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#### GENERAL ACCOUNTING OFFICE

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#### INFORMATION AND OBSERVATIONS ON

# VOLUNTEER ENLISTMENT TRENDS AND PROJECTIONS

FOR FISCAL YEARS 1974-75

#### INTRODUCTION

DOD has made significant progress in increasing the total number of enlisted true volunteer accessions in the past 15-month period without a military draft. However, accession shortfalls and an overall percentage decline in the Army and Marine Corps accessions with high school diplomas have occurred.

Concern for what appears to be an overall deterioration in the guality of the active duty personnel being recruited in the volunteer environment prompted the Congress recently to institute legislative control. These requirements are spelled out in Section 718 of the Fiscal Year 1974 Department of Defense Appropriation Act, which reads:

> "None of the funds in this Act shall be available for the enlistment or pay of non-prior service personnel during fiscal year 1974 when the enlistment will cause the percentage of non-high school graduate enlistments of the service concerned to exceed 45 percent or the mental category IV enlistments to exceed 18 percent of the total non-prior service enlistments for the entire fiscal year."

Section 718 was formulated with the hope that the funding limitation would help to:

- 1. Provide a positive incentive to prevent further deterioration in the overall quality of the Armed Forces.
- 2. Maintain a well-motivated and trainable force.

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- 3. Prevent further erosion of the broad public support which the military establishment needs to perform its long run missions.
- 4. Reduce the number of disciplinary problems, high AWOL and desertion rates, and the number of unsuitable, unfit, and unruly enlistees.
- 5. Insure that recruiting shortfalls are not reduced by the lowering of enlistment standards.

The Army and Marine Corps are concerned with the enlistment shortfalls they are experiencing. They believe that when the number of high school graduates available is not sufficient to meet requirements, then the service should have the option of recruiting non-high school graduates.

The Marine Corps testified during the Fiscal Year 1975 Military Personnel Authorization hearings that without Section 718, it anticipated a shortfall at the end of fiscal year 1974 of as much as 6,000. Section 718 will increase that shortfall to an estimated 12,000. The Army testified that it will not recruit enough soldiers to fill all of its authorized spaces in fiscal year 1974 and possibly not during the first half of fiscal year 1975.

In the volunteer environment, the current DOD policy permits each service to establish the entry standards needed to meet its job requirements. This policy, according to DOD, is under continual review to insure a consistent distribution of quality among the services.

The services basically have four quality characteristics which they use to determine whether or not a potential enlistee will be successful. These characteristics and how they are measured on entrance into the service are abbreviated below:

Characteristics:	Determined by:
Physical condition	Medical examination
Moral background	Enlistee statement and/or checks on misdemeanors, felonies, etc.
Trainability	Aptitude tests
Motivation/discipline	Interviews/high school diploma

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DOD has recently come to describe quality in terms of mental group categories and high school graduation status. DOD states that, while these are easy to measure and use, they are only two of the indicators of quality used, and, when used in isolation, hardly present a complete picture.

The mental categories historically have been based on score groupings derived from the Armed Forces Qualification Test (AFQT)- a 50-minute test given to measure military trainability. The AFQT was the primary test for acceptance in the military during the draft era. In the volunteer environment, the services are no longer required to give the AFQT. The services are moving toward the use of more comprehensive aptitude tests for determining eligibility, enlistment guarantees, and assignment to occupations. The scores from the tests are, however, statistically convertible to the mental category groupings for the purposes of cross-service comparisons and observing historical trends.

The high school diploma, while used as a measure of quality, is no longer used, according to DOD, to screen entry into a skill. In the volunteer environment, the diploma is being used as an indicator of motivation and discipline. Non-high school graduates tend to have more discipline problems, higher retraining rates, and more early discharges. For that reason, DOD says the services seek to maximize the intake of high school graduates.

Appendix I shows the changes in the services quality requirements over the past few years.

#### APPROACH AND SCOPE

This paper is a sequel to Chapter 2 of our report "Problems In Meeting Military Manpower Needs In The All-Volunteer Force, B-177952, May 2, 1973." Chapter 2 dealt with the military services' abilities to meet military manpower objectives--both quantitative and qualitative--in fiscal year 1974.

In this paper we have developed information in answer to the following two questions.

 Will the active military services obtain their required number of non-prior service (nps) enlistments during fiscal year 1974 and at the same time meet the quality constraints imposed by Section 718 of the Fiscal Year 1974 Department of Defense Appropriation Act?

2. What level of nps enlistments can be expected during fiscal year 1975, assuming the congressional quality constraints remain in-force?

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To answer these questions we have provided a series of enlistment projections for nps males for fiscal years 1974 and 1975 based upon a range of circumstances which are likely to occur and variables such as quality constraints, which can be controlled.

In addition, we have included a number of related analyses which add insight to these projections or provide a historical frame of reference. These are:

- --Trend analyses showing the change in accession quality since fiscal year 1971.
- --An analysis of the impact on total accessions of increasing the number of women and the number of individuals with high school equivalence certificates who are enlisted.
- --Enlistment projections for the combined services which may show greater enlistment potential than indicated by the performance of the individual services.
- --Analyses of the tradeoffs between number and quality of accessions.

Our enlistment projections indicate the number of accessions which are likely based upon current accession levels. Assumptions implicit in these projections are:

- --The services will enlist the number of women planned for fiscal years 1974 and 1975.
- --Non-high school graduate and mental category IV accessions are available in sufficient numbers to support any realistic accession levels.

Should major changes occur in the recruiting program, advertising budget, military pay or other factors related to enlistments, then accession levels could increase or decrease substantially from the projections shown.

Data for most of our analyses covers the period January 1970 through March 1974. It was obtained from the General Research Corporation, which, under contract with the Army, maintains up-to-date data on all nps enlistments. This data is obtained from the U.S. Army Recruiting Command accession tapes which contain records of each individual entering the armed services. We used this data because it was current and because much of the processing needed for our analyses had already been done. Our projections and quality analyses take into account the number of women which the services plan to enlist in fiscal years1974 and 1975. All women enlisted are high school graduates in mental category I II, and III. They are counted in the high school graduates percentage and mental category I, II, and III percentage of total nps accessions.

Individuals who enlist with state accredited high school equivalency certificates are also considered as high school graduates for projection purposes since the services include them in their high school graduate statistics. Such individuals are frequently referred to as GEDs because the high school equivalency certificates are called General Educational Development Certificates.

#### Requirements for enlistments

The accession requirements used in this paper were furnished by the Office of the Assistant Secretary of Defense, Manpower and Reserve Affairs. They are:

		Accession requirements					
	Fi	scal year	: 1974	Fi	scal yea	r 1975	
Service	Male	Female	Total	Male	Female	Total	
Army	171,500	14,900	186,400	185,600	17,200	202,800	
Navy	69,800	6,000	75,800	75 <b>,</b> 700	6,700	82,400	
Air Force	65,400	8,000	73,400	64,000	10,000	74,000	
Marine Corps	54,800	1,200	56,000	49,000	1,200	50,200	
Total	361,500	30,100	391,600	374,300	35,100	409,400	

We did not ascertain the appropriateness of the accession requirements or evaluate the ability of the services to meet total force manning objectives.

