AFHRL-TR-71-46

IMPACT OF AN ALL-VOLUNTEER FORCE ON AFROTC OFFICER PROCUREMENT

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Lackland Air Force Base, Texas

December 1971

AIR FORCE HUMAN RESOURCES LABORATORY

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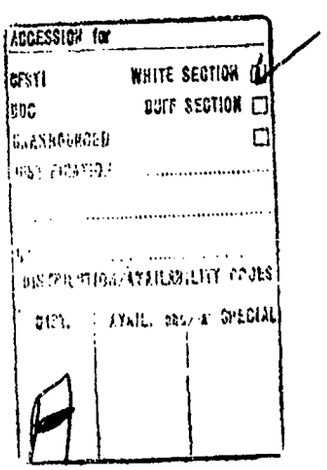

Unclassified

Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY *(Corporate author)*
Air Force Human Resources Laboratory
Personnel Research Division
Lackland AFB, Texas 78236

2a. REPORT SECURITY CLASSIFICATION

2b. GROUP

3. REPORT TITLE
IMPACT OF AN ALL-VOLUNTEER FORCE ON AFROTC OFFICER PROCUREMENT

4. DESCRIPTIVE NOTES *(Type of report and inclusive dates)*

5. AUTHOR(S) *(First name, middle initial, last name)*
Nancy Guinn
William E. Alley
C. Byron Farmer

6. REPORT DATE	7a. TOTAL NO. OF PAGES	7b. NO. OF REFS
December 1971	11	8

8a. CONTRACT OR GRANT NO.	9a. ORIGINATOR'S REPORT NUMBER(S)
b. PROJECT NO. 7719	AFHRL-TR-71-46
c. Task 771902	9b. OTHER REPORT NO(S) *(Any other numbers that may be assigned this report)*
d. Work Unit No. 77190205	

10. DISTRIBUTION STATEMENT
Approved for public release; distribution unlimited.

11. SUPPLEMENTARY NOTES	12. SPONSORING MILITARY ACTIVITY
	Air Force Human Resources Laboratory Personnel Research Division Lackland AFB, Texas 78236

13. ABSTRACT

As the armed forces consider the feasibility of implementing an all-volunteer force, it becomes necessary to determine the impact of such a move on officer accessions. A representative sample of AFROTC advanced cadets were surveyed and categorized into groups based on draft vulnerability and expressed attitude toward officer training in the absence of the draft. Results indicate that AFROTC cadet enrollments are motivated to some extent by draft pressure. In comparisons made between self- and draft-motivated cadets, statistically significant differences were found on demographic, aptitudinal, and attitudinal variables.

DD FORM 1 NOV 65 1473

Unclassified

Security Classification

14. KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	ROLE	WT	ROLE	WT
all volunteer force draft motivated self motivated officer procurement Air Force Reserve Officer Training Corps. (AFROTC)						

AFHRL-TR-71-46 December 1971

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FOREWORD

This work was conducted under Project 7719, Air Force Personnel System Development on Selection, Assignment, Evaluation, Quality Control, Retention, Promotion, and Utilization; Task 771902, Research on Prediction and Assessment of Adaptability to Air Force Life.

This report has been reviewed and is approved.

George K. Patterson, Colonel, USAF
Commander

ABSTRACT

As the armed forces consider the feasibility of implementing an all-volunteer force, it becomes necessary to determine the impact of such a move on officer accessions. A representative sample of AFROTC advanced cadets were surveyed and categorized into groups based on draft vulnerability and expressed attitude toward officer training in the absence of the draft. Results indicate that AFROTC cadet enrollments are motivated to some extent by draft pressure. In comparisons made between self- and draft-motivated cadets, statistically significant differences were found on demographic, aptitudinal, and attitudinal variables.

SUMMARY

Guinn, Nancy, Alley, W.E., & Farmer, C.B. *Impact of an all-volunteer force on AFROTC officer procurement.* AFHRL-TR-71-46. Lackland AFB, Tex.: Personnel Research Division, Air Force Human Resources Laboratory, December 1971.

