Research Report 1453

Participation in the Army College Fund

Michael B. Tannen and Winnie Young
University of the District of Columbia

Manpower and Personnel Policy Research Group
Manpower and Personnel Research Laboratory

U. S. Army

Research Institute for the Behavioral and Social Sciences

October 1987

U. S. ARMY RESEARCH INSTITUTE
FOR THE BEHAVIORAL AND SOCIAL SCIENCES

A Field Operating Agency under the Jurisdiction of the

Deputy Chief of Staff for Personnel

EDGAR M. JOHNSON
Technical Director

WM. DARRYL HENDERSON
COL, IN
Commanding

Research accomplished under contract
for the Department of the Army

University of the District of Columbia
Department of Economics

Technical review by

Charles J. Dale
Edward Schmitz

NOTICES

DISTRIBUTION: Primary distribution of this report has been made by ARI. Please address correspondence concerning distribution of reports to: U.S. Army Research Institute for the Behavioral and Social Sciences, ATTN: PERI-POT, 5001 Eisenhower Ave., Alexandria, Virginia 22333-5600.

FINAL DISPOSITION: This report may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER ARI Research Report 1453	2. GOVT ACCESSION NO. AD-A190 996 3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) PARTICIPATION IN THE ARMY COLLEGE FUND	5. TYPE OF REPORT & PERIOD COVERED Final Report Period ending 9-86 6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Michael B. Tannen Winnie Young	8. CONTRACT OR GRANT NUMBER(s) DAAG 29-81-D-0100
9. PERFORMING ORGANIZATION NAME AND ADDRESS University of the District of Columbia Department of Economics, Building 41 1200 Connecticut Ave., N.W., Washington, DC 20008	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 20162722A791
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Army Research Office Research Triangle Park, NC 27709-2211	12. REPORT DATE October 1987 13. NUMBER OF PAGES 87
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office) U.S. Army Research Institute 5001 Eisenhower Avenue Alexandria, VA 22333-5600	15. SECURITY CLASS. (of this report) Unclassified 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE --

16. DISTRIBUTION STATEMENT (of this Report)

Distribution unlimited; approved for public release.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

--

18. SUPPLEMENTARY NOTES

Contracting Officer's Representative, Curtis Gilroy.

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Army College Fund
Educational benefits
Enlistment incentives
Veteran's Education Assistance Program

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This report provides statistics on participation in the Army College Fund (ACF). Data files of individual records were merged from the Military Enlistment Processing Station accession files, Army Finance and Accounting Center, and Veterans Administration Banking and Benefits records. The resulting data base provided information on ACF enrollment, contribution and refund behavior, and benefit usage.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

Research Report 1453

Participation in the Army College Fund

Michael B. Tannen and Winnie Young
University of the District of Columbia

Manpower and Personnel Policy Research Group
Curtis L. Gilroy, Chief

Manpower and Personnel Research Laboratory
Newell K. Eaton, Director

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
5001 Eisenhower Avenue, Alexandria, Virginia 22333-5600

Office, Deputy Chief of Staff for Personnel
Department of the Army

October 1987

Army Project Number
2Q162722A791

Manpower, Personnel, and Training

FOREWORD

The Manpower and Personnel Policy Research Group conducts research on significant issues of particular concern to the U.S. Army on manpower and related issues. The Army College Fund is a major program for assisting in the recruiting of highly capable individuals into the Army. This research examines the participation of soldiers in the Army College Fund and will enable Army policy makers to better understand the costs and benefits of this program as an enlistment incentive.

EDGAR M. JOHNSON
Technical Director

PARTICIPATION IN THE ARMY COLLEGE FUND

EXECUTIVE SUMMARY

Requirement:

To investigate the numbers and characteristics of individuals who enlist for the Army College Fund (ACF) and their subsequent behavior with respect to making contributions to the program and using the ACF program to attend college.

Procedure:

Individual records from the Military Enlistment Processing Station accession files, Army Finance and Accounting Center, and Veterans Administration were merged.

The resulting data base provided information on ACF enrollment, contribution and refund behavior, and benefit usage. Tabulations of this behavior are provided by fiscal year and selected demographic characteristics.

Findings:

Program enrollments have increased each year from 1981 through 1984 in both numbers and proportions. The vast majority of ACF enrollments have made some contributions to their account. Two-year enlistments were most likely to contribute, while four-year enlistments were least likely to do so.

Utilization of Findings:

The results can be used for projecting participation in and costs of the Army College Fund program.

PARTICIPATION IN THE ARMY COLLEGE FUND

CONTENTS

CONTENTS (Continued)

I. INTRODUCTION

The purpose of this report is to establish a set of baseline statistics on soldier participation in the Army College Fund. This participation is considered according to three dimensions: (1) program enrollment; (2) contribution and refund behavior; (3) benefit usage. Participation rates are presented for all soldiers in total, and then disaggregated according to demographic characteristics (gender, ethnicity, age and marital status), Military Occupational Specialty, enlistment term, and mental category (as scored on the Armed Forces Qualifications Test).

Information presented in this report has been developed from a data base of individual records especially constructed for this project. These data consist of merged records from the Military Enlistment Processing Stations (MEPS) Accession File, the Army Finance and Accounting Center's HACSMA File (which includes the better known Educational Savings File), and Banking and Benefit Records from the Veterans Administration. The Accession File provides data on a detailed list of personal characteristics, including whether an Army College Fund contract was signed. The HACSMA File contains information on soldier contributions made to and refunds taken from

their accounts. The Banking and Benefit Records provide the necessary data on the actual use of accrued benefits after the soldier has been discharged. Records from all three files have been merged according to Social Security Number. The result is a complete set of individual case histories on participation in the Army College Fund, beginning with the program's inception.

A major limitation of these records, however, is that they are truncated in time, i.e. they do not allow us to fully evaluate the ultimate contribution, refund, and benefit use behavior of the individuals under consideration. That is because many of these individuals were still on active duty as of the latest date for which information is available. Moreover, those who had been discharged have a full ten years after their separation to use any accrued benefits. We are only able to currently observe their behavior for a small fraction of that time.

But while ultimate behavior can not now be reported, the statistics presented below do provide a very good description of the extent of current financial and other participation in the program.

II. BACKGROUND OF THE PROGRAM

A. Program Objectives and Requirements for Participation

The Army College Fund (ACF) has been instituted to satisfy four main objectives:[1]

1) to act as an enlistment incentive available only to those who elect to serve in the Army

2) to increase the number of Armed Forces Qualifications Test (AFQT) Category I-IIIA Army accessions in critical Military Occupational Specialties (MOS)

3) to encourage greater soldier participation in the Veterans Educational Assistance Program (Basic VEAP)

4) to further improve the opportunity for educational advancement by ex-soldiers.

Army College Fund benefits are offered over and above those available under Basic VEAP. Enrollment in the ACF is available only to Regular Army, non-prior service recruits who sign a contract upon their accession. This enrollment is open only in eligible MOS, and is further restricted to those who scored 50 or above (i.e. in Categories I-IIIA) on the Armed Forces Qualifications Test, and who have received a high school diploma.

No extra financial contributions beyond those necessary for Basic VEAP are required of soldiers who participate in the Army College Fund. But eligibility for the Fund's benefits are contingent upon these base contributions having been made. Until very recently,[2] soldier contributions to educational benefit accounts could be made by either having regular allotments subtracted from pay until the maximum contribution was reached (see below), or else by making a lumpsum contribution(s) any time prior to discharge. Refunds of these contributions could be liberally obtained either during active duty, or up to ten years after discharge. Such refunds would, however, involve the corresponding loss of educational benefits.

B. Evolution of the Program

The Army College Fund became effective in FY 82 as the nationwide successor to a series of limited and experimental educational bonus programs. Prior programs differed from one another in terms of the size of bonuses offered, the geographic area in which they applied, and to some extent in the MOS which were eligible (although all programs included a core list of MOS corresponding to combat arms and certain high tech specialties).[3] Other requirements have remained unchanged (i.e. as explained above). The following

paragraphs contain a brief history of the evolution of the program.

The GI Bill expired at the end of calendar year 1976 and was immediately replaced by the Veterans Educational Assistance Program (Basic VEAP). Unlike its predecessor, which offered to help defray the cost of higher education on a non-contributory basis, Basic VEAP benefits were available only if a serviceman had made his contributions to an account maintained by the Veterans Administration. Contributions by individuals were then matched by DOD on a two for one basis, up to a maximum DOD contribution of $5400 (and a corresponding contribution by the serviceman of $2700), bringing the maximum benefit available to $8100.

Participation in the Basic VEAP program during its first two years was disappointing. There was a perception in some quarters that equity considerations dictated that the Army needed to make greater post-service educational opportunities available to those who had served their country. The Army, moreover, was experiencing difficulty in attracting highly qualified recruits in several critical MOS. Increased educational benefits were seen as one means of providing a selective recruitment incentive which could help the Army achieve its recruiting objectives, and at the

same time, help servicemen prepare for greater success in civilian life.

On January 1, 1979, the Army began testing the enlistment incentive of enhanced but selective educational bonuses. A variety of "kickers" (as the added amounts were called) to the Basic VEAP amounts were offered, depending upon enlistment term and MOS chosen. These ranged up to a maximum of $6000 over the Basic VEAP allotment. These "kickers" had only limited success, though, in attracting participants, again because (according to some advocates) of the relatively low level of benefits offered. A desire to increase further the level of bonuses available to Army recruits, and to evaluate the inter-Service recruiting consequences of such a development, led to the establishment of a more formal demonstration program.

Thus, in FY 81, all Services participated in the DOD Educational Assistance Test Program, offering enhanced educational benefits in several forms, including tuition assistance, a student loan repayment program, a "Mini GI Bill" (i.e. no contributions required by soldiers to be eligible for "kicker" benefits), and add-ons to Basic VEAP benefits (i.e. the "Ultra VEAP" program). Only the Army, however, offered bonuses or "kickers" up to $12000 beyond the benefits in Basic VEAP. The program targeted different

Armed Forces Entrance and Examining Stations (AFEES) at different times during the year.

The experience gained during these experiments led the Army to institute the program nationwide in FY 82 under the new name of the Army College Fund.[4,5] In FY 83 the size of the maximum kicker was raised by the Army $15400. In late FY 85, with the passage of the "New GI Bill" and the "New Army College Fund," maximum benefits available under the program rose to $25200, maximum soldier contributions were reduced to $1200 (automatically deducted from pay during the first year of active duty), and refunds of soldier contributions were no longer allowed.

C. Measures of Participation

In identifying the extent to which recruits have actually participated in these programs, a distinction should be drawn between those who enrolled, and those who made the financial contributions necessary to be eligible for benefits. This distinction is necessary to determine first the extent to which recruits have been attracted to the program (reflecting upon the first two objectives cited above), and second whether enrollees have actively followed through in their financial commitment (i.e. meet the third and fourth objectives of the program). The latter

information is also useful in identifying the potential financial obligation the Army will accrue in terms of paying benefits in future years.

In the paragraphs immediately below, we therefore discuss statistics relating to those who enrolled in the Fund (i.e. the "takers" as they are sometimes called). Information about actual financial participation in the program (i.e. contribution and refund behavior, and benefit use) is presented in subsequent sections of this paper.

III. ENROLLMENT IN THE ARMY COLLEGE FUND

A. Number of Enrollees

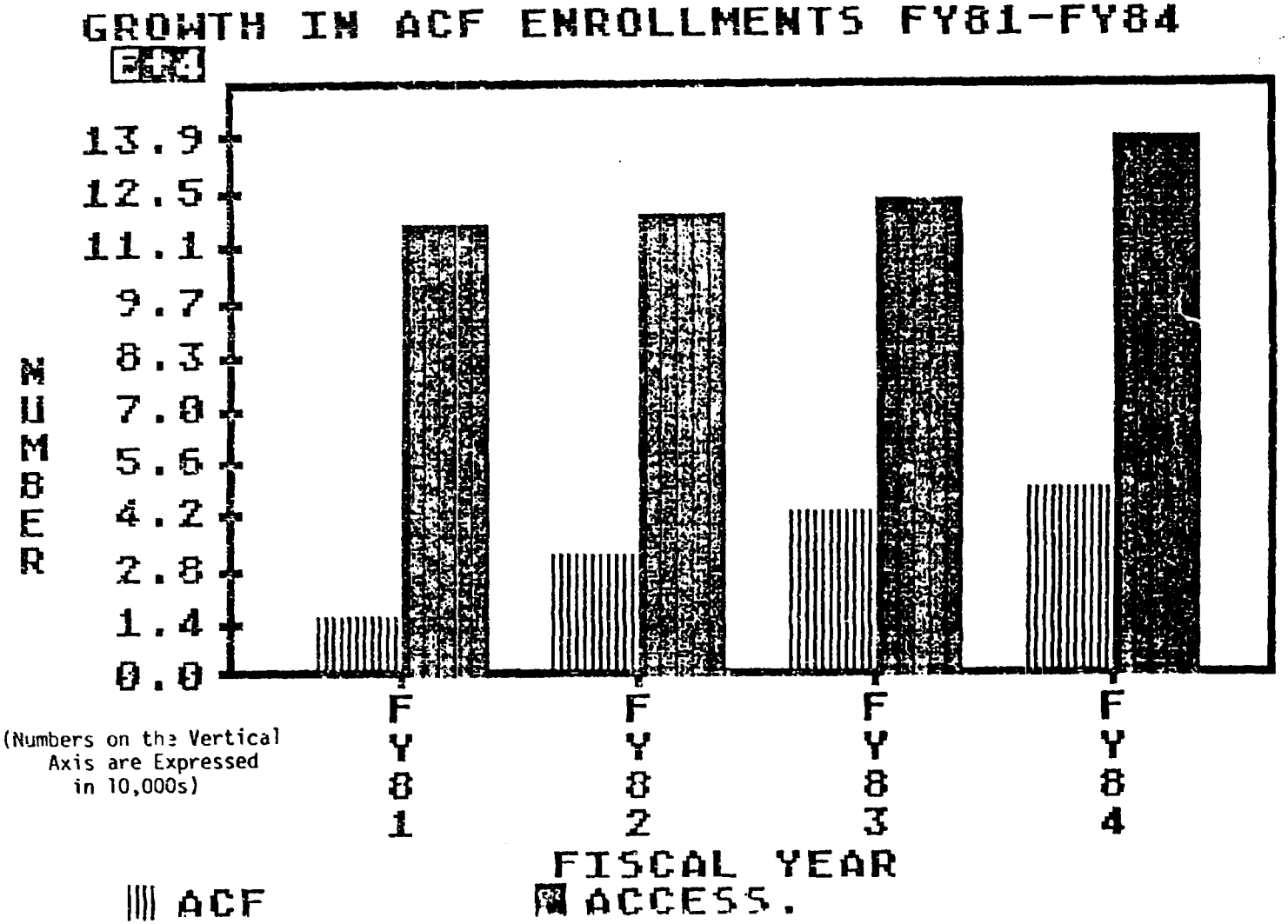
The number of recruits enrolling in the Army College Fund has dramatically and continuously increased from FY 81 to FY 84. Data shown in Table 1 and depicted in Figure 1 were extracted from the annual Accession Files for FY 81 through FY 84, and apply to all non-prior service Regular Army recruits (all tables in the report are also restricted to this group). These data demonstrate that the number of ACF enrollees has more than tripled, from just under fifteen thousand in FY 81 to over forty-eight thousand in FY 84. The largest annual jump (in both absolute and percentage terms) occurred between the FY 81 and FY 82 accession