The quality measures in this paper (high school graduate and mental category percentages) are the same measures which the Congress used to place quality requirements on nps accessions in the Fiscal Year 1974 DOD Defense Appropriation Act.

Appendix II shows the services' fiscal year 1974-to-date progress in obtaining enlisted nps accessions as reported by DOD.

The following section summarizes the results of our analysis. Additional pertinent analyses are contained in supporting appendixes III through VII.

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# SUMMARY

# Enlistment Projections for Fiscal Year 1974

The Army will fall short of its requirement for 171,500 nps male enlistments but will stay within the congressionally established limits on non-high school graduate and mental category IV enlistments. Either limit would cause nps male enlistments to fall below 171,500. The limit causing the more severe shortfall is the non-high school graduate limitation. If current levels of high school graduate enlistments continue, and allowing for 45 percent non-high school graduates among nps accessions (male and female), the Army will enlist 152,000 nps males and probably have fewer than 18 percent of all nps accessions in mental category IV.

The Marine Corps will fall short of its requirement for 54,800 nps males and will exceed the 45 percent limit for non-high school graduates among nps accessions. It will stay well below the 18 percent limit for mental category IV enlistments. Marine Corps nps male enlistments are constrained more by the non-high school graduate limitation, but the Marine Corps is not achieving 55 percent high school graduates among nps accessions. If current nps male enlistment rates were to continue, the Marine Corps would enlist 47,000 nps male accessions this fiscal year (a shortfall of nearly 8,000), with 42 percent of all nps accessions (male and female) as high school graduates. However, in an effort to comply with the congressional requirement that no more than 45 percent of fiscal year 1974 recruits be non-high school graduates, the Marine Corps instructed recruiters to enlist only high school graduates starting April 1, 1974. We estimate that this action will result in the Marine Corps obtaining 49 percent high school graduates with a shortfall of about 14,500

The Navy will meet or exceed its accession requirement of 69,800 nps males and hold non-high school graduate and mental category IV accession to well below the congressional limits. If current nps male enlistment rates continue, the Navy will enlist 80,000 nps males and enlist 68 percent of all its nps accessions as high school graduates.

The Air Force will meet or exceed its requirement for 65,400 nps males and easily meet the congressional quality requirements. If current nps male enlistment rates continue, the Air Force will enlist 69,000 nps males with 91 percent of all nps accessions (male and female) as high school graduates.

The total male nps requirement for the combined services is 361,500 in fiscal year 1974. We project a likely total shortfall of 34,000 for the Army and Marine Corps. On the basis of recent DOD high school graduate accessions, we estimate that the services could have enlisted the required 361,500 males with about 62 percent of nps enlistees as

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high school graduates. The 34,000 shortfall may result from the quality distribution among the services rather than a shortage of high school graduate accessions. The mental category IV limitation is less restrictive on total DOD accessions.

#### Enlistment Outlook for Fiscal Year 1975

The Army's total nps male enlistments in fiscal year 1975 will be determined to a great extent by the percentage of non-high school graduates which it enlists. This is assuming that the number of high school graduates it can take is predictable on the basis of current enlistment rates. If current levels of high school graduate enlistments continue and the Army enlists 55 percent of all nps accessions as high school graduates, it can obtain 152,000 nps males--33,600 short of its fiscal year 1975 requirement for 185,600. If the high school graduate percentage of nps accessions is 46 percent, then the Army can probably enlist 185,600 nps males. This assumes that there would be enough nonhigh school graduate enlistees to make up the difference. Limitation of the percentage of mental category IVs accepted will be a less important constraining factor on enlistments.

Marine Corps nps male enlistments will also depend on the percentage of high school graduates enlisted. If the Marine Corps continues to enlist high school graduates at the present rate and enlists 55 percent high school graduates among all nps enlistments (male and female), it will obtain only 36,000 nps males, a shortfall of 13,000 from the required 49,000. With 41 percent high school graduates among nps enlistments (male and female), they could probably enlist the required 49,000 nps males. The percentage of mental category IV accessions is a less constraining factor on nps male enlistments.

The Navy should be able to enlist a slightly higher number of nps males (84,000) in fiscal year 1975 than this year (80,000) and still enlist the same percentage of nps accessions as high school graduates (68 percent). The Navy nps male accession requirement for fiscal year 1975 is 75,700.

The Air Force is also improving its enlistment capability. On the basis of current enlistment rates, the Air Force should be able to enlist 70,000 nps males in fiscal year 1975 and achieve a high school school graduate percentage of 91 percent among nps accessions which is the percentage we predict for fiscal year 1974.

# Trends in the quality of men enlisting in the services

The quality of Army nps enlistments, as measured by the percentage of men having high school diplomas, has declined since fiscal year 1971. In the first 8 months of fiscal years 1971-1974, the percentages of nps male accessions who were high school graduates were 67, 60, 59 and 47, respectively. In the same time period, quality improved as measured by the percentage who were in mental categories I, II and III. The percentages of nps male accessions in the first 8 months of each fiscal year were 75, 81, 82 and 80, respectively.

Marine Corps quality has declined since fiscal year 1971, as measured by the high school graduate percentage of nps male accessions. The percentages of nps male accessions who were high school graduates in the first 8 months of fiscal years 1971-1974 were 49, 50, 47 and 43, respectively. In the same time period, quality improved as measured by the percentage of nps males who were in mental categories I, II and III. The analagous percentages were 79, 78, 81 and 92, respectively.

The quality of Navy nps male accessions exhibits no clear cut trend since fiscal year 1971, as measured by the percentage of accessions who were high school graduates. In the first 8 months of fiscal years 1971-1974, the percentages of nps male accessions who were high school graduates were 74, 82, 68 and 72, respectively. In the same period, quality has significantly improved as measured by the percentages of total nps male accessions in mental categories I, II and III. The percentages were 87, 84, 80 and 97, respectively.

Air Force quality has remained relatively constant as measured by the high school graduate percentages of nps male accessions in the first 8 months of fiscal years 1971-1974. The percentages were 87, 83, 87 and 86, respectively. In the same period, quality improved as measured by the percentage of nps males who were mental categories I, II and III. The percentages were 82, 89, 95 and 99 for the 4 years.

The quality of all DOD nps male accessions has declined since fiscal year 1971 as measured by the percentage who were high school graduates. In the first 8 months of fiscal years 1971-1974, the percentages of nps male accessions who were high school graduates were 69, 68, 65 and 58, respectively. Quality improved as measured by the percentage of nps males in mental categories I, II and III. The percentages in the first 8 months of fiscal years 1971-1974 were 79, 83, 84 and 89, respectively.

# True Volunteers Compared to Draftees and Draft-Motivated Enlistees

Army nps male true volunteers were of lower quality than draftees and draft-motivated enlistees in calendar years 1971 and 1972 as measured by the percentage of high school graduates in each group. The high school graduate percentage among true volunteers was less than 50 percent in 1971 while the high school graduate percentage of draft/draft-motivated accessions was in excess of 80 percent.