Problem

The Air Force Officer Training Corps (AFROTC) has for many years served as one of the major sources for officer procurement. Since the program's inception, cadet accessions to advanced AFROTC training have been maintained exclusively with volunteer applicants without use of direct conscription. It is recognized, however, that a certain proportion of AFROTC cadets may be influenced to seek commissions in the Air Force because of the draft. In view of current proposals to establish an all-volunteer armed force, it becomes necessary for planning purposes to determine the qualitative and quantitative characteristics of young men who might be expected to apply for commissions under these circumstances. The purpose of this study is to examine the implications of the all-volunteer force concept on present and future AFROTC accessions.

Approach

Biographical survey forms and attitude questionnaires were completed by 3,201 advanced cadets from a representative sample of non-compulsory AFROTC detachments. Air Force Officer Qualifying Test (AFOQT) scores for all respondents were provided by detachment personnel. Subjects were categorized according to draft vulnerability based on their draft lottery number and self-expressed intent to enter training in the absence of the draft. Draft-motivated cadets were defined as those with high draft vulnerability who indicated that they probably or definitely would not have entered an AFROTC program in the absence of the draft. Self-motivated cadets (true volunteers) were defined as those with low draft vulnerability who stated that they probably or definitely would have entered a training program without the draft. Comparisons between these two groups were made on various demographic, aptitudinal, and attitudinal variables.

Results and Conclusions

Data from this study indicate that a certain proportion of advanced AFROTC enrollments may be considered draft-induced. However, the amount of draft motivation evidenced varied among subgroups of cadets categorized as potential rated and non-rated personnel.

Comparisons between self- and draft-motivated cadets reveal that self-motivated cadets indicated "desire to become a pilot or navigator" as their most important reason for entering officer training, while draft-motivated cadets selected "to avoid draft pressure." In academic background, a larger proportion of self-motivated cadets indicated business, biological, and social science majors; for draft-motivated cadets a larger proportion of engineering, professional, and physical science majors were found. In socioeconomic comparisons, self-motivated cadets indicated a larger percentage of military careerists as the major wage earner in their family. Upon graduation from college, the self-motivated cadets anticipated a lower civilian earning capacity than that of the draft-motivated group, although a sizable proportion of the self-motivated group estimated their earning capacity above that of the 1971 military pay bill. The aptitude test performance of the self-motivated group was significantly lower than their draft-motivated cohorts. While 38 percent of the self-motivated cadets indicated probable or definite intent to make the Air Force a career, 50 percent expressed uncertainty as to their career decisions. A comparison of the projected retention of self-motivated cadets with the actual retention of a group of AFROTC officers indicates no measurable increase in retainability under zero-draft conditions.

This summary was prepared by Nancy Guinn and W.E. Alley, Personnel Systems Branch, Personnel Research Division, Air Force Human Resources Laboratory.

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I. INTRODUCTION

For the past 23 years, the armed services of the United States have relied on a military draft system to obtain sufficient manpower to provide for national defense and security. In recent years interest has focused on the feasibility of eliminating the draft and moving toward a completely volunteer force. However, some concern and a great deal of speculation have arisen regarding the effects of such a move on the quality and quantity of personnel who would most likely fill the ranks of the armed forces in the absence of the draft.

The feasibility of converting to an all-volunteer manpower procurement system has been the topic for intensive research during recent years, and various attempts have been made to project reasonable estimates of the quantity and quality of the probable volunteer force (Fechter, 1967; Hause & Fisher, 1968; Cook, 1970; Cook & White, 1970; Rhode, Gelke, & Cook, 1970; Gates Commission Report, 1970). For the most part, Air Force research related to a zero-draft concept has been primarily concerned with the impact of proposed changes on the Air Force's capability to recruit and maintain a viable enlisted force (Valentine & Vitola, 1970; Vitola & Valentine, 1971). However, little is known about potential problems that may arise in the area of officer procurement.

