7	1.0	66.5	62.5
Kansas	1,648	0.9	1.1	0.8	66.8	62.9
SOUTH REGION	77,071	41.4	34.9	1.2	60.2	59.5
South Atlantic Division	*37,106*	*20.4*	*17.1*	*1.2*	*60.2*	*59.6*
Delaware	452	0.2	0.3	0.9	57.5	59.1
Maryland	3,330	1.8	1.7	1.1	60.9	60.1
District of Columbia	170	0.1	0.2	0.5	45.9	53.7
Virginia	5,289	2.9	2.2	1.4	62.6	61.1
West Virginia	1,289	0.7	0.6	1.3	56.6	57.9
North Carolina	5,296	2.9	2.6	1.1	60.9	59.8
South Carolina	3,192	1.8	1.4	1.3	57.4	58.0
Georgia	5,810	3.2	2.9	1.1	55.6	57.9
Florida	12,278	6.8	5.2	1.3	62.1	60.3
East South Central Division	*11,386*	*6.3*	*6.2*	*1.0*	*58.3*	*58.7*
Kentucky	2,277	1.3	1.6	0.8	59.3	58.9
Tennessee	3,391	1.9	2.1	0.9	62.7	61.4
Alabama	3,675	2.0	1.6	1.3	57.5	58.0
Mississippi	2,043	1.1	1.0	1.2	51.1	55.2

(Continued)

CENSUS REGION CENSUS DIVISION STATE	Area's Contribution of All NPS Accessions	Area's Percent of All NPS Accessions	Area's Percent of All 18- to 24-Year-Olds	Represen-tation Ratio	Percent of Accessions that are High-Quality*	Mean AFQT Percentile Score
SOUTH REGION (continued)						
West South Central Division	*26,597*	*14.6*	*11.6*	*1.3*	*61.0*	*59.6*
Arkansas	1,994	1.1	0.9	1.2	58.6	58.0
Louisiana	3,561	2.0	1.8	1.1	52.7	56.1
Oklahoma	2,977	1.6	1.2	1.3	61.4	60.0
Texas	18,047	9.9	7.6	1.3	62.8	60.4
WEST REGION	41,680	23.0	24.6	0.9	63.2	61.2
Mountain Division	*13,760*	*7.6*	*7.0*	*1.1*	*63.7*	*62.4*
Montana	1,001	0.6	0.3	2.0	62.4	63.4
Idaho	1,122	0.6	0.5	1.2	65.2	64.3
Wyoming	444	0.2	0.2	1.6	68.2	62.4
Colorado	2,844	1.6	1.7	0.9	64.4	63.7
New Mexico	1,532	0.8	0.7	1.3	59.3	59.1
Arizona	3,892	2.1	1.9	1.1	64.1	61.8
Utah	1,281	0.7	1.1	0.7	66.4	63.7
Nevada	1,644	0.9	0.6	1.5	62.1	61.6
Pacific Division	*27,920*	*15.4*	*17.6*	*0.9*	*63.0*	*60.6*
Washington	4,361	2.4	2.0	1.2	67.1	64.7
Oregon	2,657	1.5	1.2	1.2	65.8	63.7
California	19,575	10.8	13.9	0.8	61.9	59.3
Alaska	599	0.3	0.2	1.5	64.3	63.2
Hawaii	728	0.4	0.4	1.2	56.0	56.6
TOTAL (50 STATES + DC)	179,739	99.0	100.0	1.0	62.3	60.6
TERRITORIES OR POSSESSIONS	1,515	0.8			32.0	44.7
Puerto Rico	1,306	0.7			30.8	44.2
Virgin Islands	128	0.1			42.2	48.2
Other Territories or Possessions[1]	81	**			35.8	46.9
UNKNOWN	256	0.1			63.3	61.2
TOTAL	181,510	100.0			62.0	60.5

Columns may not add to total due to rounding.
* High-quality accessions are high school graduates who score at or above the 50th percentile on the AFQT. This column is the number of high-quality accessions in area divided by the total number of accessions in area.
** Less than one-tenth of one percent.
[1] Other Territories or Possessions includes: American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Palau, and U.S. Minor Outlying Islands.
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, October 2001 – September 2002. The Civilian Population Survey does not collect data from residents of U.S. territories or possessions.

The sixth column of Table 2.10 shows the proportion of accessions that are high-quality by geographical area. There were only minor differences by region in FY 2002. The proportion of high-quality accessions by region ranged from a low of 60 percent in the South to a high of 65 percent in the North Central region. Differences across divisions were somewhat larger.

Approximately 8 percentage points separated the East South Central and West North Central divisions. Differences at the state level were still larger, ranging from 46 percent in the District of Columbia to 73 percent in North Dakota. Of those accessions claiming home of record in the U.S. territories or possessions (e.g., Puerto Rico, Guam), 32 percent were high-quality.

The last column of Table 2.10 shows the mean AFQT score by each geographical area. Occasionally, interest has been expressed in using AFQT scores as an indicator of the performance of state educational systems. AFQT statistics are not particularly suitable for this purpose for several reasons. As a sample of youth in a state, ASVAB test-takers reflect a number of selection biases, the total effect of which is unknown. Those who take the test as part of the enlistment process exclude many students who intend to enroll in college, prospects who fail the enlistment screening test, and youth who do not have an interest in military enlistment. Therefore, youth who take the ASVAB should not be presumed to be representative of the communities or school systems from which they are drawn. Even without the biases, it would be difficult to determine how much the test scores reflect differences in school performance from state to state, or how much they reflect other state characteristics, such as social composition and economic conditions. In sum, while the ASVAB is an excellent instrument for the purposes for which it was designed, it does not provide valid state-by-state school performance data.

Nevertheless, AFQT scores by state may be of interest for purposes other than assessing school system performance. The AFQT figures in Table 2.10 reflect the mean AFQT percentile scores for accessions in each state. Percentiles displayed in Table 2.10 are all above 50 (except for several territories or possessions); low-scoring applicants are screened out.

Chapter 3

ACTIVE COMPONENT ENLISTED FORCE

At the end of Fiscal Year 2002, enlisted force end-strength reached nearly 1.18 million, an increase from the FY 2001 end-strength of 1.15 million. This is a change to the trend, as enlisted end-strength has dropped each year between FYs 1987 and 1999. The Active Components counted 1.85 million enlisted members in FY 1987, more than in any year since FY 1974. End-strength reached a low point in FY 1999 (1.151 million) with a marginal increase to 1.154 million in FY 2000, and 1.153 in FY 2001. Figure 3.1 displays trend lines by Service for the active duty enlisted force size since FY 1973, and Appendix Table D-15 provides end-strength data by year and by Service for FYs 1964 and 1973 through 2002.

Also see Appendix Table D-15 (Enlisted Strength by Fiscal Year).
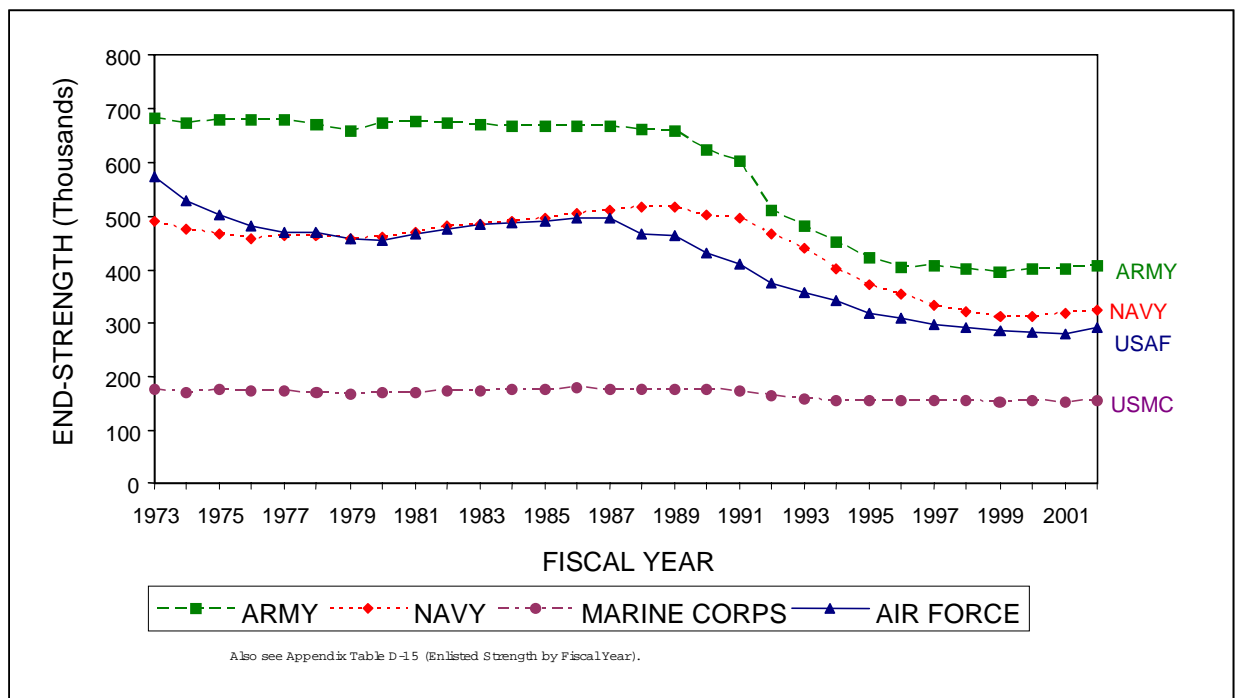
Figure 3.1. Active Component enlisted force end-strength, by Service, FYs 1973–2002.

Characteristics of Active Component Enlisted Force

Age. Trained person-years are equal in importance to aggregate end-strength when evaluating personnel readiness. Greater proportions of trained person-years reduce training costs and enable the Services to cut recruiting objectives. To gain increased person-years with the same number of Servicemembers, DoD and Service planners increase the mean initial term of enlistment and restructure the mix of first-term and career force personnel.

The mean number of months in service per enlisted Servicemember is highlighted in Figure 3.2. Mean time in service rose from 75 months in FY 1987 to 90 months in FY 1996 and then dropped slightly to 84 months in FY 2002. Although the cumulative effect of various policies put in place since the early 1980s resulted in an increase in the mean age of the Services' enlisted force from 25 years old in FY 1980 to a peak of almost 27 and a half years old in FYs 1996 and 1997, current retention problems have led to a slight decrease in mean age and time in

service during the last few years. The current mean age of the Services' enlisted force is almost exactly 27 years old.
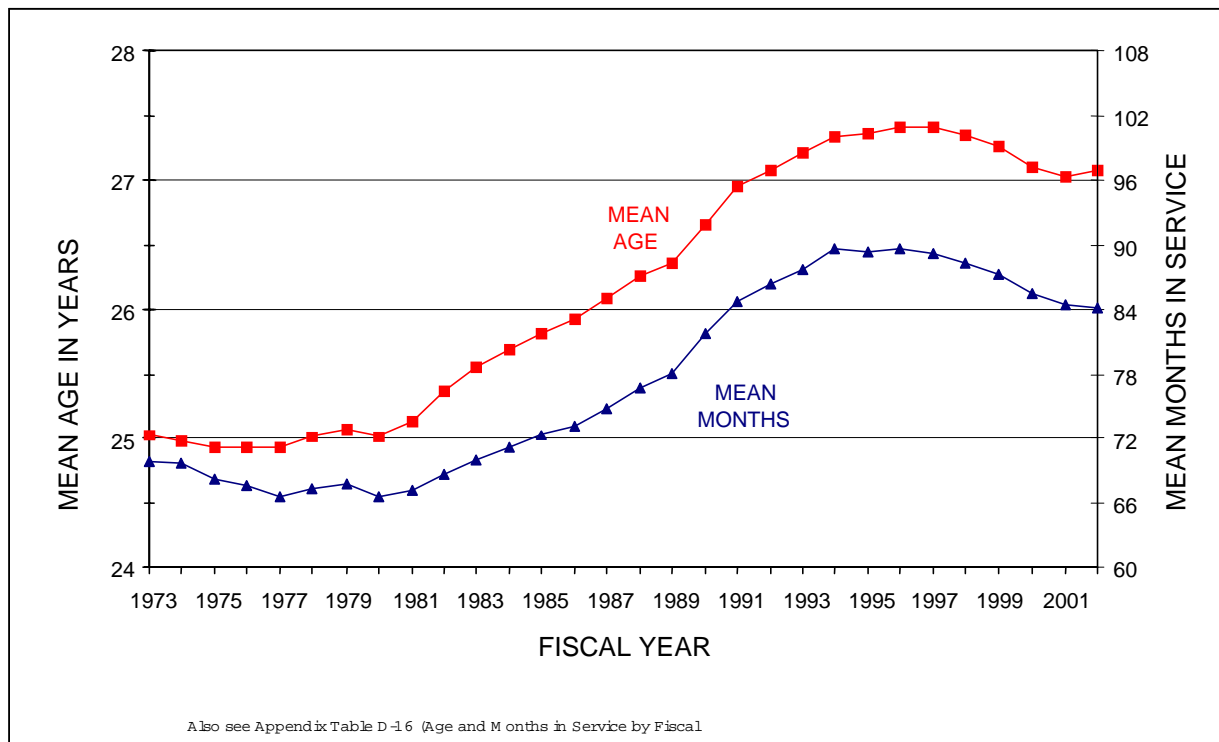
Figure 3.2. Active Component enlisted force average age and months in service, FYs 1973–2002.

Force structure, retention, and personnel policies govern the distribution of Servicemembers by occupation and grade. These factors have resulted in an overall DoD force profile wherein approximately half the force (51 percent) has less than 6 years of service, with slightly less than half (45 percent) having 6 to 19 years, and 4 percent having more than 20 years.[1] Pay grade and time in service are highly correlated. Paralleling the years in service data, pay grade distributions include slightly more than half of the enlisted force in pay grades E1 through E4 (53 percent) and slightly less than half in pay grades E5 through E9 (47 percent), as shown in Table 3.1. Progression from E1 and E2 (trainees) to E3 occurs quickly; consequently, relatively few enlisted members are in pay grades E1 and E2 (13 percent). Nearly three-quarters (75 percent) of the enlisted force are in pay grades E3 through E6. Service differences primarily are the result of retention trends as well as the force structure and personnel requirements needed to support Service-unique roles and missions. Thus, time in service and pay grade data should be interpreted cautiously.

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[1]   See Timenes, N., Jr., *Force Reductions and Restructuring in the United States,* presented to NATO Seminar on Defense Policy and Management, Brussels, Belgium, July 2, 1992. The derived force was based on the distribution by years of service from FY 1987 through FY 1989—a period of stable funding preceding the drawdown.

Table 3.1. FY 2002 Pay Grade of Active Component Enlisted Members, by Service (Percent)					
Pay Grade	Army	Navy	Marine Corps	Air Force	DoD
E1	5.2	4.8	8.1	5.4	5.5
E2	8.0	8.1	13.0	4.4	7.8
E3	16.6	16.7	28.2	18.4	18.6
E4	25.4	20.2	18.5	17.6	21.1
E5	17.9	22.7	14.7	25.0	20.6
E6	14.1	16.7	8.8	15.3	14.4
E7	9.2	7.5	5.7	10.8	8.7
E8	2.7	2.2	2.1	2.0	2.3
E9	0.8	1.0	0.9	1.0	0.9
Unknown	0.0	*	0.0	0.0	*
Total	100.0	100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
* Less than one-tenth of one percent.
Also see Appendix Table B-46 (Active Component by Pay Grade and Service).

In FY 2002, 49 percent of the enlisted force was 17–24 years old, yet a little less than 2 percent was older than 44, as shown in Table 3.2. For those who make the military a career, the 20-year retirement option results in many leaving the service while in their late 30s and early 40s. In the Army, Navy, and Marine Corps, a large proportion of the enlisted force was under age 25 (48, 47, and 68 percent, respectively). Marine Corps members were the "youngest" with more than two-thirds under age 25, and 3 percent 40 years or older. Air Force members were the "oldest" with 42 percent under age 25, and 10 percent 40 years or older. The Marine Corps traditionally has the youngest accessions. Historically, the Air Force has experienced higher enlisted retention rates than the other Services, contributing to somewhat "older" enlisted members.

Although 49 percent of the enlisted force was in the 17–24 age group, approximately 15 percent of the civilian labor force fell in this range. At the other end of the distribution, over one-half (51 percent) of the civilian labor force was 40 years old or older, compared with 7 percent of enlisted members.

Race/Ethnicity. The military attracts and retains higher proportions of Blacks and "Other" minority groups but lower proportions of Hispanics than are in the civilian labor force. As Table 3.3 indicates, the overall proportion of enlisted minorities was higher than in the civilian labor force in FY 2002 (38 and 32 percent, respectively). However, Hispanics were underrepresented among enlisted members (10 percent versus 14 percent).

In FY 2002, 22 percent of the enlisted force was Black, compared with 13 percent of the civilian labor force (18–44 year-olds). The Army had the highest proportion of Black enlisted members in FY 2002 (28 percent).

Table 3.2. FY 2002 Age of Active Component Enlisted Members, by Service, and Civilian Labor Force 17 and Older (Percent)						
Age	Army	Navy	Marine Corps	Air Force	DoD	Civilian Labor Force
17–19	10.4	10.1	17.3	8.5	10.8	4.5
20–24	37.1	36.7	50.6	33.4	37.9	10.3
25–29	20.3	18.8	15.8	18.7	18.9	10.4
30–34	14.5	13.5	7.4	13.1	13.0	11.5
35–39	11.3	13.0	5.8	15.9	12.2	12.4
40–44	4.6	6.0	2.4	8.7	5.7	13.6
45–49	1.3	1.6	0.6	1.5	1.3	12.4
50+	0.3	0.3	0.1	0.1	0.2	25.0
Unknown	0.2	0.0	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
* Less than one-tenth of one percent.
Also see Appendix Table B-23 (Active Component by Age Group, Service, and Gender).
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, September 2002.

Table 3.3. FY 2002 Race/Ethnicity of Active Component Enlisted Members, by Service, and Civilian Labor Force 18–44 Years Old (Percent)						
Race/ Ethnicity	Army	Navy	Marine Corps	Air Force	DoD	18- to 44-Year-Old Civilians
White	55.7	58.9	66.3	71.8	62.0	68.4
Black	27.5	21.0	15.2	18.1	21.8	12.6
Hispanic	10.4	10.9	14.2	6.0	10.0	13.9
Other	6.4	9.3	4.3	4.0	6.3	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
Also see Appendix Table B-25 (Race/Ethnicity by Service and Gender).
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, September 2002.

Changes over time in the percentage of Black enlisted members in each Service are shown in Figure 3.3. Black soldiers in the Army increased from 18 percent in FY 1973 to a high of 33 percent in FY 1981. That proportion decreased to 30 percent by the mid-1980s, in large part due to an increase in entrance standards and the Army's decision not to renew enlistment contracts of low-scoring members who entered during the ASVAB misnorming. The proportion of Blacks in the Army has decreased slightly during the past 10 years, from 32 percent in FY 1990 to 28 percent in FY 2002. The Marine Corps has experienced slight decreases in Blacks during recent years too. Decreases in the Army and Marine Corps parallel the drop in minority accessions in FY 1991 and the concomitant decrease in the propensity to enlist among Black

youth.[2] The Navy, on the other hand, has exhibited a consistent long-term increase in the proportion of Blacks, from 8 percent in FY 1973 to 21 percent in FY 2002. In all Services, the percentage of female members who are Black significantly exceeds the percentage of male members who are Black, 34 percent compared to 20 percent for all Services in FY 2002 (Appendix Table B-25).

Also see Appendix Table D-17 (Black Enlisted Members by Service and Fiscal Year).
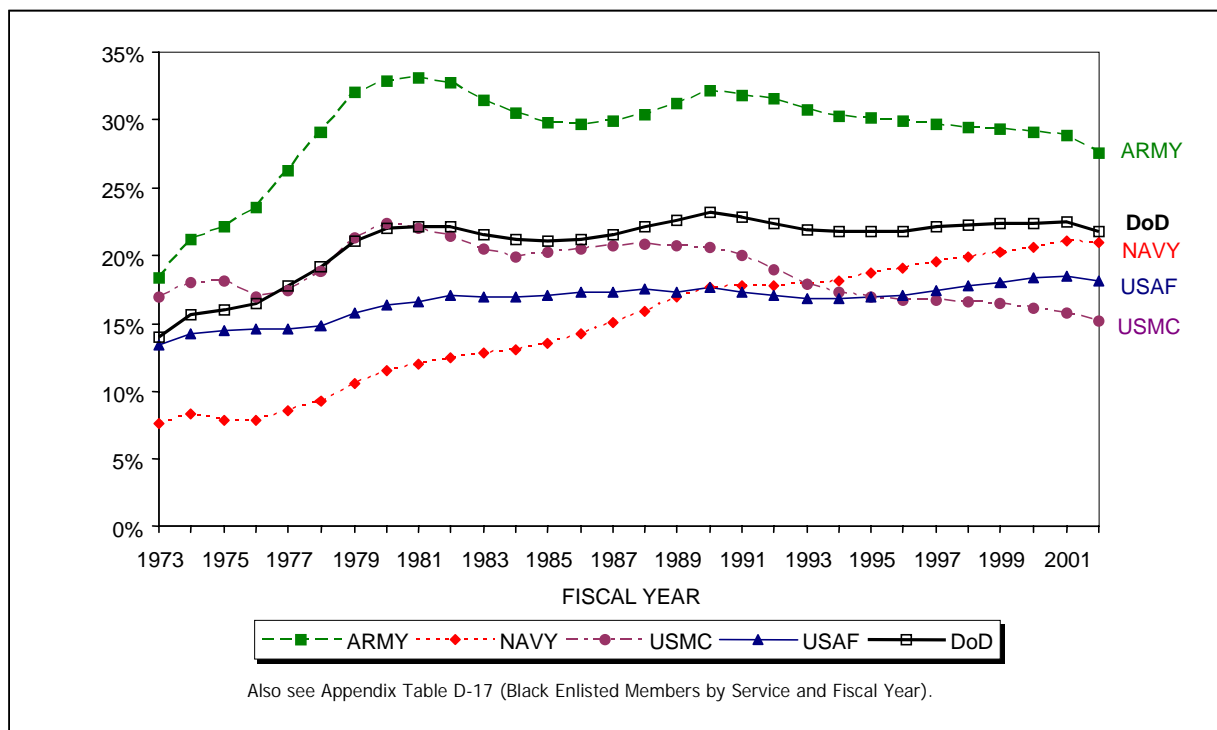
Figure 3.3. Blacks as a percentage of Active Component enlisted members, by Service, FYs 1973–2002.

In FY 2002, active duty Hispanic enlisted members were a smaller part of the enlisted force than of the civilian labor force in the 18–44 age group (10 percent and 14 percent, respectively). The highest representation of Hispanics was in the Marine Corps (14 percent). The proportions of "Other" minority individuals in the Army, Marine Corps and Air Force were similar (6, 4 and 4 percent, respectively), while the Navy had somewhat more (9 percent).

Although Hispanic enlisted members were underrepresented in FY 2002, Hispanic representation in the Services has increased 5 percentage points since 1985, when less than 4 percent of the enlisted force was Hispanic (Figure 3.4). Hispanics are the fastest growing group in the United States. In 1985, the 18- to 44-year-old civilian labor force included nearly 7 percent declaring Hispanic descent. By 1994, the civilian population boasted more than 10 percent Hispanics, compared to less than 6 percent in the DoD. By FY 2002, Hispanics made up nearly 14 percent of the civilian labor force, with projections of continuing increases.[3] The

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[2]   Memorandum from Alphonso Maldon, Jr., Assistant Secretary of Defense (Force Management Policy), Subject: 1999 Youth Attitude Tracking Study, January 11, 2000.

[3]   U.S. Census Bureau. *Projections of the Resident Population by Race, Hispanic Origin, and Nativity: Middle Series, 2006 to 2010.* URL: http://www.census.gov/population/www/projections/popproj.html

military's increases, on average, have nearly, but not quite, kept pace with the rate of growth of Hispanics in the civilian population during the last 15 years. However, DoD has not been able to catch up to the percentages of those of Hispanic origin in the civilian labor force.

Also see Appendix Table D-18 (Hispanic Enlisted Members by Service and Fiscal Year).
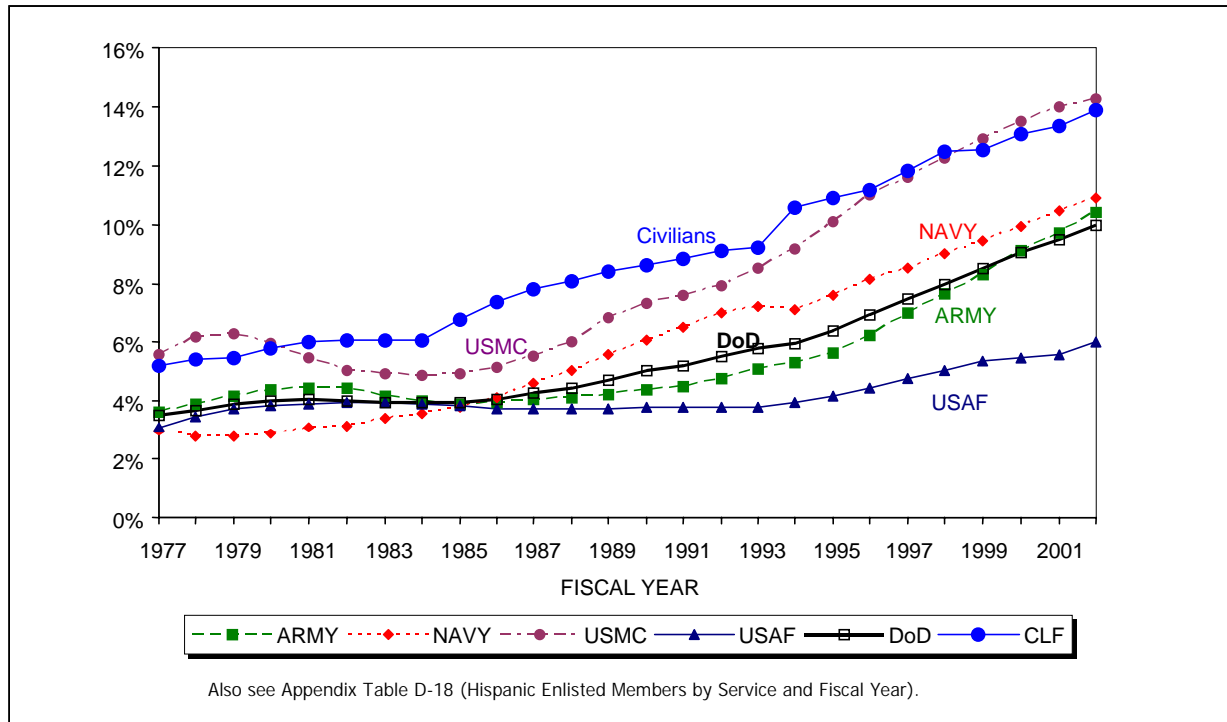
Figure 3.4. Hispanics as a percentage of Active Component enlisted members, by Service, with the civilian labor force, FYs 1977–2002.