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The Marine Corps experience has been quite similar. In calendar year 1971, the high school graduate percentage among true volunteers was below 50 percent and nearly 80 percent among draft/draft-motivated accessions.

#### The Impact of Women on nps Male Enlistments

The services have been gradually increasing the number of women in the force. Since all women enlisted are high school graduates, increasing the number of women allows the individual service to increase the number of male non-high school graduate accessions or raise the high school graduate percentage or both. Increasing the number of women by 1,000 allows the enlistment of 818 non-high school graduate males with 55 percent of these 1,818 additional enlistees as high school graduates.

The Army is making the largest increase in the enlistment of women. It enlisted 8,700 in fiscal year 1973, is enlisting 14,900 in fiscal year 1974 and plans to enlist 17,200 in fiscal year 1975. By increasing the planned number of female enlistments by 6,200 from fiscal year 1973 to fiscal year 1974, the Army was able to decrease its male accession requirement by 6,200 and increase by 5,070 the number of non-high school graduate males which could be enlisted under the 55 percent high school graduate requirement. This is an 11,270 decrease in the nps enlistment shortfall for fiscal year 1974, without enlisting any additional male high school graduates. By doubling the planned 17,200 nps female enlistments to 34,400 in fiscal year 1975, the Army could reduce its nps male accession requirement by 17,200 to 168,400, and assuming 55 percent high school graduates, enlist 166,000 nps males, virtually eliminating the 33,600 shortfall which we project as likely.

The Marine Corps enlists only about 2 percent of its nps accessions as women. This is the lowest of the four services. The number of women enlisted has not been increased substantially since fiscal year 1971 when they enlisted 1,100 women. The Marine Corps plans to enlist 1,200 in each of fiscal years 1974 and 1975. Thus the number of women enlisted is having little impact on the quantity or quality of nps accessions. If the Marine Corps were to increase the number of female enlistments in fiscal year 1975 to 10 percent of nps accessions (5,000 women), the 13,000 shortfall in nps enlistments, which we predicted based on the 55 percent high school graduate requirement, could be reduced to less than 4,000.

The Navy plans to enlist 6,000 women in fiscal year 1974 ( 8 percent of nps enlistments) as compared to the 2,500 which it enlisted in fiscal year 1971. Since the Navy's high school graduate percentage among enlistees is well above the congressional limit, increasing female enlistments allows the Navy to decrease the male quantity requirement and increase the high school graduate percentage, but does not actually result in increased enlistments.

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The Air Force plans to enlist 8,000 and 10,000 women in fiscal years 1974 and 1975, respectively. The Air Force enlists more women proportionally than the other services; the 10,000 women planned for fiscal year 1975 represents 13.5 percent of nps enlistments.

# The Impact of Enlistees With High School Equivalency (GED) Certificates

The services have also been enlisting more individuals with GEDs. Such individuals are counted against the 55 percent high school graduate requirement and, judging from recent enlistments, are more readily available than additional high school graduates. For each 1,000 enlistees with GED certificates, the military services can enlist as many as 818 non-high school graduates. This ratio is derived from the 55 percent high school graduate requirement.

In January and February of this year the Army enlisted roughly the same number of males with GED certificates (1,817) as it did in the first 8 months of 1973 (1.833). As a result of the January and February GED enlistments, the Army can enlist 1,487 more non-high school graduate enlistments in fiscal year 1974 for a total increase in nps male enlistments of 3,304 (1,817 plus 1,487).

The Marine Corps took fewer than 400 GED accessions in calendar year 1973 (less than 1 percent of total males). They have taken only 84 in January and February of 1974. If they were to enlist 2,000 GEDs in fiscal year 1975 they could increase total accessions by 3,636 and maintain 55 percent high school graduates (actually GEDs) among these additional accessions.

The Air Force enlisted 3,000 individuals with GED certificates in the first 8 months of fiscal year 1974. It enlisted three times as many in January and February of 1974 (1,238) as it did in January and February of 1973 (468).

No information was obtained on the Navy's enlistment of recruits with GED certificates.

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APPENDICES

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# 1 Oct - 30 Nov 1971

- a. Non-high school graduate. Mental Group III's and IV's not credited (GED equivalent O.K.)
- b. Mental Group IV quota 10%

#### **1** Dec 1971 - 29 Feb 1972

- a. High school graduate Mental Group IV limited to 3,000
- b. No Mental Group IV's below score of 20 (lower IV's)

#### **1** Mar - 15 Jul 1972

a. No credit for Mental Group III non-high school graduates unless a Mental Group III high school graduate is obtained
b. 20% ceiling on upper Mental Group IV high school graduates

# **15 Jul - 30 Sep 1972**

a. Mental Group IV ceiling of 19%

#### 1 Oct 1972 - 14 Jan 1973

- a. 19% Mental Group IV ceiling
- b. No credit for below 21 on AFQT (lower IV's)

#### 15 Jan - 31 Jan 1973

 a. No credit for non-high school graduates who scored AFQT 21-30

#### 1 Feb - 30 Jun 1973

- a. 15% ceiling on Mental Group IV's
- b. 30% ceiling on non-high school graduates
- c. No credit for below 21 on AFQT
- d. No credit for non-high school graduates AFQT 21-30
- e. No 17 year old non-high school graduates who scored below 50 on the AFQT

#### **1** Jul - 31 Jul 1973

- a. Credit for AFQT 10 and above
- b. 15% ceiling on Mental Group IV's
- c. 30% ceiling on non-high school graduates
- d. No 17 year old non-high school graduates who scored below 50 on AFQT
- e. All high school graduates must have one aptitude area of 90
- f. All non-high school graduates must have two aptitude areas of 90

# 1 Aug - 14. Oct 1973

- a. 19% Mental Group IV ceiling
- b. 45% ceiling on non-high school graduates
- c. No 17 year old non-high school graduates who scored below 50 on the AFQT

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# 15 Oct 1973 - Present

- a. No credit for below 16 on AFQT
- b. No more than 50% of accessions can be non-high school graduates
- c. No 17 year old non-high school graduates
- d. 19% Mental Group IV ceiling

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SUMMARY OF CHANGES IN MARINE CORPS STANDARDS FOR MALES

#### Jul 1971 - Jan 1972

All high school graduate Mental Group IV's (AFQT 10-30) were acceptable. Mental Croup IV's (AFQT 16-30) who were not high school graduates wide required to have a score of 90 on at least one AQB. Mental Group IV's in the 10-15 AFQT range, who were not high school graduates, were required to have a 90 on at least two AQB's. All new mental standards accessions (lower Mental Group IV) must have an Odds for Effectiveness score of 50 or above. Of the new mental standards accessions, 65% must be high school graduates. Seventeen year olds must be high school graduates or score 50 or above on the AFQT. Men enlisted in the Medically Remedial Enlistment Program (MREP) must score 50 or above on the AFQT. The goal for high school graduate NPS accessions was 65%.