TABLE 1

ARMY COLLEGE FUND ENROLLMENTS AND TOTAL ACCESSIONS

YEAR	ACF Enrollees	Total Accessions
FY 81	14799	116911
FY 82	29981	118583
FY 83	41300	123010
FY 84	48426	139411

FIGURE 1


GROWTH IN ACF ENROLLMENTS FY81-FY84
13.9
12.5
11.1
9.7
8.3
7.0
5.6
4.2
2.8
1.4
0.0
NUMBER
(Numbers on the Vertical Axis are Expressed in 10,000s)
FY 81
FY 82
FY 83
FY 84
FISCAL YEAR
ACF
ACCESS.

cohorts, when enrollment doubled as the program moved from the experimental stage to the full fledged Army College Fund. This growth declined somewhat (again, in both absolute and percentage terms) in FY 83, and more so in FY 84, although the increase in enrollments from FY 83 to FY 84 still stood at over seven thousand recruits.

Table 1 also reveals that the growth in ACF enrollments from FY 81 to FY 82, and from FY 82 to FY 83 was much larger than the growth in total accessions (in both absolute and percentage terms). However, the growth in total accessions between FY 83 and FY 84 was much larger than between any or all of the preceding years considered, but the growth in enrollments in the Army College Fund was the smallest in that year.

When the above relationship is expressed as a ratio (i.e. a percentage), the following becomes clear. The percentage of each accession cohort enrolling in the Fund has increased in every successive year. In FY 81, only 13.2% of all enlistees chose the Army College Fund. In FY 82 the corresponding percentage was 25.3%. By FY 83 this percentage had grown to 33.6%, and by FY 84 it stood at 34.8%. So while fewer than one out of seven signed up for the ACF in FY 81, by FY 84 more than one out of three had.

The propensity for recruits to enroll in the ACF has therefore increased in every accession cohort from FY 81 to FY 84, although the increase in this propensity has greatly leveled off in the most recent year for which we have data. Several developments have contributed to both the rapid growth of the program and to its apparent slowdown. Those related to the rapid growth include the spread of the program's availability and the increase in the size of the bonuses offered; an increase in the program's visibility due in part to advertising; an increase in the size of the accession cohorts from FY 81 to FY 84; and an increase in the proportion of each accession cohort meeting the program's minimum eligibility criteria.[6] Certain of these factors, of course, may not only have been a cause of the program's growth but may also have been an effect of the program (e.g. the increase in qualified accessions may have been caused in part by the availability of the ACF).

The reduction in the growth of enrollees, on the other hand, is likely related to the fact that enrollment among eligible recruits may be approaching the saturation point. This is due to the high percentage of Cat I-IIIA recruits most recently enrolled in the program, and also due perhaps to the fact that several of the MOS for which the program is nominally available are filling their quotas more rapidly

than before, and hence and closed to recruits who would otherwise opt to enter them.[7]

B. Mental Category (AFQT Score)

The growth in Army College Fund enrollments by mental category is documented in Table 2. This table sheds further light on the growth reported on above by revealing that the increase in ACF enrollments from FY 81 to FY 84 is related to three developments: (1) a growing number of accessions in each year (considered above); (2) a rising proportion of each accession cohort scoring in categories I-IIIA on the AFQT test; and (3) a rising proportion of those in categories I-IIIA signing up for the Fund.

Let us direct our attention to the consequences of the second development. In the FY 81 cohort, 49383 persons (or 42.3% of total accessions) scored in categories I-IIIA on the AFQT test. This number increased in FY 82 to 62800 (or 53.0% of total accessions). For the FY 83 cohort, it increased further to 75492 (or 61.4% of the cohort). And in FY 84, the number was higher still, at 88408 (or 63.5% of total accessions in that year). Thus the pool of individuals eligible to enroll in the program on the basis of their AFQT score increased by thirteen thousand in each successive cohort.

TABLE 2 - ACF BY MENTAL CATEGORY

AFQT CAT	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
1	1107	2923	2050	3506	2729	4256	2899	4892
2	8468	25543	17074	34386	23074	40556	26503	47119
3A	5231	20917	10502	24908	15267	30680	18971	36397
3B	472	39458	321	32968	208	33030	44	37611
4	102	27991	30	22804	20	14482	9	13300
5	0	10	1	5	1	5	0	0

Consider now the effect of the third development cited. In FY 81 less than one third (30.0%) of those scoring in categories I-IIIA on the AFQT test had signed up for the Army College Fund. By FY 82, however, close to half (47.2%) of those classified in these categories opted for the Fund. In FY 83, this percentage grew again, as more than half (54.4%) of accessions in these categories chose the ACF. Enrollment by persons scoring in these categories stabilized in FY 84, at a percentage (54.7%) almost identical to that recorded in the previous accession cohort. But ACF enrollments still continued to rise in that year as a result of the first two developments cited above.

Viewed from another perspective, the ACF enrollment rate (expressed as a percent of the total accession cohort), was substantially lower than the percentages quoted above (which apply only to categories I-IIIA) in each fiscal year. But this total enrollment rate exhibited an even more rapid growth trend, owing to the reduction over time in the proportion of individuals in each cohort falling in categories IIIB-V. In FY 81, only 13.2% of all enlistees chose the Army College Fund. In the FY 82 cohort, the corresponding percentage was 25.3%. By FY 83, this percentage had grown to 33.6%. And by FY 84, it stood at 34.8%.

ACF participation of those scoring in categories II and IIIA has also increased continually from FY 81 to FY 84, as the table indicates. However, one unusual note concerns participation by those scoring in the top category. This percentage rose dramatically from FY 81 to FY 82. It also increased in FY 83, by about the same percentage amount as was true for category II and IIIA enlistments. But the growth in ACF enrollment in the top group apparently reversed itself in FY 84, falling back to the level achieved in FY 82.

C. Training MOS

One of the objectives of the program was to increase the number of qualified recruits in targeted MOS. The list of MOS which were so designated, though, has been altered from year to year, in response to changing manpower needs and recruiting difficulties. In Table 3, we provide the list of the eligible Training MOS in each fiscal year.

The number of recruits who signed up for the Army College Fund in these MOS is presented in Table 4. The list of MOS shown was obtained from those valid codes contained in the Accessions File for which there was at least one individual in any fiscal year.[8] Soldiers who were coded on

TABLE 3 - ELIGIBLE MOS

TMOS	FY 81	FY 82	FY 83	FY 84
03C	X	X		
05B	X	X		
05C	X	X	X	X
05D				
05G	X	X	X	X
05H	X	X	X	X
05K	X	X	X	X
11X	X	X	X	X
12B	X	X	X	X
12C	X	X	X	X
12E	X	X	X	X
12F				
13B	X	X	X	X
13C	X	X	X	X
13E	X	X	X	X
13F	X	X	X	X
13R	X	X	X	X
15D	X	X	X	X
15E	X	X	X	X
15J	X	X	X	X
16B	X	X	X	
16C	X	X		
16D	X	X	X	
16E	X	X	X	
16F				X
16H	X	X	X	X
16J				X
16P	X			X
16R	X	X	X	X
16S		X	X	X
16X				X
17B	X			
17C	X	X	X	X
19A			X	
19D	X	X	X	X
19E	X	X	X	X
19F	X			
19J	X			
19K	X	X	X	X
19L	X			
21G	X	X	X	X
31M		X	X	X
35G	X	X	X	X
36K	X	X	X	X
42D	X	X	X	X
45K	X	X	X	X
45N	X	X	X	X
54C	X	X		
54E	X	X	X	X
55B	X	X	X	X
55D			X	X
55G	X	X	X	X

Table 3, cont'd.

TMOS	FY 81	FY 82	FY 83	FY 84
63B	X	X	X	X
63D				X
63E				X
63G				X
63H				X
63J				X
63N				X
63S				X
63T				X
63W				X
63Y				X
64C	X	X	X	X
71D	X	X	X	X
71L	X	X	X	X
71M	X			
71R	X		X	
72E	X	X	X	X
72G	X	X	X	X
75B	X	X	X	X
76C	X	X	X	X
76Y	X	X	X	X
82B	X	X	X	X
82C	X	X	X	X
82D	X	X	X	X
91E	X	X	X	X
93H	X	X	X	X
93J			X	
94B	X	X	X	X
95B	X	X	X	X
96C	X	X	X	X
98C	X	X	X	X
98G	X	X	X	X
98J				

the Accession File as having signed a contract for the predecessor Ultra VEAP program or the Mini GI Bill, are included in the Army College Fund column. Those who signed up for the predecessor tuition assistance or the student loan repayment program are excluded from the ACF column, although they are included in the total column. The latter action is based on the premise that that the tuition assistance and loan repayment programs were targeted largely toward a different audience, i.e. those who were presently going or had already gone to college.

Simple measures of the effect of the program on recruitment in designated MOS include the number of recruits electing that Training MOS, the percentage of each Training MOS who were ACF enrollees in each year, and the change in the number of soldiers choosing to enlist in those MOS from year to year. Readers may obtain these indicators for MOS they are particularly interested in from Table 4.

Notice that the percentage of ACF enrollees increased in most MOS from FY 81, or perhaps more appropriately, from FY 82 to FY 84. Most notably, in these targeted MOS, the percentage of recruits enrolling in the Army College Fund rose from 37.5% in FY 82 to 49.7% in FY 83.

TABLE 4 - ACF ENROLLMENT BY MOS

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
ØØØ	55	7686	17	217	22	190	34	4333
Ø1B	Ø	1	Ø	3	Ø	1	Ø	1
Ø1H	Ø	27	Ø	14	Ø	8	Ø	14
Ø2B	1	56	1	45	Ø	44	Ø	66
Ø2C	Ø	11	Ø	22	Ø	17	Ø	9
Ø2D	Ø	18	Ø	12	Ø	22	Ø	16
Ø2E	1	33	Ø	33	Ø	22	Ø	28
Ø2F	Ø	21	Ø	30	Ø	24	Ø	19
Ø2G	Ø	18	Ø	21	Ø	22	Ø	11
Ø2H	Ø	5	Ø	4	Ø	9	Ø	5
Ø2J	1	37	Ø	21	Ø	35	Ø	23
Ø2K	Ø	2	Ø	5	Ø	10	Ø	3
Ø2L	1	53	Ø	28	Ø	32	Ø	39
Ø2M	1	38	Ø	25	Ø	8	Ø	7
Ø2N	Ø	10	Ø	15	Ø	7	Ø	7
Ø2S	1	32	Ø	20	Ø	13	Ø	10
Ø2T	Ø	13	Ø	20	Ø	8	Ø	7
Ø3B	Ø	1	Ø	Ø	1	1	Ø	Ø
Ø3C	4	209	28	101	1	4	1	94
Ø4B	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
Ø4C	Ø	Ø	Ø	1	1	1	Ø	Ø
Ø5B	381	1519	376	1084	376	711	1	4
Ø5C	949	3094	1124	2210	1248	1765	1885	3487
Ø5D	56	108	94	132	181	204	74	83
Ø5E	Ø	Ø	1	1	2	4	Ø	Ø
Ø5F	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
Ø5G	124	226	195	358	49	55	103	151
Ø5H	151	355	435	513	678	729	382	556
Ø5K	187	370	187	230	219	246	127	172
Ø5L	1	4	2	4	1	2	1	2
Ø5N	1	1	2	2	Ø	Ø	Ø	Ø
Ø5R	Ø	Ø	1	1	Ø	Ø	Ø	Ø
Ø5S	Ø	2	Ø	1	1	1	Ø	2
Ø5X	Ø	Ø	Ø	Ø	1	1	Ø	Ø
Ø7C	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
Ø8B	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
Ø8G	1	1	Ø	1	Ø	Ø	Ø	Ø
Ø9B	1	2	Ø	1	1	1	Ø	Ø
Ø9C	1	1	Ø	1	2	2	Ø	1
Ø9G	2	2	1	1	1	1	Ø	Ø
Ø9R	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
Ø9S	5	305	Ø	306	Ø	380	Ø	399
Ø9U	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
Ø9W	1	213	Ø	156	Ø	166	2	325
10A	Ø	1	2	3	Ø	Ø	Ø	Ø
10B	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
10P	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
11A	Ø	2	1	1	Ø	Ø	1	Ø

Table 4, cont'd.