Gender. Trends in the percentage of enlisted women since FY 1973 are shown in Figure 3.5 (Appendix Table D-19 provides numerical data). Thirty years ago, because of legal restrictions, women constituted less than 2 percent of military members. In 1967, Public Law 90-30 removed the 2-percent cap on women in the military.[4] However, policies, particularly those related to the roles of women, did not change accordingly. It took nearly 20 years for the Services to achieve 10 percent representation of women.

Four factors affect the proportion of enlisted female members. First, women tend to have a lower inclination to enlist than men do.[5] Second, ground combat exclusion policies restrict the positions and skills in which women may serve. Third, the military personnel system is a "closed" system. Growth must come from within, and from the bottom up; lateral entries play virtually no role. Consequently, the gender structure of the career force is shaped primarily by the proportion of females recruited. Fourth, women leave the Services at a higher rate than men. Thus, the percentage of women in the military may not change much from current levels unless there are significant increases in female recruiting or retention.

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[4]   Born, D.H. and Lehnus, J.D., *The World of Work and Women at War*, paper presented at the International Military Testing Association, Toronto, Canada, October 1995.

[5]   Memorandum from Alphonso Maldon, Jr., Assistant Secretary of Defense (Force Management Policy), Subject: 1999 Youth Attitude Tracking Study, January 11, 2000.
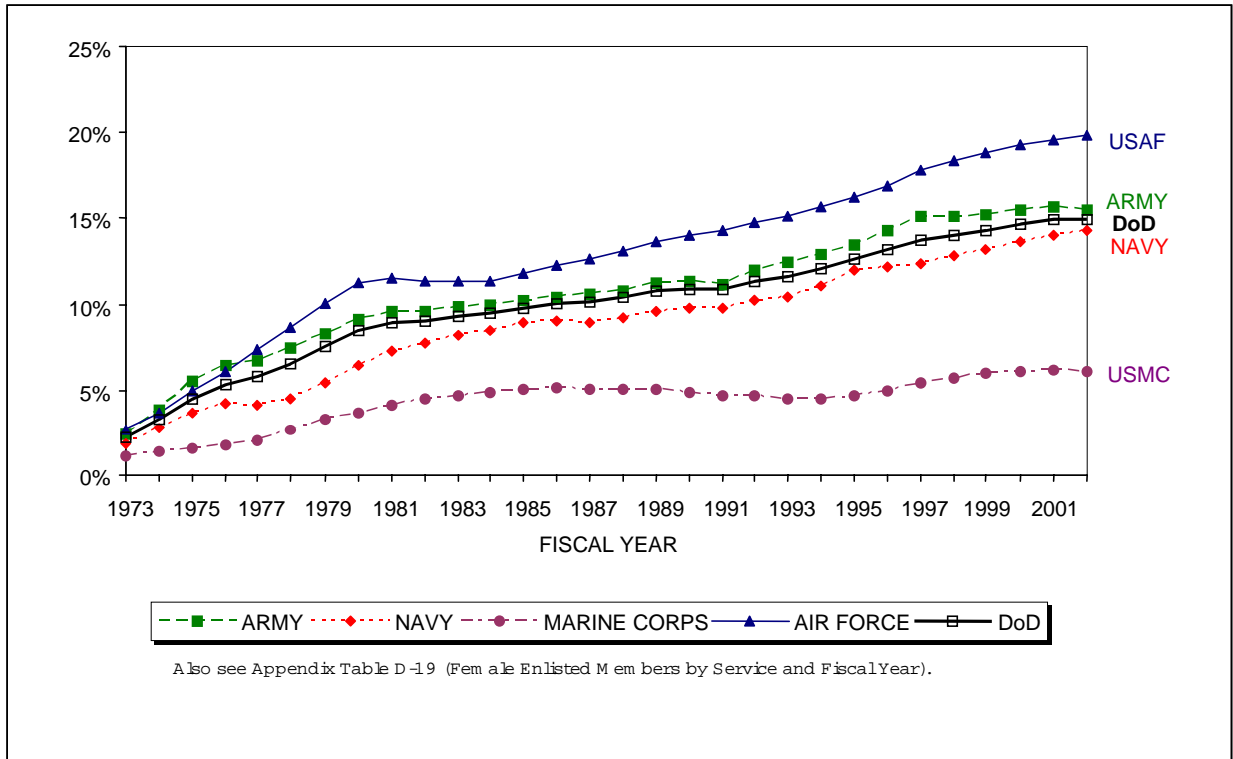
Figure 3.5. Women as a percentage of Active Component enlisted members, by Service, FYs 1973–2002.

As a result of policy and social changes, the number of active duty enlisted women increased from nearly 32,000 in FY 1972 to a pre-drawdown peak of 196,000 in FY 1989, then down to 160,000 in FY 1995. The number and proportion of women has increased to just under 177,000, 15 percent of enlisted members, in FY 2002, an increase from nearly 172,000 in FY 2001. The increase in women in the military since FY 1972 brought about significant changes across all aspects of personnel management: in training programs and physical fitness regimens, in assignments, in living arrangements, and in medical services. It also created new administrative issues regarding pregnancy, the proportion of single parents in the military, child care arrangements during peacetime and deployment, and dual-service marriages (where husband and wife both serve in uniform).

Nearly all career fields (92 percent) are now open to women: 91 percent in the Army, 96 percent in the Navy, 93 percent in the Marine Corps, and 99 percent in the Air Force.[6] Gradual increases in the proportion of women in the military underscore the Services' commitment to recruit and retain women.

As shown in Table 3.4, the Air Force has the highest proportion of women on active duty (20 percent), while the Marine Corps has the lowest (6 percent). Percentages in the Army and Navy are 16 and 14 percent, respectively. Service differences reflect differences in the proportion of positions closed to women and the availability of occupations of interest to women. Overall, the proportion of enlisted women has gradually increased (about half a

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[6]   News release from Office of the Assistant Secretary of Defense (Public Affairs), "Secretary of Defense Perry Approves Plans to Open New Jobs for Women in the Military," July 29, 1994.

percentage point each year) over the past nine years, from 11.6 to 15.0 percent from FY 1993 to FY 2002 (Appendix Table D-19).

Table 3.4. FY 2002 Gender of Active Component Enlisted Members, by Service, and Civilian Labor Force 18–44 Years Old (Percent)						
Gender	Army	Navy	Marine Corps	Air Force	DoD	18- to 44-Year-Old Civilians
Male	84.5	85.7	93.9	80.2	85.0	53.6
Female	15.5	14.3	6.1	19.8	15.0	46.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Also see Appendix Table B-23 (Age by Service and Gender).
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, September 2002.

Marital Status. Although only 9 percent of first-time enlisted recruits are married, a large percentage of enlisted Servicemembers are (49 percent). By the end of the first term of service (typically four years), approximately 42 percent of male enlisted members have become married.[7] Trends in marital status of active duty members are shown in Figure 3.6. The proportion of married enlisted members declined from FY 1977 (50 percent) to FY 1980 (47 percent). In FY 1981 the proportion began to increase until a peak of 57 percent in FY 1994. Since FY 1994, the proportion of married members has dropped to 49 percent in FY 2002. Marital status varies by Service. Air Force members are most likely to be married (56 percent), while Marines are least likely to be married (41 percent).

The percentages of FY 2002 Active Component enlisted married males and females are shown by Service in Table 3.5 and by age in Appendix Table B-24. Proportionally, more Servicemen were married than Servicewomen (50 and 42 percent, respectively). The only Service where these proportions are not evident is the Marine Corps where only 41 percent of both men and women are married. Similarly, more civilian men were married than civilian women (52 versus 50 percent, respectively). The proportion of married Servicemen was slightly smaller than married 18- to 44-year-old men in the civilian population (50 and 52 percent, respectively). The proportion of married Servicewomen was lower than that of women in the comparable civilian population (42 and 50 percent, respectively).

The percentage of married military women has changed significantly since FY 1973.[8] Twenty-five years ago women constituted 2 percent of military members. Military women were not expected to be married; retention directives implicitly encouraged separation of married enlisted women. In FY 1973, 18 percent of military women were married, increasing to 36 percent in FY 1978 and to 42 percent in FY 2002.

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[7]   Office of the Assistant Secretary of Defense (Personnel and Readiness), *Family Status and Initial Term of Service, Volume I—Summary* (Washington, DC: Office of the Assistant Secretary of Defense [Personnel and Readiness], December 1993).

[8]   Department of Defense, *Population Representation in the Military Services: Fiscal Year 1989* (Washington, DC: Office of the Assistant Secretary of Defense [Force Management and Personnel], July 1990).

Figure 3.6. Percentage of Active Component enlisted members who were married, by Service, FYs 1973–2002.

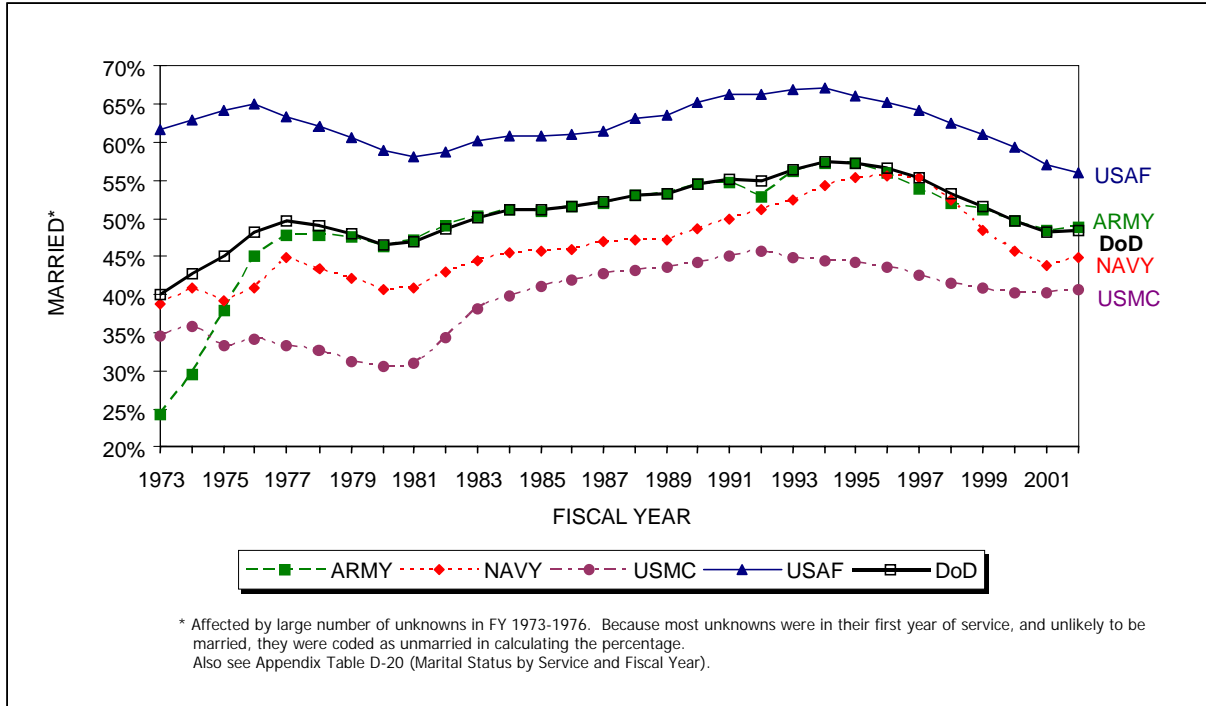| Table 3.5. FY 2002 Active Component Enlisted Members Who Were Married, by Gender and Service, and Civilian Labor Force 18–44 Years Old (Percent)						
Gender	Army	Navy	Marine Corps	Air Force	DoD	18- to 44-Year-Old Civilians
Male	50.1	46.9	40.7	58.1	49.7	51.8
Female	42.6	33.1	41.2	47.0	41.5	49.8
Total	48.9	44.9	40.7	55.9	48.5	50.9
Also see Appendix Table B-24 (Age by Marital Status and Gender). Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, September 2002.						

During and after the Persian Gulf War, questions were raised regarding the deployment of both parents in a dual-service marriage (i.e., a marriage wherein both husband and wife are military members). The proportion of members in each Service who are married and the proportion of those married who are members of a dual-service marriage are shown in Table 3.6.

Larger proportions of men than women are married, but significantly greater proportions of women are members of dual-service marriages (49 percent of married women versus 7 percent of married men; Table 3.6). The Marine Corps has the greatest variance, with 6 percent of married men but 66 percent of married women in dual-service marriages. Proportionally, more Air Force personnel are members of dual-service marriages (20 percent).   Across the Services, 13 percent of enlisted members are in dual-service marriages.

Gender	End-Strength	Married		Married Who Were In Dual-Service Marriages	
		Number	Percent	Number*	Percent**
ARMY					
Male	343,377	172,021	50.1	11,324	6.6
Female	62,806	26,756	42.6	11,214	41.9
Total	406,183	198,777	48.9	22,538	11.3
NAVY					
Male	278,208	130,502	46.9	5,559	4.3
Female	46,490	15,389	33.1	6,353	41.3
Total	324,698	145,891	44.9	11,912	8.2
MARINE CORPS					
Male	146,140	59,463	40.7	3,270	5.5
Female	9,459	3,897	41.2	2,555	65.6
Total	155,599	63,360	40.7	5,825	9.2
AIR FORCE					
Male	234,571	136,350	58.1	16,230	11.9
Female	57,957	27,263	47.0	15,914	58.4
Total	292,528	163,613	55.9	32,144	19.7
DoD					
Male	1,002,289	498,336	49.7	36,383	7.3
Female	176,712	73,305	41.5	36,036	49.2
Total	1,179,001	571,641	48.5	72,419	12.7

Table 3.6. FY 2002 Active Component Enlisted Personnel Who Were Married, and in Dual-Service Marriages, by Gender and Service (Number and Percent)

 * There are some differences between the number of males and females reporting dual-service marriages.
** These percentages reflect the proportion of married enlisted members who are married to a Servicemember. For example, 11,324 male Army enlisted personnel are in dual-service marriages. That is, 6.6 percent of married male Army enlisted members (172,021) are in dual-service marriages.

Education. The majority of the enlisted force have high school diplomas (94 percent), as indicated in Table 3.7. In FY 2002, 97 percent of female and 94 percent of male enlisted personnel were high school diploma graduates (Tier 1). These results are very similar to FY 2001. Other trends that continue are that there were fewer people with no credentials in the military than in the civilian labor force (less than 1 percent versus 11 percent), and fewer people with college experience (10 percent versus 57 percent). This latter comparison is misleading because enlisted occupations are generally comparable to civilian occupations that do not require college degrees. Most military members with college degrees are officers (95 percent of officers have undergraduate or advanced degrees). The education levels of the officer corps are discussed in Chapter 4.

Table 3.7. FY 2002 Education of Active Component Enlisted Members, by Service, and Civilian Labor Force 18–44 Years Old (Percent)						
Education Level	Army	Navy	Marine Corps	Air Force	DoD[2]	18- to 44-Year-Old Civilians*
Tier 1: Regular High School Graduate or Higher	91.8	92.1	95.8	99.8	94.4	89.0
Tier 2: GED, Alternative Credentials	7.5	5.7	4.0	0.2	4.7	
Tier 3: No Credentials	0.7	2.2	0.3	0.1	0.9	11.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
College Experience[1] (Part of Tier 1)	10.7	5.9	3.4	87.8	10.4	56.2

* Civilian percentages combine Tiers 1 and 2.

[1] Air Force data from the Air Force Personnel Center. Due to coding differences, the Air Force reports 15 semester hours of college, whereas the other Services report 2-year college graduates. Military data represent only enlisted members. Officers, who usually have college degrees, are not included. See Chapter 4 for a discussion of officers. Civilian college experience is defined as attendance, full- or part-time, in any 2- or 4-year college or university in a class for which credit may be applied toward a degree. Also see Appendix Table B-27 (Education by Service and Gender).

[2] DoD percentages are based on DMDC data for all Services and do no reflect differences in data provided by Air Force Personnel Center data. Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, September 2002.

The proportion of Army, Marine Corps, Navy, and Air Force high school diploma graduate enlisted members changed very little from FY 2001 to FY 2002 (92, 96, 92 and nearly 100 percent, respectively). Almost all Air Force members held diplomas (99+ percent). The Navy and Army have the largest proportion without at least a high school diploma (8 percent each). The Air Force had the smallest proportion (three-tenths of one percent).

The Services encourage enlisted members to continue their education while in the military. Many college-level classes and degree programs are offered on military installations around the world. A recent program, Army University Access Online, facilitates enrollment in college-level distance learning courses, assists soldiers in securing course credit for military training, and aids participants in earning degrees. In-service tuition assistance programs pay 75 percent of tuition costs. Members also can use the Montgomery GI Bill to cover the majority of the cost of off-duty college and technical courses.[9] The investment in continuing education is a sound one. Enlisted personnel who used tuition assistance had higher promotion rates and stayed in the service longer than those who did not.[10]

Representation Within Occupations. Each Service classifies enlisted occupations using DoD occupational codes. At the most general level, there are 10 one-digit categories as shown in Table 3.8. Occupational codes get more specific, with two- and three-digit codes. The number of codes increases with each level of specificity.

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[9] Department of Defense, *Biennial Report to Congress on the Montgomery GI Bill Education Benefits Program* (Washington, DC: Office of the Assistant Secretary of Defense [Force Management Policy], May 2001); Memorandum from Alphonso Maldon, Jr., Assistant Secretary of Defense (Force Management Policy), Subject: Uniform Tuition Assistance Policy, April 4, 2000.

[10] See Boesel, D. and Johnson, K., *The DoD Tuition Assistance Program: Participation and Outcomes* (Arlington, VA: Defense Manpower Data Center, May 1988).

Infantry, gun crews, and seamanship includes more than infantry. Enlisted personnel serving on gun crews and those serving in some ship-based occupations are included. Specific specialties include infantryman, special forces, tank crewman, gunner's mate, in-flight refueling, and quartermaster.

Electronic equipment repairers consists of those jobs requiring knowledge of electronics to maintain and repair electronic equipment. Jobs included are electronics technician, radio repairer, communication and navigation systems specialist, air traffic control radar technician, missile systems maintenance, and computer technician.

Communications and intelligence specialists includes personnel who operate electronic equipment, such as radios, and others specializing in communication or intelligence. For example, radioman, air traffic controller, linguist, and intelligence/counter-intelligence specialist all fall into this category.

Medical and dental specialists are health care workers. Types of occupations within this category include medical service specialist, aeromedical specialist, pharmacy specialist, and dental laboratory specialist.

Other allied specialists includes a variety of occupations, not captured by the other codes. Examples of specific jobs are photojournalist, cartographer, weather specialist, musician, and disaster preparedness specialist.

Functional support and administration encompasses positions related to administrative functions of the Services. Personnelman, recruiter, information management specialist, computer programmer, accounting specialist, traffic manager, and public affairs specialist are jobs included in this code.

Like electronic equipment repairers, electrical/mechanical equipment repairers are involved in maintenance and repair of Service-specific equipment. Compared to electronic equipment repairers, these jobs deal with more mechanical, less electronically-sophisticated maintenance and repair. Types of jobs in the electrical/mechanical equipment repair area are aviation safety specialist, aircraft mechanic, vehicle mechanic, nuclear weapons specialist, and electrician's mate.

Craftsmen includes the skilled blue collar trades. Types of positions include metal worker, crane operator, plumber, and electrician.

Service and supply handlers include food service specialists, vehicle operators, military police, parachute riggers, and morale, welfare, and recreation specialists.

Non-occupational personnel are those who have not completed training for an occupation or who are unable to serve in the position for which they have been trained. Patients, prisoners, students, and recruits are included in this category.

The percentages of enlisted personnel by occupational area in FY 2002 are shown in Table 3.8. No shifts in the occupational distribution of the force occurred this year. The majority of enlisted members serve in electrical/mechanical equipment repair (21 percent), infantry, gun crews, and seamanship (17 percent), or functional support and administration (16

percent). These occupational areas have been predominant in the Armed Services at least since FY 1976, the earliest year for which reliable data are available.[11]

	Table 3.8. FY 2002 Occupational Areas of Active Component Enlisted Personnel by Gender (Percent)			
	Occupational Code and Area	Males	Females	Total DoD
0	Infantry, Gun Crews, and Seamanship Specialists	18.8	5.0	16.7
1	Electronic Equipment Repairers	10.0	6.1	9.4
2	Communications and Intelligence Specialists	9.2	10.0	9.3
3	Medical and Dental Specialists	5.2	15.3	6.7
4	Other Allied Specialists	2.7	3.1	2.8
5	Functional Support and Administration	12.9	33.1	16.0
6	Electrical/Mechanical Equipment Repairers	22.5	8.7	20.5
7	Craftsmen	4.1	1.8	3.7
8	Service and Supply Handlers	8.5	10.5	8.8
9	Non-occupational*	6.2	6.4	6.2
	Total	100.0	100.0	100.0

Columns may not add to total due to rounding.
* Non-occupational includes patients, students, those with unassigned duties, and unknowns.
See Appendix Tables B-29 (Occupational Area by Service and Gender) and B-30 (Occupational Area by Service and Race/Ethnicity).

Only modest changes are predicted in work characteristics of military occupations in the next ten years. Thus, the knowledge, skills, and characteristics required of military personnel are not likely to change substantially. Where changes are expected, they result from increasingly sophisticated technology of military equipment.[12]

The assignment of enlisted personnel to military occupations depends on eligibility (determined by ASVAB scores and sometimes other tests or requirements), individual preference, and the availability of openings. As part of the occupational classification process, the military uses aptitude composites made up of ASVAB test scores related to occupations. The composites vary by Service, and are developed empirically to predict the probability of training success.

Men tend to score higher than women on the ASVAB tests in the mechanical and electronics composites, while women tend to do better on administrative measures. On average, Whites have higher test scores than Hispanics and "Other" minorities, who in turn have higher scores than Blacks. Within each demographic group, there is wide variation in ASVAB test scores, and most recruits qualify for a number of occupations. The recruits' preferences and the availability of openings for which they are qualified determine the occupations to which individuals are assigned.

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[11] Gribben, M., *Trends in Distribution of Military Personnel Across Occupational Categories,* paper presented to the Committee on the Youth Population and Military Recruitment of the National Academy of Sciences, Washington, DC, May 2001.

[12] Levy, D.G., Thie, H.J., Robbert, A.A., Naftel, S., Cannon, C., Ehrenberg, R., and Gershwin, M., *Characterizing the Future Defense Workforce* (Santa Monica, CA: RAND Corporation, 2001).

<u>Women and occupational assignments</u>. The major shift that has occurred in assignment patterns for women in the last two decades has been to increase their presence in "non-traditional" jobs. In the early 1970s only about 12 percent of enlisted women served in areas considered non-traditional (gun crews, communications, craftsmen, etc.). In FY 2002, however, 45 percent of all enlisted women were in these occupations.

Women are ineligible for infantry and other positions in which the primary mission is to physically engage the enemy.[13] However, women can serve on aircraft and ships engaged in combat. In FY 2002, 5 percent of enlisted women were in occupational code 0 (infantry, gun crews, and seamanship specialists). The percentage of enlisted men in these occupations was nearly four times that of enlisted women because of the direct ground combat exclusion policy for women.

The occupational differences by gender are illustrated in Table 3.8. In FY 2002, almost half of enlisted women were in functional support and administration or health care occupations (33 percent in administration and 15 percent in healthcare). In contrast, only 18 percent of enlisted men were in these occupations. This shows that although the percentages of women in the technical and craftsmen occupations are greater now than when women first joined the military, men continue to account for the preponderance of enlisted personnel in these areas.

<u>Minorities and occupational assignments</u>. In FY 2002, the proportions of Black, White, and Hispanic Servicemembers were similar in three of the nine occupational areas—medical and dental specialists, other allied specialists, and craftsmen (Table 3.9). In electronic equipment repair, where the proportions of Blacks, Hispanics, and "Others" were very similar, the proportion of Whites was higher. The proportions of Hispanics, "Others," and Whites were approximately the same in service and supply handlers, and were lower than Blacks. In electrical/mechanical equipment repair, Whites, Hispanics, and "Others" were similar and were higher than Blacks. Blacks were more heavily represented in the functional support and administration area and, to a lesser extent, the service and supply area.

Pay Grade. Enlisted pay grades, E1 to E9, correspond to the ranks of Private in the Army and Marine Corps, Seaman Recruit in the Navy, and Airman Basic in the Air Force through Sergeant Major in the Army and Marine Corps, Master Chief Petty Officer in the Navy, and Chief Master Sergeant in the Air Force. Enlisted personnel in grades E1 and E2 are trainees. Members in pay grades E3 and E4 are at the apprentice level, working under journeymen, who are at pay grades E5 and E6. Supervisor positions are at pay grades E7 through E9. Soldiers, marines, and airmen at pay grades E5 and above and some at E4 are noncommissioned officers (NCOs), with demonstrated ability in the job and as a leader. In the Navy, those at pay grades E4 and above are petty officers, with leadership responsibilities. Servicemembers in NCO and petty officer positions are required to lead, supervise, and train entry-level enlisted personnel. They perform the work as well as direct the work of others.