### 1 Feb 1972 - 31 Jan 1973

Mental Group IV's in the AFQT 21-30 range were required to have a score of 90 on at least one AQB. High school graduate Mental Group IV's in the AFQT 10-20 range were acceptable if they had 90's on two AQB's plus a GT score of 80. Non-high school graduate Mental Group IV's in AFQT range 10-20 were not acceptable. The same Odds for Effectiveness score requirements remained for new mental standards accessions. Seventeen-year olds must still be high school graduates or score 50 or above on the AFQT. The Medical Remedial Enlistment Program accessions must score 31 or above on the AFQT. The high school graduate goal remained 65%.

**1** Feb 1973 - 28 Feb 1973

All Mental Group IV's were limited to a two year enlistment:

# 1 Mar 1973 - 16 Aug 1973

Mental Group IV accessions were limited to 10% of non-prior service accessions. Mental Group IV's in the AFQT 10-20 range were not acceptable. All accessions in Mental Group IV AFQT range 21-30 and lower Mental Group III (AFQT 31-49) were required to have 90's on at least two AQB's and a GT score of 80.

#### 17 Aug 1973 - 24 Sep 1973

The requirement that high school graduate Mental Group III's in AFQT range 31-49 have 90's on at least 2 AQB's and a GT score of 80 was dropped. The requirement remained for non-high school graduates AFQT 31-49.

# 25 Sep 1973 - 3 Oct 1973

Seventeen year old non-high school graduates in AFQT range 40-49 were acceptable if they had at least 90 on two aptitude areas and a GT score of 80. Seventeen year old non-high school graduates with AFQT score of 50 and above were acceptable with no additional aptitude area requirement.

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# 4 Oct 1973 - 10 Dec 1973

An ST (Skilled Technical) score of 80 was acceptable in lieu of a GT score of 80.

# 11 Dec 1973 - Present

The requirement was dropped for an ST of 80 or a GT of 80 for AFQT 31-49 non-high school graduates, upper Mental Group IV's (AFQT 21-30), and seventeen year old non-high school graduates in AFQT range 40-49.

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SUMMARY OF CHANGES IN NAVY STANDARDS FOR MALES

#### Prior to February 1972

Project 100,000 standards were in effect. Men with AFQT scores as low as 10 were acceptable if they passed supplementary screens.

#### 25 Feb 1972 - 13 Apr 1972

Mental Group IV men who scored an AFQT score of 20 or below were not acceptable. Mental Group IV men with AFQT scores of 21-30 were acceptable with no additional screening. Seventeen-year olds must be high school graduates; a GED was not acceptable for enlistment. Eighteen-year olds must be a high school graduate or have a GED equivalency plus a score of 69 on the Odds for Effectiveness Table.

# 14 Apr 1972 - 23 Jul 1972

Mental Group IV's in the 10-20 range of the AFQT were acceptable if they scored a minimum of 37 on the GCT portion of the Short Basic Test Battery (SBTB). Seventeen-year old non-high school graduates were acceptable (as well as high school graduates). The Odds for Effectiveness tables were cancelled.

# 24 Jul 1972 - 15 Oct 1972

Enlistment standards were not changed. A quota of 70% school eligibles was established. (School eligibles were defined as personnel scoring 49 or above on the AFQT and a GCT + ARI = 100 on the SBTB.) A quota of 75% of NPS accessions as high school graduates was established. The quota for minority school eligibles was set at 67%.

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16 Oct 1972 - 30 Nov 1972

The school eligible quota for FY 1973 was set at 75%, but the monthly school eligible quota was set at 81% in order to reach the yearly quota. Mental Group IV's scoring AFQT 10-20 were not acceptable. Mental Group IV's scoring AFQT 21-30 must be high school graduates - a GED equivalency was not acceptable. The overall high school graduate quota remained at 75%. The minority school eligible quota remained at 67%.

# 1 Dec 1972 - 31 Dec 1972

The minority school eligible goals were established at the level of the overall school eligible quota. Guidelines were established that quality was to take precedence over quantity.

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# 1 Jan 1973 - 31 Jan 1973

New Odds for Effectiveness tables using SBTB scores were published. The use of the AFQT for selection was discontinued and the SBTB became the selection test.

# 1 Feb 1973 - 30 Jun 1973

Effective 1 February 1973, all Odds for Effectiveness scores must be recorded and written waivers at the District Recruiting level wore required for anyone scoring below 68 on the Odds for Effectiveness tables. It was also required that all police record checks be in writing.

# **1 Jul 1973 - 11 Dec 1973**

90% of NPS accessions must be school eligible (GCT + ARI = 100) for FY 1974. Goal of 80% high school graduates for FY 1974.

# 12 Dec 1973 - Present

The cumulative percentage of school eligibles for FY 1974 was set at 85%.

Goal of 80% high school graduates for FY 1974, and a long range goal of 90%.

SUMMARY OF CHANGES IN AIR FORCE STANDARDS FOR MALES

Since Project 100,000 standards (AFQT 10) were stopped, the Air Force has consistently raised its quality standards.

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Since December 3, 1971, all 17-year olds must be high school graduates or Mental Group I's or II's (AFQT 65).

Since May 1972, the Air Force has taken no Mental Group IV's who are not high school graduates. A drug abuse screen was put on enlistments. AFQT 21 became the minimum acceptable. All non-high school graduates must have a general score of 40 or higher plus 40 or higher on another AQE.

During FY 1974 non-high school graduate Mental Group III's are not being enlisted unless they are already in the delay pool. Mental Group IV's are not being enlisted unless they are in the delay pool. 90% of NPS accessions are expected to be high school graduates.

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# FISCAL YEAR 1974-TO-DATE ENLISTED NON-PRIOR SERVICE MALES (JULY 1973 THROUGH MARCH 1974)

Results	Army	Navy	Marine Corps (Thousand	Air Force (s)	Total DOD
Objective Actual Shortfall (Excess)	$   \begin{array}{r} 139.5 \\         \underline{120.2} \\         \underline{19.7} \\         \end{array}   $	56.7 $54.9$ $1.8$	39.4 <u>36.5</u> <u>2.9</u>	49.4 49.9 (.5)	285.0 261.5 23.5
Percent of Shortfall	14	3	7	<u>0</u>	8

# FISCAL YEAR 1974-TO-DATE NON-PRIOR SERVICE ENLISTED MEN AND WOMEN (JULY 1973 THROUGH MARCH 1974)

Results	Army	<u>Navy</u>	Marine Corps	Air Force	Total DOD
Percent high school graduate	54	71	48	94	65
Percent mental category IV	18	3	8	1	10

# NON-PRIOR SERVICE WOMEN ENLISTED ACCESSIONS

Fiscal Year	Army	Navy	Marine <u>Corps</u>	Air Force	Total DOD
1971 (actual)	5,200	2,500	1,100	4,300	13,100
1973 (actual)	8,700	4,900	1,100	6,200	20,800
1974 (plan)	14,900 <sup>a</sup>	6,000	1,200	8,000	30,100
1975 (plan)	17,200	6,700	1,200	10,000	35,100

<sup>a</sup>Army reports revised objective of 14,400 as of March 31, 1974.