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
11B	1349	6127	7	20	Ø	5	3	113
11C	247	1549	1	4	4	7	3	27
11D	1	3	Ø	Ø	1	2	Ø	1
11E	Ø	Ø	2	5	1	1	Ø	Ø
11F	Ø	Ø	Ø	1	3	6	6	11
11G	Ø	1	Ø	1	1	2	Ø	Ø
11H	282	1294	1	2	Ø	Ø	Ø	10
11J	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
11L	Ø	4	Ø	Ø	Ø	1	Ø	Ø
11S	Ø	Ø	Ø	Ø	4	4	4	8
11T	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
11U	Ø	Ø	1	1	Ø	Ø	Ø	Ø
11V	Ø	3	Ø	1	4	4	3	4
11X	1325	6311	6123	16429	7712	14876	9709	18667
11Y	6	44	8	26	17	32	24	46
11Z	Ø	Ø	1	1	Ø	Ø	Ø	1
12B	634	3375	963	2817	626	1533	1273	3638
12C	47	561	129	495	178	714	114	535
12E	43	189	165	357	127	255	96	228
12F	6	443	Ø	93	27	205	75	384
12L	1	3	Ø	Ø	Ø	1	Ø	1
12P	Ø	Ø	Ø	Ø	1	1	Ø	Ø
12S	Ø	Ø	Ø	1	Ø	1	Ø	.
12X	Ø	Ø	Ø	1	Ø	Ø	Ø	.
13B	606	5485	1847	6256	2298	6274	1408	4887
13C	15	85	62	112	36	60	66	130
13D	1	7	2	3	1	1	1	3
13E	275	961	465	854	223	315	303	429
13F	358	1381	567	1004	771	1179	848	1396
13G	1	1	1	3	Ø	1	2	2
13L	Ø	2	Ø	Ø	1	1	Ø	Ø
13M	Ø	1	1	70	4	214	109	421
13N	Ø	1	Ø	Ø	Ø	1	Ø	1
13R	35	197	109	160	14	70	111	237
13T	Ø	1	Ø	1	Ø	2	Ø	Ø
13V	Ø	3	Ø	Ø	Ø	2	Ø	1
14C	Ø	Ø	1	1	Ø	Ø	Ø	1
14D	Ø	Ø	1	1	Ø	Ø	Ø	Ø
15B	Ø	4	1	2	1	2	1	1
15C	Ø	2	Ø	Ø	1	1	Ø	1
15D	87	534	339	643	466	960	291	631
15E	86	557	327	624	574	896	341	584
15F	1	2	Ø	Ø	2	3	2	5
15G	Ø	1	Ø	1	Ø	Ø	1	1
15J	20	75	58	98	38	46	127	186
15K	Ø	Ø	Ø	Ø	1	1	Ø	1
15R	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
15S	Ø	Ø	Ø	Ø	Ø	2	Ø	1
15V	Ø	1	1	1	Ø	Ø	Ø	Ø

Table 4, cont'd.

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
16A	Ø	Ø	Ø	Ø	Ø	1	Ø	1
16B	16	369	22	113	6	15	1	2
16C	32	206	28	77	6	9	1	2
16D	12	179	15	88	130	279	3	7
16E	11	113	90	187	147	265	2	3
16F	Ø	Ø	1	1	1	1	Ø	Ø
16H	19	97	19	50	110	173	67	136
16J	23	170	5	124	1	66	43	124
16K	Ø	8	Ø	5	1	5	1	7
16M	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
16X	Ø	1	Ø	1	Ø	1	722	1241
17A	Ø	Ø	Ø	Ø	1	1	Ø	1
17B	7	73	7	132	1	70	3	88
17C	56	368	108	272	78	155	61	183
17D	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
17H	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
17K	7	304	3	211	9	402	3	215
17L	Ø	1	4	4	1	1	Ø	2
17M	Ø	1	Ø	Ø	Ø	19	Ø	28
17P	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
17U	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
18D	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
19A	522	3107	1325	3773	1438	3090	1610	3248
19B	Ø	4	2	2	Ø	6	Ø	3
19C	Ø	3	1	4	Ø	Ø	1	2
19D	351	1974	718	1637	1022	2219	1058	2638
19E	Ø	29	Ø	6	1	1	1	28
19H	Ø	1	2	5	Ø	1	Ø	Ø
19K	Ø	1	102	338	351	593	572	961
19L	Ø	Ø	Ø	Ø	1	1	Ø	Ø
19M	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
19O	Ø	Ø	Ø	1	Ø	Ø	1	Ø
19Q	Ø	Ø	Ø	1	Ø	1	Ø	Ø
19R	Ø	1	Ø	Ø	1	1	Ø	Ø
19S	Ø	Ø	Ø	Ø	1	1	Ø	2
19V	Ø	Ø	1	1	Ø	Ø	1	1
21B	Ø	Ø	1	[illegible]	Ø	Ø	Ø	Ø
21G	13	61	71	[illegible]	93	118	63	81
21L	1	58	Ø	[illegible]	2	77	Ø	36
22L	1	34	Ø	35	Ø	8	Ø	Ø
22N	Ø	33	Ø	42	Ø	Ø	Ø	Ø
22X	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
23B	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
23F	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
23N	1	18	Ø	22	Ø	5	Ø	Ø
23T	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
23U	Ø	3	Ø	4	Ø	Ø	Ø	Ø

Table 4, cont'd.

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
23V	0	0	0	1	0	0	0	0
24C	1	142	0	89	0	93	0	78
24D	0	2	0	1	0	0	0	0
24E	1	129	0	4	0	46	0	28
24G	0	104	0	42	2	43	0	76
24H	0	16	0	31	0	40	0	32
24J	0	21	0	39	0	53	0	48
24K	0	13	0	37	0	72	0	43
24L	0	4	0	50	1	52	0	68
24M	1	123	2	166	0	73	0	45
24Y	0	1	0	1	0	2	0	0
25B	0	1	0	2	0	0	0	0
25C	0	0	0	1	0	0	0	0
25L	1	65	0	137	1	31	0	21
25V	0	0	0	1	0	0	0	0
26A	0	0	0	1	0	1	0	0
26B	0	49	0	44	0	29	0	44
26C	0	82	0	59	1	51	0	74
26D	0	10	0	31	0	11	0	53
26E	0	9	0	11	0	21	0	41
26F	0	0	0	13	0	15	1	15
26G	0	1	0	4	0	1	0	3
26H	0	16	0	10	0	13	0	40
26J	0	0	0	1	0	0	0	0
26K	0	0	0	3	0	0	0	0
26L	1	107	2	182	0	127	0	165
26Q	5	219	1	323	2	265	1	443
26R	0	9	0	100	0	0	0	0
26T	0	28	0	21	0	79	0	25
26U	0	1	0	2	0	4	0	2
26V	5	227	1	392	1	263	1	261
26X	0	0	0	0	0	1	0	1
26Y	2	111	0	166	0	189	35	263
27B	0	88	0	87	1	53	0	66
27C	0	0	0	1	0	0	0	0
27E	0	344	0	377	1	226	44	374
27F	1	208	0	5	0	28	1	74
27G	0	68	0	36	0	18	0	66
27L	0	0	0	0	0	32	0	20
27M	0	0	0	3	0	46	0	39
27N	0	23	0	102	0	49	0	36
27W	0	0	0	0	0	1	0	0
28G	0	0	0	0	1	1	0	0
31B	0	4	1	3	0	1	4	4
31C	0	0	0	1	0	0	68	87
31D	0	1	0	2	0	2	0	1

Table 4, cont'd.

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
31E	Ø	219	1	396	1	160	1	304
31F	Ø	Ø	Ø	1	Ø	Ø	Ø	1
31G	Ø	1	Ø	Ø	Ø	1	Ø	Ø
31H	Ø	3	Ø	Ø	2	3	Ø	Ø
31J	Ø	223	1	274	2	403	2	407
31K	Ø	Ø	Ø	Ø	1	1	552	1774
31L	Ø	Ø	Ø	Ø	Ø	1	Ø	4
31M	10	1889	670	2213	1167	2026	1400	2125
31N	1	328	2	163	4	101	3	160
31P	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
31V	9	1132	Ø	917	1	683	293	911
31W	Ø	1	Ø	3	Ø	1	Ø	Ø
31X	Ø	1	1	2	Ø	Ø	1	1
31Y	Ø	3	Ø	Ø	Ø	2	Ø	1
32A	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
32B	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
32C	Ø	Ø	Ø	2	Ø	1	1	1
32D	3	370	4	383	13	372	23	274
32E	Ø	Ø	Ø	Ø	Ø	1	Ø	1
32F	Ø	25	Ø	124	Ø	69	Ø	29
32G	1	56	Ø	90	Ø	39	Ø	117
32H	Ø	25	2	117	Ø	37	1	98
32J	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
32N	Ø	1	Ø	1	Ø	Ø	Ø	Ø
32S	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
33J	Ø	2	Ø	Ø	Ø	1	Ø	1
33S	1	383	Ø	274	1	225	Ø	174
34B	Ø	3	Ø	3	Ø	7	Ø	Ø
34E	Ø	3	Ø	1	Ø	Ø	Ø	Ø
34G	3	176	Ø	1	Ø	Ø	Ø	Ø
34H	Ø	2	Ø	1	Ø	1	Ø	Ø
34U	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
34V	Ø	Ø	Ø	1	Ø	1	Ø	Ø
34X	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
34Y	Ø	32	Ø	68	Ø	123	Ø	122
35B	Ø	28	Ø	5	Ø	Ø	Ø	Ø
35C	Ø	3	1	28	1	53	Ø	45
35D	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
35E	Ø	72	Ø	145	Ø	88	Ø	95
35F	Ø	27	Ø	65	Ø	21	Ø	16
35G	6	113	82	164	38	44	56	97
35H	3	168	Ø	165	Ø	148	Ø	50
35K	Ø	103	1	138	Ø	175	Ø	204
35L	2	174	Ø	56	Ø	29	Ø	61
35M	1	92	Ø	16	2	63	Ø	31
35R	Ø	32	Ø	30	Ø	15	Ø	23
36B	Ø	Ø	Ø	Ø	1	2	Ø	2
36C	3	577	3	1564	5	1465	56	856

Table 4, cont'd.

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
36D	Ø	53	Ø	28	Ø	23	Ø	Ø
36E	Ø	29	Ø	34	Ø	31	Ø	Ø
36G	Ø	2	1	2	Ø	Ø	1	2
36H	1	145	Ø	223	1	242	1	284
36J	Ø	2	Ø	Ø	Ø	1	Ø	Ø
36K	121	2451	449	1640	804	2095	397	994
36L	Ø	24	Ø	12	1	63	Ø	131
36M	Ø	1	Ø	Ø	Ø	19	17	372
36Q	Ø	1	Ø	Ø	Ø	2	Ø	1
36R	Ø	3	1	2	Ø	1	Ø	Ø
38K	Ø	Ø	Ø	Ø	1	1	Ø	Ø
40N	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
41B	Ø	15	Ø	8	Ø	Ø	Ø	18
41C	1	174	1	164	Ø	198	Ø	76
41E	2	18	Ø	1	Ø	8	Ø	10
41G	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
41J	Ø	8	Ø	1	Ø	Ø	Ø	2
41M	Ø	Ø	1	1	Ø	Ø	Ø	Ø
41S	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
42C	Ø	12	Ø	12	Ø	11	Ø	13
42D	12	126	20	41	54	72	36	70
42E	Ø	40	Ø	23	1	33	1	35
43B	Ø	1	Ø	Ø	Ø	1	Ø	1
43D	Ø	Ø	Ø	2	Ø	1	Ø	Ø
43E	Ø	264	1	365	2	627	20	750
43F	Ø	1	Ø	1	Ø	2	Ø	2
43G	Ø	Ø	Ø	1	Ø	1	Ø	Ø
43M	Ø	68	Ø	56	Ø	108	1	71
43N	Ø	Ø	Ø	2	Ø	Ø	Ø	1
44B	4	255	Ø	231	2	215	2	395
44D	Ø	Ø	Ø	2	Ø	Ø	Ø	1
44E	Ø	119	Ø	142	Ø	162	Ø	134
45B	Ø	47	Ø	51	1	144	1	172
45C	Ø	4	Ø	1	Ø	3	1	4
45D	Ø	196	3	270	Ø	47	4	82
45E	Ø	18	Ø	29	Ø	22	6	86
45G	Ø	18	Ø	66	Ø	64	Ø	87
45H	Ø	Ø	Ø	2	2	3	Ø	Ø
45K	18	334	50	191	139	318	138	451
45L	1	163	Ø	82	Ø	89	15	174
45M	Ø	Ø	1	8	2	6	Ø	1
45N	3	68	41	309	101	307	79	292
45T	Ø	128	Ø	178	Ø	159	8	69
45V	Ø	Ø	1	3	Ø	Ø	Ø	Ø
45W	Ø	Ø	Ø	Ø	Ø	1	Ø	2
46E	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
46N	Ø	46	Ø	29	Ø	84	Ø	57

Table 4, cont'd.