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[13]   Memorandum from Les Aspin, Secretary of Defense, Subject: Direct Ground Combat Definition and Assignment Rule, January 13, 1994.

Table 3.9. FY 2002 Occupational Areas of Active Component Enlisted Personnel by Race/Ethnicity (Percent)		White	Black	Hispanic	Other
0	Infantry, Gun Crews, and Seamanship Specialists	18.5	11.7	18.0	14.5
1	Electronic Equipment Repairers	10.7	7.0	7.9	7.9
2	Communications and Intelligence Specialists	10.2	8.2	7.7	6.9
3	Medical and Dental Specialists	5.6	8.2	7.5	10.6
4	Other Allied Specialists	3.1	2.4	2.4	2.3
5	Functional Support and Administration	11.7	26.8	17.7	17.9
6	Electrical/Mechanical Equipment Repairers	22.3	15.4	19.4	21.8
7	Craftsmen	4.0	3.1	3.3	3.8
8	Service and Supply Handlers	7.4	12.6	9.0	8.5
9	Non-occupational*	6.7	4.6	7.2	5.9
Total		100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
 * Non-occupational includes patients, students, those with unassigned duties, and unknowns.
Also see Appendix Tables B-29 (Occupational Area by Service and Gender) and B-30 (Occupational Area by Service and Race/ Ethnicity).

More than half of the enlisted force is in pay grades E1 through E4 (53 percent). Grades E4 and E5 have the largest concentration of the enlisted force (21 percent each). This distribution is necessary to provide a sufficient number of trained leaders to fill the higher ranks; not all personnel in the lower ranks reenlist and progress to the higher grades. There are slight variations among racial/ethnic groups (Table 3.10) as well as differences between male and female enlisted members (Table 3.11).

A comparison of pay grade distributions by race/ethnicity shows differences in retention. Blacks traditionally have higher retention rates than other racial/ethnic groups, resulting in a larger percentage of Black enlisted members at pay grades E6 through E8. In contrast, Hispanic enlisted members are found more in lower grades (E1 through E4).

Table 3.10. FY 2002 Pay Grade of Active Component Enlisted Members, by Race/Ethnicity (Percent)					
Pay Grade	White	Black	Hispanic	Other	Total DoD
E1	5.8	4.4	6.8	4.8	5.5
E2	8.1	6.4	9.4	7.5	7.8
E3	18.8	16.8	22.2	17.9	18.6
E4	20.5	20.7	24.7	22.8	21.1
E5	20.4	21.2	19.8	21.4	20.6
E6	14.4	16.5	10.1	14.4	14.4
E7	8.7	10.3	5.1	8.3	8.7
E8	2.3	2.7	1.4	2.1	2.3
E9	0.9	1.0	0.5	0.9	0.9
Unknown	*	*	*	*	*
Total	100.0	100.0	100.0	100.0	100.0

*Less than one tenth of one percent.
Columns may not add to total due to rounding.
Also see Appendix Table B-47 (Active Component by Pay Grade and Race/Ethnicity.)

Table 3.11. FY 2002 Pay Grade of Active Component Enlisted Personnel, by Gender (Percent)			
Pay Grade	Male	Female	Total DoD
E1	5.5	5.4	5.5
E2	7.7	8.3	7.8
E3	18.1	21.8	18.6
E4	20.4	25.0	21.1
E5	20.4	21.5	20.6
E6	15.1	10.4	14.4
E7	9.2	5.6	8.7
E8	2.5	1.4	2.3
E9	1.0	0.5	0.9
Unknown	*	*	*
Total	100.0	100.0	100.0

*Less than one tenth of one percent.
Columns may not add to total due to rounding.
Also see Appendix Table B-46 (Active Component by Pay Grade and Gender).

As shown in Table 3.11, 61 percent of enlisted women are in pay grades E1 to E4, while only 52 percent of enlisted men are in these grades. The primary reason for the difference by gender is lower retention rates among enlisted women.

Chapter 4

ACTIVE COMPONENT OFFICERS

The commissioned officer corps is the senior leadership and management of the Armed Forces. This chapter presents a view of the demographic and social characteristics of the FY 2002 Active Component commissioned officer corps, including separate information regarding newly commissioned officers (i.e., those officers entering the corps for the first time, also known as officer accessions).[1] Also highlighted are longitudinal changes among officers. Figure 4.1 illustrates the trend in Active Component officer strength by Service since 1973. Supporting data are provided in Appendix Table D-25.
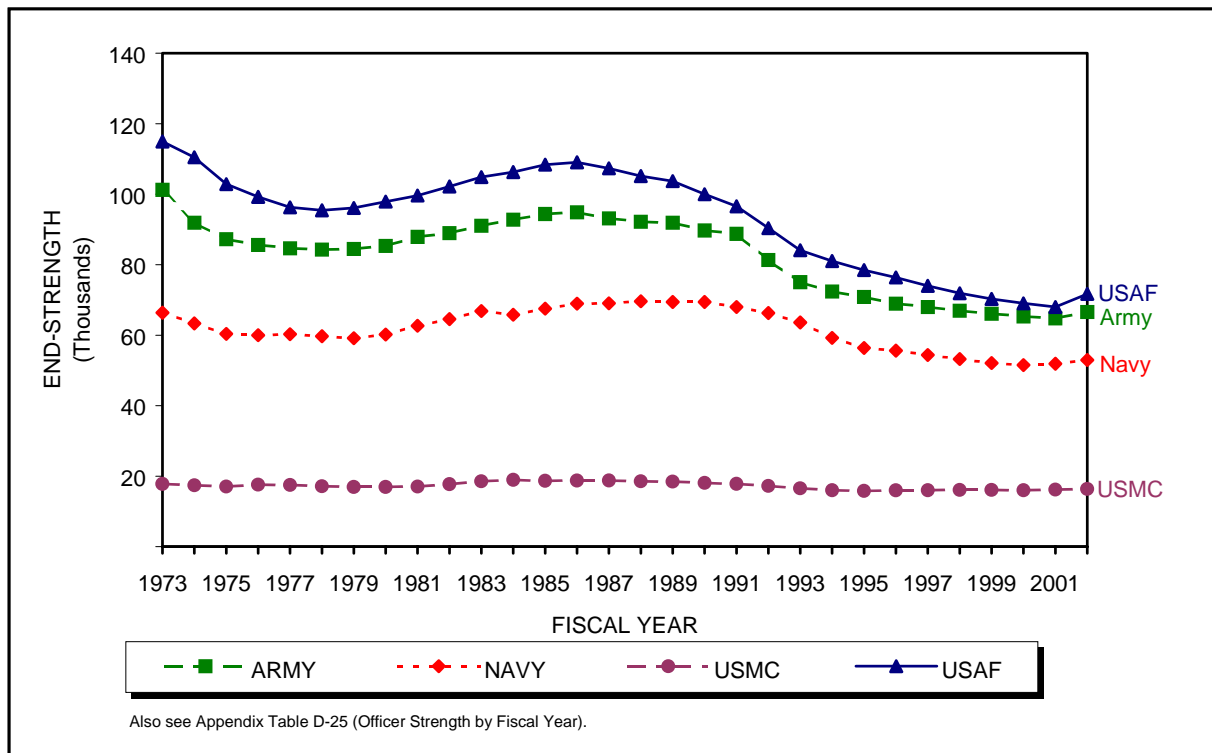
Figure 4.1. Active Component officer end-strength, by Service, FYs 1973–2002.

These data depict two drawdowns and one buildup in the Active Component officer corps. The changes in military strength can be attributed, at least partially, to changes in the world situation. The first decline, in the 1973 to 1979 period, occurred during the demobilization following the end of the Vietnam Conflict. The defense buildup of the 1980s was generated by the escalation of the Cold War, and the second drawdown resulted from the fall of communism and the end of the Cold War. FY 2002 saw a reversal in the trend of a smaller Active Component officer corps, and the first increase in the number of officers since 1986.

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[1] Data are for commissioned officers; warrant officers are excluded. A brief sketch of warrant officers is presented at the end of this chapter.

The overall number of individuals commissioned by the Services increased approximately 22 percent in FY 2002, with 21,518 newly commissioned officers. (Figure 4.2). This level represents the highest number of accessions since FY 1989.
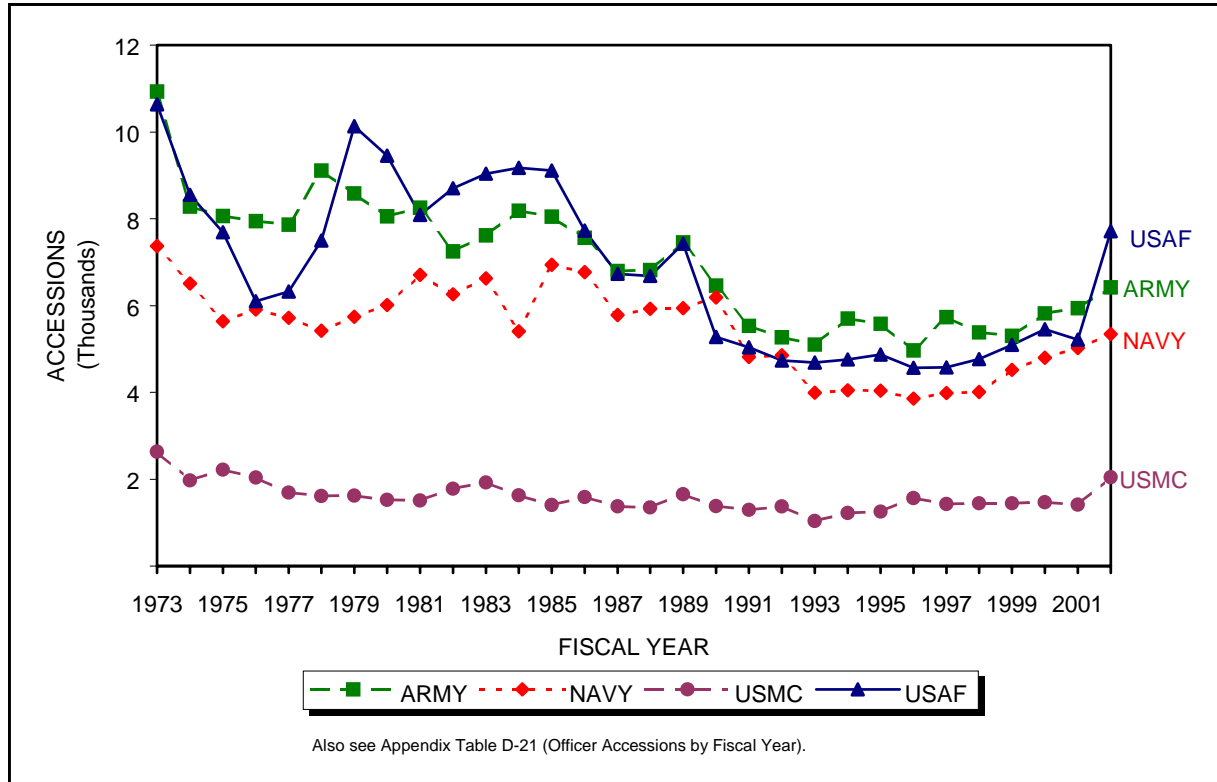
Figure 4.2. Active Component officer accessions, by Service, FYs 1973–2002.

Characteristics of Active Component Officers

Table 4.1 shows the number and percentage of FY 2002 Active Component officer accessions and officers by Service. In total personnel, the Army is the largest Service, but the Air Force has the highest commissioned officer content. The Air Force had 71,687 active duty officers in contrast to the Army's 66,583. This variation in force structure reflects differences in mission requirements (e.g., number of pilots) of the two Services.

The Air Force also had the highest number of Active Component officer accessions in FY 2002. This is the first time since 1986 that the Air Forced exceeded the Army in this regard.

Table 4.1. FY 2002 Active Component Officer Accessions and Officer Corps (Number and Percent)[1]				
	Active Component Officer Accessions		Active Component Officer Corps	
Service	Number	Percent	Number	Percent
Army	6,423	29.8	66,583	32.1
Navy	5,340	24.8	52,961	25.5
Marine Corps	2,042	9.5	16,402	7.9
Air Force	7,713	35.8	71,687	34.5
Total	21,518	100.0	207,633	100.0
Columns may not add to total due to rounding. [1] Number of active component officer corps (end-strength) reflects commissioned officers only (it excludes warrant officers). Also see Tables D-21 (Officer Accessions by Fiscal Year) and D-25 (Officer Strength).				

Pay Grade. The commissioned officer corps is divided into 10 pay grades (O-1 through O-10). Officers in pay grades O-1 through O-3 are considered company grade officers. In the Army, Marine Corps, and Air Force, these pay grades correspond to the ranks of second lieutenant (O-1), first lieutenant (O-2), and captain (O-3), and in the Navy, ensign, lieutenant junior grade, and lieutenant. Officers in the next three pay grades (O-4 through O-6) are considered field grade officers. In the Army, Marine Corps, and Air Force, these pay grades correspond to the ranks of major (O-4), lieutenant colonel (O-5), and colonel (O-6), and in the Navy, lieutenant commander, commander, and captain. The highest four pay grades are reserved for general officers in the Army, Marine Corps, and Air Force, and flag officers in the Navy. The ranks associated with each pay grade are as follows: in the Army, Marine Corps, and Air Force, brigadier general (O-7), major general (O-8), lieutenant general (O-9), and general (O-10); in the Navy, rear admiral-lower half, rear admiral-upper half, vice admiral, and admiral.

As Table 4.2 shows, the force structure of the officer corps is that of a pyramid with the company grade officers making up the broad base (59 percent of officers in FY 2002), followed by field grade officers representing the narrower middle (40 percent of officers in FY 2002), and general/flag officers representing the pinnacle (less than 1 percent of officers in FY 2002). This pay grade distribution is influenced not only by the military's emphasis on youth and fitness, but also by the choices and competition engendered by "up or out" career progression policies.

Source of Commission. The criteria for the selection of potential officers for commissioning include age, U.S. citizenship, physical fitness, moral character, education, and cognitive ability. Given that officers form the military's leadership and professional echelon and that financial investment in officer education programs is high, the selection standards are quite stringent.[2]

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[2]   See Eitelberg, M.J., Laurence, J.H., and Brown, D.C., "Becoming Brass: Issues in the Testing, Recruiting, and Selection of American Military Officers," in B.R. Gifford and L.C. Wing (Eds.), *Test Policy in Defense: Lessons from the Military for Education, Training, and Employment* (Boston: Kluwer Academic Publishers, 1991).

Table 4.2. FY 2002 Active Component Officer Corps, by Rank/Pay Grade and Service (Percent)						
Rank[*]	Pay Grade	Army	Navy	Marine Corps	Air Force	DoD
Second Lieutenant (Ensign)	O-1	12.7	14.5	14.3	14.2	13.8
First Lieutenant (Lieutenant Jr. Grade)	O-2	13.4	13.8	18.7	12.0	13.5
Captain (Lieutenant)	O-3	33.2	31.7	31.1	31.6	32.1
Major (Lieutenant Commander)	O-4	21.5	19.6	20.9	21.8	21.1
Lieutenant Colonel (Commander)	O-5	13.2	13.4	10.8	14.8	13.6
Colonel (Captain)	O-6	5.5	6.6	3.8	5.3	5.6
Brigadier General (Rear Admiral - Lower Half)	O-7	0.2	0.2	0.2	0.2	0.2
Major General (Rear Admiral - Upper Half)	O-8	0.2	0.1	0.2	0.1	0.1
Lieutenant General (Vice Admiral)	O-9	0.1	0.1	0.1	0.1	0.1
General (Admiral)	O-10	**	**	**	**	**
Total		100.0	100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
* Ranks in parenthesis are Navy designations.
** Less than one-tenth of one percent.
Also see Appendix Table B-48 (Pay Grade by Gender and Service).

A 4-year college degree, while not a universal prerequisite for commissioning, is necessary for continued service in the military. To this end, two of the primary commissioning programs, the Service academies and the Reserve Officers Training Corps (ROTC), are administered in conjunction with an individual's academic preparation. The United States Military Academy (USMA), the United States Naval Academy (USNA), and the United States Air Force Academy (USAFA) each offer room, board, medical and dental care, salary, and tuition throughout a 4-year undergraduate program of instruction leading to a baccalaureate degree.[3] Located at numerous undergraduate colleges and universities throughout the country, ROTC has both scholarship and non-scholarship options.[4]

The two remaining primary commissioning programs, Officers Candidate/Training School (OCS/OTS) and Direct Commissioning, are designed almost exclusively for individuals who already possess at least a baccalaureate degree. OCS/OTS exists as a rather quick

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[3] There is no separate academy for the Marine Corps, but a percentage of each Naval Academy graduating class pledges to become Marine Corps officers.

[4] Non-scholarship ROTC is not without benefits. There is a subsistence allowance upon progress to advanced training.

commissioning source for college graduates who did not receive military training or indoctrination as part of their undergraduate education. This source also provides a means for high-potential enlisted personnel to earn a commission. Direct commissions, with a minimum of military training, are offered to professionals in fields such as law, medicine, and the ministry. Because of their advanced degrees and/or work experience, officers directly appointed are often commissioned at ranks higher than the customary second lieutenant or ensign. There are other specialized commissioning sources that, together with the primary programs, ensure that the Services have access to a number of different pools of personnel with diverse skills.

Table 4.3 highlights the flexibility in officer procurement afforded by the alternative commissioning programs. The largest proportion of FY 2002 officer accessions (33 percent) came through ROTC programs—with a roughly equal split between those receiving scholarships (48 percent) and those who did not (52 percent). Direct appointments and academy graduates accounted for 11 percent and 15 percent of incoming officers, respectively. OCS/OTS produced about 29 percent of FY 2002 Active Component officer accessions.

Table 4.3. FY 2002 Source of Commission of Active Component Officer Accessions and Officer Corps, by Service (Percent)					
Source of Commission	Army	Navy	Marine Corps	Air Force	DoD
ACTIVE COMPONENT OFFICER ACCESSIONS					
Academy	16.9	17.1	9.3	13.7	15.1
ROTC–Scholarship	32.9	16.7	1.9	4.0	15.6
ROTC–No Scholarship	14.2	1.6	0.0	34.6	17.0
OCS/OTS	17.1	25.1	78.2	30.0	29.5
Direct Appointment	4.0	20.6	0.4	13.4	11.2
Other *	14.8	18.3	10.0	4.3	11.5
Unknown	0.1	0.5	0.2	**	0.2
Total	100.0	100.0	100.0	100.0	100.0
ACTIVE COMPONENT OFFICER CORPS					
Academy	16.3	19.2	12.3	19.0	17.7
ROTC–Scholarship	36.3	18.2	13.8	19.8	24.2
ROTC–No Scholarship	21.0	2.2	0.0	22.3	15.0
OCS/OTS	10.3	22.2	65.1	21.3	21.4
Direct Appointment	8.2	21.0	1.3	16.8	13.9
Other *	7.9	17.3	7.6	0.9	7.8
Unknown	0.1	0.0	0.0	0.0	**
Total	100.0	100.00	100.00	100.00	100.00
Columns may not add to total due to rounding. * Includes officers trained in one Service and accessed into another (primarily Marine Corps). ** Less than one-tenth of one percent. Also see Appendix Tables B-40 (Active Component Officer Accessions by Source of Commission, Service, and Gender) and B-41 (Active Component Officer Corps by Source of Commission, Service, and Gender).					

The Services differ in their reliance on the various commissioning sources. For example, 78 percent of the Marine Corps' newly commissioned officers came through OCS-type pipelines, while comparable figures for the other Services were between 17 and 30 percent. Fewer than one percent of Marine Corps officer accessions were recipients of direct commissions compared

to 21 percent in the Navy. In fact, the Marine Corps does not have a Service academy or ROTC program. Midshipmen at the Naval Academy and in the Navy's ROTC program can opt to enter the Marine Corps upon program completion. The Marine Corps relies on the Navy for officers in medical and dental specialties and chaplains, thereby lowering its need for direct commissioning. The Service differences are probably influenced by retention rates, budget considerations, and historical fluctuations in officer recruiting needs.

Age. As shown in Table 4.4, officers, on average, tend to be older than enlisted personnel. Upon commissioning in FY 2002, the average officer was nearly 28 years old in contrast to 20 years old for the average enlisted accession. The mean age of all active officers was 34 years, while that of enlisted members was 27 years. The mean age of officer accessions varies by source of commission. In FY 2002, the average age of newly commissioned officers ranged from less than 24 years for Service academy graduates to nearly 32 years for officers accessed through direct appointment.[5]

Table 4.4. FY 2002 Mean Age of Active Component Officer Accessions and Officer Corps in Comparison to Enlisted Personnel		
	Officers	Enlisted
Active Component Accessions	27.7	20.1
Active Component Force	34.3	27.0
Also see Appendix Table B-31 (Age by Service).		

Figures 4.3 and 4.4 (together with Appendix Table B-31) highlight the military's emphasis on youth. The importance of youth is particularly salient in the Marine Corps, in which approximately 14 percent of newly commissioned officers were 31 or older. In contrast, the proportion of officer accessions in this age range was 24 percent in the Army, 28 percent in the Navy, and 29 percent in the Air Force. The rigorous physical demands and rapid deployment of Marines, and this Service's absence of officers in medical and ministry fields, no doubt are related to the relative youth of Marine Corps officers.

Figure 4.5 shows that FY 2002 broke the recent trend of increasing average age and time in service for the officer corps. The average officer age remained nearly constant at somewhat over 34 years in FY 2002, as did the average time in service at slightly less than 11 years. The trends in age and tenure of the officer corps reflect the transition from a period of drawdown to a period of stability in the size of the force.

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[5]   Data from Defense Manpower Data Center.
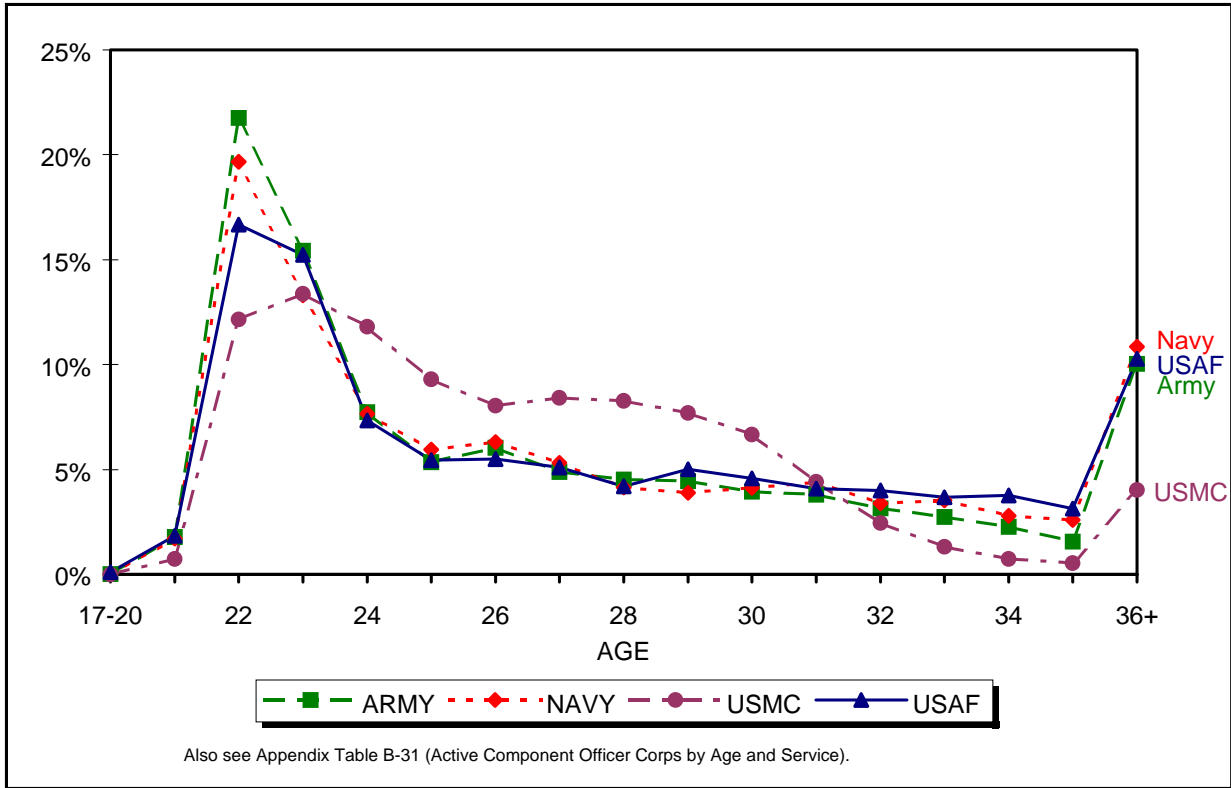
Figure 4.3. Age of FY 2002 Active Component officer accessions, by Service.
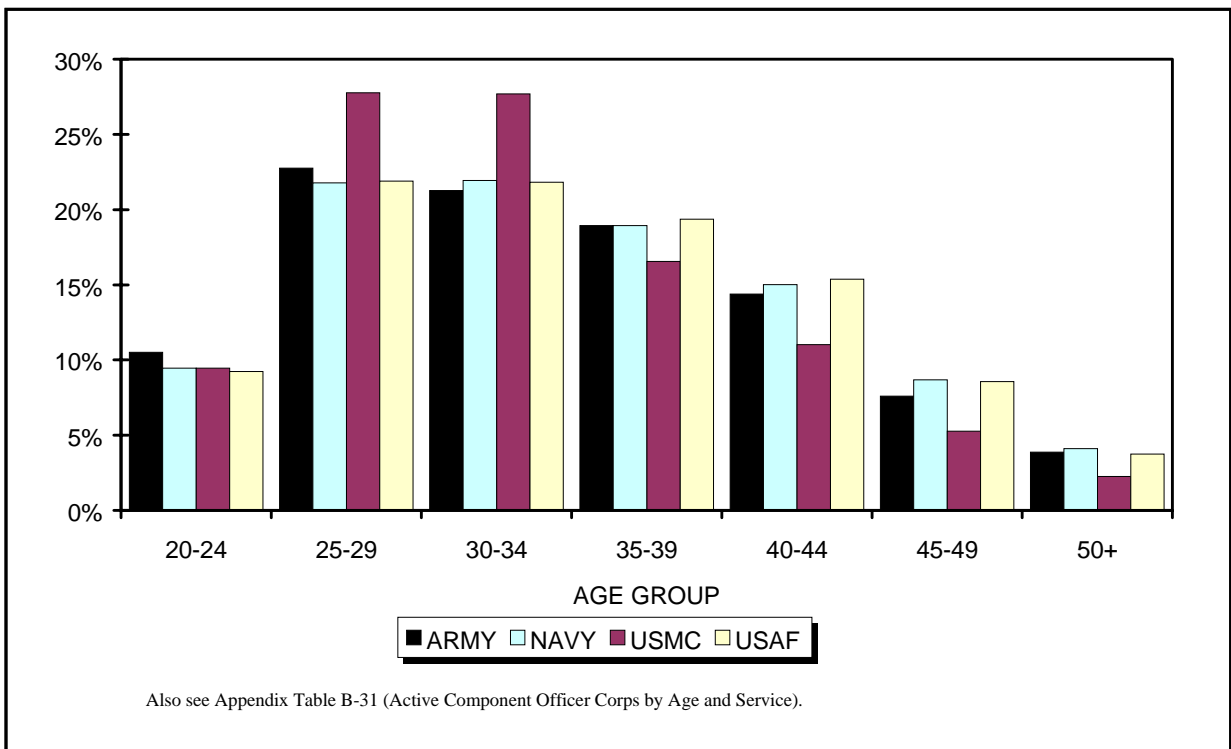
Figure 4.4. Age of FY 2002 Active Component officer corps, by Service.