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#### ARMY ENLISTMENT AND QUALITY ANALYSES

# 1974 AND 1975 PROJECTIONS BASED ON THE MENTAL CATEGORY IV LIMITATION

Based on current enlistment rates for males in mental categories I, II, and III, and allowing for 18 percent mental category IV among all nps accessions, the Army could enlist 161,000 nps males in fiscal year 1974. This projection includes 129,000 males in mental categories I, II and III, and the assumption that 14,900 women will be enlisted.

With 18 percent of nps accessions in mental category IV, the Army could enlist 166,000 nps males in fiscal year 1975. This projection is based on an estimate that they will enlist 133,000 males in mental categories I, II and III, and the assumption that 17,200 women will be enlisted.

#### INCREASING ENLISTMENTS

The Army has been faced with a declining number of high school graduates since the draft was discontinued. Chart 1 shows the Army high school graduate totals by calendar year.

	CHART 1 Total nps male
Calendar year	high school graduates
1970	199,616
1971	153,651
1972	135,582
1973	76,920

By continuing to enlist mental category IVs (about 20 percent thus far in fiscal year 1974), increasing the number of women and by recruiting more men with GEDs, the Army has been able to enlist many more recruits than otherwise possible without further affecting quality as measured by the high school graduate percentage.

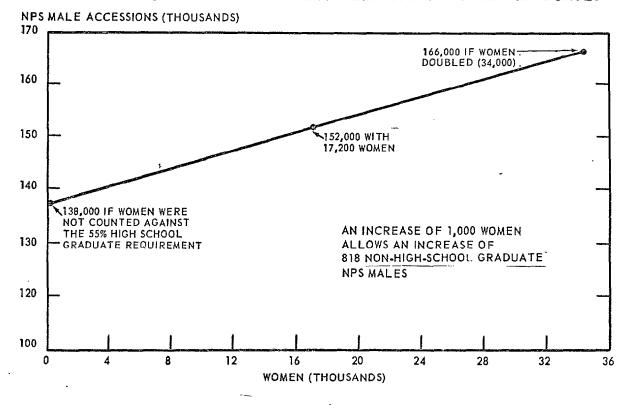
The month of February 1974 illustrates the impact of both women and GEDs. The high school graduate percentage of nps males was 45 percent. When male GEDs were counted as high school graduates, the percentage became 53 percent, and when the high school graduate percentage of all nps accessions (male and female) including GEDs were calculated, it became 58 percent.

# Impact of women

Chart 2 shows the relationship between the number of women enlisted and the number of nps males the Army can enlist. For every 1,000 additional women enlisted, the Army can enlist 818 non-high school graduate males and maintain 55 percent among these 1,818 accessions.

# CHART 2

# ARMY IMPACT OF WOMEN ON NPS MALE ACCESSIONS FY 1975 PROJECTIONS - ASSUMING 55 PERCENT HIGH SCHOOL GRADUATES



#### Impact of GED enlistees

In January and February of 1974 the Army enlisted about the same number of males with GEDs (1,817) as it did in the 8 months from January through August of 1973 (1,833). In February 1974, the Army enlisted nearly 9 times the number of GEDs that it enlisted in February 1973 (1,091 versus 123). As in the case of women, for each 1,000 GEDs enlisted, 818 non-high school graduate accessions without GED certificates can be enlisted. As a result of the January and February GED enlistments, the Army was able to enlist 1,487 more nonhigh school enlistments in fiscal year 1974. The sharp increase in the number of Army nps accessions holding GEDs can be traced to a special effort on the part of the Army to meet the 55 percent high school requirement. In December 1973 and January 1974, the U.S. Army Recruiting Command issued several letters urging recruiters to obtain more enlistees having GED certificates. If an applicant for enlistment was not a high school graduate, and did not have a GED, the recruiter was to encourage him to obtain a State approved certificate. The recruiter was also authorized to assist the enlistee and incur certain associated expenses, such as paying for a copy of the certificate, on behalf of the recruit. They could not, however, pay any State fees to take the examination.

These letters also specified conditions under which individuals holding GEDs, who would not otherwise be eligible, could be enlisted. These conditions were

- when a letter from a State authority indicates that an individual has met the State requirements and will be granted a GED certificate,
- 2. when the individual has a Job Corps GED certificate,
- 3. when the individual is 17 years old but has a State accredited or Job Corps GED certificate.

Recruiters are give credit for GED accessions toward their high school graduate quotas.

This discussion is not meant to imply that GED accessions are in any way inferior to high school graduates. In most States the GED certificate requires the passage of a battery of demanding tests and an individual who passes them must display competence in each subject area. In our opinion, GED accessions may well be a valuable resource which has been under utilized in the past. Our analysis in this area is intended only to show how this resource impacts on the services ability to meet high school graduate requirements.

# QUALITY ANALYSIS (male nps accessions)

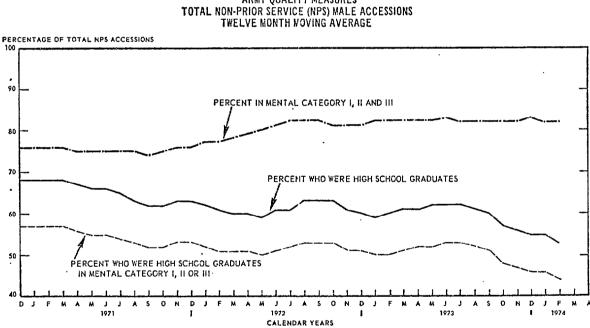
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Chart 3 shows the quality mix by mental categories I, II and III percentages, high school graduate percentages, and high school graduate percentages in mental categories I, II and III for the first 8-month period of each of the last four fiscal years. Eight-month periods were used to allow comparison to the experience thus far in fiscalyear 1974.

	Percent of nps male accessions (First 8 months of each fiscal year)					
Group	1971	<u>1972</u>	<u>1973</u>	1974		
Category I, II and III (Category IV)	75 (25)	81- (19)	82 (18)	- 80 (20)		
High School Graduates	67	60	59	47		
High School Graduates in Mental Category I, II and III	57	· 52	50	39		

Chart 4 shows the trend in these quality measures when the monthly data is smoothed by using a 12-month moving average. The individual points do not represent the percentages in those specific months but rather the percentages for the pervious 12-month period.

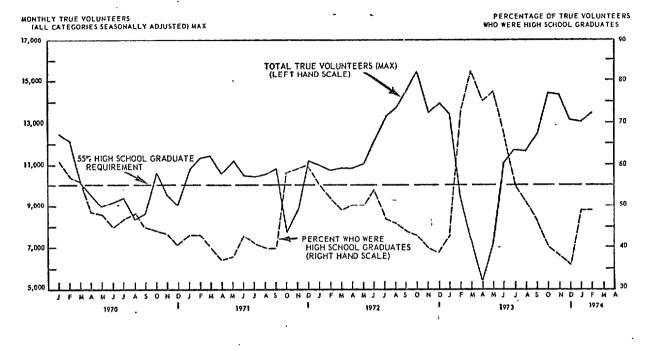
# CHART 4



**ARMY QUALITY MEASURES** 

Chart 5 shows seasonally adjusted male true volunteer high school graduate percentages and total true volunteers from January 1970 through February 1974.