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
47D	Ø	Ø	1	1	Ø	Ø	Ø	Ø
50C	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
51B	3	522	Ø	351	Ø	177	1	414
51C	1	207	Ø	39	Ø	20	1	50
51D	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
51F	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
51G	Ø	29	Ø	11	1	47	Ø	18
51H	Ø	2	Ø	1	Ø	1	Ø	1
51K	Ø	238	Ø	277	Ø	131	Ø	85
51M	Ø	24	Ø	32	1	59	Ø	26
51N	1	162	Ø	35	Ø	67	Ø	283
51R	3	210	Ø	114	Ø	188	Ø	166
51W	Ø	1	Ø	Ø	Ø	1	Ø	Ø
52B	Ø	Ø	Ø	2	Ø	Ø	1	2
52C	3	307	Ø	355	1	443	3	402
52D	Ø	454	Ø	656	1	862	623	1680
52E	Ø	Ø	Ø	1	Ø	Ø	1	2
52F	Ø	Ø	Ø	Ø	Ø	18	5	157
52G	Ø	Ø	Ø	Ø	Ø	20	1	32
52L	Ø	Ø	Ø	2	Ø	2	Ø	Ø
52P	Ø	Ø	Ø	Ø	Ø	3	Ø	1
52V	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
53C	Ø	2	Ø	Ø	Ø	1	Ø	Ø
53D	Ø	7	Ø	2	Ø	1	1	1
53E	Ø	2	Ø	Ø	Ø	3	Ø	2
53N	Ø	Ø	Ø	Ø	Ø	1	Ø	1
53T	Ø	Ø	1	1	Ø	Ø	Ø	Ø
54B	Ø	Ø	1	1	Ø	Ø	Ø	Ø
54C	9	186	22	83	12	116	7	82
54D	Ø	1	Ø	1	Ø	1	Ø	Ø
54E	55	543	196	847	401	1157	448	1167
54F	1	1	Ø	1	Ø	2	1	3
54G	Ø	Ø	Ø	1	1	2	Ø	Ø
54H	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
54N	Ø	Ø	Ø	Ø	Ø	1	Ø	1
54R	Ø	Ø	2	2	Ø	Ø	Ø	Ø
54Y	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
55B	2	633	45	491	98	511	100	788
55D	Ø	3	Ø	59	32	86	85	157
55E	Ø	1	Ø	Ø	1	1	Ø	1
55G	20	133	69	109	32	43	90	142
55K	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
55R	Ø	Ø	Ø	Ø	2	87	Ø	124
55V	Ø	Ø	Ø	Ø	1	1	Ø	Ø
56C	Ø	Ø	Ø	Ø	Ø	1	Ø	2
56J	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
56K	Ø	Ø	Ø	1	Ø	Ø	Ø	1
56M	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
56Y	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
57B	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
57E	Ø	131	Ø	151	1	244	Ø	122
57F	Ø	39	Ø	25	Ø	40	Ø	66

Table 4, cont'd.

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
57H	0	324	0	252	1	465	0	264
57R	0	0	0	0	0	1	0	1
57U	0	0	0	0	0	1	0	0
57Y	0	0	0	0	0	1	0	1
59C	0	0	0	1	0	0	0	0
59E	0	0	0	0	0	1	0	0
61B	2	168	0	230	0	182	0	179
61C	1	206	0	106	0	17	0	51
61F	0	14	0	7	0	6	0	0
61G	0	1	0	0	0	1	0	0
61L	0	2	0	2	0	0	0	0
61M	0	0	0	0	0	1	0	0
61P	0	0	0	1	0	1	0	1
61S	0	1	0	0	0	1	0	0
62B	6	757	1	516	1	585	38	638
62C	0	3	0	2	1	3	1	4
62D	0	1	0	2	0	0	0	2
62E	3	502	0	263	1	708	56	686
62F	5	308	0	231	0	330	0	281
62G	0	47	0	10	1	2	0	38
62H	0	48	0	25	0	39	0	60
62J	0	185	0	221	0	465	42	440
62N	0	1	0	1	0	3	0	1
62S	0	0	0	1	0	0	1	1
62T	0	1	0	0	0	1	0	0
62W	0	1	0	0	0	1	1	2
62Y	0	1	0	0	0	1	0	0
63B	130	4269	549	2489	1541	4486	1805	5037
63C	0	16	0	14	2	8	1	8
63D	1	505	1	396	16	380	160	357
63E	0	50	1	99	3	164	134	252
63F	0	8	0	1	0	5	2	4
63G	0	182	0	141	2	113	168	265
63H	2	537	4	1261	5	503	291	865
63J	0	74	0	148	1	238	113	285
63K	0	2	0	1	1	2	2	5
63M	0	1	0	4	0	3	0	0
63N	1	606	5	1030	12	700	294	722
63P	0	0	0	1	0	1	1	3
63Q	0	1	0	0	0	1	0	0
63S	1	103	0	357	3	487	239	530
63T	2	888	44	1335	53	1314	122	441
63V	0	1	0	4	0	3	0	1
63W	3	553	1	594	11	990	398	1179
63X	0	0	0	2	0	3	0	1
63Y	3	376	0	258	3	417	111	336
64B	0	2	0	6	2	8	3	8
64C	130	4961	608	3562	1050	4221	1387	5898

Table 4, cont'd.

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
64D	Ø	1	1	7	2	5	Ø	Ø
64E	Ø	Ø	1	3	Ø	2	Ø	2
64F	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
64G	Ø	Ø	Ø	2	Ø	Ø	Ø	Ø
64H	Ø	3	Ø	2	Ø	1	2	3
64L	Ø	1	Ø	3	Ø	Ø	Ø	2
64M	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
64N	Ø	Ø	Ø	Ø	Ø	1	Ø	2
64U	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
64V	Ø	1	Ø	1	Ø	Ø	Ø	Ø
64W	Ø	1	Ø	2	Ø	Ø	Ø	Ø
64Y	Ø	1	Ø	2	1	2	Ø	Ø
65B	Ø	Ø	Ø	1	Ø	1	Ø	1
65C	Ø	1	Ø	Ø	1	1	2	2
65H	Ø	Ø	Ø	1	Ø	1	Ø	1
65J	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
65N	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
65T	Ø	Ø	Ø	1	1	2	Ø	Ø
65Y	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
66N	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
67B	Ø	3	Ø	1	Ø	3	Ø	1
67C	Ø	1	Ø	Ø	1	3	Ø	2
67E	Ø	Ø	Ø	1	Ø	2	Ø	3
67G	2	148	1	72	Ø	174	Ø	59
67H	Ø	5	Ø	33	Ø	27	Ø	81
67J	Ø	1	Ø	1	Ø	4	Ø	2
67M	Ø	3	Ø	2	Ø	3	Ø	1
67N	13	985	Ø	510	Ø	611	Ø	648
67T	1	167	Ø	128	Ø	83	Ø	224
67U	6	359	Ø	222	Ø	236	Ø	274
67V	2	379	1	350	2	576	Ø	574
67W	Ø	4	Ø	7	Ø	8	Ø	13
67X	Ø	1	Ø	2	Ø	2	Ø	3
67Y	4	441	Ø	309	Ø	391	Ø	473
68B	1	122	Ø	118	Ø	168	1	176
68C	Ø	2	Ø	1	Ø	1	Ø	Ø
68D	2	157	Ø	162	Ø	117	Ø	125
68E	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
68F	1	99	Ø	92	Ø	140	Ø	115
68G	2	134	Ø	241	1	217	1	304
68H	Ø	45	Ø	91	Ø	150	Ø	115
68J	Ø	287	2	198	Ø	158	Ø	169
68K	Ø	Ø	Ø	1	Ø	1	Ø	Ø
68M	2	199	Ø	173	1	129	Ø	204
68P	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
68U	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
68V	Ø	Ø	Ø	1	Ø	Ø	Ø	1
69G	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
69W	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø

Table 4, cont'd.

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
71A	Ø	Ø	Ø	Ø	1	1	Ø	Ø
71B	Ø	2	1	5	Ø	1	Ø	3
71C	2	316	4	288	8	19	9	17
71D	25	239	99	173	134	157	124	275
71E	Ø	1	1	2	2	4	Ø	Ø
71F	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
71G	Ø	198	Ø	203	1	303	Ø	107
71H	Ø	2	Ø	1	Ø	Ø	Ø	Ø
71K	Ø	Ø	Ø	2	Ø	5	Ø	2
71L	213	4248	2093	4712	3160	5159	2243	3288
71M	16	378	28	296	7	331	16	406
71N	1	284	Ø	189	Ø	282	Ø	77
71O	Ø	2	Ø	Ø	1	1	Ø	Ø
71P	3	126	1	245	5	360	1	127
71Q	2	134	Ø	112	Ø	127	Ø	105
71R	8	50	52	68	57	67	13	49
71U	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
71V	Ø	3	Ø	2	Ø	1	1	1
71W	Ø	3	Ø	Ø	Ø	4	Ø	Ø
71X	Ø	2	Ø	Ø	Ø	1	Ø	Ø
71Y	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
72B	Ø	5	1	2	Ø	Ø	1	2
72C	Ø	4	Ø	2	3	4	3	5
72C	Ø	Ø	Ø	2	3	4	Ø	Ø
72D	Ø	1	Ø	Ø	2	2	1	2
72E	44	457	650	1334	1288	1908	1040	1800
72F	Ø	Ø	1	4	3	4	1	1
72G	54	678	344	759	622	815	516	750
72H	Ø	Ø	Ø	Ø	1	1	Ø	Ø
72J	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
72L	Ø	1	Ø	1	1	1	1	3
72M	Ø	Ø	Ø	1	Ø	Ø	Ø	Ø
72P	Ø	Ø	Ø	Ø	Ø	1	Ø	Ø
72S	Ø	Ø	Ø	Ø	1	1	Ø	Ø
73B	Ø	1	Ø	1	1	2	1	1
73C	4	636	Ø	290	Ø	213	1	399
73D	1	100	Ø	41	1	17	1	88
73E	Ø	1	1	5	Ø	Ø	1	2
73G	Ø	Ø	Ø	1	Ø	1	Ø	Ø
73L	1	Ø	Ø	Ø	Ø	3	Ø	1
73W	Ø	Ø	Ø	Ø	Ø	2	1	1
73Y	Ø	1	Ø	Ø	1	1	Ø	Ø
74B	Ø	Ø	Ø	1	1	1	Ø	1
74C	Ø	3	Ø	2	Ø	Ø	Ø	1
74D	3	299	1	209	Ø	197	Ø	165
74E	Ø	5	Ø	Ø	Ø	1	Ø	Ø
74F	2	121	1	158	Ø	98	Ø	209
74L	Ø	1	1	2	Ø	1	1	1
74V	Ø	Ø	Ø	Ø	Ø	1	Ø	1

Table 4, cont'd.

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
75B	50	1247	156	626	414	557	283	1086
75C	2	411	0	403	2	247	2	391
75D	8	1298	1	791	4	836	2	448
75E	0	624	0	288	0	314	2	182
75F	0	1	0	298	0	139	0	132
75G	0	2	0	1	0	1	1	1
75H	0	0	0	1	0	0	0	0
75J	0	0	0	2	0	0	0	0
75L	0	2	1	2	0	0	0	1
75N	0	0	0	1	0	0	0	0
75P	0	3	0	0	0	2	0	2
75V	0	0	0	2	0	0	0	2
75W	0	0	0	0	0	1	0	0
75Y	0	0	0	2	1	2	0	0
76B	0	3	0	2	2	5	0	2
76C	35	2568	256	1464	762	1898	595	1652
76D	0	58	1	2	0	7	0	1
76E	0	2	0	1	1	6	1	2
76F	0	1	0	1	0	1	0	2
76G	0	12	1	13	6	13	1	3
76H	0	2	0	0	0	1	0	0
76J	0	221	0	216	0	322	0	277
76L	0	14	1	6	4	6	3	5
76M	0	1	0	0	0	1	1	3
76N	0	8	1	3	1	8	0	4
76P	2	1768	0	513	4	1396	32	717
76Q	0	1	0	0	0	1	0	1
76R	0	1	0	1	0	3	0	0
76S	0	2	0	1	0	0	0	0
76T	0	4	0	0	0	5	0	3
76U	0	11	0	10	1	10	4	8
76V	1	1120	11	1340	6	1062	320	1113
76W	1	780	3	917	0	0	0	0
76X	2	127	2	200	4	85	79	310
76Y	114	4280	715	2760	1475	3609	1230	2681
78F	0	0	0	0	0	1	0	0
78V	0	0	0	0	0	1	0	0
79L	0	0	0	0	1	1	0	0
81B	1	96	0	44	0	69	0	63
81C	1	141	0	79	0	171	0	61
81E	2	37	0	73	0	89	0	103
81L	0	1	2	2	0	1	0	0
81R	0	1	0	1	0	0	0	0
82B	12	80	24	46	53	58	43	56
82C	113	701	243	552	279	503	335	678
82D	3	35	23	37	26	33	44	58
82E	0	0	0	1	1	2	0	0
82G	0	2	1	1	0	0	0	0

Table 4, cont'd.

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
82L	0	0	1	2	1	1	1	1
83B	0	0	0	0	1	2	0	1
83C	0	1	0	2	1	1	2	3
83E	0	40	0	10	0	23	0	15
83F	0	85	0	52	1	89	0	90
84B	0	31	1	112	0	96	0	44
84C	0	23	0	29	0	19	1	2
84F	2	72	0	23	0	23	0	55
85B	1	3	1	5	2	3	1	1
85C	0	0	0	1	0	0	1	1
85G	0	0	0	1	0	0	0	0
86B	0	0	0	0	0	1	0	0
86C	0	0	0	0	1	1	0	0
86Y	0	0	0	0	0	1	0	0
91A	2	5	1	4	1	2	967	1848
91B	32	2698	10	3364	13	4475	108	2853
91C	19	1568	1	402	0	11	0	20
91D	7	306	0	265	3	170	5	282
91E	17	323	144	377	252	339	188	244
91F	1	104	0	69	0	93	0	49
91G	3	140	0	173	0	153	0	102
91H	0	30	0	48	0	22	2	25
91J	0	70	0	41	0	68	0	30
91K	0	0	0	0	0	2	1	1
91L	0	25	0	41	2	18	0	6
91N	0	31	0	14	0	31	0	11
91P	2	256	1	407	2	127	0	123
91Q	2	170	0	133	0	161	0	116
91R	0	253	0	270	0	146	2	163
91S	0	140	0	69	0	81	0	95
91T	0	65	0	62	0	127	0	161
91U	0	22	0	17	0	31	0	37
91V	0	10	0	2	0	9	0	4
91W	0	0	0	1	0	0	0	0
91X	0	0	0	2	0	1	0	2
91Y	0	136	0	71	0	38	0	78
92B	10	512	0	447	1	363	0	221
92C	1	31	0	34	1	38	0	31
92D	1	25	0	59	0	19	0	63
92E	0	0	0	1	0	1	0	0
92G	0	0	2	2	0	0	1	1
92J	0	0	1	1	0	0	0	0
92L	0	0	0	1	0	0	0	0
92T	0	0	0	0	0	1	0	0
93A	0	0	0	0	0	0	0	0
93B	1	2	0	1	3	6	1	1
93C	0	2	0	1	1	1	1	2
93E	1	37	1	26	0	26	0	0
93F	1	119	0	76	1	36	0	36

Table 4, cont'd.