Also see Appendix Table D-26 (Age and Months in Service by Fiscal Year).
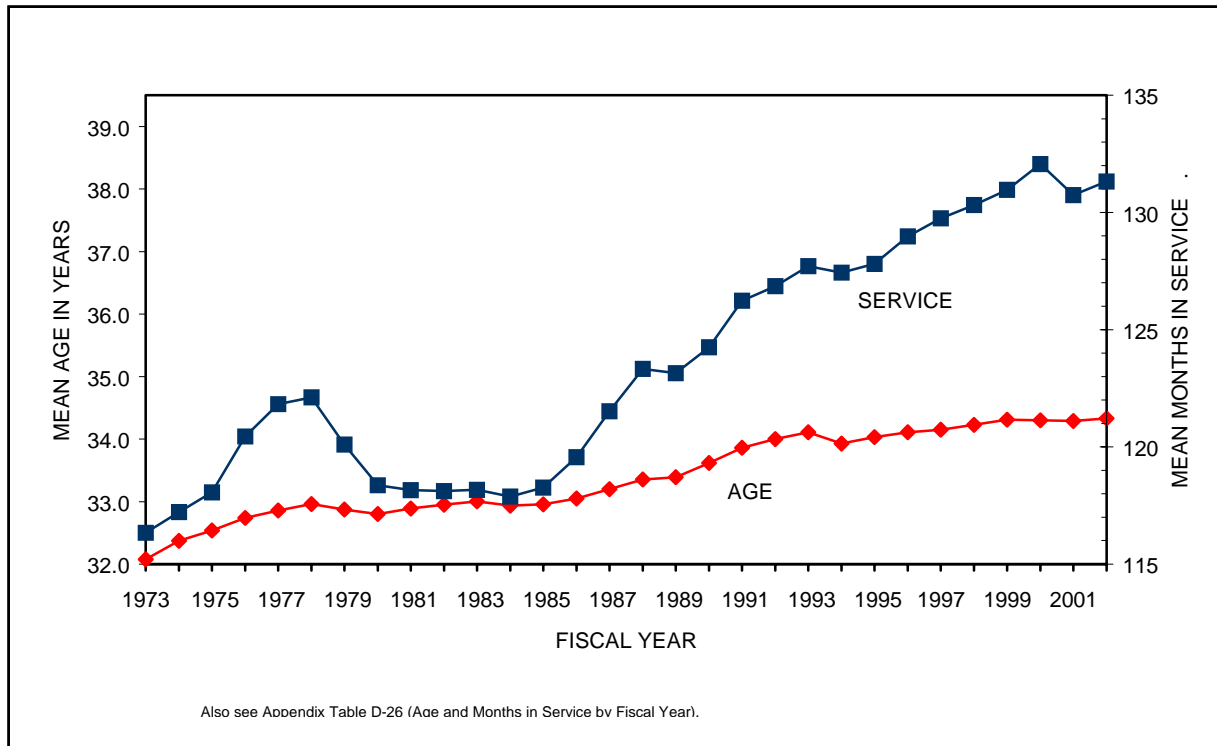
Figure 4.5. Active Component officers' mean years of age and months of service, FYs 1973–2002.

Race/Ethnicity. The percentages of minorities among newly commissioned officers and the Active Component officer corps are shown in Table 4.5. In FY 2002, 21 percent of entering officers were minorities—Blacks, Hispanics, and "Others" (e.g., Native Americans, Asians, and Pacific Islanders)—and over 17 percent of all commissioned officers on active duty were members of minority groups. The Air Force had the smallest proportion of minority officer accessions at 17 percent, and the Army had the largest at nearly 28 percent. The most populous minority group, Blacks, represented approximately 9 percent of officer accessions and over 8 percent of all active duty officers.

Over the last few years the focus on minority representation within the officer corps has increased. Concern stems from the appearance of underrepresentation among officers in stark contrast to the trends for the enlisted ranks. A number of factors contribute to the seeming underrepresentation of Blacks and Hispanics (though not "Other" minorities) in the officer corps. For reasons too complicated to dissect within this report, minorities disproportionately suffer from poverty and disorderly learning environments.[6] These risk factors take their toll in the form of lower college enrollment and graduation rates, and, on average, lower achievement than other population groups. Although test score trends have improved for minorities over the past two decades, large average differences compared to Whites remain. For example, the mean verbal SAT scores for college-bound seniors in 2002 were 527 for Whites and 430 for Blacks; mean

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[6]   See Smith, T.M., *The Educational Progress of Black Students* (Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, May 1996).

math scores were 533 for Whites and 427 for Blacks.[7] In light of these and other factors (e.g., fierce labor market competition for college-educated minorities),[8] minority representation among officer accessions appears rather equitable when compared to the 21- to 35-year-old civilian population of college graduates which stands at 7.9 percent Black, 5.8 percent Hispanic, and 10.2 percent "Other." Blacks are slightly overrepresented among officer accessions, while Hispanics and "Other" minorities are slightly underrepresented.

Table 4.5. FY 2002 Active Component Minority Officer Accessions and Officer Corps, by Service (Percent)					
Minority	Army	Navy	Marine Corps	Air Force	DoD
ACTIVE COMPONENT OFFICER ACCESSIONS					
Black	12.8	7.5	6.0	8.0	9.1
Hispanic	6.0	5.9	7.4	3.6	5.2
Other	8.9	6.9	5.4	5.0	6.7
Total Minority Officer Accessions	27.7	20.3	18.8	16.6	21.0
ACTIVE COMPONENT OFFICER CORPS					
Black	12.1	6.9	6.4	6.7	8.5
Hispanic	4.5	4.9	5.5	2.8	4.1
Other	6.3	5.3	3.5	3.7	4.9
Total Minority Officers	22.9	17.1	15.4	13.2	17.5
Columns may not add to total due to rounding. "Other" includes Native Americans, Asians, and Pacific Islanders. Also see Appendix Table B-34 (Race/Ethnicity by Service).					

Academic achievement differences factor into the divergent racial/ethnic distributions across the commissioning sources as shown in Tables 4.6 and 4.7. Across racial/ethnic groups, the highest proportion of officer accessions were commissioned through OCS/OTS, while non-scholarship ROTC programs were the next most used avenue for all but "other" minorities. White officers were more likely to have attended one of the academies, while slightly higher proportions of each minority group took part in an ROTC program through which they received a scholarship. Finally, "other" racial/ethnic officers were the most likely to receive a direct appointment. For the overall Active Component officer corps in FY 2002, Black officers were less likely to have attended a Service academy, but more likely to have graduated from an ROTC program. Among the FY 2002 officer corps, "Other" minorities were more likely than other groups to have entered with a direct appointment or by another commissioning source. Hispanic officers were more likely to have entered the officer corps through OCS/OTS.

[7]   See U.S. Department of Education, *Digest of Education Statistics 2002* (NCES 2003-060) (Washington, DC: National Center for Education Statistics, 2002), Table 133.

[8]   See Eitelberg, M.J., Laurence, J.H., and Brown, D.C., "Becoming Brass: Issues in the Testing, Recruiting, and Selection of American Military Officers," in B.R. Gifford and L.C. Wing (Eds.), *Test Policy in Defense: Lessons from the Military for Education, Training, and Employment* (Boston: Kluwer Academic Publishers, 1991).

Table 4.6 FY 2002 Source of Commission of Active Component Officer Accessions, by Race/Ethnicity and Gender (Percent)						
Source of Commission	White	Black	Hispanic	Other	Male	Female
Academy	16.1	9.2	10.9	13.9	16.1	10.9
ROTC–Scholarship	15.2	16.3	17.2	17.5	14.9	18.6
ROTC–No Scholarship	16.4	21.2	22.8	14.1	16.6	19.0
OCS/OTS	29.7	31.2	32.7	22.5	31.7	20.2
Direct Appointment*	11.4	8.6	7.5	14.7	9.4	18.6
Other**	10.9	13.5	8.7	17.3	11.2	12.7
Unknown	0.2	0.0	0.2	0.1	0.2	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
* Females accessed through direct appointment are primarily health care professionals.
** Includes officers trained in one Service and accessed into another (primarily Marine Corps).
Also see Appendix Tables B-40 (Source of Commission by Service and Gender) and B-42 (Source of Commission by Service and Race/Ethnicity).

Table 4.7. FY 2002 Source of Commission of Active Component Officer Corps, by Race/Ethnicity and Gender (Percent)						
Source of Commission	White	Black	Hispanic	Other	Male	Female
Academy	18.5	10.7	16.4	17.3	18.8	11.5
ROTC–Scholarship	24.4	24.4	21.6	21.7	24.3	23.4
ROTC–No Scholarship	14.1	22.8	18.2	13.5	15.4	13.1
OCS/OTS	21.4	20.8	26.2	18.4	22.6	15.2
Direct Appointment*	13.9	13.0	11.0	17.7	11.1	28.6
Other**	7.6	8.5	6.6	11.4	7.8	8.2
Unknown	***	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
* Females accessed through direct appointment are primarily health care professionals.
** Includes officers trained in one Service and accessed into another (primarily Marine Corps).
*** Less than one-tenth of one percent.
Also see Appendix Tables B-41 (Source of Commission by Service and Gender) and B-43 (Source of Commission by Service and Race/Ethnicity).

The Department of Defense is actively looking into issues affecting minority officer recruitment, performance, promotion, and retention in keeping with its track record of dedication to equal opportunity. The Services have programs designed to increase minority participation in the officer corps. In addition to academy preparatory schools, ROTC programs have a considerable presence at Historically Black Colleges and Universities (HBCUs) and there are Army ROTC units placed at predominantly Hispanic institutions. Furthermore, there are incentive and preparation programs aimed at boosting the presence of minorities within ROTC programs and the officer corps.

Targeted recruiting programs, together with a focus on equal opportunity once commissioning takes place, have contributed to increased representation of minorities (especially Blacks) within the officer corps over the years (see Appendix Tables D-22, D-23, D-27, and D-28). The 9.1 percent of Blacks, for example, among officer accessions in FY 2002 compares favorably with figures from one and two decades ago (1992: 6.8 percent; 1982: 6.2 percent).

Although relatively stable between 2001 and 2002, accession trends have been contributing to greater minority strength levels in the total officer corps. For example, Blacks comprised nearly 6 percent of all active duty officers in FY 1982, just over 7 percent in FY 1992, and over 8 percent by the end of FY 2002. The lagging long-term minority progress seen through the Active Component officer percentages, relative to the near-term success seen among officer accessions, is mirrored in the pay grade distribution differences by minority status as shown in Table 4.8.

Table 4.8. FY 2002 Pay Grade[1] of Active Component Officers, by Service and Race/Ethnicity (Percent)					
Race/Ethnicity and Pay Grade	Army	Navy	Marine Corps	Air Force	DoD
O-1 through O-3					
White	74.4	79.6	81.9	85.3	80.0
Black	12.5	8.0	7.1	7.3	9.1
Hispanic	5.4	6.0	6.8	3.1	4.9
Other	7.7	6.4	4.2	4.4	6.0
Total	100.0	100.0	1000.0	100.0	100.0
O-4 through O-6					
White	80.8	87.8	89.4	88.9	86.1
Black	11.6	5.3	5.2	5.9	7.5
Hispanic	3.3	3.3	3.2	2.4	3.0
Other	4.3	3.6	2.3	2.8	3.5
Total	100.0	100.0	100.0	100.0	100.0
O-7 through O-10					
White	88.3	95.4	91.4	93.4	91.9
Black	8.1	2.8	7.4	4.7	5.7
Hispanic	2.0	1.4	1.2	1.1	1.5
Other	1.6	0.5	0.0	0.7	0.9
Total	100.0	100.0	100.0	100.0	100.0
Columns may not add to total due to rounding. [1] Excludes those with unknown rank/pay grade. Also see Appendix Table B-49 (Active Component Officer Corps by Pay Grade, Service, and Race/Ethnicity).					

The racial/ethnic makeup of the lower grades (O-1 through O-3) fairly closely mimics that of officer accessions. Minorities comprise 20 percent of company grade officers, compared to 21 percent of officer accessions. However, higher grades are more predominantly occupied by whites. Minorities represent 14 percent of field grade officers and approximately 8 percent of general or flag officers. Some of these differences are undoubtedly a byproduct of the improvements in minority accessions that have occurred in the previous decades. Officers with higher grades were commissioned at a time when minorities comprised a smaller proportion of

the total population and were more underrepresented within officer accessions. However, lower minority representation among higher grades may also indicate that minorities are not promoted at the same rate as White officers, or that they tend to separate from service at an earlier date.[9] To the extent that differences between racial and ethnic groups in retention and promotion rates exist, they should be addressed by career management policies. Factors such as increased college graduation rates and targeted recruiting programs have provided minorities with greater access to the officer corps. However, it is also important to monitor progress further along the pipeline.[10]

Gender. As shown in Table 4.9, women constituted about 19 percent of officer accessions and 16 percent of the officer corps in FY 2002. The Air Force holds its place as the most gender-integrated regarding officers, with the Army and the Navy not far behind. Though the levels of women in the officer corps are nowhere near college graduate population proportions, sustained growth has occurred in the representation of women among officers (see Appendix Tables D-24 and D-29 for trends among accessions and the officer corps since FY 1973).

Table 4.9. FY 2002 Active Component Female Officer Accessions and Officer Corps (Percent)					
	Army	Navy	Marine Corps	Air Force	DoD
Active Component Accessions	20.0	18.2	8.2	21.9	19.1
Active Component Officer Corps	16.0	15.3	5.4	17.8	15.6
Also see Appendix Table B-32 (Gender by Service).					

In FY 2002, nearly equal percentages of female officers were commissioned through OCS/OTS (20 Percent), ROTC scholarship programs (19 percent), ROTC non-scholarship programs (19 percent), and direct appointment (19 percent). (See Table 4.6.) Female officer accessions were less likely than males to have attended an academy, but considerable more likely to have received a direct appointment. The majority of directly appointed officers are in the professional groups (i.e., medical, dental, legal, and ministry). Officers from these professional groups are classified as "non-line," are managed separately, and do not assume command responsibilities over "line" officers. Career opportunities tend to be somewhat limited for non-line officers and can result in differences in pay grade distributions. Table 4.10 shows pay grade by gender for each of the Services and for DoD as a whole. While females comprised 18 percent of company grade officers, their representation decreased to 13 percent of field grade officers and 4 percent of general or flag officers.

Commissioning source differences complicate the interpretation of variations in pay grade distributions by gender. For example, direct commissions may provide an early grade boost for women, since advanced degree requirements associated with occupations in the

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9   See Hosek, S.D., Tiemeyer, P., Kilburn, M.R., Strong, D.A., Ducksworth, S., and Ray, R., *Minority and Gender Differences in Officer Career Progression* (Santa Monica, CA: Rand Corporation, 2001).

10   Department of Defense, *Career Progression of Minority and Women Officers* (Washington, DC: Office of the Under Secretary of Defense [Personnel and Readiness], August 1999).

professional echelons are rewarded by DoD with advanced pay grade initially for commissioned officers. Assignment qualifications, interests, and policy also affect pay grade. In the Air Force, for example, status as a pilot usually enhances career prospects. (Assignment data are provided later in this chapter in the discussion of occupation areas.)

Table 4.10. FY 2002 Pay Grade[1] of Active Component Officers, by Service and Gender (Percent)					
Pay Grade	Army	Navy	Marine Corps	Air Force	DoD
O-1 through O-3					
Male	81.9	83.8	93.0	79.1	82.4
Female	18.1	16.2	7.1	20.9	17.6
Total	100.0	100.0	100.0	100.0	100.0
O-4 through O-6					
Male	86.9	86.0	97.5	86.3	87.2
Female	13.1	14.0	2.5	13.8	12.8
Total	100.0	100.0	100.0	100.0	100.0
O-7 through O-10					
Male	96.4	95.4	98.8	95.6	96.1
Female	3.6	4.7	1.2	4.4	3.9
Total	100.0	100.0	100.0	100.0	100.0
Columns may not add to total due to rounding. [1] Excludes those with unknown rank/pay grade. Also see Appendix Table B-48 (Pay Grade by Gender and Service).					

Marital Status. As indicated in Table 4.11, officers were more likely to be married than the enlisted personnel they lead. It is interesting to note that for officers as well as enlisted personnel, women on active duty were less likely than men to be married. In fact, while nearly three-quarters of male officers were married, only 51 percent of women officers had a spouse. Furthermore, whereas male officers were approximately as likely as their civilian counterparts (college graduates in the workforce 21 to 49 years of age) to be married, female officers were substantially less likely to be married. This suggests that women in the officer corps are more divergent from their civilian peers regarding family patterns.

Though female officers are less likely to be married than male officers, among those who are married women are considerably more likely to be a partner in a dual-military marriage. As can be seen from Table 4.12, married female officers are nearly 7.5 times more likely than married male officers to have a spouse in uniform. This trend is more than a curiosity, as dual-service marriages pose unique challenges to assignment and deployment, in addition to affecting Servicemembers' satisfaction with military life.

Table 4.11. FY 2002 Married Active Component Officer Corps and Enlisted Personnel, by Gender (Percent)		
Gender	Officers	Enlisted
Males	71.1	49.7
Females	50.9	41.5
Total	68.0	48.5
Also see Appendix Table B-33 (Marital Status by Service).		

Table 4.12. FY 2002 Active Component Officers Who Were Married, and in Dual-Service Marriages, by Gender and Service (Number and Percent)					
		Married		Married Who Were In Dual-Service Marriages	
Gender	End-Strength	Number	Percent	Number*	Percent
ARMY					
Male	55,914	40,601	72.6	2,490	6.1
Female	10,669	5,593	52.4	2,549	45.6
Total	66,583	46,194	69.4	5,039	10.9
NAVY					
Male	44,864	29,300	65.3	695	2.4
Female	8,097	3,577	44.2	827	23.1
Total	52,961	32,877	62.1	1,521	4.6
MARINE CORPS					
Male	15,515	10,848	69.9	401	3.7
Female	887	363	40.9	247	68.0
Total	16,402	11,211	68.3	648	5.8
AIR FORCE					
Male	58,901	43,817	74.4	2,830	6.5
Female	12,786	6,992	54.7	2,839	40.6
Total	71,687	50,809	70.9	5,669	11.2
DoD					
Male	175,194	124,566	71.1	6,415	5.1
Female	32,439	16,525	50.9	6,462	39.1
Total	207,633	141,091	68.0	12,877	9.1
* There are some differences between the number of males and females reporting dual-service marriages.					

Education. There are few exceptions to the Service requirements that commissioned officers have at least a 4-year college degree, so the education levels of FY 2002 Active

Component officer accessions come as no surprise. Table 4.13 clearly shows the officer corps' reliance on the college-educated. Approximately 13 percent of officers commissioned in FY 2002 did not have at least a bachelor's degree; most likely these officers were former enlisted personnel. A notable percentage of newly commissioned officers (16 percent) held advanced degrees—mostly lawyers, chaplains, and health care professionals.

Table 4.13. FY 2002 Educational Attainment of Active Component Officer Accessions and Officer Corps, by Service (Percent)					
Educational Attainment	Army	Navy*	Marine Corps	Air Force	DoD
ACTIVE COMPONENT OFFICER ACCESSIONS					
Less than College Graduate	6.1	19.3	0.2	21.9	13.3
College Graduate (B.A., B.S., etc.)	78.9	60.4	95.2	58.1	70.2
Advanced Degree (M.A., Ph.D., etc.)	15.0	20.3	4.6	20.0	16.5
Total	100.0	100.0	100.0	100.0	100.0
ACTIVE COMPONENT OFFICER CORPS					
Less than College Graduate	1.7	11.2	3.5	3.3	4.6
College Graduate (B.A., B.S., etc.)	58.9	68.1	78.3	43.2	57.0
Advanced Degree (M.A., Ph.D., etc.)	39.4	20.7	18.2	53.5	38.4
Total	100.0	100.0	100.0	100.0	100.0
Columns may not add to total due to rounding. Percentages do not include "Unknown" data. Also see Appendix Table B-35 (Education by Service).					

Not only are college graduates amply represented among newly commissioned officers, but the education levels in the officer corps indicate that the Services promote continuing education. Significant proportions of officers attained advanced degrees while serving. The Air Force had the greatest proportion (53 percent) of officers with advanced degrees, and was the only Service with a greater proportion of officers with advanced degrees than bachelor's degrees. The Marine Corps had fewer officers with advanced degrees than the other Services. A contributing factor may be that the Navy provides the Marine Corps with health professionals, chaplains, or other such direct appointees, who typically have advanced degrees.

Representation Within Occupations. Tables 4.14 and 4.15 present the distribution of officers across occupational areas by gender and race/ethnic group, respectively. More than one-third of officers were working in jobs classified as part of tactical operation. Together, the second, third, and fourth most populous occupations—health care, engineering and maintenance, and supply—slightly exceeded the manning levels of tactical operations. Appendix Table B-37 provides FY 2002 occupational area data by Service, including personnel classified as non-occupational.

Women and occupational assignments. Table 4.14 shows significant assignment differences between male and female officers. Despite expanding numbers of and roles for women, it takes time to bring women into new positions and career fields. Significantly greater percentages of men than women were in tactical operations (41 and 10 percent, respectively), whereas greater percentages of women than men were in "traditional" female occupations of

administration (11 and 5 percent, respectively) and health care (39 and 14 percent, respectively). Appendix Table B-38 shows the assignment patterns by Service and gender.

Table 4.14. FY 2002 Occupational Areas of Active Component Officer Corps, by Gender (Percent)			
Occupational Area	Males	Females	Total
General Officers and Executives	0.5	0.1	0.4
Tactical Operations	40.6	10.0	35.8
Intelligence	5.0	5.9	5.1
Engineering and Maintenance	12.1	10.8	11.9
Scientists and Professionals	5.6	5.1	5.5
Health Care	13.6	39.5	17.7
Administration	5.2	10.8	6.1
Supply, Procurement, and Allied Occupations	8.8	10.6	9.1
Non-Occupational*	8.6	7.3	8.4
Total	100.0	100.0	100.0

Columns may not add to total due to rounding.
Calculations do not include 7 male Army, 562 male and 18 female Marine Corps, and 390 male and 23 female Air Force O-6 officers classified as general officers by the Services.
 * Non-occupational includes patients, students, those with unassigned duties, and unknowns.
 Also see Appendix Table B-38 (Occupational Area by Service and Gender).

Minorities and occupational assignments. The percentage of each racial/ethnic category by officer occupational areas is shown in Table 4.15. In FY 2002, racial and ethnic groups of officers generally had similar patterns of representation across occupational areas, although there are several specific differences in the patterns. Fewer Blacks and "Others" were assigned to tactical operations than were Whites and Hispanics. Similarly a greater percentage of officers in the "Other" racial category was in health care positions. Proportionately more Blacks than other racial/ethnic groups were in the engineering and maintenance, administration, and supply occupations. The Services strive to achieve racial/ethnic balance during the assignment process. Such a focus is important because occupational assignment is related to promotion opportunities and success as an officer.

Regardless of race/ethnicity, the largest percentage of officers worked in tactical operations; the lowest percentages worked in intelligence and scientific/professional occupations. Appendix Table B-39 provides data on occupational areas by Service and race/ethnicity.

Table 4.15. FY 2002 Occupational Areas of Active Component Officer Corps, by Race/Ethnicity (Percent)				
Occupational Area	White	Black	Hispanic	Other
General Officers and Executives	0.5	0.3	0.1	0.1
Tactical Operations	37.6	23.3	34.3	27.5
Intelligence	5.1	4.7	5.7	4.7
Engineering and Maintenance	11.5	15.6	12.0	12.2
Scientists and Professionals	5.7	4.5	4.7	5.0
Health Care	17.2	18.3	14.6	26.9
Administration	5.6	11.1	7.0	5.8
Supply, Procurement, and Allied Occupations	8.3	16.1	11.1	8.7
Non-Occupational*	8.5	6.1	10.6	9.2
Total	100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
Calculations do not include 5 White and 2 Black Army; 527 White, 30 Black, 17 Hispanic, and 6 "Other" Marine Corps; and 376 White, 25 Black, 5 Hispanic, and 7 "Other" Air Force O-6 officers classified as general officers by the Services.
* Non-occupational includes patients, students, those with unassigned duties, and unknowns.
Also see Appendix Table B-39 (Occupational Area by Service and Race/Ethnicity).