#### CHART 5



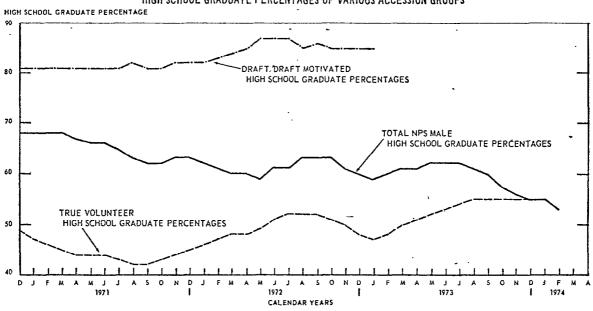
#### ARMY TRUE VOLUNTEERS HIGH SCHOOL GRADUATE PERCENTAGE AND TOTAL TRUE VOLUNTEERS

The Army has rarely exceeded 55 percent high school graduates among its true volunteers without experiencing sharp decreases in the total number of true volunteers enlisted. On the other hand, high monthly accession rates have generally been accompanied by sharp drops in the high school graduate percentage. The relatively high number of accessions enlisted by the Army in recent past months again resulted in rather low high school graduate percentages.

The high school graduate percentage of nps males thus far in fiscal year 1974 has been 47 percent (excluding GEDs). This is roughly the percentage the Army has obtained among its true volunteers in the past. Therefore, the downward trend in the Army's high school graduate percentage can be explained by the shift from reliance on draft/draftmotivated accessions to all volunteers. Chart 6 shows the difference in the high school graduate percentages of true volunteers and draft/ draft-motivated accessions using a 12-month moving average.

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#### CHART 6



ARMY NPS HALE ACCESSIONS HIGH SCHOOL GRADUATE PERCENTAGES OF VARIOUS ACCESSION GROUPS

At the beginning of the time period shown, the high school graduate percentage of draftees and draft-motivated enlistees was about 35 percentage points higher than true volunteers. During the period shown, the high school graduate percentage for true volunteers as well as draft/ draft-motivated accessions improved slightly. But as the proportion of true volunteers among total accessions increased, the high school graduate percentage of total accessions moved downward toward the high school percentage for true volunteers. At the beginning of 1970 only 41 percent of accessions were true volunteers, but by March 1973, draft-related accessions became negligible.

#### MARINE CORPS ENLISTMENT AND QUALITY ANALYSES

# 1974 AND 1975 PROJECTIONS BASED ON THE MENTAL CATEGORY IV LIMITATION

Based on current enlistment rates for males in mental categories I, II and III, and allowing for 18 percent mental category IV among all nps accessions, the Marine Corps could enlist 53,000 nps males in fiscal year 1974. This projection includes our estimate of 43,000 males in mental categories I, II and III and assumes the enlistment of 1,200 women.

With 18 percent of nps accessions in mental category IV, the Marine Corps could enlist 54,000 nps males in fiscal year 1975. This projection is based on an estimate that they will enlist 44,000 males in mental categories I, II and III, and the assumption that 1,200 women will be enlisted.

# INCREASING FISCAL YEAR 1975 ENLISTMENTS WITHIN EXISTING SUPPLY

The Marine Corps has a number of options for increasing enlistments.

- 1. Increasing mental category IV enlistments. Thus far in fiscal year 1974, the Marine Corps has taken only 8 percent of its nps male enlistees in mental category IV. It is very likely that increasing this percentage in fiscal year 1975 would increase the number of total accessions substantially without adversely affecting the high school graduate percentage. About half of the Marine Corps mental category IV true volunteers were high school graduates in fiscal year 1973. During that period, mental category IVs were enlisted at three times the present rate.
- 2. Increasing the number of GED accessions. The Marine Corps enlisted fewer than 400 GED accessions in calendar year 1973 (less than 1 percent of total nps males). They enlisted only 84 in January and February of 1974. If they were to enlist 1,000 GEDs in fiscal year 1975, they could increase total accessions by 1,818 and maintain 55 percent high school graduates among these additional accessions.
- 3. Enlisting more women. The Marine Corps enlists only about 2 percent of its nps accessions as women. This is the lowest of the four services. The number of women enlisted has not been increased substantially since fiscal year 1971 when they enlisted 1,100 women. The Marine Corps plans to enlist 1,200 in each of fiscal years 1974 and 1975. Consequently, the number of women enlisted is having little impact on the quantity or quality of nps accessions.

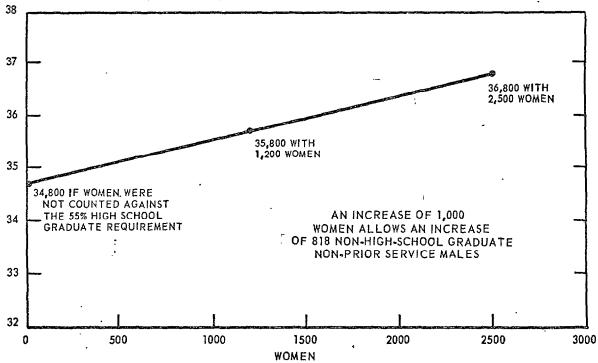
APPENDIX IV

Chart 1 shows the relationship between the number of women enlisted and the number of nps males the Marine Corps can enlist.



# MARINE CORPS IMPACT OF WOMEN ON NPS MALE ACCESSIONS FY 1975 PROJECTIONS - ASSUMING 55 PERCENT HIGH SCHOOL GRADUATES

NPS MALE ACCESSIONS (THOUSANDS)



·. ·

The following hypothetical situation illustrates the combined impact of all the factors analyzed above on the total number of nps males which can be enlisted in fiscal year 1975.

# nps male enlistment

45,613

Increase in nps males by

Total nps males possible

The addition of 2,500 women would allow a reduction in the fiscal year 1975 requirement for males from 49,000 to 46,500. This would result in a shortfall of about 1,000, without violating the 55 percent high school graduate requirement or the limit on mental category IV.

# QUALITY ANALYSIS (male\_nps\_accessions)

Chart 2 shows the quality mix by mental categories I, II and III percentages, high school graduate percentages, and high school graduate percentages in mental categories I, II and III for the first 8-month period of each of the last 4 fiscal years. Eight-month periods were used to allow comparison to the experience thus far in fiscal year 1974.

#### CHART 2

	Percent of nps male accessions (First 8 months of each fiscal year)					
Group		<u>1971</u>	<u>1972</u>	<u>1973</u>	1974	
Category I, II, III Category IV)		79 (21)	78 (22)	81 (19)	92 (8)	
High School Graduate		49	50	47	43	
High School Graduates in Category I, II and III		42	42	38	39	

APPENDIX IV

The most significant change has been the drop in the mental category IV percentage from an average of about 20 percent in the 3 previous fiscal years to about 8 percent in fiscal year 1974. The high school graduate percentage has declined 7 percentage points from about 50 percent in the recent draft years to 43 percent thus far in fiscal year 1974.