TMOS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
93H	20	119	219	313	179	194	111	133
93J	20	101	69	149	139	162	44	120
93N	0	1	0	0	1	1	0	0
93T	0	0	2	3	0	0	0	0
93V	0	0	0	1	0	0	0	0
94B	94	3577	845	4007	1406	4943	1609	4775
94C	0	0	0	2	0	2	0	1
94D	0	0	0	3	0	2	0	0
94E	0	0	0	4	0	0	0	0
94F	0	93	0	108	0	180	1	100
95B	1785	5701	3275	5330	4091	5830	3320	6452
95C	2	165	5	385	6	313	1	162
95D	0	5	0	2	2	4	0	3
95G	0	0	2	2	0	0	2	2
95J	0	0	1	1	0	0	0	0
95L	0	1	0	0	0	2	0	1
95N	0	1	1	2	0	0	0	0
95R	0	1	0	1	0	0	0	1
95S	0	0	0	1	0	1	0	0
95V	0	0	1	1	0	0	0	0
96B	7	220	1	305	4	206	2	286
96C	39	93	106	124	219	231	223	265
96D	0	47	1	68	0	31	0	60
96G	0	0	3	3	0	0	0	0
96H	0	9	0	21	0	18	0	15
96J	0	0	0	0	0	1	0	0
96P	0	0	0	1	0	0	0	0
96V	0	1	0	1	0	0	0	0
96Y	0	0	0	0	0	1	0	0
97B	4	297	2	110	0	1	0	0
98B	1	2	2	2	0	0	2	3
98C	111	513	435	522	667	682	381	417
98E	0	0	3	3	2	2	0	0
98G	525	984	666	754	506	515	633	692
98H	0	0	2	2	0	0	0	0
98J	9	118	226	283	241	264	125	161
98L	0	0	2	2	0	0	0	0
98M	0	0	0	1	0	0	0	0
98S	0	0	0	0	0	1	0	0
98T	0	0	0	0	1	1	0	0

D. Enlistment Term

Available benefits in the Army College Fund are tied not only to MOS, but also to enlistment term. A relevant consideration therefore is whether the program operates to attract enrollees for a short enlistment (i.e. two years), or a longer one. (The relationship between enlistment term and the propensity of enrollees to make contributions, request refunds, or use benefits is considered later in this report.) In Table 5, therefore, we examine data on enlistment term for program enrollees, non-enrollees and the entire accession cohort.

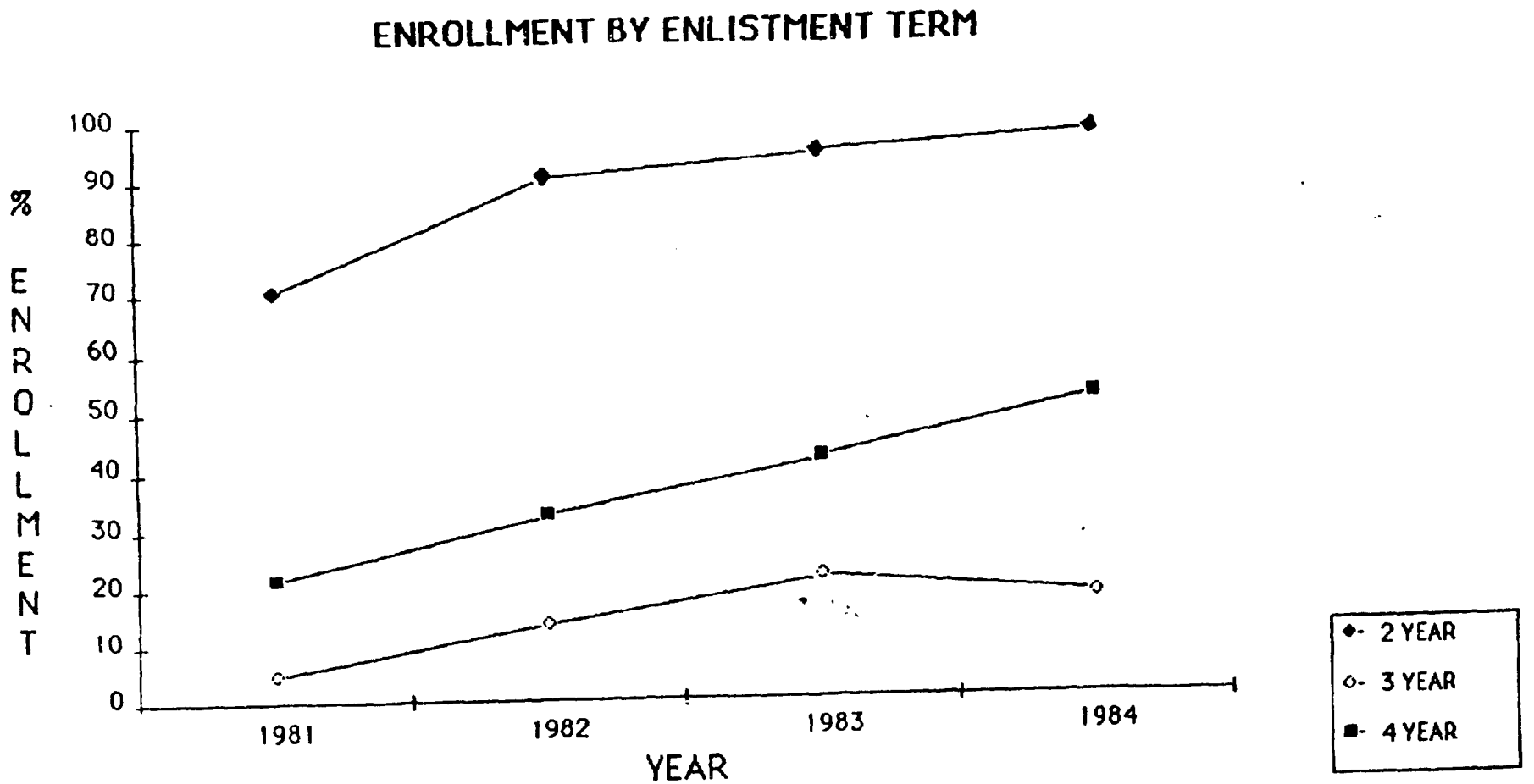
These data indicate the following tendencies. ACF enrollees were much more likely to enlist for a two year term. However, an even greater number of program enrollees opted for the three year, and especially the four year term. For non-ACF accessions, the largest category in all cohorts was the three year enlistment term. Thus, while ACF enrollees were more likely than others to enlist for a short (two year) term, they were also more likely than others to enlist for a longer (four year) term.

These data also show that a number of changes have occurred in the proportion of accessions by enlistment term

TABLE 5 - ACF BY ENLISTMENT TERM

ENLTERM	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
1	2	30	4	26	12	28	10	49
2	2664	3784	6293	6946	7989	8446	9847	10073
3	3263	72153	9189	67401	15397	71726	14733	83336
4	8356	40769	14481	44108	17888	42762	23828	45880
5	14	176	1	18	5	8	1	10
6	0	0	13	85	9	40	7	63

FIGURE 2


ENROLLMENT BY ENLISTMENT TERM
% ENROLLMENT
100
90
80
70
60
50
40
30
20
10
0
1981
1982
1983
1984
YEAR
2 YEAR
3 YEAR
4 YEAR

enrolling in the Army College Fund (see Figure 2). The percentage of two year recruits opting for the Fund rose in each successive cohort, growing from 70.4% in FY 81 to 97.8% in FY 84. This development of course reflects not only how the incentives of the Fund are structured, but also the increasingly more limited options for non-Fund participants to enlist for two years.

IV. Financial Participation in the Army College Fund

While participation information is relevant in examining the extent to which the program has succeeded in attracting recruits, the latter is needed to determine how well it is succeeding in promoting opportunities for post-service educational advancement and projecting the costs of the program. Financial participation consists of net soldier contributions (i.e. contributions less refunds), and the use of benefits after discharge. The flexibility built into the program prior to FY 85 regarding the timing of those contributions, refunds and the use of benefits, however, renders it impossible at the present time to develop conclusive statistics on ultimate financial participation by FY 81 - FY 84 enrollees. Several measures of current financial participation, though, are contained in the following sections.

A. Contribution and Refund Behavior

In Table 6 we list the number of soldiers making contributions to and requesting refunds from their Army College Fund accounts. These data have been obtained by merging records in the MEPS Accession Files for each fiscal year with the Army Finance and Accounting Center's HACSMA File according to individual Social Security Number. Note that this financial information is presented as of two dates, May 30, 1985 (the most recent HACSMA data available to us), and January 1, 1984 (an earlier version of the File we processed). The reason for including the latter will be evident below.

According to the data in column (2), 64.4% of those signed up for the contributory program in FY 81 had made a contribution to their account by May 30, 1985.[9] In the FY 82 cohort, the percentage of contributors rose to 77.0%, and in the FY 83 cohort, it increased further to 79.4%. For FY 84 accessions, this percentage increased somewhat further to 80.4%, but it may be inappropriate to compare it to the others, owing to the large number of missing HACSMA records in this cohort.

TABLE 6

CONTRIBUTIONS AND REFUNDS

YEAR	STATUS	(1) As of 1/1/84	(2) As of 5/30/85
FY 81	Contribution, No Refund		4468
	Contribution, Partial Refund		353
	Contribution, Full Refund		3417
	Non-Contributory VEAP		2010
	Enrolled, No Contribution		2615
	Enrolled, No HACSMA Record		1936
FY 82	Contribution, No Refund	18183	14949
	Contribution, Partial Refund	209	736
	Contribution, Full Refund	3755	6844
	Non-Contributory VEAP	739	739
	Enrolled, No Contribution	4965	4597
	Enrolled, No HACSMA Record	2130	2116
FY 83	Contribution, No Refund	30427	25691
	Contribution, Partial Refund	163	853
	Contribution, Full Refund	1442	6272
	Non-Contributory VEAP	11	11
	Enrolled, No Contribution	7365	6541
	Enrolled, No HACSMA Record	1892	1932
FY 84	Contribution, No Refund		35979
	Contribution, Partial Refund		291
	Contribution, Full Refund		2655
	Non-Contributory VEAP		8
	Enrolled, No Contribution		4172
	Enrolled, No HACSMA Record		5317

It is worthwhile at this point to consider both the magnitude and the probable cause of these missing entries, which appear in all four cohorts. Looking at the entry entitled "Enrolled, No HACSMA Record" in the table, we see that there were 1936 persons listed on the Accession File in FY 81 as having signed up for the Army College Fund, but for whom no financial record has been found. In FY 82 and FY 83, the number of such persons was quite comparable, at 2116 and 1932 cases, respectively. But for the FY 84 cohort, this number is more than twice as large, at 5317.

Some of these missing financial records may arise from an incorrectly coded Social Security Number on either the Accession File or the HACSMA File. After making some inquiries, however, we feel that it is unlikely that errors of this type could account for very many of the missing financial records. It certainly seems unlikely that more than twice as many such errors could have been made in the most recent year, after improvements in the record keeping system had been made. There are several other factors which we believe more important in explaining these missing records.

Consider the operational procedure involved in compiling the information on these records. The Army

College Fund entry on the Accession File is first coded on a computer terminal by a recruiter on the basis of an interview with the recruit, and before an actual contract for the program is signed. Keypunch errors could be made at this point (the codes are notoriously difficult to decipher). Or some recruits could subsequently decide not to sign an ACF contract, because they altered their choice of Training MOS (and switch to an ACF-ineligible specialty), or have second thoughts about the financial commitment involved. Apparently, many such changes of mind have occurred, and this factor, together with keypunch errors, may explain most of the unpaired Accession File records in the FY 81 - FY 83 cohorts, and certainly some of those in FY 84. But these reasons do not offer a satisfactory explanation of why there are so many more missing financial records for the FY 84 than for the preceding cohorts.

The most probable cause of the latter seems to be data processing delays. Information on program enrollment must pass through MILPERCEN and the Veterans Administration before it appears on the Army's Finance and Accounting Center's File. This multistage processing introduces time lags into the recording system, and especially in cases in which enrollees have not yet made any contributions, the delays in setting up the account may be long indeed.

Given all these sources of missing records, it is useful to recalculate the percentages of contributors cited above, based upon only those individuals for whom a financial record is present. If this is done, we can use both sets of percentages to form upper and lower limits on financial participation by enrollees. That is, calculations based upon all individuals in the Accession File who were coded as having enrolled in the program, form the lower bound on participation (i.e. this calculation assumes they were all actually enrolled).[10] But calculations based only upon those for whom a HACSMA record exists, form an upper bound on financial participation (i.e. this calculation assumes that if no financial record is present, the soldier did not actually enroll in the program).

Using the latter criteria, we report the following participation rates. In the FY 81 Accession cohort, 75.9% of those enrolling in the program had made a financial contribution by May 30, 1985. This percentage rose to 83.1% for the FY 82 cohort, and further still to 87.7% for the FY 83 cohort. The highest percentage of contributors using this criteria, however, appears in the FY 84 cohort, where 90.5% of those enrolling in the program have made contributions.[11] These upper and lower bounds are reproduced in Table 7.

TABLE 7

UPPER AND LOWER BOUNDS ON THE PERCENTAGE

OF ENROLLEES MAKING CONTRIBUTIONS

Cohort	Lower Bound (%)	Upper Bound (%)
FY 81	64.4	75.9
FY 82	77.0	83.1
FY 83	79.4	87.7
FY 84	80.4	90.5

While contributions are an important dimension of financial participation, they do not tell the whole story. Persons who contribute may later request a partial or whole refund of their money. (Partial refund entries may sometimes appear on the HACSMA File to correct mistaken entries, rather than as an actual cash withdrawal). This ambiguity does not create much of a practical problem in analyzing the data, however, because there are so few partial refunds present.

Let us now compare actual refund behavior in each cohort. Column (2) data in Table 6 imply that the percentage of contributors requesting refunds is substantially lower in each successive accession cohort. In the FY 81 cohort, 41.5% of those who had made contributions to their accounts had requested a full refund of those contributions by May 30, 1985. In the FY 82 cohort, this percentage stood at 30.4%, while for the FY 83 cohort, it was lower still, at 19.1%. Only 6.8% of all contributors in the FY 84 cohort had requested a full refund as of this date.