Warrant Officers [11]

Warrant officers comprise a relatively small but vital group of technicians and specialists who serve in the Army, Navy, and Marine Corps. These Servicemembers ordinarily do not assume typical officer command responsibilities, and their careers emphasize depth rather than breadth of experience, in contrast to commissioned officers.[12, 13] The status and duties of these experts, trainers, and specialty managers have grown and otherwise changed since their grades were established around 1920. Today, they can be found advancing within military careers such as aviation, physicians' assistant, nuclear weapons, and administration.

Although some warrant officers may enter directly from civilian life (e.g., helicopter pilots), most previously were in the upper enlisted ranks. In FY 2002, 2,049 warrant officer accessions were added to the force and the overall total force of warrant officers on active duty

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[11]   For more detailed information on warrant officers, see Department of Defense, *DoD Report on the "Warrant Officer Management Act" (WOMA)* (Washington, DC: Author, 1989).

[12]   Upper-level warrant officers, however, frequently function in foreman-type roles within their system specialties.

[13]   The Air Force discontinued its warrant officer program in 1959 and increased promotion opportunities for senior enlisted personnel.

stood at 15,486. Table 4.16 presents gender and race/ethnicity statistics on FY 2002 warrant officers. They are overwhelmingly male (93 percent) but have greater minority representation than commissioned officers. Blacks, in particular, are more highly represented among warrant officers, accounting for 17 percent of active duty warrant officers (in contrast to 8 percent of commissioned officers). Appendix Tables B-44 and B-45 provide a glimpse of warrant officer accessions and the corps of warrant officers on active duty by gender and race/ethnicity.

Table 4.16. FY 2002 Active Component Warrant Officer Accessions and Officer Corps, by Race/Ethnicity, Gender, and Service* (Percent)				
Race/Ethnicity and Gender	Army	Navy	Marine Corps	DoD
ACTIVE COMPONENT WARRANT OFFICER ACCESSIONS				
White	72.9	73.1	75.0	73.5
Black	15.8	20.6	14.2	16.1
Hispanic	5.0	1.0	8.0	5.1
Other	6.3	5.3	2.8	5.3
Male	92.9	93.7	94.6	93.4
Female	7.1	6.3	5.4	6.6
Total	100.0	100.0	100.0	100.0
ACTIVE COMPONENT WARRANT OFFICER CORPS				
White	73.1	75.5	74.3	73.5
Black	16.4	18.6	16.1	16.7
Hispanic	5.3	1.6	7.1	5.1
Other	5.2	4.4	2.5	4.8
Male	93.0	95.0	94.2	93.4
Female	7.0	5.0	5.8	6.6
Total	100.0	100.0	100.0	100.0
Columns may not add to total due to rounding. * The Air Force does not have warrant officers. Also see Appendix Tables B-44 (Warrant Officer Accessions and Officers by Gender) and B-45 (Warrant Officer Accessions and Officers by Race/Ethnicity).				

Chapter 5

SELECTED RESERVE ENLISTED ACCESSIONS
AND ENLISTED FORCE

The Ready Reserve, with an FY 2002 strength of more than 1.2 million, is the major source of manpower augmentation for the Active force. As illustrated in Figure 5.1, the two principal elements of the Ready Reserve are the Selected Reserve and the Individual Ready Reserve. Reserve Component data in this report include only the Selected Reserve.

Ready Reserve 1,186,388		
Selected Reserve 874,326[1]		Individual Ready Reserve/Inactive National Guard 312,062
Units and Full-Time Support 854,454[2]	Individual Mobilization Augmentees 19,872	

[1] Components within the Selected Reserve include the Army National Guard (ARNG), Army Reserve (USAR), Naval Reserve (USNR), Air National Guard (ANG), Air Force Reserve (USAFR), and Marine Corps Reserve (USMCR). Coast Guard Reserve is excluded.

[2] Units include Selected Reserve members in the training pipeline. The Full-Time Support Force (FTS) is primarily a unit support force, the majority of which mobilizes with their units. The number of reservists in Units is 788,070 the number in FTS is 66,384 (Active Guard and Reserve).

Source: *Department of Defense, Official Guard and Reserve Manpower Strengths and Statistics: FY 2002 Summary* (RCS: DD-RA[M]1147/1148)(Washington, DC: Office of the Assistant Secretary of Defense [Reserve Affairs], 2002), Report A0, p. 1.005.

Figure 5.1. FY 2002 composition of the Selected Reserve within the Ready Reserve.

Of the 874,326 Selected Reserve members, 744,194 are enlisted, 119,395 are officers and the remaining 10,737 are Warrant Officers. The Selected Reserve includes three types of personnel: (1) those trained in units (including full-time support personnel) who are organized, equipped, and trained to perform wartime missions; (2) trained individuals (Individual Mobilization Augmentees [IMAs]) who provide wartime augmentation on or shortly after mobilization; and (3) those in the training pipeline.[1] Reservists and Guardsmen in the training pipeline may not deploy. Selected Reservists assigned to units and some IMAs train throughout the year. Selected Reserve units may be either operational or augmentation units. Operational units train and deploy as units; augmentation units train as units in peacetime, but are absorbed into Active Component units upon mobilization.

The Selected Reserve Recruiting Process

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[1] *Department of Defense, Official Guard and Reserve Manpower Strengths and Statistics: FY 2002 Summary* (RCS: DD-RA[M]1147/1148)(Washington, DC: Office of the Assistant Secretary of Defense [Reserve Affairs], 2002), Report A0, p. 1.005.

The recruiting process is similar for the Reserve and Active Components.[2] With the exception of a number of Air National Guard (ANG) units, Reserve recruiters process their non-prior service (NPS) applicants through Military Entrance Processing Stations (MEPSs), following procedures almost identical to the Active Components.

Recruiters describe the demands and opportunities of military service, and evaluate prospective recruits to determine eligibility for enlistment. The prospect is asked about his or her age, education, involvement with the law, use of drugs, and physical and medical factors that could preclude enlistment. The prospect may take an enlistment screening test. Non-prior service prospects take the ASVAB at either a local test site or at a MEPS. If an NPS applicant achieves qualifying ASVAB scores and wishes to continue the application process, he or she is scheduled for a physical examination and background review at a MEPS. If the applicant's education, ASVAB scores, physical fitness, and moral character qualify for enlistment, he or she meets with a Service classification counselor at a MEPS (or in some instances at a National Guard unit) to discuss options for enlistment.

Up to this point, the applicant has made no commitment. The counselor has the record of the applicant's qualifications and computerized information on available training/skill openings, schedules, and enlistment incentives. They discuss the applicant's interests. The counselor may offer bonuses to encourage the applicant to choose hard-to-fill occupational specialties. The applicant, however, is free to accept or reject the offer. Many applicants do not decide immediately, but take time to discuss options with family and friends. When the applicant accepts the offer, he or she signs an enlistment contract and is sworn into a Reserve Component.

One of the most critical factors in achieving Reserve readiness is the ability to meet Selected Reserve manpower requirements—in numbers, skills, and quality. More than half (53 percent in FY 2002) of Selected Reserve accessions have prior service experience, primarily from active duty. However, a sizable proportion of new recruits enter the National Guard or Reserve without previous military affiliation. Recruiting must target both populations. Success in meeting recruiting and retention goals varies significantly from unit to unit. First, there are substantial differences in unit size; larger units require greater effort. Second, National Guard and Reserve units differ significantly in skills required. Third, National Guard and Reserve units exist in thousands of localities, and each locality presents a unique set of labor market characteristics. The size of the community, distinct demographic and socioeconomic profiles, the mix of skills in the local civilian labor force and among recent veterans, local civilian wage levels and hours worked, frequency and duration of employment, employer attitudes regarding National Guard or Reserve duty, attitudes toward the military, effect of recent mobilizations on enlistment, and other secondary job opportunities create recruiting and retention challenges for Selected Reserve units.

The occupational distribution among the Active and Reserve Components varies (e.g., 6 percent of active Navy enlistees serve as craftsmen while 15 percent of Naval Reserve [USNR] members serve as craftsmen). Some units have to recruit more NPS individuals to fill unit vacancies. Another factor that can create large differences in manning success across skills is

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[2]   For a description of NPS Selected Reserve recruiting, see Tan, H.W., *Non-prior Service Reserve Enlistments: Supply Estimates and Forecasts* (Santa Monica, CA: RAND Corporation, 1991).

marketability, including civilian skill transferability, quality of training, equipment, and promotion opportunity.

The diversity of mission and force structure among the Reserve Components affects the demographic composition of units. For example, an Army National Guard or Reserve company with a combat mission may need a significantly higher proportion of young NPS accessions. Conversely, combat service support functions may require more experienced personnel and thus have greater proportions of prior service recruiting requirements. The population representation profiles of the Reserve Components are different from the Active Services due to a number of factors, such as the proportional distribution of individuals with particular skills, the location of units, and the proportion of members with prior service experience.

This chapter provides demographic characteristics and the distribution of FY 2002 enlisted accessions and the enlisted force of the Selected Reserve. Characteristics of Selected Reserve NPS accessions are described and, where applicable, are compared to prior service accessions. Characteristics and distribution of Selected Reserve officer accessions and the officer corps are contained in Chapter 6.

Characteristics of Selected Reserve Accessions

FY 2002 Reserve Component recruiting results for NPS and prior service gains and assigned end-strengths are shown in Table 5.1. In FY 2002, the Reserve Components recruited 153,658 enlisted persons compared to the Active Component's 194,400. The Army National Guard (ARNG) has the largest Reserve Component recruiting program, followed by the Army Reserve (USAR). The ARNG recruited 33,214 NPS enlistees, 12,328 more than the USAR. The ARNG also recruited nearly 9,000 more prior service recruits than the USAR.

Selected Reserve recruiting achievements decreased by 2,770 enlisted accessions from FY 2001 to FY 2002 (from 156,428 to 153,658). The ANG, USNR, and USMCR experienced an increase in enlisted accession while all other components experienced a decrease.

Due to differences in mission and force structure, the size of recruit cohorts by component varied greatly. Therefore, comparisons between the Reserve Components percentages must be interpreted with care. The Army Components—the ARNG and USAR— had the largest Selected Reserve recruit cohorts, recruiting 69 percent of total Reserve Component accessions (41 and 28 percent for the ARNG and USAR, respectively) in FY 2002. The Naval Reserve (USNR) and Air Force Reserve (USAFR) had the highest proportion of prior service recruits (74 and 66 percent of their total recruiting efforts, respectively). The Marine Corps Reserve (USMCR) had the lowest proportion of recruits with past military experience (39 percent). Prior service accessions provide the Reserve Components with a more experienced personnel base, contributing to increased readiness to meet future missions.

Table 5.1. FY 2002 Selected Reserve Non-Prior Service (NPS) and Prior Service Enlisted Accessions and End-Strengths					
	Enlisted Accessions				
Components	Non-Prior Service	Prior Service	Total	Prior Service Percent of Components Total	Enlisted End-Strength
Army National Guard	33,214	30,675	63,885	48.0	314,629
Army Reserve	20,886	21,682	42,568	50.9	166,258
Naval Reserve	5,197	14,639	19,836	73.8	69,692
USMC Reserve	5,817	3,787	9,604	39.4	36,144
Air National Guard	5,178	4,979	10,157	49.0	98,141
Air Force Reserve	2,616	4,988	7,604	65.6	59,330
DoD Total	72,908	80,750	153,658	52.6	744,194
Also see Appendix Tables C-1 (NPS Age by Component and Gender), C-9 (Prior Service Age by Component and Gender), and C-15 (Enlisted Member Age by Component and Gender).					

The increase in availability of prior service recruits, a temporary phenomenon due to the larger number of active duty members leaving service during the drawdown, ended in the late 1990s. The result is fewer prior service individuals from which the Reserve Components can recruit. In fact, the more successful the Military Services are in retaining active duty members, the smaller the prior service pool becomes. Thus, the Reserve Components must recruit NPS individuals, in direct competition with the Active Components. The numerical effects of the drawdown, changes in the Reserve mission with increased combat risks due to an increased operating tempo (OpTempo), as well as quality of life and compensation issues have made Reserve recruiting difficult as we enter the 21st century. Potential recruits are likely to find combat risk, family hardships, and financial losses during a mobilization more important in the Reserve participation decision today and in the future.[3]

Age. The largest proportions of FY 2002 NPS Reserve Component accessions were in the 17- to 19-year age group (Table 5.2). The one exception to this trend was the USNR, which had 55 percent falling in the 25- to 34-year age group.

Several factors contribute to age differences within the Reserve Components, including the size of the recruiting mission and the incentives used by recruiters. ARNG and USAR recruiters work extensively with the high school population because of the size of their respective NPS recruiting missions. Although the high school senior market is their primary target, recruiters use the split training option as an important incentive. This option allows high school juniors to enlist and attend basic training after their junior year of high school, and then enter skill training a year later upon graduating from high school. In FY 2002, 24 percent of ARNG NPS recruits were students still enrolled in high school. This is a slight decrease from FY 2001. Fifteen percent of USAR NPS recruits were students still enrolled in high school.

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[3]   Asch, B.J., *Reserve Supply in the Post-Desert Storm Recruiting Environment* (Santa Monica, CA: RAND Corporation, 1993), p. 5.

Age Group	Army National Guard	Army Reserve	Naval Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve	Total DoD	17- to 35-Year-Old Civilians
Table 5.2. FY 2002 Selected Reserve Non-Prior Service Enlisted Accessions, by Age and Component, and Civilian Labor Force 17–35 Years Old (Percent)								
17–19	61.5	66.0	0.6	65.2	53.9	39.8	57.4	16.9
20–24	24.8	24.0	21.9	27.7	30.3	37.5	25.5	26.5
25–29	7.8	6.7	30.4	6.1	9.7	13.3	9.3	24.1
30–34	4.1	3.2	24.9	0.9	5.4	7.8	5.3	27.0
35–39	1.1	0.2	19.4	0.0	0.5	1.2	2.0	5.5
40–44	0.2	0.0	1.6	0.0	0.2	0.2	0.2	
45–49	0.1	0.0	0.8	0.0	*	0.1	0.1	
50+	0.1	0.0	0.4	0.0	0.0	0.0	0.1	
Unknown	0.4	0.0	*	0.1	0.0	0.0	0.2	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
 * Less than one-tenth of one percent.
Also see Appendix Tables C-1 (Age by Component and Gender) and C-2 (Age by Marital Status and Gender).
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, October 2001– September 2002.

Race/Ethnicity. Table 5.3 presents the racial/ethnic makeup of FY 2002 NPS enlisted accessions by Selected Reserve Components. These figures are similar to those seen in FY 2001, however the proportions of white NPS accessions have increased across all components, the highest in the USAFR at just over 5 percent and the lowest in the ANG at just over 1 percent. There has been a corresponding decrease in Black accessions for all components particularly in the USAR and ARNG who had decreases of 6 and 4 percent respectively. The percentages of Hispanic and other race/ethnicities remained about the same at 9 and 6 percent, respectively for FY 2001 and 9 and 5 percent respectively for FY 2002. This trend is not the same for Prior Service accessions where there has been an overall 2 percent increase in Black accessions. This increase is due almost entirely to a 5 percent increase in prior service Black accessions in the ARNG. Prior Service Black accessions remained virtually the same for all other components except the USMCR where it decreased 2 percentage points in FY 2002.

Since the inception of the All Volunteer Force, Blacks have been somewhat overrepresented in the active duty ranks, while Whites and Hispanics have been underrepresented as compared to the nation's youth population as a whole. We would expect this to be reflected in the makeup of the Reserve Forces. Table 5.3, however, demonstrates that in the USMCR and ANG, the proportion of non-prior service Black accessions is lower compared to their representation among the 18- to 24-year-old civilian labor force, the comparable civilian group. In the other components the proportion of non-prior service Black accessions is higher than in the civilian labor force, except for the ARNG where the proportions are the same (14 percent, respectively). Hispanics are underrepresented across the board, with the exception of the USMCR's prior service recruits. In previous years, Whites also have made up a smaller proportion of Reserve accessions than of the comparison group. However, since FY 2000, the proportion of NPS White accessions in the ARNG, USMCR, and ANG was higher than in the

civilian comparison groups. Prior service White accessions in the ARNG, USNR, ANG, and USAFR are also higher than in the civilian comparison group.

Race/ Ethnicity	Army National Guard[1]	Army Reserve	Naval Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve	Total DoD	Civilians*
Table 5.3. FY 2002 Selected Reserve Non-Prior Service and Prior Service Enlisted Accessions, by Race/Ethnicity, and Civilians (Percent)								
NON-PRIOR SERVICE								
White	75.3	61.0	64.8	71.0	78.2	64.7	70.0	65.1
Black	13.6	20.8	17.0	8.7	9.5	21.7	15.5	14.2
Hispanic	7.1	12.7	11.6	13.3	6.1	7.2	9.5	15.6
Other	4.0	5.5	6.6	7.1	6.2	6.4	5.1	5.1
PRIOR SERVICE								
White	70.6	54.4	68.5	63.8	76.7	70.9	65.9	67.3
Black	16.9	27.1	16.8	12.4	11.5	17.3	19.1	12.9
Hispanic	7.2	8.9	8.9	18.1	7.1	6.8	8.4	14.5
Other	5.4	9.7	5.8	5.7	4.7	5.0	6.6	5.3
TOTAL ACCESSIONS								
White	73.0	57.7	67.5	68.1	77.5	68.8	67.8	
Black	15.2	24.0	16.9	10.1	10.5	18.8	17.4	
Hispanic	7.2	10.7	9.6	15.2	6.6	6.9	8.9	
Other	4.7	7.6	6.0	6.5	5.5	5.5	5.9	

Columns may not add to total due to rounding.
* NPS civilian comparison is 18- to 24-year-old civilians; prior service civilian comparison is 20- to 39-year-old civilian labor force.
Also see Appendix Tables C-3 (NPS Race/Ethnicity by Component and Gender) and C-11 (Prior Service Race/Ethnicity by Component and Gender).
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, October 2001 – September 2002.

Across the Reserve Components, among female accessions the proportion of Black women was 24 and 34 percent for NPS and prior service, respectively. Among male recruits, Black men, although more numerous than Black women, accounted for only 13 and 16 percent of NPS and prior service accessions, respectively (see Appendix Tables C-3 and C-11). The USAR had the highest proportion of Black female NPS recruits (30 percent) and Black female prior service recruits (43 percent).

Gender. The proportion of Selected Reserve accessions in FY 2002 who were women was slightly greater (20 percent) than in the Active Components (17 percent). Table 5.4 reflects the gender percentages for NPS and prior service accessions by Component. The USAR and USAFR had the highest proportion of female accessions in the Selected Reserve (26 and 28 percent, respectively), while the USMCR had the lowest (5 percent). With the exception of the USMCR, the proportion of prior service female recruits was lower than NPS female recruits.

Marital Status. Approximately 10 percent of FY 2002 Selected Reserve NPS enlisted accessions were married (Table 5.5). The marriage rates of prior service recruits look markedly different, with 44 percent married. The FY 2002 prior service cohort, predominantly those leaving active duty enlisted service who chose to join the Reserves, were slightly less likely to be married (44 percent) than active duty enlisted members (48 percent). Also, prior service Reserve

recruits were less likely to be married (44 percent) than their civilian counterparts, 20- to 39-year-old civilians in the labor force (49 percent). Among FY 2002 prior service Reserve accessions, a somewhat larger proportion of males were married than females (45 and 38 percent, respectively).

Table 5.4. FY 2002 Selected Reserve Non-Prior Service and Prior Service Accessions, by Gender (Percent)						
	Non-Prior Service		Prior Service		Total	
Components	Males	Females	Males	Females	Males	Females
Army National Guard	79.0	21.0	89.8	10.2	84.2	15.8
Army Reserve	69.5	30.5	77.4	22.6	73.6	26.4
Naval Reserve	71.5	28.5	83.4	16.6	80.3	19.7
USMC Reserve	95.5	4.5	93.9	6.1	94.9	5.1
Air National Guard	75.7	24.3	83.0	17.0	79.3	20.7
Air Force Reserve	64.4	35.6	76.8	23.2	72.5	27.5
DoD Total	76.3	23.7	84.3	15.7	80.5	19.5
Also see Appendix Tables C-1 (NPS Age by Component and Gender) and C-9 (Prior Service Age by Component and Gender).						

Table 5.5. FY 2002 Married Selected Reserve Non-Prior Service and Prior Service Enlisted Accessions and Active Component Non-Prior Service Enlisted Accessions and Enlisted Members, by Gender, and Civilians (Percent)						
Gender	Non-Prior Service Reserve Accessions	Civilians, 17–35 Years Old	Prior Service Reserve Accessions	Civilian Labor Force, 20–39 Years Old	Non-Prior Service Active Component Accessions	Active Component Enlisted Members
Male	10.2	33.4	44.8	49.3	8.6	49.7
Female	10.8	39.7	37.6	48.1	11.5	41.5
Total	10.3	36.6	43.7	48.8	9.1	48.5
Also see Appendix Tables B-2 (NPS Active Component Enlisted Accession by Age, Marital Status and Gender), B-24 (Active Component Enlisted Members by Age, Marital Status, and Gender), C-2 (NPS Age by Marital Status and Gender), and C-10 (Prior Service Age by Marital Status and Gender).						
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, October 2001 – September 2002.						

Education. More Selected Reserve NPS recruits completed high school than was the case for their civilian peers (Table 5.6). Approximately 93 percent of FY 2002 Selected Reserve NPS accessions were in Tiers 1 (high school graduates) and 2 (alternative credentials), compared to 79 percent of 18- to 24-year-old civilians. In the Army Reserve, 98 percent of NPS enlistees were high school diploma graduates. This is an increase of 8 percentage points from FY 2001. Excluding those enlisted under the GED+ program, all FY 2002 USAR recruits were in Tier 1.

College experience refers to individuals who have completed at least one semester in junior college or a 4-year institution. The USNR had, by far, the highest proportion of accessions with college experience (22 percent), in part, due to college credit earned through the Navy's Tech Prep partnerships with selected community colleges. Tech Prep is a federally-

funded educational program providing technical career training and job placement. The Navy has agreements with a number of community colleges that in turn work with feeder high schools. Qualified, interested students sign up while in their junior or senior year of high school. They complete college credit Tech Prep courses during high school. After graduation, they attend two semesters at a local community college while in the Navy's delayed entry program. Following recruit training, the enlistees complete technical training courses provided by the Navy; the community college counts the Navy training toward the requirements for an associates degree.

The percentage of 18- to 24-year-old civilians with college experience is much greater than even the 22 percent in the Naval Reserve, at 47 percent. Since most enlisted occupations are generally comparable to civilian jobs not requiring college education, this should not be surprising.

Table 5.6. FY 2002 Selected Reserve Non-Prior Service Enlisted Accessions, by Education Tier and Component, and Civilians 18–24 Years Old (Percent)								
Education Tier	Army National Guard	Army Reserve	Naval Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve	Total DoD	18- to 24-Year-Old Civilians[2]
Tier 1: Regular High School Graduate or Higher[1]	73.5	97.9	97.2	97.9	96.3	96.9	86.6	79.4
Tier 2: GED, Alternative Credentials	11.6	1.2	0.6	2.1	3.7	3.1	6.2	
Tier 3: No Credentials	14.9	0.9	2.2	*	*	*	7.2	20.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
College Experience (Part of Tier 1)	3.5	4.1	20.0	2.0	3.9	5.8	4.9	46.7
Columns may not add to total due to rounding. *Less than one-tenth of one percent. [1] Tier 1 includes members still in high school. [2] Civilian percentages combine Tiers 1 and 2. Sources: Defense Manpower Data Center and Official Guard and Reserve Manpower Strengths and Statistics, Fiscal Year 2002 Summary. Civilian data from Bureau of Labor Statistics Current Population Survey File, October 2001 – September 2002.								

AFQT. FY 2002 Selected Reserve NPS accessions are compared with civilian youth by AFQT category and Reserve Components in Table 5.7. The percentage of Reservist recruits who scored in AFQT Categories I to IIIA was much higher than for comparable civilians (66 versus 50 percent). Because the data provided by DMDC includes a great deal of unknowns, data for Table 5.7 was provided by OUSD (MPP)/Accession Policy and may differ from appendix tables (see Appendix Table C-5 or C-6). The DOD information for Table 5.7 represents 76 percent of the total number of NPS Selected Reserve Enlisted Accessions.

AFQT Category	Army National Guard	Army Reserve	Naval Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve	Total DoD
Table 5.7. FY 2002 Selected Reserve Non-Prior Service Enlisted Accessions, by AFQT Category and Component (Percent)							
I-IIIA	59	69	69	79	85	73	66
IIIB	38	31	31	21	15	27	32
IV	2	0	0	0	0	0	1
Total	100	100	100	100	100	100	100

Columns may not add to total due to rounding.

Also see Appendix Tables C-5 (AFQT by Component and Gender) and C-6 (AFQT by Component and Race/Ethnicity).

Source: Service data from OUSD(MPP)/Accession Policy have been reviewed and updated by the Services for official submission. Data presented in this table may differ from the data shown in appendix tables provided by DMDC's RCCPDS File.

The 1980 civilian comparison group distribution for the total population (males and females) is 7 percent in Category I, 28 percent in Category II, 15 percent in Category IIIA, 19 percent in Category IIIB, 21 percent in Category IV, and 10 percent in Category V. Civilian data from the *Profile of American Youth* (Washington, DC: Office of the Assistant Secretary of Defense [Manpower, Reserve Affairs, and Logistics], 1982).

Characteristics of the Selected Reserve Enlisted Force

Reserve Component forces perform a variety of important missions in the event of a national emergency and assist the Active Components in meeting their operating requirements. Figure 5.2 shows the Selected Reserve enlisted end-strengths for FYs 1974 to 2002.