Chart 3 shows the trends in these quality measures. The data has been smoothed using a 12-month moving average.

#### CHART 3

#### MARINE CORPS QUALITY MEASURES TOTAL NON-PRIOR SERVICE (NPS) MALE ACCESSIONS TWELVE MONTH MOVING AVERAGE

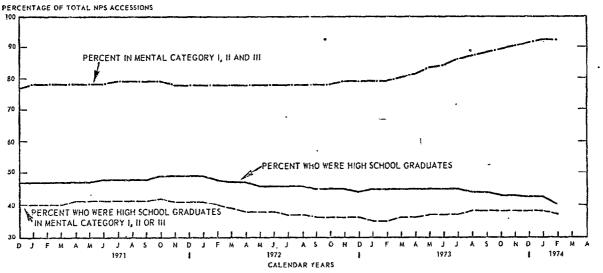
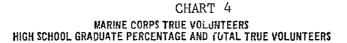
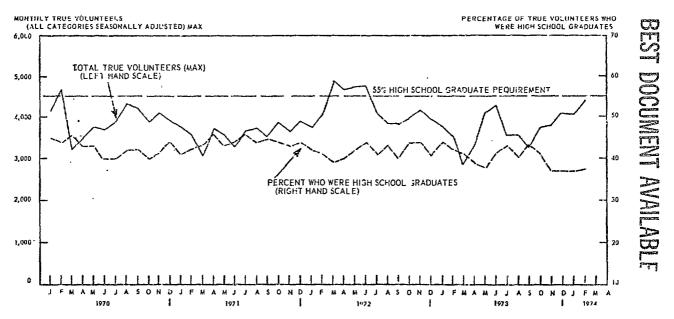


Chart 4 shows seasonally adjusted male true volunteer high school graduate percentages and total true volunteer accessions from January 1970 through February 1974. The Marine Corps has never come close to achieving 55 percent high school graduates among its male true volunteers in any month. Large increases in total accessions have generally caused significant decreases in the high school graduate percentage and vice versa.

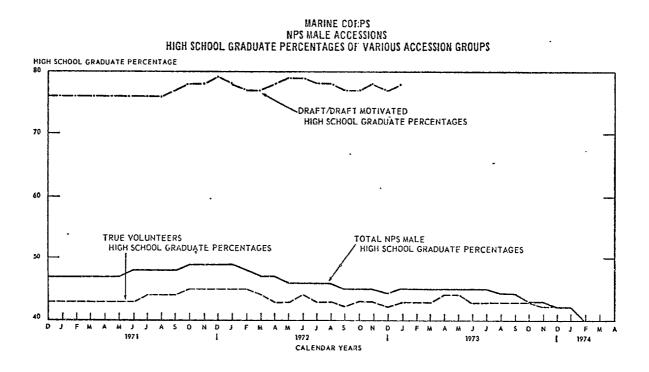




# True volunteers compared to draft/draft-motivated accessions

The difference between male true volunteers and male draft/draftmotivated accessions is just as striking as in the case of the Army. Chart 5 shows the high school graduate percentage among male true volunteers, draft/draft-motivated accessions and total accessions. At the beginning of this period the high school graduate percentage of draft/draft-motivated accessions was nearly 30 percentage points higher than the percentage of high school graduates among true volunteers.





The Marine Corps, however, was far less reliant on the draft, with 88 percent of its accessions being true volunteers in 1970 compared to 41 percent for the Army. Since calendar year 1970 the high school graduate percentage of total nps male accessions has decreased slightly, in contrast to the Army where the decrease was dramatic and could be traced to the conversion to an all volunteer force. Thus converting to the all volunteer force had much less impact on the quality of Marine Corps accessions.

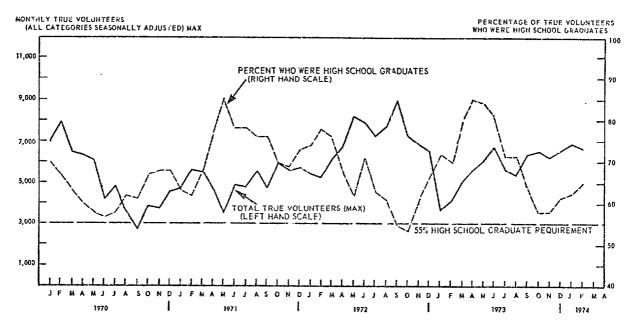
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#### NAVY QUALITY ANALYSES

Chart 1 shows that the Navy has consistently exceeded 55 percent high school graduates among its male true volunteers over the past  $\frac{1}{4}$ years. It also shows the trade-off between quantity and quality. In late 1972, when accession levels were high, the high school graduate percentage reached its lowest point since 1970. When quality was high in mid 1971 the total number of true volunteers was low.

#### CHART 1

#### NAVY TRUE VOLUNTEERS HIGH SCHOOL GRADUATE PERCENTAGE AND TOTAL TRUE VOLUNTEERS



The Navy has improved its category I, II and III percentage significantly by enlisting only 3 percent of nps male accessions in mental category IV in fiscal year 1974-to-date as compared to 13 percent, 16 percent, and 20 percent in fiscal years 1971, 1972, and 1973, respectively. Chart 2 shows the quality mix by mental categories I, II and III percentages, high school graduate percentages, and high school graduate percentages in mental categories I, II and III for the first 8 -month period of each of the last  $\frac{1}{4}$  fiscal years.

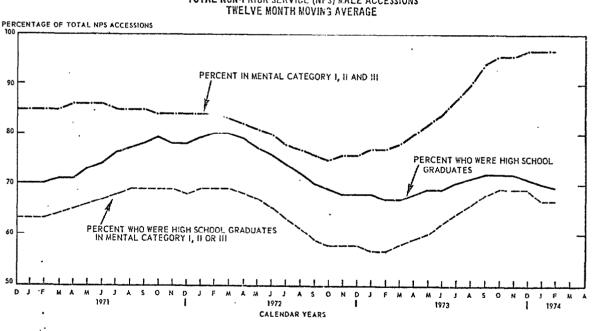
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#### CHART 2

	Percent of nps male accessions (First 8 months of each fiscal year			
Group	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>
Category I, II, III (Category IV)	87 (13)	84 (16)	80 (20)	97 (3)
High School Graduates	7 <sup>4</sup>	82	-68	68
High School Graduates in Category I, II and III	68	71	59	65

The high school graduate percentages and mental category I, II and III high school graduate percentages in this table show no clearcut trend nor do trends appear when the data is smoothed as shown in Chart 3. If anything, these mer area seem to remain very much unchanged over time even though there is significant fluctuation.