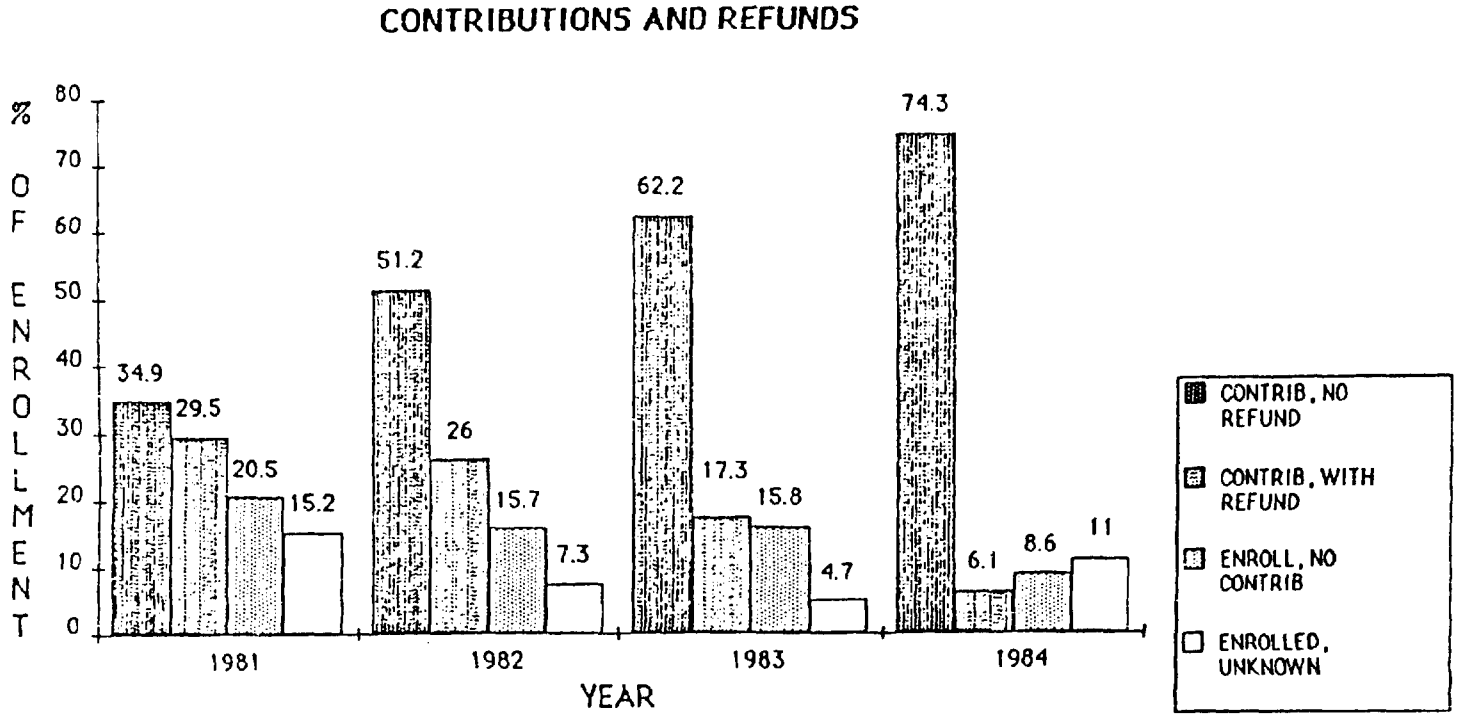
These calculations cannot be unambiguously interpreted as implying a lower propensity to request a refund in later cohorts, though, because earlier cohorts have had more time

to request refunds. A good indication of the importance of this time factor is given by comparing the column (2) information (Table 6) for the FY 82 and FY 83 cohorts with the corresponding information in column (1). As of January 1, 1984, only 17.0% of contributors in the FY 82 cohort had requested a full refund. By May 30, this percentage had increased to the 30.4% level cited above. Thus there has been a substantial jump in the proportion of contributors requesting refunds in this group in just a fifteen month period. A similar picture is evident for the FY 83 cohort. Whereas only 4.5% in this group had requested a full refund as of the earlier date, this percentage more than quadrupled (to 19.1%) by the later date.

On the basis of this evidence, then, we conclude that the propensity of program enrollees to contribute has increased from the FY 81 to the FY 84 accession cohort. But much of the apparent difference in the propensity to request a refund among the cohorts appears to result from the fact that earlier cohorts have simply had more time to request a refund.

Contribution and refund behavior for the four cohorts is summarized in Figure 3. It should be underscored at this point, however, that we have no ultimate refund information or refund projection rates to offer at this time. Soldiers

FIGURE 3


CONTRIBUTIONS AND REFUNDS
% OF ENROLLMENT
80
70
60
50
40
30
20
10
0
34.9
29.5
20.5
15.2
51.2
26
15.7
7.3
62.2
17.3
15.8
4.7
74.3
6.1
8.6
11
1981
1982
1983
1984
YEAR
CONTRIB, NO REFUND
CONTRIB, WITH REFUND
ENROLL, NO CONTRIB
ENROLLED, UNKNOWN

Soldiers have up to ten full years after discharge to request a refund, and in most cases, we have only observed their behavior for a small fraction of that time.

B. Contribution and Refund Behavior by Enlistment Term

In our interviews with program officials and managers, it was suggested that participation in the program varies systematically with enlistment term. In particular, there is a belief that soldiers enlisting for two years not only are more likely to enroll in the Army College Fund than those enlisting for longer terms, but they are also more likely to follow through this commitment in making contributions and using benefits.

To examine whether the evidence supports this view, we first disaggregated the contribution and refund behavior presented earlier by enlistment term. These new data (Table 8) allow us to perform calculations which are relevant in evaluating the propensity to contribute. In Table 9, we list two measures: (1) the percentage of program enrollees in each cohort who had ever contributed to their account;[12] and (2) the percentage of program enrollees who were net contributors (i.e. had made a contribution and had not requested a full refund).

TABLE 8

CONTRIBUTIONS AND REFUNDS

VEAP KICKER PROGRAMS FY81-FY84

FY 81 Accessions

Enlistment Term	1	2	3	4	5	6	Row Total
Category							
Number of Takers	1	2664	3263	8856	14	1	14799
Non-Contributory VEAP		357	418	1235			2010
Contrib, No Refund		884	877	2707			4468
Contrib, Full Ref		622	684	2109	1	1	3417
Contrib, Partial Ref		85	53	215			353
Record, No Contrib	1	443	632	1539			2615
No Record		273	599	1051	13		1936

FY82 Accessions

Enlistment Term	1	2	3	4	5	6	Row Total
Category							
Number of Enrollees	4	6293	9189	14481	1	13	29981
Non-Contributory VEAP		104	222	413			739
ACF Contrib, No Refund	4	3745	4474	6722	1	3	14949
ACF Contrib, Full Ref		1388	2099	3355		2	6844
ACF Contrib, Partial Ref		110	222	404			736
Record, No Contribution		645	1399	2553			4597
No Record		301	773	1034	8		2116

Table 8, cont'd.

FY83 Accessions

Enlistment Term	1	2	3	4	5	6	Row Total
Category							
Number of Enrollees	12	7989	15397	17888	5	9	41300
Non-Contributory VEAP		2	4	5			11
ACF Contrib, No Refund	4	5615	9619	10441	5	7	25691
ACF Contrib, Full Ref	2	1125	2410	2735			6272
ACF Contrib, Partial Ref		109	307	437			853
Record, No Contribution	1	830	2299	3411			6541
No Record	6	308	758	859		2	1933

FY84 Accessions

Enlistment Term	1	2	3	4	5	6	Row Total
Category							
Number of Enrollees	10	9847	14733	23828	1	7	48426
Non-Contributory VEAP		2	3	3			8
ACF Contrib, No Refund	6	7966	11159	16841	1	5	35978
ACF Contrib, Full Ref	2	521	863	1269			2655
ACF Contrib, Partial Ref		42	84	165			291
Record, No Contribution		572	1153	2447			4172
No Record	2	744	1471	3103		2	5322

TABLE 9

PERCENTAGE OF ENROLLEES MAKING CONTRIBUTIONS

VEAP KICKER PROGRAMS FY81-FY84

FY 81 Accessions

Enlistment Term	(1) Contributors	(2) Net Contributors
Two Year	59.7%	36.4%
Three Year	49.5%	28.5%
Four Year	56.8%	33.0%

FY 82 Accessions

Enlistment Term	Contributors	Net Contributors
Two Year	83.3%	61.2%
Three Year	73.9%	51.1%
Four Year	72.4%	49.2%

FY 83 Accessions

Enlistment Term	Contributors	Net Contributors
Two Year	85.7%	71.6%
Three Year	80.1%	64.5%
Four Year	76.1%	60.8%

FY 84 Accessions

Enlistment Term	Contributors	Net Contributors
Two Year	86.6%	81.3%
Three Year	82.2%	76.3%
Four Year	76.7%	71.4%

These percentages do support the belief that two year enlistees are more likely to contribute to their accounts, whether contributions are measured in gross terms (i.e. no account is taken of refunds), as in column (1), or in net terms (i.e. after taking account of full refunds), as in column (2). This is the case in all four accession cohorts.

However, while noticeable differences in contribution behavior do exist among program enrollees according to enlistment term, these differences are not of very great magnitude. The largest difference recorded (between net contribution rates for two and four year enlistments in FY 82) is only twelve percent. This suggests that while program enrollees with two year enlistments are somewhat more likely to contribute to their accounts than others, the differences are not nearly as great as we originally believed.

C. Benefit Use

A second dimension of financial participation in the program is, of course, the actual use of benefits by former servicemen. Because the program has been in effect for a relatively short period of time, however, only a brief glimpse of benefit use among early program enrollees is

possible. Data on this benefit use is shown in Table 10 for the FY 81 and FY 82 Accession cohorts. This data was compiled by merging Accession File records with a special Banking and Benefit Record File created specifically for us by the Veterans Administration. The latter file is current as of August 29, 1984.

In the first row of each panel of the table we list the number of individuals in each accession cohort who have actually used a benefit, according to their enlistment term. In the second row, we report the "percentage of benefit use," that is, the number of persons using a benefit divided by the number of persons enrolling in the Army College Fund (the latter information is contained in Table 8). The third row of each panel contains an entry identified as the "percentage of benefit use among contributors," which has been calculated by dividing the number of individuals using benefits by the number of net contributors (the latter is shown in column (2) of the preceding table). Finally, in the fourth row of each panel, we report the number of remaining eligibles, that is, the number of contributors who have neither used benefits nor requested a full refund of their contributions.

Benefit use, as identified by the measures in rows one and three, is clearly much greater by two year enlistments

TABLE 10

BENEFIT USE

FY 81 Accessions

	Enlistment Term			
Category	2	3	4	Row Total
Used Benefit	589	258	106	953
Percentage of Benefit Use	22.1	7.9	1.2	6.4
% of Benefit Use Among Contributors	37.0	16.0	2.1	11.6
Number of Remaining Eligibles	380	672	2816	3868

FY 82 Accessions

	Enlistment Term			
Category	2	3	4	Row Total
Used Benefit	1381	59	71	1511
Percentage of Benefit Use	21.9	.6	.5	5.0
% of Benefit Use Among Contributors	26.3	.9	.7	6.7
Number of Remaining Eligibles	2474	4637	7055	14166

than by three or four year enlistments. Two year enlistments, of course, have had one to two more years to use their benefits, and this may account for some of the differences.

It would seem that the much higher benefit usage rate among two year enlistments than among three year enlistments in FY 81 cannot be explained in terms of the extra year the former have had. However, this is too strong a conclusion to draw at this point, since it involves an assumption that contributors in the FY 81 cohort are equally motivated in regard to educational advancement as are their counterparts in the FY 82 cohort. This may not be a valid assumption, because as we explained earlier, the scope of the program (and perhaps whom it attracted) changed in those years. Finally, it should be reminded that individuals have ten full years after discharge to request their benefits. It is hazardous, indeed, to try to form definitive judgments on benefit use based upon behavior in the limited time frame we have been able to observe.

V. Summary and Conclusions

Our major findings in this report have been as follows:

o 48426 soldiers who entered the Army in FY 84 signed up for the Army College Fund. This is an increase of 7126 over the previous fiscal year. The increase in ACF enrollments was proportionately greater than the increase in accessions from the previous year. As a result, the percent of total accessions who enrolled in the Army College Fund rose from 33.6% in FY 83 to 34.7% in FY 84.

o An analysis of ACF enrollments by mental category reveals enrollments have increased from FY 81 to FY 84 as a result of three developments: (1) a growing number of accessions in each year; (2) a rising proportion of each accession cohort scoring in categories I-IIIA on the AFQT test; and (3) a rising proportion of those in categories I-IIIA opting for the Army College Fund.

o While ACF participants comprise the great majority of two year enlistments, a much larger number of ACF participants enlist for both three and four year terms.

o Most persons enrolling in the Army College Fund in FY 81-FY 84 had made contributions to their accounts. The

percentage of persons so contributing, moreover, has increased in every successive accession cohort. In FY 84, more than eight out of every ten persons enrolling the ACF had made a contribution as of May 30, 1985.

o A substantial number of contributors, however, later request refunds. The exact percentage of persons who will ultimately request a refund can not yet be determined. Our best estimate at this time, though, is that between one third and one half of those who contribute will request a refund by the time they are discharged. Refunds, of course, can be requested up to ten years later under the program's guidelines.

o Program enrollees who signed up for a two year enlistment term are somewhat more likely than those who have enlisted for three or four years to have contributed to their accounts. These differences, however, are not great. But the very limited evidence available to date suggests that those in the two year enlistment term are much more likely to have used their benefits than those who enlisted for three or four year terms. Since ex-servicemen have up to ten years after discharge to use these benefits, and since we have only observed their behavior for a small fraction of that time, this finding is very tentative.