Also see Appendix Table D-30 (Reserve Component Enlisted Strength).
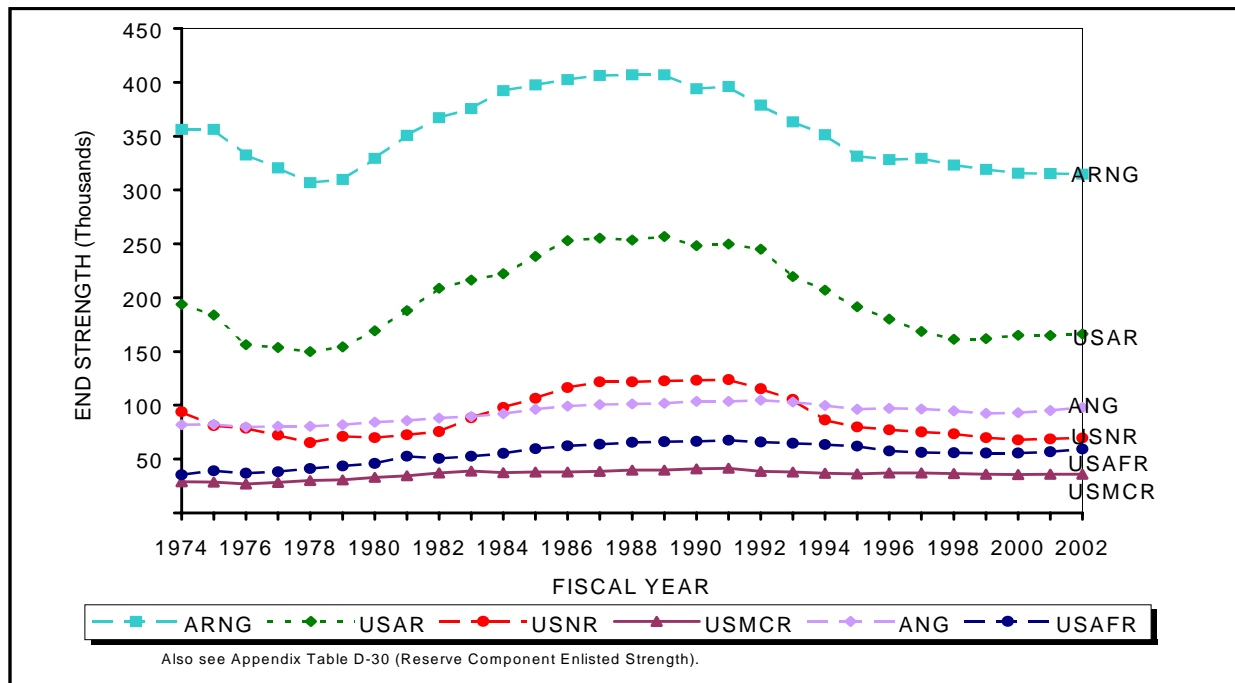
Figure 5.2. Reserve Component enlisted end-strength, FYs 1974–2002.

Age. Substantive differences exist among the Reserve Components in the proportion of enlisted members in various age groups, as shown in Table 5.8. The Air Force Reserve Components (ANG and USAFR) have the "oldest" members with 34 and 39 percent, respectively, of enlisted members 40 years of age or older. These proportions are strikingly

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different from the Active Components and other Reserve Components. For example, only 3 percent of USMCR enlisted members are 40 or older.

Age Group	Army National Guard	Army Reserve	Naval Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve	Total DoD	Civilians
17–19	10.9	12.2	1.0	12.6	4.3	2.2	8.8	4.5
20–24	24.2	24.9	7.8	51.3	14.6	9.7	21.7	10.3
25–29	15.5	15.2	16.8	20.2	13.3	12.6	15.3	10.4
30–34	14.4	13.3	25.0	8.5	15.6	16.3	15.2	11.5
35–39	13.1	13.1	24.8	4.5	18.2	20.4	15.1	12.4
40–44	9.5	10.0	14.2	1.9	14.3	16.9	10.9	13.6
45–49	5.4	5.7	6.3	0.6	8.3	10.0	6.1	12.4
50+	7.0	5.4	4.2	0.4	11.5	11.9	7.1	25.0
Unknown	*	0.1	*	*	0.0	0.0	*	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 5.8. FY 2002 Selected Reserve Enlisted Members, by Age and Component, and Civilian Labor Force Over 16 Years Old (Percent)

Columns may not add to total due to rounding.
* Less than one-tenth of one percent.
Also see Appendix Table C-15 (Age by Component and Gender).
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, September 2002.

Age differences among the Components result from diverse mission requirements and retention. The mission drives the NPS/prior service mix in each of the Reserve Components. For example, the labor-intensive requirements of infantry and other ground combat units usually mandate the need for younger individuals, while equipment-intensive requirements demand more formal training. Normally, longer training periods result in the Services seeking recruits for longer terms of enlistment or maintaining a force with greater experience. Individuals in equipment-intensive or high-technology fields, such as those found more often in the USNR, ANG, and USAFR, usually are more experienced, and therefore older.

Race/Ethnicity. As shown in Table 5.9, the proportion of minority Servicemembers varies by Reserve Component. The proportion of Blacks is higher than in the comparable civilian group (18 and 12 percent, respectively), but lower than in the Active Components (22 percent). The USAR has the largest proportion of Blacks (28 percent), while the ANG has the lowest (9 percent). The USMCR has the greatest proportion of Hispanic members (15 percent) and the greatest proportion of "Other" racial minorities (7 percent). The ANG, USAR and USAFR are close behind with 6 percent each of "Other" racial minorities. All of these percentages are very similar to those of FY 2001.

Table 5.9. FY 2002 Selected Reserve Enlisted Members, by Race/Ethnicity, Gender, and Component, and Civilian Labor Force 18–49 Years Old (Percent)							
Race/ Ethnicity	Army National Guard	Army Reserve	Naval Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve	Total DoD
MALES							
White	73.7	58.7	71.5	67.1	80.0	71.8	70.8
Black	14.5	23.3	14.3	10.9	8.0	16.2	15.4
Hispanic	7.8	11.8	8.9	15.4	5.9	6.5	8.8
Other	4.0	6.2	5.4	6.6	6.0	5.5	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
FEMALES							
White	60.8	42.8	59.3	57.4	71.1	58.6	56.0
Black	27.2	41.0	26.3	18.2	16.0	29.0	30.1
Hispanic	7.2	10.5	8.8	16.5	5.8	6.6	8.8
Other	4.8	5.7	5.4	7.9	7.2	5.8	5.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
TOTAL							
White	72.0	54.8	69.0	66.6	78.4	68.9	68.2
Black	16.1	27.7	16.8	11.3	9.4	19.0	17.9
Hispanic	7.7	11.5	8.8	15.4	5.9	6.5	8.7
Other	4.1	6.1	5.4	6.7	6.2	5.6	5.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

CIVILIAN LABOR FORCE 18–49 YEARS OLD				
White	Black	Hispanic	Other	**Total**
69.8	12.3	12.9	5.1	100.0

Columns may not add to total due to rounding.
Also see Appendix Tables C-17 (Race/Ethnicity by Component and Gender) and C-18 (Ethnicity by Component).
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, September 2002

Substantial gender differences exist in the racial and ethnic composition of Reserve Component members (Appendix Table C-17). While Black males represent 15 percent of the male enlisted Selected Reserve, Black females represent 30 percent of females. Approximately 57 percent of USAR females are minorities: 41 percent Black, 11 percent Hispanic, and nearly 6 percent in the "Other" racial category. Conversely, the ANG has the lowest proportion of minority females (29 percent), comparable to the 18- to 49-year-old civilian labor force (30 percent).

Gender. The proportion of enlisted women is slightly higher in the Selected Reserve than in the Active Components (17 versus 15 percent, respectively) which is unchanged from FY 2001. Table 5.10 illustrates that there are differences in the proportion of women across the different Reserve Components. The component with the highest proportion of women is the USAR (25 percent), while the ARNG has 13 percent and the USMCR, with the lowest proportion, has 5 percent. Differences in gender composition are the result of the types of units in the Components. For example, the ARNG and USMCR have mainly combat units and the USAR has primarily combat support and combat service support units.

Table 5.10. FY 2002 Selected Reserve Enlisted Members, by Gender and Component, and Civilian Labor Force 18–49 Years Old (Percent)								
Gender	Army National Guard	Army Reserve	Naval Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve	Total DoD	18- to 49-Year-Old Civilians
Male	87.3	75.1	79.3	95.3	82.4	78.2	82.9	53.4
Female	12.7	24.9	20.7	4.7	17.6	21.8	17.1	46.6

Also see Appendix Table C-15 (Age by Component and Gender).
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, September 2002.

Marital Status. Just under half of Selected Reserve members are married (Table 5.11). This proportion is lower than for the comparable civilian population (54 percent), but the same as enlisted members in the Active Components (48 percent). The proportion of married female Selected Reserve members (34 percent) is much lower than the proportion of married female civilians (53 percent). This difference is in part explained by the younger age of women enlisted members compared to their civilian counterparts.

Table 5.11. FY 2002 Selected Reserve Enlisted Members who are Married and in Dual-Service Marriages, by Gender, and Civilian Labor Force 18–49 Years Old (Percent)			
Gender	DoD	In Dual-Service Marriages*	18- to 49-Year-Old Civilians
Male	50.4	4.3	55.7
Female	34.2	41.2	52.8
Total	47.6	8.9	54.3

Also see Appendix Table C-16 (Age by Marital Status and Gender).
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, September 2002.
* These percentages reflect the proportion of married Selected Reserve enlisted members who are married to a Servicemember.

Education. As shown in Table 5.12, 98 percent of FY 2002 Selected Reserve enlisted members have a high school diploma or alternative credential (Tiers 1 and 2), compared to 90 percent of the comparably aged civilian labor force. Comparing Table 5.6 (education levels of Selected Reserve accessions) with Table 5.12 suggests that a significant number of enlisted members gain college experience while in the Selected Reserve (6 percent of NPS accessions versus 24 percent of enlisted members).

Representation Within Occupations. The assignment of Reserve Component personnel to occupations is based upon individual qualifications and desires, military requirements, and unit vacancies. The changing missions of the Armed Services, including domestic and international humanitarian efforts, affect personnel assignment. Table 5.13 shows the occupational area distribution of Reserve and Active Components.

Table 5.13 indicates that the occupational distribution among Active and Reserve Components varies. The differences reflect each Reserve Component's unique mission requirements and force structure, which may preclude some direct transfers from active duty to the National Guard and Reserve within the same skill. For example, 26 percent of active Army enlisted members serve in the infantry, but the Army Reserve has only 8 percent in this skill area. On the other hand, only 16 percent of active Army enlistees serve in administration while 25 percent of USAR enlistees serve in administration. Similar occupational differences are

found in each Service component. Some occupational areas may not be able to absorb all transfers, while other areas may have to recruit more NPS individuals to fill unit vacancies or retrain those with prior service. The occupational distribution percentages for FY 2002 are relatively similar to those of FY 2001.

Table 5.12. FY 2002 Selected Reserve Enlisted Members, by Education Levels and Component, and Civilian Labor Force 18–49 Years Old (Percent)								
Education Tier	Army National Guard	Army Reserve	Naval Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve	Total DoD	18- to 49-Year-Old Civilians*
Tier 1: Regular High School Graduate or Higher	87.6	88.6	97.7	97.4	97.8	99.6	91.5	89.5
Tier 2: GED, Alternative Credentials	8.6	10.1	1.1	2.5	2.0	0.3	6.4	
Tier 3: No Credentials	3.8	1.4	1.2	0.1	0.2	0.1	2.1	10.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
College Experience (Part of Tier 1)	9.5	20.5	26.6	7.6	82.7	24.4	24.3	57.2

Columns may not add to total due to rounding.
* Civilian percentages combine Tiers 1 and 2.
Also see Appendix Tables C-19 (Education by Component and Gender) and C-20 (Education by Component and Race/Ethnicity).
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, September 2002.

Table 5.13. Comparison of FY 2002 Reserve and Active Enlisted Occupational Areas (Percent)			
Occupational Code and Area		Reserve	Active
0	Infantry, Gun Crews, and Seamanship Specialists	16.3	16.7
1	Electronic Equipment Repairers	4.5	9.4
2	Communications and Intelligence Specialists	4.8	9.3
3	Medical and Dental Specialists	6.4	6.7
4	Other Allied Specialists	3.0	2.8
5	Functional Support and Administration	18.8	16.0
6	Electrical/Mechanical Equipment Repairers	15.8	20.5
7	Craftsmen	5.9	3.7
8	Service and Supply Handlers	11.3	8.8
9	Non-occupational*	13.3	6.2
Total		100.0	100.0

Columns may not add to total due to rounding.
* Non-occupational includes patients, students, those with unassigned duties, and unknowns.
Also see Appendix Tables B-29 (Active Component Enlisted by Occupational Area, Service, and Gender), B-30 (Active Component Enlisted by Occupational Area, Service, and Race/Ethnicity), C-21 (Reserve Component Enlisted by Occupational Area, Component, and Gender), and C-22 (Reserve Component Enlisted by Occupational Area, Component, and Race/Ethnicity).

Table 5.14. Comparison of FY 2002 Occupational Area Distribution of Enlisted Members, by Active and Reserve Components (Percent)										
Active and Reserve Components	Occupational Area*									
	0	1	2	3	4	5	6	7	8	9
ARMY										
Active Component	25.7	6.5	11.1	7.5	3.4	16.3	14.3	1.9	12.9	0.4
Army National Guard	23.2	3.1	5.2	4.1	2.6	13.9	13.7	4.1	11.8	18.4
Army Reserve	8.1	2.1	3.9	10.3	3.7	24.7	10.8	5.6	17.4	13.5
NAVY										
Active Component	9.4	14.6	9.1	8.2	1.3	10.7	27.7	5.9	5.1	8.1
Naval Reserve	10.9	10.5	6.6	9.4	0.8	21.3	18.8	15.1	5.3	1.1
MARINE CORPS										
Active Component	21.8	6.8	7.2	0.0	2.5	16.4	16.1	2.5	12.9	13.8
USMC Reserve	29.3	3.4	7.8	0.0	1.1	13.2	12.7	3.1	14.5	15.0
AIR FORCE										
Active Component	9.6	9.1	8.1	7.4	3.7	21.1	23.4	4.5	5.0	8.1
Air National Guard	9.2	9.2	3.7	4.6	4.6	21.3	26.5	6.4	6.2	8.4
USAF Reserve	12.8	5.0	3.1	10.7	3.5	25.2	21.9	5.9	5.0	7.0

* Occupational Area Codes: 0=Infantry, 1=Electronics, 2=Communications, 3=Medical, 4=Other Technical, 5=Administration, 6=Electrical, 7=Craftsmen, 8=Supply, 9=Non-occupational.

Minorities and occupational assignments. As shown in Table 5.15, just under two-thirds of all Selected Reserve personnel are in four occupational areas: infantry, administration, electrical/mechanical equipment repair, and service and supply. The largest percentage of Blacks and "Others" are in functional support and administration, while combat and electrical/ mechanical repair occupations are the most prevalent among Whites and combat and functional support occupations are most prevalent among Hispanics.

Table 5.15. FY 2002 Occupational Areas of Selected Reserve Enlisted Personnel within Race/Ethnicity (Percent)		White	Black	Hispanic	Other
Occupational Code and Area					
0	Infantry, Gun Crews, and Seamanship Specialists	17.8	10.8	16.6	15.3
1	Electronic Equipment Repairers	4.9	3.5	3.7	4.7
2	Communications and Intelligence Specialists	5.3	3.1	4.3	4.5
3	Medical and Dental Specialists	5.8	7.9	7.0	7.9
4	Other Allied Specialists	3.1	2.6	2.6	2.6
5	Functional Support and Administration	16.0	28.5	19.9	21.6
6	Electrical/Mechanical Equipment Repairers	17.1	11.7	15.0	14.9
7	Craftsmen	6.4	4.5	5.1	5.4
8	Service and Supply Handlers	10.2	15.1	12.5	9.5
9	Non-occupational*	13.5	12.4	13.3	13.6
Total		100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
* Non-occupational includes patients, students, those with unassigned duties, and unknowns.
Also see Appendix Table C-22 (Occupational Area by Component and Race/Ethnicity).

Women and occupational assignments. The assignment patterns for Selected Reserve enlisted men and women in occupational areas are reflected in Table 5.16. Most Selected Reserve enlisted women are assigned to two occupational areas: functional support (40 percent) and medical (14 percent). Enlisted men are assigned primarily to infantry (19 percent) and electrical/mechanical equipment repair (18 percent).

Table 5.16. FY 2002 Occupational Areas of Selected Reserve Enlisted Personnel, by Gender (Percent)			
	Occupational Code and Area	Male	Female
0	Infantry, Gun Crews, and Seamanship Specialists	19.1	2.5
1	Electronic Equipment Repairers	4.9	2.5
2	Communications and Intelligence Specialists	5.1	3.3
3	Medical and Dental Specialists	4.8	14.0
4	Other Allied Specialists	3.0	2.7
5	Functional Support and Administration	14.5	39.5
6	Electrical/Mechanical Equipment Repairers	17.9	5.8
7	Craftsmen	6.6	2.4
8	Service and Supply Handlers	11.3	11.1
9	Non-occupational*	12.7	16.2
Total		100.0	100.0

Columns may not add to total due to rounding.
* Non-occupational includes patients, students, those with unassigned duties, and unknowns.
Also see Appendix Table C-21 (Occupational Area by Component and Gender).

The April 1993 policy[4] to open more specialties and assignments to women resulted in new opportunities for women in both the Active and Reserve Components. Women are not permitted to serve in direct ground combat roles, but positions on ships and aircraft engaging in combat are now open to women. In FY 2002, 3 percent of women served in infantry, gun crew, and seamanship specialties, as illustrated in Table 5.16, about the same as in FY 2001, but 2 percent less than in FY 2000.

The proportion of Selected Reserve women in non-traditional occupations, such as technical and craftsmen, was relatively low in FY 2002. Women were almost three times as likely than men to serve in the traditional occupational areas of medical and administration. In the future, the proportion of women enlisting in non-traditional positions in the National Guard and Reserves will depend to a considerable extent on the number of Active Component women in non-traditional skills, their willingness to join a Selected Reserve unit upon separating from active duty, and the proportion of technical skill vacancies in Guard and Reserve units. However, with the end of the military drawdown, there are fewer prior service women available to enter the Selected Reserve. Consequently, it is important to continue monitoring occupational trends by gender in both the Active and Reserve Components.

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[4] Memorandum from Les Aspin, Secretary of Defense, Subject: Policy on the Assignment of Women in the Armed Forces, April 28, 1993.

Chapter 6

SELECTED RESERVE OFFICER ACCESSIONS
AND OFFICER CORPS

This chapter describes demographic characteristics of Selected Reserve officer accessions and commissioned officers in FY 2002.[1] The total officer accessions for Reserves increased in FY 2002 (from 14,653 in FY 2001 to 15,463 in FY 2002). The size of the officer corps remained about the same with a slight decrease from 119,803 in FY 2001, to 119, 395 in FY 2002. Figure 6.1 shows officer corps end-strengths for the Reserve Components for FYs 1974 to 2002.

Also see Appendix Table D-31 (Officer Strength by Fiscal Year).
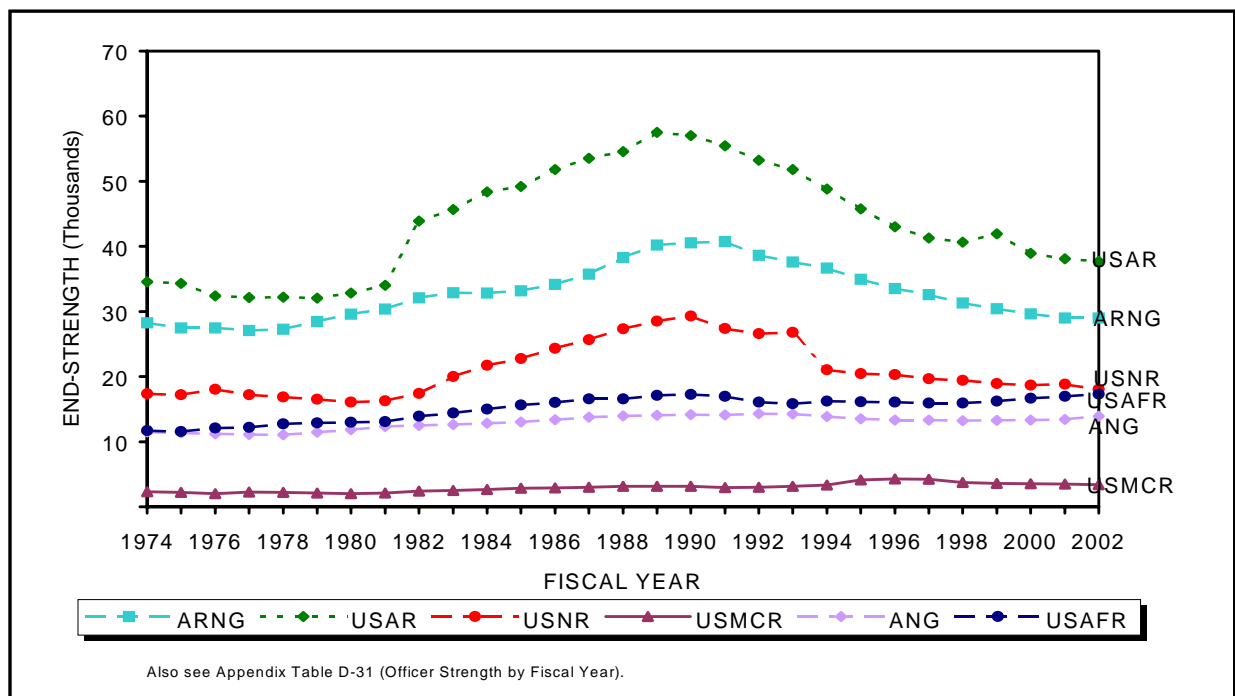
Figure 6.1. Reserve Components officer corps end-strength, FYs 1974–2002.

Table 6.1 compares the number and proportion of Reserve officer accessions with the officer corps. The ARNG and the USAR account for the largest proportion of Selected Reserve officers. The two Army components comprise 56 percent of Reserve officer accessions and 56 percent of Reserve officer end-strength. Overall, there was a slight increase in accessions from FY 2001 to FY 2002. End-strength, however, fell slightly from FY 2001 to FY 2002. In particular, end-strength decreased in the USAR, USNR and USMCR, but increased slightly in the Air Force components (the ANG and USAFR) and remained virtually the same in the ARNG.

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[1]   Data are for commissioned officers; warrant officers are excluded. A brief look at Reserve Component warrant officers is provided in Appendix Tables C-34 and C-35.

Table 6.1. FY 2002 Selected Reserve Officer Accessions and Officer Corps End-Strength (Number and Percent)				
	Reserve Officer Accessions		Reserve Officer Corps End-Strength	
Components	Number	Percent	Number	Percent
Army National Guard	3,130	20.2	29,023	24.3
Army Reserve	5,496	35.5	37,710	31.6
Naval Reserve	2,932	19.0	18,060	15.1
USMC Reserve	745	4.8	3,370	2.8
Air National Guard	1,367	8.8	13,930	11.7
Air Force Reserve	1,793	11.6	17,302	14.5
Total	15,463	100.0	119,395	100.0
Columns may not add to total due to rounding. Also see Appendix Tables C-23 (Officer Accessions by Age and Component) and C-24 (Officers by Age and Component).				

Characteristics of Selected Reserve Officer Accessions and Officer Corps

Age. The differing missions and force structures of the Reserve Components affect the age composition of the officer corps as shown in Figure 6.2. The USAFR, USAR and USNR, have the largest proportions of officers aged 40 and older (58, 54, and 53 percent, respectively). The ARNG, USMCR and ANG have smaller proportions of officers 40 or older (35, 46, and 49 percent, respectively). The ARNG, ANG and USAR have the greatest proportions of officers aged 29 and younger (14, 7 and 6, percent, respectively), while the USNR has the smallest proportion of officers aged 29 and younger (2 percent).

Recruiting policies affect the age structure of the Selected Reserve officer corps. As in the Active Components, one might expect the USMCR to have a greater proportion of younger officers than the other Reserve Components. However, this is not the case. The USMCR's policy to recruit only officers with prior military service increases the age of its officers.

Race/Ethnicity. Table 6.2 shows the FY 2002 Selected Reserve officer accessions and officer corps by race/ethnicity. The proportions of Black and Hispanic officer accessions in the Selected Reserve (10 and 4 percent, respectively) are almost the same as the proportions in the Active Components (9 and 5 percent, respectively). In FY 2002, the Selected Reserve accessed the same proportion of new officers of "Other" race/ethnicity as the Active Components (7 percent).