# CHART 3

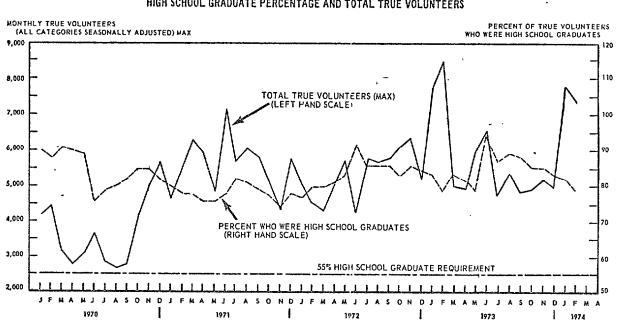


#### NAVY QUALITY MEASURES TOTAL NON-PRIOR SERVICE (NFS) MALE ACCESSIONS TWELVE MONTH MOVING AVERAGE

#### AIR FORCE QUALITY ANALYSES

Chart 1 shows the consistency with which the Air Force has exceeded 55 percent high school graduates among its male true volunteers over the past 4 years.

## CHART 1



AIR FORCE TRUE VOLUNTEERS HIGH SCHOOL GRADUATE PERCENTAGE AND TOTAL TRUE VOLUNTEERS

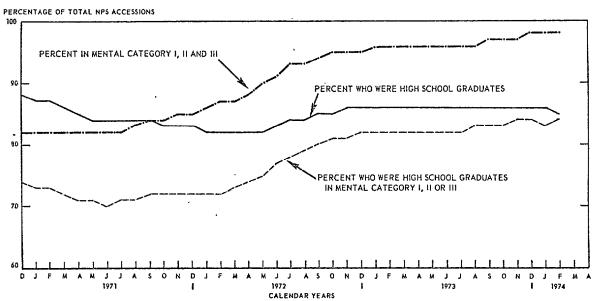
The Air Force has improved its mental category I, II and III percentage by enlisting only 1 percent nps male enlistees as mental category IV so far in fiscal year 1974 compared to 18 percent, 11 percent, and 5 percent in fiscal years 1971, 1972 and 1973, respectively. Chart 2 shows the quality mix by mental categories I, II and III percentages, high school graduate percentages, and high school graduate percentages in mental categories I, II and III for the first 8-month period of each of the last four fiscal years.

# CHART 2

	Percent of nps male accessions (First 8 months of each fiscal year				
Group	<u>1971</u>	1972	<u>1973</u>	<u>1974</u>	
Category I, II, III (Category IV)	82 (18)	89 (11)	95 (5)	99 (1)	
High School Graduates	87	83	87	86	
High School Graduates in Category I, II and III	72	76	82-	85	

The high school graduate percentages are relatively constant while the mental categories I, II and III high school graduate percentages are increasing. This phenomena is more clearly demonstrated in Chart 3 which portrays the long-term trend in these quality measures.

# CHART 3



#### AIR FORCE QUALITY FEASURES TOTAL NON-PRIOR SERVICE (NPS) KALE ACCESSIONS TWELVE MONTH MOVING AVERAGE

1

#### ALL SERVICES ENLISTMENT AND QUALITY ANALYSIS

#### ENLISTMENT PROJECTION

Based on the 55 percent high school requirement and the 18 percent category IV limitation, we forecast the Army and Marine Corps will fall short of their fiscal year 1975 accession requirements and the Navy and Air Force could take more accessions than needed. Except for the Army, the services have reduced mental category IV accessions far below the 18 percent limit. The Navy and Air Force have continued to attract a high percentage of nps male accessions with high school diplomas and have pushed their high school percentage even higher by enlisting more women and GEDs.

On the basis of recent levels of high school graduate accessions, we estimate that the services could have enlisted the required 361,500 nps males with 62 percent of total nps accessions as high school graduates or GEDs. If under these circumstances the Army and Marine Corps had taken exactly 55 percent of their accessions as high school graduates or GEDs, then the Navyand Air Force could still take 73 percent of their accessions as high school graduates or GEDs.

We were unable to assess the exact extent to which this kind of quality trade-off among the services is possible, but our calculations provide an upper limit on the potential for such trade-offs. We believe that establishing an upper limit on the percentage of high school graduates the Air Force and Navy enlist would more than likely provide increased high school graduate enlistments for the Army and Marine Corps. Some evidence indicating that such trade-offs are possible is shown in Chart 1.

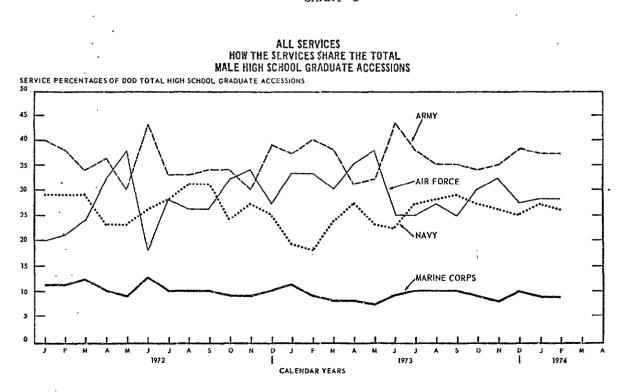


CHART 1

Certain of the fluctuations in Chart 1 can be explained in terms of demand against supply. For example, when the Army was pushing for quality in late 1971 and early 1972 (beginning in October 1971 the Army denied recruiters credit for enlisting mental category IV's and nonhigh school graduates in mental category III), they were taking a high percentage of the total high school graduate accessions, apparently, at the expense of the Air Force. In February 1973, the Army again pushed for quality by trying to enlist 70 percent high school graduates. This action seemingly impacted on the Navy's share of high school graduates.

During the total 26-month period, the rate of high school graduate enlistments was reasonably stable. The monthly totals were relatively consistent on a seasonally adjusted basis, and the total number of high school graduate true volunteers in 1972 and 1973 were 210,588 and 201,431, respectively.

Some of the fluctuations in Chart 1 are no doubt due to seasonal factors or individual recruiting patterns on the part of the individual services. Therefore, we do not believe this analysis provides proofpositive that increases in the number of high school graduates enlisted by one service necessarily causes a decrease in the number enlisted by another service.

#### PROJECTION BASED ON MENTAL CATEGORY IV LIMITATION

We analyzed the total possible nps males that could be enlisted based on recent mental category I, II and III accessions. The services could enlist the 361,500 nps males required in fiscal year 1974 and take 10 percent of accessions in mental category IV.

We have not analyzed the impact of this on the individual services because the high school graduate constraint is more binding, but it is possible that if the Navy and the Air Force were to take a greater number of mental category IVs, a larger number of mental category I, II and III enlistees with high school diplomas would be available to the Army and Marine Corps.

#### QUALITY

Chart 2 illustrates the 4 year trend in the quality measures which were analyzed for each of the services individually.

CHART	2
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	Percent of total nps male accessions					
	First (	First 8 months of each fiscal year				
Group	<u>1971</u>	1972	<u>1973</u>	<u>1974</u>		
Category I, II and III (Category IV)	79 (21)	- 83 (17)	84 (16)	89 (11)		
High School Graduates	69	68	65	58		
High School Graduates in Category I. II and III	59	60	57	54		

The decrease in the quality of nps male accessions over the past 4 comparable fiscal year periods, as measured by the high school graduate percentage, is far less than the quality decline experienced by the Army.