APPENDIX A

ERRORS IN MOS CODES

The reader should be alerted that there are some possible sources of error in these MOS data. A number of obviously invalid codes turned up on the Accession File. These codes do not resemble valid ones, and appear to be the result of keypunch errors. Obviously invalid codes are not shown in the table, and fortunately do not represent a major source of error since the total number of individuals placed in these codes is fairly small. For example, in FY 82 there were 140 individuals on the Accession File who received an obviously incorrect MOS code. (42 of these were listed as having signed an ACF contract.) In FY 83, the number given obviously incorrect codes was lower, at 51 individuals (16 of whom were listed for the ACF). These figures apply only to codes which are clearly incorrect, and do not include several codes shown in the table which appear to require further explanation (e.g. code 000, which might correspond to missing information).

Also troublesome is the prospect that if recognizable errors were made in coding MOS, the possibility of unrecognizable error in terms of incorrectly placing some ACF individuals into the wrong (but a valid) MOS code

arises. Evidence that the latter occurred seems to be the fact that some individuals who signed up for the Army College Fund are coded with a MOS which was not eligible for participation. A check revealed that in FY 82, there were 383 such cases, and in FY 83, 477 such cases.

There are at least two other possible explanations of these seemingly invalid entries, however. Special exceptions were granted to some recruits in cases in which recruiters had erred in signing off on an Army College Fund contract to an individual who had selected an ineligible MOS. And in other cases, a MOS had been targeted for enhanced benefits in FY 81 (but not in FY 82 or FY 83). Some individuals could have signed contracts in FY 81, although their service entry date occurred in a later fiscal year. So the actual extent of MOS coding error might be considerably less than the numbers cited in the preceding paragraph.

In addition to possible errors in coding MOS, though, there is also the possibility of incorrectly coding having signed an ACF contract. Two directions of error could exist here, i.e. coding someone as having signed a contract, when in fact that did not occur, or coding someone as not having signed a contract, when in fact one was signed.

Consider the first direction of error. The potential magnitude of this error is not apparent on the basis of data in the Accession File alone. But based upon data we present later, the number of missing HACSMA records suggest that the upper bound on this type of error (i.e. the maximum extent to which participation in the ACF is overstated by Accession File data) is about 7% in FY 82, and about 5% in FY 83. We have no means at this time, however, of identifying the opposite type of error, i.e. the potential extent to which the number of ACF contracts signed has been understated by inaccurate coding. To the extent that this kind of error occurred, it serves to reduce the maximum overstatement error below the 7% and 5% levels just cited.

APPENDIX B

DEMOGRAPHIC CHARACTERISTICS OF ENROLLEES

A. Enrollment by Sex

In Table B-1 we report on Army College Fund enrollment by sex. The table demonstrates that from the FY 81 to FY 84 cohorts, enrollment has been rising for both men and women. The FY 81 data show that enrollment by males (as a percentage of total male accessions) was higher than for females. The table reveals, however, that beginning in the next accession cohort (FY 82) and continuing thereafter, the reverse was true. However, while female enrollment rose more rapidly than that of males from FY 82 to FY 83, this was no longer the case in FY 84, when the percentage of male enrollees rose slightly while the percentage of female enrollees fell somewhat from the preceding year. Nonetheless, the percentage of female recruits enrolling in the program remains higher than that of males.

B. Enrollment by Ethnicity

In Table B-2 we report on ACF enrollment according to ethnicity. A continuous upward trend in program enrollment for each ethnic group from FY 81 to FY 84 is evident. The

TABLE B-1 ACF ENROLLMENT BY SEX

SEX	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
M	13095	98726	25730	103511	34334	107429	41179	121973
F	1704	18185	4251	15072	6966	15581	7247	17438

TABLE B-2 ACF ENROLLMENT BY ETHNICITY

ETHNICITY	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
WHITE	12807	75726	25261	81386	34180	88195	39570	98978
BLACK	1411	31912	3559	29128	5235	26789	6345	31081
HISPANIC	315	5624	574	4616	936	4411	1240	5040
OTHER	266	3650	587	3454	949	3615	1271	4312

increase in enrollment in each ethnic group from FY 83 to FY 84 was small compared to the gains recorded in FY 83 from the previous year. This gain in enrollees in FY 84 was quite minor for whites and blacks, although it was somewhat larger for both Hispanics and the Other category.

A comparison of group enrollment rates (i.e. the percentage of each ethnic group in each accession cohort signing up for the program) reveals the following. In every cohort, whites have been more likely to enroll than any other group by a substantial majority. Members of the Other group have remained the second most likely to enroll, and they have also closed the gap between their enrollment rate and that of whites in each year since FY 81. Hispanics are the third most likely group to sign up for the program, but they, too, have increased their enrollment rate more rapidly than whites. In FY 81, whites had an enrollment rate almost four times higher than Hispanics. But in FY 84, the enrollment rate for whites was less than twice that of Hispanics. Blacks remain the least likely to sign up for the ACF in each cohort, but they too have increased their enrollment rate more rapidly than whites. So the gap in program enrollment between whites and the three other ethnic groups has been narrowing over time.

C. Enrollment by Sex and Ethnicity Combined

Figures 4 and 5 present the relative shares of enrollment in the Army College Fund in the FY 83 accession cohort, according to the combined characteristics of sex and ethnicity. In Figure 4 we have depicted the enrollment rate of each demographic subgroup, i.e. the percent of each subgroup's accessions who have enrolled in the program. The highest enrollment rates using this c teria are recorded for white females. The next highest is for "other" females, followed closely by white males, Hispanic females and black females. Enrollment rates are substantially lower for "other" males and lower still for Hispanic males. The lowest enrollment rate appears for black males.

Figure 5 depicts ACF enrollment according to a different criteria, i.e each demographic subgroup's share of total ACF enrollment. This figure demonstrates that the great majority of AC. enrollees are white males. The next largest group are white females, followed by black males, and then black females. All remaining groups together account for less than 10% of total ACF enrollees.

FIGURE 4

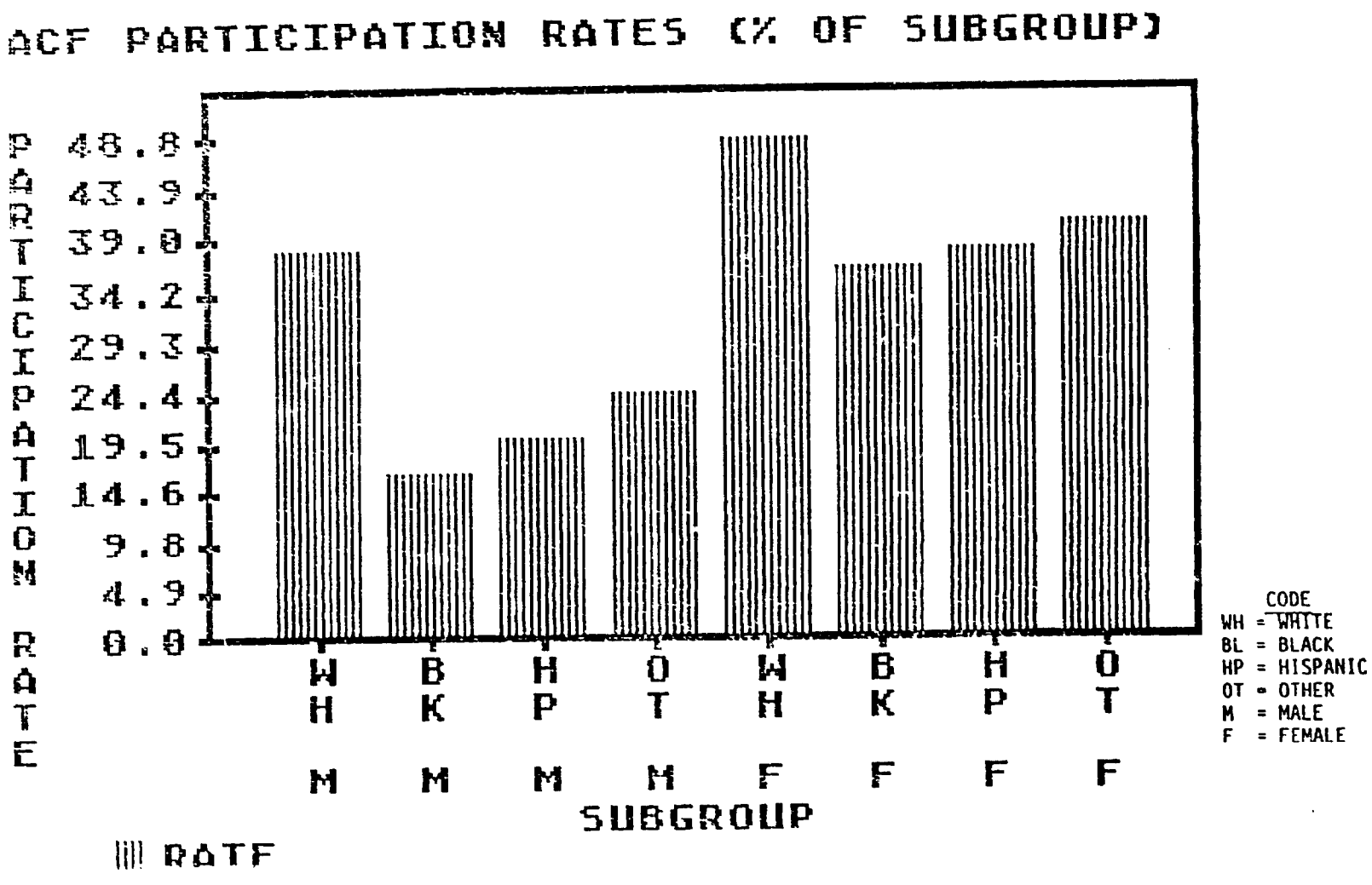
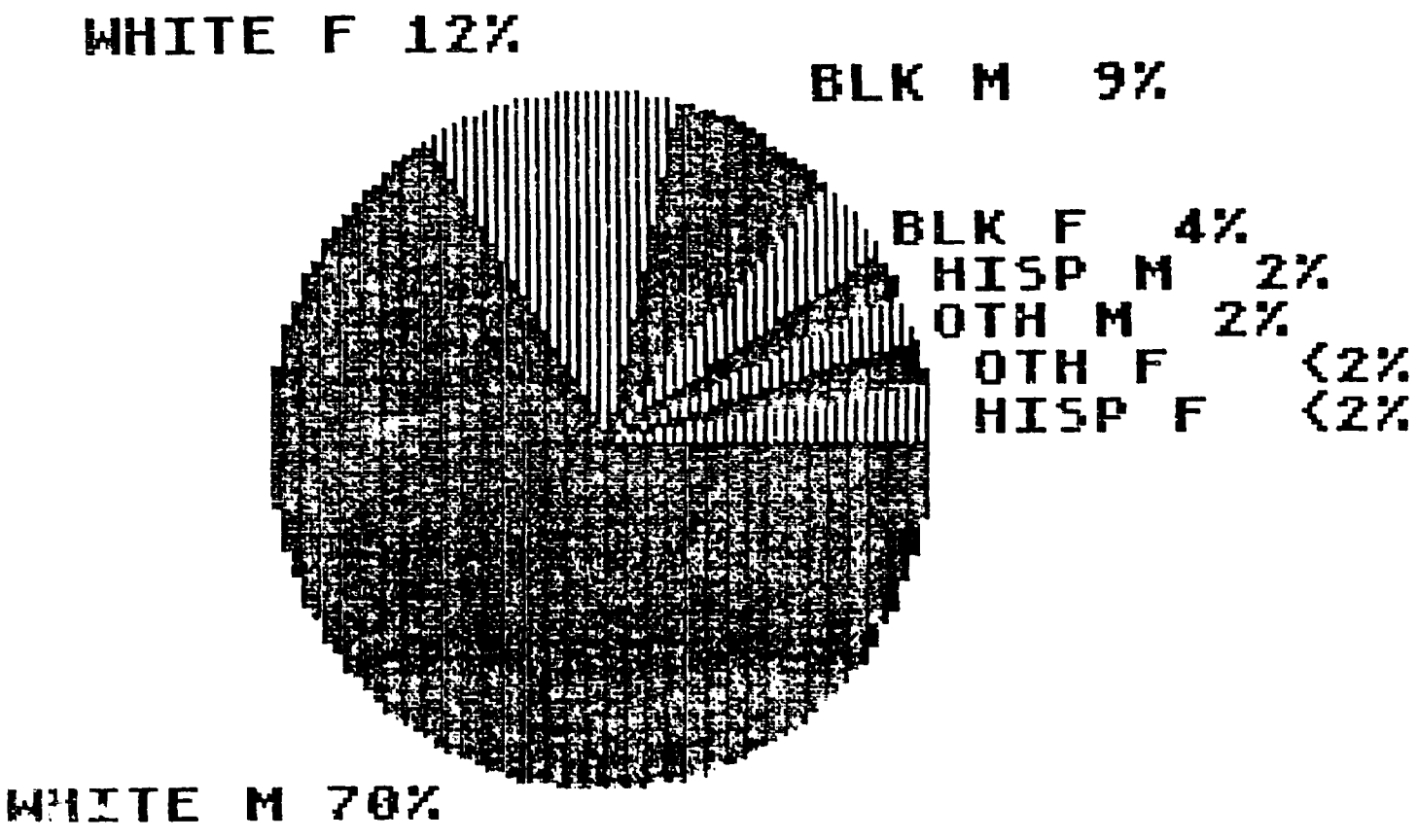

ACF PARTICIPATION RATES (% OF SUBGROUP)
PARTICIPATION RATE
48.8
43.9
39.0
34.2
29.3
24.4
19.5
14.6
9.8
4.9
0.0
WH BK HP OT WH BK HP OT
M M M M F F F F
SUBGROUP
RATE
CODE
WH = WHITE
BL = BLACK
HP = HISPANIC
OT = OTHER
M = MALE
F = FEMALE

FIGURE 5

FY83 ACF PARTICIPANTS



D. Enrollment by Age

Table B-3 contains information on enrollment in the Army College Fund by Age. The table indicates that there are few differences in the accession cohorts in terms of enrollment in the Army College Fund according to age. In each cohort, the considerable majority of those enrolling in the program were between the ages of 18 and 22. In FY 81 this percentage stood at 77.5%. In FY 82 it was 76.2%, and in FY 83 it rose again to 77.5%. In FY 84 this percentage was slightly higher, at 79.0%. Thus, the percentage falling in this age group has remained consistently high in all four cohorts.