The Army components of the Selected Reserve have the highest proportions of Black (ARNG – 8 percent, USAR – 16 percent) and Hispanic (ARNG and USAR 5 percent, each) officers. The USNR has the lowest percentage of Blacks (4 percent); the USNR and USAFR both have less than 3 percent Hispanic officers – the lowest of the Reserve Components. In the remaining components, the proportion of Black officers is approximately 4 to 6 percent and the

proportion of Hispanic officers is slightly above 3 percent. The Reserve Components maintained an equal percentage of officers of the "Other" race/ethnicity group as the Active Components (5 percent).
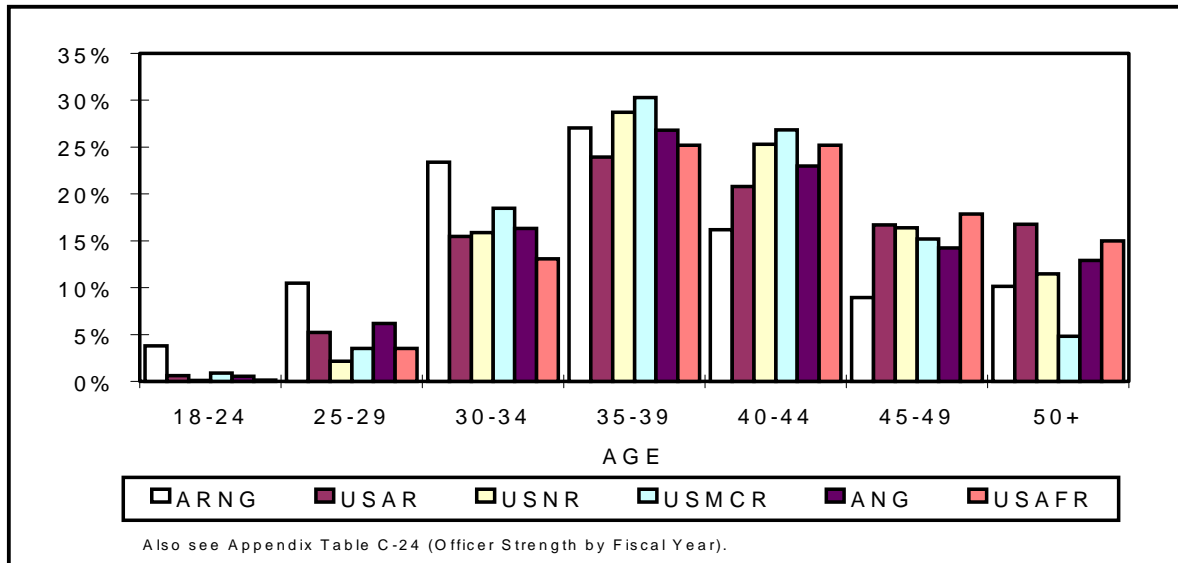
Figure 6.2. Percent of Selected Reserve officer corps by age group, FY 2002.

Gender. Women comprise nearly 19 percent of both the Selected Reserve officer accessions and the Selected Reserve officer corps, as shown in Table 6.3. The proportion of Selected Reserve female officer accessions is approximately the same as in the Active Components (19 percent each). However, the proportion of women in the Selected Reserve officer corps is larger than in the Active Components (19 and 16 percent, respectively), due to higher retention among female officers in the Reserve Components.

The impact of force structure and mission diversity is reflected in the distribution of women officers among the Reserve Components. The proportion of female officers in the USMCR is 5 percent, while 25 percent each of the USAR and USAFR officers are female. Reasons for this divergence are discussed in the portion of this chapter dealing with the occupational assignment of officers.

Marital Status. In FY 2002, the proportion of Selected Reserve officer accessions and officers who were married was higher than for enlisted members. As in the Active Components, more males were married than females. Table 6.4 shows that the proportion of married male Selected Reserve officers (77 percent) is larger than the proportion of the male civilian college graduate labor force who are married (71 percent). The proportion of married female Selected Reserve officers (57 percent) is lower than for the comparable married, female, civilian college graduate labor force (61 percent).

Table 6.2. FY 2002 Selected Reserve Officer Accessions and Officer Corps, by Race/Ethnicity (Percent)					
Components	White	Black	Hispanic	Other	Total
SELECTED RESERVE OFFICER ACCESSIONS					
Army National Guard	82.1	9.7	3.9	4.4	100.0
Army Reserve	70.9	13.7	4.4	11.0	100.0
Naval Reserve	88.6	3.9	3.2	4.3	100.0
USMC Reserve	84.0	7.1	4.8	4.0	100.0
Air National Guard	85.9	5.8	3.7	4.6	100.0
Air Force Reserve	83.4	8.7	2.1	5.9	100.0
Total DoD	79.9	9.5	3.7	6.9	100.0
SELECTED RESERVE OFFICER CORPS					
Army National Guard	84.0	7.8	4.6	3.6	100.0
Army Reserve	73.5	15.9	4.9	5.7	100.0
Naval Reserve	89.7	3.9	2.3	4.1	100.0
USMC Reserve	88.7	4.5	3.7	3.1	100.0
Air National Guard	86.8	5.3	3.2	4.7	100.0
Air Force Reserve	86.2	6.2	2.8	4.9	100.0
Total DoD	82.3	9.1	3.9	4.6	100.0

Rows may not add to total due to rounding.
Also see Appendix Table C-27 (Race/Ethnicity by Component).

Table 6.3. FY 2002 Selected Reserve Female Officer Accessions and Officer Corps (Percent)							
	Army National Guard	Army Reserve	Naval Reserve	USMC Reserve	Air National Guard	Air Force Reserve	DoD Total
Officer Accessions	13.2	23.4	14.8	7.0	16.6	25.3	18.6
Officer Corps	10.7	24.9	17.5	5.0	15.2	25.0	18.6

Also see Appendix Table C-25 (Gender by Component).

Source of Commission. Each Reserve Component applies its own selection procedures for officer candidates. Many officers who transfer from an Active Component already possess at least a college degree. Officer candidates who do not have a degree undergo rigorous selection procedures and must successfully complete an officer candidate or training school. Forty-one percent of Army Reserve officer accessions were commissioned through the Reserve Officer Training Corps (ROTC). Over a quarter of USNR officer accessions were also commissioned through ROTC.

Table 6.4. FY 2002 Selected Reserve Officers and Enlisted Members who were Married, and in Dual-Service Marriages, by Gender, and Civilians (Percent)								
Gender	Reserve Officer Accessions	Civilians[1]	Reserve Officer Corps	Dual-Service Marriages	Civilians[2]	Reserve Enlisted Members	Dual-Service Marriages	Civilians[3]
Male	59.0	49.4	76.5	5.5	71.2	50.4	4.3	55.7
Female	48.2	54.2	57.4	47.5	61.0	34.2	41.2	52.8
Total	56.1	52.0	72.7	11.3	66.5	47.6	8.9	54.3

Also see Appendix Tables C-16 (Enlisted Members by Age, Marital Status, and Gender) and C-26 (Officers by Gender, Marital Status, and Component).
[1] 21- to 35-Year-Old Civilian College Graduates
[2] Civilian College Graduates in the Work Force
[3] 18- to 49-Year-Old Civilians
Source: Civilian data from Bureau of Labor Statistics Current Population Survey File, October 2001 – September 2002.

Table 6.5. FY 2002 Source of Commission of Selected Reserve Officer Accessions (Percent)							
Source of Commission	Army National Guard	Army Reserve	Naval Reserve	USMC Reserve	Air National Guard	Air Force Reserve	DOD Total
Service Academy	1.7	4.4	15.9	6.0	9.7	15.1	7.8
ROTC–Scholarship	2.7	14.9	22.8	0.0	6.8	13.0	12.3
ROTC–No Scholarship	7.0	26.1	4.0	14.1	12.9	15.0	15.0
OCS/OTS/PLC	0.2	4.2	16.9	73.3	9.3	19.5	11.4
ANG AMS/ARNG OCS	3.2	6.7	0.0	0.0	8.9	3.2	4.2
Direct Appointment	3.3	22.7	27.1	0.0	14.9	30.1	18.7
Other[1]	81.6	1.3	4.6	0.0	37.6	4.2	21.7
Unknown	0.3	19.6	8.7	6.6	0.0	0.0	9.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
Also see Appendix Table C-33 (Officers by Source of Commission and Component).
[1] All ARNG officers receive their commission from one of the sources listed here. The reason the majority of ARNG officer accessions are listed as "Other," however is because most of ARNG officer accessions are prior service and commission source is not transferred in the personnel data system.

Table 6.5 shows the sources of commission that each of the Reserve Components most frequently use. The USAR, USNR and USAFR use direct appointment as a source of commission more than the other Components. In fact, the USNR and USAFR use direct appointment as their largest source of commissions. The overwhelming majority of USMCR officer accessions (73 percent) obtained their commissions through OCS or the Marine Corps Platoon Leader Class (PLC). PLC is a split-training program in which candidates normally attend officer training in the summers after their junior and senior years of college. The Army

components rely heavily on ROTC, primarily without scholarships, and the ANG uses other programs as their main source of commission.[2]

Education. The Reserve Components also tend to vary in the educational attainment levels of its officer accessions (Table 6.6). Overall in FY 2002, 81 percent of Reserve officer accessions were at least college graduates (bachelor and/or advanced degrees). The USNR and the USMCR had the highest proportions of officer accessions with at least a college degree (98 and 95 percent, respectively). In the other components, the percentage of officer accessions with degrees ranged from 69 percent in the ARNG to 92 percent in the Air Force Reserve.

Table 6.6. FY 2002 Educational Attainment of Selected Reserve Officer Accessions and Officer Corps (Percent)							
Educational Attainment*	Army National Guard	Army Reserve	Naval Reserve	USMC Reserve	Air National Guard	Air Force Reserve	DoD Total
SELECTED RESERVE OFFICER ACCESSIONS							
Less than College Graduate	30.8	19.4	1.6	5.5	25.0	7.6	18.6
College Graduate (B.A., B.S., etc.)	59.1	55.9	67.7	79.7	49.4	53.5	58.3
Advanced Degree (M.A., Ph.D., etc.)	10.1	24.7	30.7	14.8	25.6	38.9	23.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
SELECTED RESERVE OFFICER CORPS							
Less than College Graduate	12.6	14.2	1.6	0.5	4.9	2.8	9.0
College Graduate (B.A., B.S., etc.)	65.0	50.3	57.8	68.8	65.0	47.7	56.9
Advanced Degree (M.A., Ph.D., etc.)	22.4	35.5	40.6	30.7	30.1	49.5	34.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Columns may not add to total due to rounding. * Excludes unknowns. Also see Appendix Table C-28 (Education by Component).							

Overall in the Reserve Components, the proportion of officers with at least an undergraduate degree is higher than that of its officer accessions, though the difference is slight. This difference is most evident, however, in the ANG where 75 percent of accessions and 95 percent of the officer corps have a college degree, and in the ARNG where 69 percent of accessions and 87 percent of the officer corps have a college degree.

Several factors help explain why more officers have college degrees than do officer accessions. A number of Selected Reserve accessions have college credits but have not yet earned a degree when they join the Selected Reserve. Because of Service emphasis on an educated officer corps, many individuals join to take advantage of educational opportunities and

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[2]   For Reserve Component commissioned officer accessions, "other" sources of commission are defined as: Merchant Marine Academy, Aviation Cadet, and Aviation Training Program.

education financing (e.g., the Montgomery G.I. Bill), and many non-degreed officers complete their college education while serving in the Selected Reserve.

Representation Within Occupations. The distribution of officers across occupational areas is shown in Table 6.7 for Active and Reserve Components. Overall, the largest proportions of officers in the Reserve and Active Components are assigned to tactical operations and health care positions (55 percent each). However, due to assigned missions, the Reserve Components have a smaller proportion than the Active Components in tactical operations (33 and 36 percent, respectively), but a greater proportion of officers in health care (22 and 18 percent, respectively).

Table 6.7. FY 2002 Occupational Areas of Active and Selected Reserve Officer Corps (Percent)		
Occupational Area	Active Components	Reserve Components
General Officers and Executives *	0.4	0.5
Tactical Operations	35.8	32.8
Intelligence	5.1	5.5
Engineering and Maintenance	11.9	9.7
Scientists and Professionals	5.5	6.8
Health Care	17.7	21.8
Administration	6.1	7.2
Supply, Procurement, and Allied Occupations	9.1	9.9
Non-Occupational**	8.4	5.9
Total	100.0	100.0
Columns may not add to total due to rounding. * Reserve Components calculations do not include 704 O-6 officers classified as general or executive officers by the Services (4 - ARNG, 5 – USAR, 293 - USMCR, 231 - ANG, and 171 - USAFR). ** Non-occupational includes patients, students, those with unassigned duties, and unknowns. Also see Appendix Tables B-37 (Occupational Area by Service and Gender) and C-31 (Occupational Area by Component).		

Differences in occupational assignment among the Reserve Components are shown in Table 6.8. With the exception of the USAR, the largest proportion of officers in each component is in tactical operations. Among the Reserve components, the ARNG and USMCR have the greatest proportions of officers in tactical operations (46 and 59 percent, respectively). The USAR has the smallest proportion of officers in tactical operations (17 percent).

Many Selected Reserve officers are health care professionals. The USAR and USAFR have the greatest proportion of officers in health care occupations (33 and 26 percent, respectively). Health care comprises the second largest percentage of officers in the USAFR, ANG and USNR (26, 16 and 21 percent, respectively). Relatively few Reserve officers are in intelligence, science and professional, and administrative occupations.

Active and Reserve	Occupational Area*								
Table 6.8. Comparison of FY 2002 Occupational Area Distribution of Officers, by Active and Reserve Component (Percent)									
Components	0**	1	2	3	4	5	6	7	8
ARMY									
Active Component	0.5	34.7	6.1	11.8	6.8	20.6	6.7	10.4	2.4
Army National Guard	0.6	45.5	3.3	8.0	3.6	10.4	5.8	10.2	12.7
Army Reserve	0.3	17.4	4.7	8.5	10.7	32.8	8.3	13.3	4.0
NAVY									
Active Component	0.4	38.2	3.9	10.4	3.9	21.1	4.2	6.2	11.8
Naval Reserve	0.3	39.0	11.1	10.7	4.0	20.8	6.5	6.5	1.2
MARINE CORPS									
Active Component	0.5	51.5	4.9	8.1	3.0	0.0	6.2	13.8	12.0
USMC Reserve	0.3	58.5	5.0	7.7	5.7	0.0	6.3	14.8	1.7
AIR FORCE									
Active Component	0.4	31.5	5.1	13.9	6.1	16.4	7.0	8.9	10.8
Air National Guard	1.2	37.9	2.7	13.5	4.6	16.0	9.1	6.5	8.6
USAF Reserve	0.5	30.2	7.2	11.3	8.7	26.1	6.3	7.6	2.1

Rows may not add to total due to rounding.
* Occupational Area Codes: 0=General Officers, 1=Tactical Operations, 2=Intelligence, 3=Engineering and Maintenance, 4=Scientists and Professionals, 5=Health Care, 6=Administration, 7=Supply, Procurement, and Allied, 8=Non-occupational.
** Reserve Components calculations do not include 704 O-6 officers classified as general or executive officers by the Services (4 - ARNG, 5 – USAR, 293 - USMCR, 231 - ANG, and 171 - USAFR).
Also see Appendix Tables B-37 (Occupational Area by Service and Gender) and C-30 (Occupational Area by Component).

Women and occupational assignments. The occupational assignments by gender of Selected Reserve officers are shown in Table 6.9. Nearly half of all female officers are assigned to health care positions, 13 percent to administration positions, and 10 percent to supply, procurement and allied occupations. As indicated in Appendix Table C-31, the assignment of women into officer occupational areas differs by component. Across components, female officers serving in health care positions range from 27 percent in the ARNG to 59 percent in the USAR. Two percent of USAR female officers hold tactical operations positions compared to 9 percent in the ANG. As in the Selected Reserve enlisted force, reasons for this distribution include the differing missions of each component; the occupational preferences of female officers; the number of female officers in Active Components possessing such skills who join a Selected Reserve unit after separation from active duty; the proportion of technical skill unit vacancies; and direct ground combat exclusion policies.

Minorities and occupational assignments. An overview of the distribution of Selected Reserve officers by race/ethnicity is provided in Table 6.10. More than half of Whites, Hispanics, and "Others" serve in either tactical operations or health care occupations. The largest proportions of White and Hispanic officers are in tactical operations (35 and 28 percent, respectively); the largest percentages of Black and "Other" racial category officers are in health care occupations (28 and 31 percent, respectively).

As detailed in Appendix Table C-32, there are race/ethnicity differences among the Reserve Components by occupational areas. For example, 60 percent of White officers in the USMCR have occupations in tactical operations, while only 36 percent of Black officers do. Other occupational areas such as health care attract members of different race/ethnic groups more uniformly. For example, in the USAFR, 41 percent of Blacks, 36 percent of "Other" minorities, and 35 percent of Hispanics serve in health care, compared to 24 percent of Whites.

Table 6.9. FY 2002 Occupational Areas of Selected Reserve Officer Corps, by Gender (Percent)			
Occupational Area	Male	Female	Total
General Officers and Executives*	0.6	0.1	0.5
Tactical Operations	39.3	5.0	32.8
Intelligence	5.4	5.7	5.5
Engineering and Maintenance	10.2	7.2	9.7
Scientists and Professionals	7.4	4.5	6.8
Health Care	15.3	49.8	21.8
Administration	5.9	12.5	7.2
Supply, Procurement, and Allied Occupations	9.9	10.3	9.9
Non-Occupational**	6.1	5.0	5.9
Total	100.0	100.0	100.0

Columns may not add to total due to rounding.
* Calculations do not include 682 male and 22 female O-6 officers classified as general or executive officers by the Services.
** Non-occupational includes patients, students, those with unassigned duties, and unknowns.
Also see Appendix Table C-31 (Occupational Area by Component and Gender).

Table 6.10. FY 2002 Occupational Areas of Selected Reserve Officer Corps, by Race/Ethnicity (Percent)					
Occupational Area	White	Black	Hispanic	Other	Total
General Officers and Executives*	0.6	0.2	0.2	0.2	0.5
Tactical Operations	35.4	16.9	27.5	23.3	32.8
Intelligence	5.7	3.0	4.9	5.7	5.5
Engineering and Maintenance	9.5	10.9	10.3	10.4	9.7
Scientists and Professionals	7.1	5.4	5.1	5.9	6.8
Health Care	20.4	27.7	23.9	31.2	21.8
Administration	6.6	12.1	8.3	6.1	7.2
Supply, Procurement, and Allied	9.1	17.0	12.7	8.5	9.9
Non-Occupational**	5.5	6.9	7.2	8.8	5.9
Total	100.0	100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
* Calculations do not include 664 White, 17 Black, 10 Hispanic, and 13 Other O-6 officers classified as general or executive officers by the Services.
** Non-occupational includes patients, students, those with unassigned duties, and unknowns.
Also see Appendix Table C-32 (Occupational Areas by Component and Race/Ethnicity).

Chapter 7

U. S. COAST GUARD

The U.S. Coast Guard (USCG), sometimes referred to as "America's Shield of Freedom," is the nation's oldest continuous seagoing service. The USCG traces its history to 1790 with the introduction of the Revenue Cutter Service, whose mission was the enforcement of the first Congressional tariff laws enacted under the Constitution. Today's Coast Guard is actually a combination of five former Federal agencies. In addition to the Cutter Service, these agencies include the Lighthouse Service, the Steamboat Inspection Service, the Bureau of Navigation, and the Lifesaving Service.[1] The multiple missions and responsibilities of today's Coast Guard can be traced back to these initial agencies with five strategic goals today—maritime safety, maritime mobility, maritime security, national defense, and protection of natural resources.[2]

In March of 2003, USCG jurisdiction changed from the Department of Transportation (DoT) to the Department of Homeland Security. Even though the USCG is not situated in the Department of Defense, it is at all times an armed force—a full-time military organization with a true peacetime mission. During times of war or at the direction of the President, the USCG functionally transfers to the Department of Defense under the Secretary of the Navy. The Coast Guard's priorities shifted in the aftermath of the September 11th terrorist attacks and funding shifted from its traditional mission to support large-scale port security operations.[3]

In this chapter, the characteristics of both the Active and Reserve Components of the USCG are presented. Comparisons are presented for applicants (active enlisted only), accessions, and end-strength for enlisted members, officer corps, and warrant officers. Where applicable, comparisons include overall DoD[4] figures and comparable civilian data for reference.

Characteristics of Active Component Non-Prior Service Applicants

As with the other Armed Forces, the USCG has entrance standards for age, physical fitness, maximum number of dependents, citizenship status, moral character, and mental ability to include minimum scores on the Armed Forces Qualification Test (AFQT). In this section various demographic characteristics of USCG active component enlisted applicants along with similar overall DoD figures and civilian comparisons are reported.

In FY 2002, a total of 11,041 individuals without prior military experience applied to serve in the USCG, more than the 8,901 in FY 2001. The distribution of FY 2002 USCG and overall DoD Active Component NPS applicants' race/ethnicity by gender is shown in Table 7.1. Eighty-six percent of the USCG applicants were male (Appendix Table E-2), of whom 78 percent were White, 6 percent Black, 10 percent Hispanic, and 7 percent "Other." For female

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[1] URL: http://www.uscg.mil/hq/g-cp/history/h_USCGhistory.html.

[2] Fiscal Year 2002 Coast Guard Report: FY 2001 Performance Report and FY 2003 Budget in Brief. URL: http://www.uscg.mil/news/reportsandbudget/2002_report.pdf.

[3] Ibid.

[4] Overall DoD refers to the combined total of the Army, Navy, Marine Corps, and Air Force.

applicants, 74 percent were White, 8 percent Black, 7 percent Hispanic, and 10 percent "Other." Additional statistics on applicant characteristics (e.g., age, education levels, and AFQT scores, by gender and race/ethnicity) are contained in Appendix E, Tables E-1 through E-4 for the USCG and Appendix A for the overall DoD.

Table 7.1. Race/Ethnicity by Gender of FY 2002 USCG and DoD Active Component NPS Applicants and Accessions, and Civilians 18–24 Years Old (Percent)						
Race/Ethnicity	Coast Guard[1]			DoD		
	Male	Female	Total	Male	Female	Total
NPS ACTIVE COMPONENT APPLICANTS						
White	77.7	74.0	77.1	65.6	53.7	62.9
Black	5.6	8.2	6.0	16.0	26.4	18.3
Hispanic	9.9	7.4	9.5	11.6	12.5	11.8
Other	6.8	10.4	7.3	6.9	7.5	7.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
NPS ACTIVE COMPONENT ACCESSIONS						
White	84.0	82.2	83.8	69.0	57.3	67.0
Black	4.2	6.6	4.5	14.0	23.8	15.7
Hispanic	7.9	5.2	7.6	11.1	12.2	11.3
Other	3.9	5.9	4.2	5.9	6.7	6.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
NON-INSTITUTIONALIZED CIVILIANS 18–24 YEARS OLD						
White	Black	Hispanic	Other	Total	Male	Female
65.1	14.2	15.6	5.1	100.0	49.8	50.2

Columns may not add to total due to rounding.
[1] U.S. Coast Guard data for NPS Active Component Accessions from Coast Guard Recruiting Command.
Also see Appendix Tables A-3 (Applicants for Active Component Enlistment by Race/Ethnicity, Service, and Gender), B-3 (NPS Active Component Enlisted Accessions by Race/Ethnicity, Service, and Gender), E-2 (Coast Guard Applicants for Active Component Enlistment by Race/Ethnicity and Gender), and E-6 (Coast Guard NPS Active Component Enlisted Accessions by Race/Ethnicity and Gender).

Characteristics of Active Component Non-Prior Service Accessions

Of the 11,041 individuals who applied for service in the USCG, a total of 4,604 actually accessed. This number represents a 41-percent accession-to-applicant ratio, down from 43 percent in FY 2001 and 47 percent in 2000. The distribution of race/ethnicity by gender for FY 2002 Coast Guard and overall DoD Active Component NPS accessions is shown in Table 7.1. Eighty-eight percent of USCG NPS accessions were male (Appendix Table E-6), of whom 84 percent were White, 4 percent Black, 8 percent Hispanic, and 4 percent "Other." Of the female USCG accessions, 82 percent were White, 7 percent Black, 5 percent Hispanic, and 6 percent "Other." Overall, USCG accessions were more likely to be White and male than accessions in DoD. The proportion of Black USCG accessions is approximately one-quarter of the percentage for the overall DoD.

Age. While the overall acceptable age range for enlistment in the Armed Services is between 17 and 35, the USCG further restricts its new accessions to the 17 to 27 age range. In FY 2002, 89 percent of USCG NPS accessions fell in the 18 to 24 age range as compared to 86 percent of overall DoD accessions, and 38 percent of the comparable civilian population. Age differences are explained, in part, by different age requirements in each Service. The Army and

Navy (accounting for 62 percent of overall DoD NPS accessions) accept 17 to 35 year olds. For detailed age statistics, see Appendix Table E-5 for USCG and Appendix Table B-1 for overall DoD figures.

Education. As shown in Table 7.2, almost 90 percent of USCG NPS accessions in FY 2002 were regular high school diploma graduates. The USCG accepted nearly 11 percent GED holders this year, but no applicants without education credentials were accepted for duty in the Coast Guard. For both the USCG and DoD as a whole, the overall percentage of accessions with high school credentials, either diplomas or GED certificates, was 99 percent, exceeding the comparable civilian group at 79 percent.

Table 7.2. Education Levels and AFQT Categories of FY 2002 USCG and DoD Active Component NPS Accessions and Civilians 18–24 Years Old (Percent)			
Education Level	Coast Guard[1]	DoD[2]	18- to 24-Year-Old Civilians*
Tier 1: Regular High School Graduate or Higher	88.8	91.9	79.4
Tier 2: GED, Alternative Credentials	11.2	7.2	
Tier 3: No Credentials	0.0	0.8	20.6
Total	100.0	100.0	100.0
College Experience (Part of Tier 1)	4.7	8.5	46.7
Columns may not add to total due to rounding. * Civilian numbers/percentages for education combine Tiers 1 and 2; civilian data include GED certificates with high school graduate rates. [1] U.S. Coast Guard education tier data from Coast Guard Recruiting Command. [2] Service data from OUSD(P&R)(MPP)/Accession Policy have been reviewed and updated by the Services for official submission. Data presented in this table may differ slightly from the data shown in appendix tables that are taken from DMDC's USMEPCOM Edit File Also see Appendix Tables B-7 (NPS Active Component Enlisted Accessions by Education, Service, and Gender) and E-8 (Coast Guard NPS Active Component Enlisted Accessions by Education, Gender, and Race/Ethnicity).			

Characteristics of Active Component Enlisted Force[5]

At the end of FY 2002, the enlisted end-strength of the USCG stood at 29,767, up from 28,046 in FY 2001.[6] The FY 2002 Coast Guard enlisted force was 90 percent male and 10 percent female. Relative to the overall DoD, proportionally the Coast Guard has more male enlisted members (85 and 90 percent, respectively).