This apparent constancy, however, masks some interesting underlying developments. The percentage of total accessions that are between the ages of 18-22 has declined over the period. (In FY 81, it was 82.4%, in FY 82 it fell to 79.6%, in FY 83 it rose very slightly to 79.6%, and it FY 84 it dropped to 78.2%.) The enrollment rate in the Army College Fund for those 18-22 has, however, risen more rapidly over this period than the enrollment rate for those 23-36. In the younger group, the percentage of each accession cohort signing up for the program was 11.9% in FY 81, 24.2% in FY 82, 32.6% in FY 83, and 35.1% in FY 84. For

TABLE B-3 ACF ENROLLMENT BY AGE

AGE	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
17	21	510	34	281	15	556	34	302
18	2098	20694	4665	18138	6403	18481	6955	17581
19	3740	31794	7302	31487	10703	32201	12840	35244
20	2659	22479	5029	22278	7213	23994	9155	28493
21	1773	13404	3403	13645	4587	14254	5614	17025
22	1199	8003	2445	8898	3099	9171	3670	10692
23	885	5551	1865	6327	2433	6600	2707	7530
24	652	4045	1349	4705	1828	4792	2050	5854
25	483	2841	1020	3456	1305	3340	1473	4137
26	363	2088	754	2401	969	2487	1031	3060
27	263	1525	584	1929	711	1844	731	2280
28	211	1105	423	1369	519	1368	596	1738
29	155	871	345	1149	413	1093	427	1390
30	109	650	265	775	331	839	295	1032
31	68	415	181	603	237	591	252	833
32	48	322	108	396	198	461	200	642
33	36	233	85	309	134	347	152	515
34	25	195	63	201	96	250	109	400
35	0	0	54	184	84	190	101	367
36	0	0	7	52	22	60	33	165

the older group, the percentage also increased by about the same amount from FY 81 to FY 83, but it fell in FY 84. Thus, in FY 81 it was 16.5%, in FY 82 it was 29.8%, in FY 83 it was 38.1%, but in FY 84 it dropped to 33.8%. So, while the enrollment rate has been higher for the older group in FY 81-FY 83, this is no longer the case in the FY 84 cohort.

E. Enrollment by Marital Status

Table B-4 reveals that the great majority of those who enroll in the Army College Fund have never been married (shown as "Single" in the table). The table indicates, moreover, that this is primarily, but not exclusively the result of the fact that the great majority of accessions have never been married. As a proportion of each marital status category, the highest percentage of ACF enrollments is recorded in the "Ever Married" (i.e but not currently married) group from FY 81 to FY 83. In FY 84, however, the highest enrollment rate occurs in the "Single" (i.e. never married) category. Over the entire period, moreover, the enrollment rate has in fact been rising most rapidly for those who have never been married.

TABLE B-4 ACF BY MARITAL STATUS

STATUS	'81ACF	'81TOT	'82ACF	'82TOT	'83ACF	'83TOT	'84ACF	'84TOT
SINGLE	12776	101865	25335	75911	35511	105001	42005	117229
MARRIED	1701	12526	3848	14681	4894	15526	5362	19140
EVER MARRIED	408	2520	797	2655	895	2483	1053	3039

APPENDIX C

FINANCIAL PARTICIPATION BY SEX AND ETHNICITY

Information on financial participation in the program by sex is presented in Table C-1. These data reveal that the pattern of contributions and refunds we described for all soldiers together also applies to males and females separately. Thus, the percentage of those signing up for the Army College Fund and actually making contributions to their accounts has risen for each sex in successive cohorts. Moreover, the percentage of those contributing to but later requesting a refund is lower for both sexes in successive cohorts. But again, on the basis of a comparison of column (1) and column (2) data for the FY 82 and FY 83 accession groups, we conclude that the primary reason why the percentage of refunds is higher in earlier cohorts appears to be because they have had more time to have requested a refund. There is no behavioral difference evident among the cohorts for either males or females in the propensity to request a refund.

The data do reveal, however, one noteworthy distinction between men and women. While males who sign up for the program are no more likely than females in each cohort to have made a contribution to their accounts, males in every

TABLE C-1

CONTRIBUTIONS AND REFUNDS - MALES

YEAR	STATUS	(1) As of 1/1/84	(2) As of 5/30/85
FY 81	Contribution, No Refund		4030
	Contribution, Partial Refund		311
	Contribution, Full Refund		2949
	Non-Contributory VEAP Enrolled, No Contribution Enrolled, No HACSMA Record		2431
FY 82	Contribution, No Refund	15906	13187
	Contribution, Partial Refund	175	631
	Contribution, Full Refund	3053	5637
	Non-Contributory VEAP Enrolled, No Contribution Enrolled, No HACSMA Record	4394	4080
FY 83	Contribution, No Refund	25520	21878
	Contribution, Partial Refund	122	674
	Contribution, Full Refund	1046	4786
	Non-Contributory VEAP Enrolled, No Contribution Enrolled, No HACSMA Record	6179	5500
FY 84	Contribution, No Refund		30796
	Contribution, Partial Refund		231
	Contribution, Full Refund		2070
	Non-Contributory VEAP Enrolled, No Contribution Enrolled, No HACSMA Record		3598

TABLE C-1 (CONT.)

CONTRIBUTIONS AND REFUNDS - FEMALES

YEAR	STATUS	(1) As of 1/1/84	(2) As of 5/30/85
FY 81	Contribution, No Refund		438
	Contribution, Partial Refund		42
	Contribution, Full Refund		468
	Non-Contributory VEAP Enrolled, No Contribution		184
	Enrolled, No HACSMA Record		
FY 82	Contribution, No Refund	2277	1762
	Contribution, Partial Refund	34	105
	Contribution, Full Refund	702	1207
	Non-Contributory VEAP Enrolled, No Contribution	571	517
	Enrolled, No HACSMA Record		
FY 83	Contribution, No Refund	4907	3813
	Contribution, Partial Refund	41	179
	Contribution, Full Refund	396	1486
	Non-Contributory VEAP Enrolled, No Contribution	1186	1041
	Enrolled, No HACSMA Record		
FY 84	Contribution, No Refund		5183
	Contribution, Partial Refund		60
	Contribution, Full Refund		585
	Non-Contributory VEAP Enrolled, No Contribution		574
	Enrolled, No HACSMA Record		

cohort are clearly less likely than females to have requested a refund. In the FY 81, FY 82 and FY 83 cohorts, the percentage of female contributors requesting a refund is about 10% higher than the corresponding percentage for males. This difference between the sexes falls to about 5% in the FY 84 cohort. However, it is not clear that this represents a narrowing in the differential between the sexes, because a comparison of column (1) and column (2) data for the FY 82 and FY 83 cohorts suggests that the gap may widen with the passage of time.

Information on financial participation in the program according to ethnicity is presented in Table C-2. The same pattern of contribution and refund behavior which characterized all soldiers together also applies to separate ethnic groups as well. In each ethnic group, there is a rising percentage of contributors (out of those enrolling in the program) in successive cohorts. However, some differences do exist among the groups in the propensity to contribute. Hispanics consistently have the highest percentage of contributors, followed by the Other group, then blacks, and then whites. Differences among the groups in this regard, though, are fairly minor in almost all instances.

TABLE C-2

CONTRIBUTIONS AND REFUNDS - WHITES

YEAR	STATUS	(1) As of 1/1/84	(2) As of 5/30/85
FY 81	Contribution, No Refund		3903
	Contribution, Partial Refund		301
	Contribution, Full Refund		2870
	Non-Contributory VEAP		1683
	Enrolled, No Contribution		2327
	Enrolled, No HACSMA Record		1723
FY 82	Contribution, No Refund	15272	12692
	Contribution, Partial Refund	166	566
	Contribution, Full Refund	3061	5571
	Non-Contributory VEAP	604	604
	Enrolled, No Contribution	4315	3995
	Enrolled, No HACSMA Record	2447	1833
FY 83	Contribution, No Refund	25099	21434
	Contribution, Partial Refund	132	647
	Contribution, Full Refund	1166	4973
	Non-Contributory VEAP	8	8
	Enrolled, No Contribution	6168	5480
	Enrolled, No HACSMA Record	1615	1638
FY 84	Contribution, No Refund		29249
	Contribution, Partial Refund		224
	Contribution, Full Refund		2146
	Non-Contributory VEAP		6
	Enrolled, No Contribution		3506
	Enrolled, No HACSMA Record		4439

TABLE C-2 (CONT.)

CONTRIBUTIONS AND REFUNDS - BLACKS

YEAR	STATUS	(1) As of 1/1/84	(2) As of 5/30/85
FY 81	Contribution, No Refund		347
	Contribution, Partial Refund		35
	Contribution, Full Refund		384
	Non-Contributory VEAP		248
	Enrolled, No Contribution		216
	Enrolled, No HACSMA Record		181
FY 82	Contribution, No Refund	2161	1634
	Contribution, Partial Refund	37	145
	Contribution, Full Refund	516	979
	Non-Contributory VEAP	110	110
	Enrolled, No Contribution	515	474
	Enrolled, No HACSMA Record	330	217
FY 83	Contribution, No Refund	3870	3014
	Contribution, Partial Refund	23	169
	Contribution, Full Refund	213	1014
	Non-Contributory VEAP	2	2
	Enrolled, No Contribution	925	827
	Enrolled, No HACSMA Record	204	209
FY 84	Contribution, No Refund		4712
	Contribution, Partial Refund		53
	Contribution, Full Refund		389
	Non-Contributory VEAP		2
	Enrolled, No Contribution		532
	Enrolled, No HACSMA Record		657

TABLE C-2 (CONT.)

CONTRIBUTIONS AND REFUNDS - HISPANICS

YEAR	STATUS	(1) As of 1/1/84	(2) As of 5/30/85
FY 81	Contribution, No Refund		117
	Contribution, Partial Refund		11
	Contribution, Full Refund		90
	Non-Contributory VEAP		59
	Enrolled, No Contribution		42
	Enrolled, No HACSMA Record		-
FY 82	Contribution, No Refund	366	299
	Contribution, Partial Refund	3	10
	Contribution, Full Refund	95	161
	Non-Contributory VEAP	19	19
	Enrolled, No Contribution	56	52
	Enrolled, No HACSMA Record	54	33
FY 83	Contribution, No Refund	7[illegible]	612
	Contribution, Partial Refund		20
	Contribution, Full Refund	31	143
	Non-Contributory VEAP	1	1
	Enrolled, No Contribution	140	121
	Enrolled, No HACSMA Record	42	39
FY 84	Contribution, No Refund		999
	Contribution, Partial Refund		8
	Contribution, Full Refund		60
	Non-Contributory VEAP		0
	Enrolled, No Contribution		65
	Enrolled, No HACSMA Record		100

TABLE C-2 (CONT.)

CONTRIBUTIONS AND REFUNDS - OTHER

YEAR	STATUS	(1) As of 1/1/84	(2) As of 5/30/85
FY 81	Contribution, No Refund		101
	Contribution, Partial Refund		6
	Contribution, Full Refund		73
	Non-Contributory VEAP		20
	Enrolled, No Contribution		30
	Enrolled, No HACSMA Record		36
FY 82	Contribution, No Refund	384	324
	Contribution, Partial Refund	3	15
	Contribution, Full Refund	83	133
	Non-Contributory VEAP	6	6
	Enrolled, No Contribution	79	76
	Enrolled, No HACSMA Record	38	33
FY 83	Contribution, No Refund	739	631
	Contribution, Partial Refund	4	17
	Contribution, Full Refund	32	142
	Non-Contributory VEAP	0	0
	Enrolled, No Contribution	132	113
	Enrolled, No HACSMA Record	42	46
FY 84	Contribution, No Refund		1019
	Contribution, Partial Refund		6
	Contribution, Full Refund		60
	Non-Contributory VEAP		0
	Enrolled, No Contribution		69
	Enrolled, No HACSMA Record		117

The groups also do not exhibit much variation in their refund behavior. Differences in the percentage of contributors requesting a refund among whites, Hispanics and the Other category are minor in all cohorts. Black contributors, however, do exhibit a somewhat higher propensity to request a refund, although the differences from other groups is not great. In all cases, the percentage of contributors requesting a refund is lower in successive cohorts. But also in all cases, the FY 82 and FY 83 cohort data reveal the refund percentage rises with the passage of time. Hence, the pattern for separate ethnic groups closely resembles that for all soldiers taken together.

FOOTNOTES

1. The first three objectives are cited in Army Circular No. 621-82-1. The fourth was identified to us at the United States Army Recruiting Command.

2. That is, with the imposition of the "New GI Bill" and the "New Army College Fund," effective July 1, 1985. The rules under these new programs are explained below.

3. The list of eligible MOS is shown in Table 3.

4. The experience gained during these experiments was evaluated by the Rand Corporation.

5. The term "Army College Fund" is used in the remainder of the paper to also apply to the predecessor "Ultra VEAP" program.

6. Scores on the AFQT were renormed during the period under study, affecting (increasing) eligibility of recruits.

7. Individuals who are primarily interested in the Army College Fund, of course, may simply have chosen another MOS.

8. See Appendix A for information regarding invalid MOS.

9. This category includes those who had made a contribution but had not requested a refund, plus those for whom a refund entry was evident on the HACSMA file.

10. Strictly speaking, this is not necessarily the lower bound since it is possible for a financial record to exist for a person who was not coded on the Accession File as having entered the program (i.e. an error of omission on the latter). A spot check of a sample of records, however, indicated no instances in which this occurred.

11. The "New GI Bill" and the "New Army College Fund" may have stimulated some prior enrollees to make contributions, because a prior enrollee would lose eligibility to participate in the program unless contributions were made or a pay reduction agreement signed by June 30, 1985.

12. This includes those persons for whom a partial or total refund is evident.