Race/Ethnicity. The distribution of race/ethnicity by gender for FY 2002 USCG and overall DoD Active Component enlisted members along with the applicable civilian comparison group is shown in Table 7.3. Relative to the comparable civilian population, the USCG enlisted force was more likely to be White (68 and 83 percent, respectively) and less likely to be Black (13 and 6 percent, respectively) or Hispanic (14 and 7 percent, respectively). Furthermore, compared to the overall DoD enlisted force, members of the USCG are more likely to be White and less likely to be minorities, particularly Black (6 percent Black in the USCG vs. 22 percent Black in the DoD).

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[5] There may be discrepancies between data provided in text and the chapter's textual tables and the data provided in the appendix tables. Appendix tables are provided by the Defense Manpower Data Center (DMDC) and in many cases may not match official Coast Guard data represented in this chapter. As a rule, information is provided by DMDC, except where noted.

[6] Enlisted end-strength data provided by U.S. Coast Guard Workforce Forecasting & Analysis Staff.

Age. Youth dominates enlisted members, particularly in the overall DoD, where nearly half (49 percent) of the force was 24 years or younger compared to 43 percent in the USCG (Table 7.4). Thirty-nine percent of the USCG enlisted force was 30 years of age or older as compared to 33 percent of the overall DoD, and 75 percent of the civilian group. Though the USCG enlisted force tends to be older than the overall DoD enlisted force, it is considerably younger than the comparable civilian group.

Table 7.3. Race/Ethnicity by Gender of FY 2002 USCG and DoD Active Component Enlisted Members and Civilians 18–44 Years Old (Percent)						
	Coast Guard			DoD		
	Male	Female	Total	Male	Female	Total
Race/Ethnicity	ACTIVE COMPONENT ENLISTED MEMBERS					
White	83.1	76.7	82.5	64.3	48.9	62.0
Black	5.3	10.6	5.8	19.5	34.3	21.8
Hispanic	7.3	6.7	7.2	9.9	10.1	10.0
Other	4.3	6.1	4.5	6.3	6.7	6.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
CIVILIANS 18–44 YEARS OLD						
White	Black	Hispanic	Other	Total	Male	Female
68.4	12.6	13.9	5.1	100.0	53.6	46.4
Columns may not add to total due to rounding. Also see Appendix Tables B-25 (Active Component Enlisted Members by Race/Ethnicity, Service, and Gender) and E-15 (Coast Guard Active Component Enlisted Members by Race/Ethnicity and Gender).						

Table 7.4. Age of FY 2002 USCG and DoD Active Component Enlisted Members and Civilians (Percent)			
Age	Coast Guard	DoD	Civilian Labor Force 17 and Older
17–19	7.3	10.8	4.5
20–24	35.2	37.9	10.3
25–29	20.7	18.9	10.4
30–34	14.0	13.0	11.5
35–39	12.4	12.2	12.4
40–44	8.2	5.7	13.6
45–49	1.8	1.3	12.4
50+	0.4	0.2	25.0
Unknown	0.0	0.1	0.0
Total	100.0	100.0	100.0
Columns may not add to total due to rounding. Also see Appendix Tables B-23 (Active Component Enlisted Members by Age Group, Service, and Gender) and E-14 (Coast Guard Active Component Enlisted Members by Age Group and Gender).			

Representation Within Occupations. The representation of USCG enlisted force by race/ethnicity and gender in occupational areas with the overall DoD rates for comparison is presented in Table 7.5. The USCG is unique in that all occupations are open to both men and women—there are no combat restrictions. However, women were still underrepresented in the infantry, gun crews, and seamanship specialties compared to men in the USCG (9 and 17

percent, respectively). Restructuring of the Coast Guard's aviation rating from late FY 1997 through FY 1999 with additional reclassification occurring in FYs 2000 and 2002 led to some changes in occupational area distributions. The most notable differences were an increase in the number of positions classified as infantry, gun crews, and seamanship with a corresponding decrease in electrical/mechanical equipment repair. In FY 2000 there was a decrease in infantry, gun crews, and seamanship with increases in electrical/mechanical equipment repair and electronic equipment repair. Then, in FY 2002 there was an increase in electrical/mechanical equipment repair with a corresponding decrease in electronic equipment repair as the USCG moved jobs into the appropriate occupational code to reflect updated job requirements. In FY 2002, no significant restructuring of occupational areas took place. FY 2002 percentages remained roughly in the same proportions as percentages for FY 2001.

Table 7.5. Occupational Areas of FY 2002 USCG and DoD Active Component Enlisted Personnel by Race/Ethnicity and Gender (Percent)								
Occupational Codes and Areas	Coast Guard							DoD Total
	Male	Female	White	Black	Hispanic	Other	USCG Total	
0 Infantry, Gun Crews, and Seamanship Specialists	17.0	9.4	17.6	4.3	12.6	13.6	16.3	16.7
1 Electronic Equipment Repairers	8.0	2.5	7.6	5.6	5.7	8.8	7.4	9.4
2 Communications and Intelligence Specialists	5.2	6.8	5.2	7.2	5.6	5.4	5.4	9.3
3 Medical and Dental Specialists	2.0	5.9	2.0	5.0	3.9	3.7	2.4	6.7
4 Other Allied Specialists	5.5	5.2	5.7	4.1	3.7	7.0	5.5	2.8
5 Functional Support and Administration	11.5	35.5	11.7	37.4	18.2	16.8	13.9	16.0
6 Electrical/Mechanical Equipment Repairers	18.4	7.3	17.3	14.6	18.9	18.6	17.3	20.5
7 Craftsmen	13.5	3.3	12.8	8.3	13.0	10.3	12.5	3.7
8 Service and Supply Handlers	1.2	0.1	1.3	0.1	0.4	1.3	1.1	8.8
9 Non-Occupational*	17.6	23.9	18.8	13.6	18.1	14.6	18.2	6.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Columns may not add to total due to rounding.
* Non-occupational includes patients, students, those with unassigned duties, and unknowns.
** Less than one-tenth of one percent.
Also see Appendix Tables B-29 (Active Component Enlisted Members by Occupational Area, Service, and Gender) and E-16 (Coast Guard Active Component Enlisted Members by Occupational Area, Gender, and Race/Ethnicity).

Historically, all new USCG enlisted members were directly assigned to field units before attending specialty training in the A-schools where the introductory job-specific training courses are taught. Presently, an effort is being made to assign more recruits directly to A-schools in critical specialties. Approximately 15 percent of USCG recruits go directly to advanced training after basic training. A USCG member is admitted to any A-school for which he or she is

qualified based on the individual's ASVAB scores.[7] Training takes place as openings become available, which may explain the higher percentage of those classified as non-occupational in the USCG enlisted force compared to the overall DoD (18 and 6 percent, respectively).

Characteristics of Active Component Officers

The USCG uses a variety of officer commissioning programs. These include programs for civilians and active USCG enlisted members and warrant officers to become commissioned officers. In FY 2002, the USCG commissioned a total of 559 new officers, up from 503 in FY 2001. The USCG commissioned officer corps stood at 5,803 at the end of FY 2002, up from FY 2001 when the end-strength stood at 5,594.[8]

Source of Commission. In Table 7.6, the distribution of new USCG officers (accessions) and current officers (corps) by source of commission is presented with applicable overall DoD figures for comparison. The USCG relies heavily on the U. S. Coast Guard Academy for its officer accessions. The USCG gets over half (56 percent) of its new officers from its Academy and Officer Candidate School as compared to 45 percent for DoD officer accessions. This difference can be explained almost entirely by the fact that the USCG does not have an ROTC program. The fact that an even greater proportion of the USCG officer corps compared to USCG officer accessions were academy graduates is an indication that the retention rate for graduates is higher than for the other sources of officers.

Table 7.6. FY 2002 USCG and DoD Active Component Officer Accessions and Officer Corps by Source of Commission (Percent)				
	Officer Accessions		Officer Corps	
Source of Commission	Coast Guard[1]	DoD	Coast Guard[1]	DoD
Academy	28.8	15.1	46.2	17.7
ROTC – Scholarship	0.0	15.6	0.0	24.2
ROTC – No Scholarship	0.0	17.0	0.0	15.0
OCS/OTS	27.2	29.5	33.3	21.4
Direct Appointment	15.4	11.2	9.8	13.9
Other	28.6	11.5	10.8	7.8
Total	100.0	100.0	100.0	100.0
Columns may not add to total due to rounding. Percentages do not include "Unknown" data. [1] Data provided by U.S. Coast Guard Workforce Forecasting & Analysis Staff. Also see Appendix Tables B-40 (Active Component Officer Corps by Source of Commission, Service, and Gender), B-41 (Active Component Officer Corps by Source of Commission), and E-20 (Coast Guard Active Component Officer Accessions and Officer Corps by Source of Commission, Gender, and Race/Ethnicity).				

Race/Ethnicity and Gender. The USCG percentage of Whites was slightly higher than the overall DoD rate for officer accessions (83 and 79 percent, respectively) and officers (86 and 83 percent, respectively), as shown in Table 7.7. By gender, the USCG officer accessions were

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[7] USCG Frequently Asked Questions About Recruiting. URL: http://www.gocoastguard.com/faq.html.

[8] Commissioned officer information provided by U.S. Coast Guard Workforce Forecasting & Analysis Staff

equally as likely to be male as were DoD officer accessions (80 percent each). However, members of the USCG's officer corps were slightly more likely to be male than were DoD officers (86 and 84 percent, respectively).

Table 7.7. Race/Ethnicity and Gender of FY 2002 USCG and DoD Active Component Officer Accessions and Officer Corps (Percent)				
	Officer Accessions		Officer Corps	
Race/Ethnicity	Coast Guard[1]	DoD	Coast Guard[1]	DoD
White	83.2	79.0	85.8	82.5
Black	5.2	9.1	4.9	8.5
Hispanic	6.5	5.2	4.7	4.1
Other	5.1	6.7	4.6	4.9
Total	100.0	100.0	100.0	100.0
Gender				
Male	80.2	80.9	86.3	84.4
Female	19.8	19.1	13.7	15.6
Total	100.0	100.0	100.0	100.0
Columns may not add to total due to rounding. [1] Data provided by U.S. Coast Guard Workforce Forecasting & Analysis Staff. Also see Appendix Tables B-32 (Active Component Officer Accessions and Officer Corps by Gender and Service), B-34 (Active Component Officer Accessions and Officer Corps by Race/Ethnicity and Service), and E-18 (Coast Guard Active Component Officer Accessions and Officer Corps by Race/Ethnicity and Gender).				

   Representation Within Occupations. Because the USCG does not have any combat restrictions, the same proportion of USCG female and male officers were in tactical operations. Women were underrepresented in engineering and maintenance, and overrepresented in the non-occupational area (Table 7.8).

Table 7.8. Occupational Areas of FY 2002 USCG and DoD Active Component Officer Personnel by Race/Ethnicity and Gender (Percent)								
	Coast Guard							DoD Total
Occupational Area	Male	Female	White	Black	Hispanic	Other	Total	
General Officers and Executives	0.7	0.3	0.7	0.7	0.0	0.0	0.6	0.4
Tactical Operations	38.4	38.7	39.4	25.9	33.6	38.2	38.4	35.8
Intelligence	0.5	0.5	0.5	0.0	1.5	0.4	0.5	5.1
Engineering and Maintenance	29.7	22.6	29.1	29.7	21.0	27.4	28.7	11.9
Scientists and Professionals	0.4	1.1	0.5	0.4	0.7	0.8	0.5	5.5
Health Care	0.3	0.4	0.3	1.1	0.4	0.0	0.4	17.7
Administration	8.8	7.1	8.6	7.7	7.8	9.3	8.6	6.1
Supply, Procurement, and Allied Occupations	0.7	0.3	0.6	0.7	1.1	1.2	0.7	9.1
Non-Occupational	20.5	29.1	20.2	33.9	34.0	22.8	21.6	8.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Columns may not add to total due to rounding. Also see Appendix Tables B-37 (Active Component Officer Corps by Occupational Area and Service) and E-19 (Coast Guard Active Component Officer Corps by Occupational Area, Gender, and Race/Ethnicity).								

By race/ethnicity, Black officers were underrepresented in tactical operations and Hispanic officers were underrepresented in engineering and maintenance. Compared to the overall DoD, the USCG officer corps comprised, proportionally, more engineering and maintenance officers and fewer health care providers. The difference in health care can be partially explained by the USCG's reliance on the Public Health Service for some of its medical and dental care.

Warrant Officers

In FY 2002, the USCG accessed a total of 182 new warrant officers; the warrant officer end-strength was 1,474.[9] The distribution by race/ethnicity and gender of USCG warrant officer accessions and warrant officers with overall DoD rates for comparison is presented in Table 7.9. In general, USCG warrant officers were more likely to be White compared to their DoD counterparts.

Table 7.9. FY 2002 USCG and DoD Active Component Warrant Officer Accessions and Officer Corps by Race/Ethnicity and Gender (Percent)				
	Warrant Officer Accessions		Warrant Officer Corps	
Race/Ethnicity	Coast Guard[1]	DoD	Coast Guard[1]	DoD
White	87.1	73.5	86.5	73.5
Black	7.6	16.1	7.2	16.7
Hispanic	4.1	5.1	3.6	5.1
Other	1.2	5.3	2.7	4.8
Total	100.0	100.0	100.0	100.0
Gender				
Male	87.8	93.4	94.5	93.4
Female	12.2	6.6	5.5	6.6
Total	100.0	100.0	100.0	100.0
Columns may not add to total due to rounding. [1] Data provided by U.S. Coast Guard Workforce Forecasting & Analysis Staff. Also see Appendix Tables B-44 (Active Component Warrant Officer Accessions and Warrant Officer Corps by Gender and Service), B-45 (Active Component Warrant Officer Accessions and Warrant Officer Corps by Race/Ethnicity and Service), and E-21 (Coast Guard Active Component Warrant Officer Accessions and Warrant Officer Corps by Race/Ethnicity and Gender).				

Characteristics of USCG Reserve Enlisted Accessions

In FY 2002, the USCG Reserve accessed a total of 1,744 new enlisted personnel up from 1,405 in FY 2001. Of these, 296 (17 percent) had no prior military experience, and 1,448 (83 percent) had served in the Armed Forces previously.

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[9] Warrant Officer accession and end-strength data provided by U.S. Coast Guard Workforce Forecasting & Analysis Staff.

Race/Ethnicity and Gender. Compared to the overall DoD, USCG Reserve enlisted accessions were more likely to be White, as shown in Table 7.10. In FY 2002, 76 percent of USCG Reserve NPS enlisted accessions were male and 24 percent were female (Appendix E, Table E-23), almost identical to the overall DoD Reserve Components (76 percent male and 24 percent female).

Table 7.10. Race/Ethnicity by Gender of FY 2002 USCG and DoD Reserve Component Enlisted Accessions and Civilians (Percent)						
Race/Ethnicity	Coast Guard			DoD		
	Male	Female	Total	Male	Female	Total
NON-PRIOR SERVICE						
White	80.1	78.6	79.7	72.9	60.5	70.0
Black	6.6	15.7	8.8	12.8	24.3	15.5
Hispanic	9.3	2.9	7.8	9.2	10.1	9.5
Other	4.0	2.9	3.7	5.1	5.1	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
PRIOR SERVICE						
White	84.2	82.8	84.0	68.6	51.4	65.9
Black	4.1	6.0	4.4	16.3	33.8	19.1
Hispanic	7.5	6.0	7.3	8.6	7.8	8.4
Other	4.2	5.2	4.4	6.5	7.0	6.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
TOTAL ACCESSIONS						
White	83.6	81.8	83.3	70.5	56.7	67.8
Black	4.5	8.3	5.2	14.7	28.3	17.4
Hispanic	7.8	5.3	7.3	8.9	9.2	8.9
Other	4.2	4.6	4.2	5.9	5.9	5.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

18–24/20–39 YEAR-OLD NON-INSTITUTIONALIZED CIVILIANS						
White	Black	Hispanic	Other	Total	Male	Female
65.1/67.2	14.2/12.6	15.6/14.9	5.1/5.3	100.0	49.8/53.6	50.2/46.4

Columns may not add to total due to rounding.
Also see Appendix Tables C-3 (NPS Selected Reserve Enlisted Accessions by Race/Ethnicity, Component, and Gender), C-11 (Prior Service Selected Reserve Enlisted Accessions by Race/Ethnicity, Component, and Gender), E-23 (NPS Coast Guard Reserve Enlisted Accessions by Race/Ethnicity and Gender), and E-25 (Prior Service Coast Guard Reserve Enlisted Accessions by Race/Ethnicity and Gender).

Characteristics of Reserve Component Enlisted Force

At the end of FY 2002, the USCG Reserve enlisted force stood at 6,610.[10] The race/ethnicity by gender distribution of these enlisted members is presented in Table 7.11.

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[10] USCG Reserve enlisted data provided by U.S. Coast Guard Workforce Forecasting & Analysis Staff.

Race/Ethnicity and Gender.   Overall, USCG Reserve enlisted members were more likely to be White than either the overall DoD or the comparable civilian group.   USCG Reserve enlisted members were also slightly less likely to be female than were their DoD counterparts (15 and 17 percent, respectively).

Table 7.11. Race/Ethnicity by Gender of FY 2002 USCG and DoD Reserve Component Enlisted Members and Civilian Labor Force 18–49 Years Old (Percent)						
	Coast Guard			DoD		
Race/Ethnicity	Male	Female	Total	Male	Female	Total
RESERVE ENLISTED MEMBERS						
White	85.5	77.1	84.3	70.8	56.0	68.2
Black	4.2	10.5	5.1	15.4	30.1	17.9
Hispanic	6.5	7.1	6.6	8.8	8.3	8.7
Other	3.8	5.3	4.0	5.1	5.6	5.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
CIVILIAN LABOR FORCE 18–49 YEARS OLD						
White	Black	Hispanic	Other	Total	Male	Female
69.8	12.3	12.9	5.1	100.0	53.4	46.6
Columns may not add to total due to rounding.						
Also see Appendix Tables C-17 (Selected Reserve Enlisted Members by Race/Ethnicity, Component, and Gender) and E-27 (Coast Guard Reserve Enlisted Members by Race/Ethnicity and Gender).						

Age.   In general, USCG Reserve enlisted members tended to be older than the DoD comparison group.   Almost 36 percent of USCG Reserve enlisted members were 40 years of age or older, while only 25 percent of the DoD Reserve comparison group fell into this category, but 54 percent of the civilian comparison group was 40 or older (Table 7.12).   This can be explained, in part, by the proportion of prior service individuals in each Service.   The Coast Guard Reserve relies more on prior service recruits to fill its enlisted ranks than the overall DoD Reserve Components (83 and 53 percent prior service accessions in FY 2002, respectively).   Therefore, members of the USCG enlisted force joined the Coast Guard Reserve at an older age, on average, than those joining the overall DoD Reserve Components.

Table 7.12. Age of FY 2002 USCG and DoD Reserve Component Enlisted Members and Civilians (Percent)			
Age	Coast Guard	DoD	Civilian Comparison
17–19	3.0	8.8	4.5
20–24	14.5	21.7	10.3
25–29	15.0	15.3	10.4
30–34	17.3	15.2	11.5
35–39	14.4	15.1	12.4
40–44	12.3	10.9	13.6
45–49	9.6	6.1	12.4
50+	13.9	7.1	25.0
Unknown	0.0	*	0.0
Total	100.0	100.0	100.0
*Less than one-tenth of one percent. Columns may not add to total due to rounding. Also see Appendix Tables C-15 (Selected Reserve Enlisted Members by Age Group, Component, and Gender) and E-26 (Coast Guard Reserve Enlisted Members by Age Group and Gender).			

Characteristics of Reserve Component Officers

In FY 2002, the USCG Reserve accessed a total of 233 new officers and the overall Reserve officer corps end-strength stood at 1,039.[11] Accessions were stable, and the corps was up slightly from FY 2001 (172 accessions and 1,028 end-strength). By race/ethnicity and gender, USCG Reserve officer accessions were more likely to be White than their peers in the DoD Reserve Components. Likewise, members of the overall USCG Reserve officer corps, were more likely to be White than were their DoD Reserve counterparts, as shown in Table 7.13.

Table 7.13. Race/Ethnicity and Gender of FY 2002 USCG and DoD Reserve Component Officer Accessions and Officer Corps (Percent)				
	Reserve Officer Accessions		Reserve Officer Corps	
Race/Ethnicity	Coast Guard	DoD	Coast Guard	DoD
White	90.1	79.9	88.9	82.3
Black	1.7	9.5	3.4	9.1
Hispanic	4.3	3.7	3.5	3.9
Other	3.9	6.9	4.3	4.6
Total	100.0	100.0	100.0	100.0
Gender				
Male	82.0	81.5	82.1	81.4
Female	18.0	18.6	17.9	18.6
Total	100.0	100.0	100.0	100.0
Columns may not add to total due to rounding. Also see Appendix Tables C-25 (Selected Reserve Officer Accessions and Officers by Gender), C-27 (Selected Reserve Officer Accessions and Officers by Race/Ethnicity), and E-29 (Coast Guard Reserve Officer Accessions and Officer Corps by Race/Ethnicity and Gender).				

Source of Commission. Table 7.14 presents source of commission for Reserve officer accessions and Reserve officers in the Coast Guard and overall DoD Reserve Components. The most often cited source of commission for both new USCG Reserve officer accessions and members of the USCG Reserve officer corps was OCS/OTS.

Table 7.14. FY 2002 USCG and DoD Reserve Component Officer Accessions and Officer Corps by Source of Commission (Percent)				
	Reserve Officer Accessions		Reserve Officer Corps	
Source of Commission	Coast Guard	DoD	Coast Guard	DoD
Academy	2.9	8.6	1.7	5.7
ROTC – Scholarship	0.0	13.5	0.0	11.6
ROTC – No Scholarship	0.0	16.5	0.0	21.8
OCS/OTS	88.2	12.5	85.5	11.5
ANG AMS/ARNG OCS	0.0	4.6	0.0	16.9
Direct Appointment	0.0	20.5	0.0	30.3
Other	8.8	23.8	12.8	2.2
Total	100.0	100.0	100.0	100.0
Columns may not add to total due to rounding. Percentages do not include "Unknown" data. Also see Appendix Tables C-33 (Selected Reserve Officer Accessions by Source of Commission), C-34 (Selected Reserve Officers by Source of Commission), and E-30 (Coast Guard Reserve Officer Accessions and Officers by Source of Commission).				

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[11] USCG Reserve accession data provided by U.S. Coast Guard Workforce Forecasting & Analysis Staff.

The remainder of new officer accessions or officer corps members were commissioned via either the Coast Guard Academy or "Other" sources, such as officers trained in one military Service, but accessed or serving in another Service. The Coast Guard Reserve does not have an ROTC program.

Reserve Component Warrant Officers

In FY 2002, the USCG Reserve accessed a total of 33 new warrant officers; their end-strength was 167. The number of USCG Reserve warrant officer accessions was approximately the same as in FY 2001; end-strength decreased by 10 from 177 in FY 2001. Any differences between the USCG and overall DoD information should be interpreted with caution given the small numbers of USCG Reserve warrant officer accessions and warrant officers (Table 7.15).

Table 7.15. FY 2002 USCG and DoD Reserve Component Warrant Officer Accessions and Officer Corps by Race/Ethnicity and Gender (Percent)				
	Reserve Warrant Officer Accessions		Reserve Warrant Officer Corps	
Race/Ethnicity	USCG	DoD	USCG	DoD
White	93.9	85.9	94.0	87.5
Black	0.0	7.5	3.6	6.3
Hispanic	6.1	3.5	1.8	3.7
Other	0.0	3.1	0.6	2.6
Total	100.0	100.0	100.0	100.0
Gender				
Male	87.9	88.4	88.0	92.2
Female	12.1	11.6	12.0	7.8
Total	100.0	100.0	100.0	100.0
Columns may not add to total due to rounding. Also see Appendix Tables C-35 (Selected Reserve Warrant Officer Accessions and Warrant Officers by Gender and Component), C-36 (Selected Reserve Warrant Officer Accessions and Warrant Officers by Race/Ethnicity and Component), and E-31 (Coast Guard Reserve Warrant Officer Accessions and Warrant Officers by Race/Ethnicity and Gender).				

Closing

While the Coast Guard's organizational positioning is unique—part of one cabinet level department during peace (Transportation[12]) and another during war or under Presidential direction (Defense)—its contributions to national defense have been significant over the years since the USCG's creation. The USCG represents the oldest continuous seagoing service in this country and has fought in almost every war since implementation of the U.S. Constitution to include battles with pirates, the War of 1812, the Mexican War, the Seminole Indian uprising, the Spanish-American War, both world wars, Korea, Vietnam[13], and the Persian Gulf War, where the USCG was the only Armed Force with the ship search capabilities necessary to make the embargo of seagoing goods a success.

On a daily basis numerous Coast Guard personnel are protecting our nation's ports, shores, and waters. On a daily average the Coast Guard: responds to 20 oil and hazardous

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[12] The USCG becomes an agency under the Department of Homeland Security during FY 2003.

[13] Scheina, R. The Coast Guard at War. URL: http://www.uscg.mil/hq/g-cp/history/h_CGatwar.html.

chemical spills, conducts almost 20 maritime security boardings, seizes illegal drugs worth approximately 10 million dollars, conducts about 110 search and rescue cases, assists nearly 200 people in distress, saves 10 lives, and protects nearly three million dollars worth of property within more than 3.4 million square miles of Exclusive Economic Zones.[14]

The Coast Guard has always held a key role in ensuring our nation's maritime homeland security. However, the pace of security activities in and around our ports has increased tremendously since September 11th. Operation Noble Eagle, launched after the attacks of September 11, 2001, is the Coast Guard's largest homeland port security operation since World War II.[15] With such varied missions, roles, and responsibilities, the U.S. Coast Guard truly is a full-time military organization with a genuine peacetime mission.

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[14] U.S. Coast Guard Average Day Factoids. URL: http://www.uscg.mil/hq/g-cp/comrel/factfile/Factcards/AvgDay.html.

[15] U.S. Coast Guard Homeland Security and the New Normalcy. URL: http://www.uscg.mil/hq/g-cp/comrel/factfile/Factcards/Homeland.htm.