The Air Force currently relies on two sources for the majority of its newly commissioned officers: the Reserve Officer Training Corps (ROTC) and Officer Training School (OTS). It is generally recognized that a certain proportion of officer cadets entering these programs are motivated to do so in order to avoid the draft. However, the extent to which this occurs is, as yet, undetermined.

This study was designed to estimate the effect of the draft on non-compulsory AFROTC enrollment and the extent to which AFROTC cadets might choose to enter officer training in the absence of the draft. Additional comparisons were made between draft- and self-motivated cadets on the basis of aptitude, attitude, and demographic characteristics. Although a full evaluation of a voluntary military system must await the actual removal of the draft, the data presented suggest general trends, and they should provide a useful basis for assessing the probable impact of zero-draft conditions on officer supply from one of the Air Force's major input sources.

II. METHOD

Biographical survey forms and attitude surveys were sent to a representative sample of AFROTC detachments[1] to be administered to cadets enrolled in the advanced AFROTC program during the spring semester of 1971. A total of 3,201 completed surveys were returned for analysis. Table 6 in the appendix lists the number of respondents surveyed by detachment. The survey sample is considered representative of all advanced AFROTC cadets enrolled in non-compulsory programs.

Each cadet completed a biographical survey form and an Officer Attitude Survey, PA 7011. The surveys contained no name identification, and there was a clear statement that responses were to be kept strictly confidential and used for research purposes only. Detachment personnel were requested to transcribe the respondent's Air Force Officer Qualifying Test (AFOQT) scores from official records to his individual survey form.

In the analyses comparisons were made between groups of advanced AFROTC cadets categorized in terms of their attitude toward entering the Air Force in the absence of the draft and their draft vulnerability based on assigned draft lottery number. Classification of cadets by attitude toward voluntary military service was based on a survey question in which respondents were asked whether or not they would have entered an officer training program in the absence of the draft. Draft vulnerability for each cadet was derived from his ordinal position in the draft lottery sequence. Subjects receiving numbers 1 through 122 were identified as the high vulnerability group; those with numbers 123 through 244 as the medium vulnerability group; and those with numbers 245 through 366 were identified as the low vulnerability group.

In order to make comparisons more meaningful, two primary interest groups, defined as self-motivated and draft-motivated cadets, were formed. Self-motivated cadets (true volunteers) were defined as those cadets who stated that they

[1]Detachments located at institutions with compulsory AFROTC programs were not included in the survey.

Table 1. **Distribution of Total Sample and Various Subgroups for Categories of Attitudes Toward Voluntary Military Service by Draft Lottery Sequence**

Draft Vulnerability Group[a]		Distribution for Attitude Category: Definite Volunteer N	Definite Volunteer Col %	Probable Volunteer N	Probable Volunteer Col %	Undecided N	Undecided Col %	Probable Non-Volunteer N	Probable Non-Volunteer Col %	Definite Non-Volunteer N	Definite Non-Volunteer Col %	Total Group N	Total Group Col %
All AFROTC Cadet Respondents													
High	N	267	33	365	37	177	41	295	41	127	50	1,231	38
	Row %	22		30		14		(24		10)[b]		100	
Medium	N	257	32	354	35	156	36	267	38	80	32	1,114	35
	Row %	23		32		14		24		7		100	
Low	N	289	35	277	28	97	23	148	21	45	18	856	27
	Row %	(34		33)[c]		11		17		5		100	
Total	N	813	100	996	100	430	100	710	100	252	100	3,201	100
	Row %	25		31		14		22		8		100	
Potential AFROTC Pilots													
High	N	145	31	182	40	58	43	72	44	17	48	474	38
	Row %	31		38		12		(15		4)[b]		100	
Medium	N	146	31	148	33	46	34	58	36	9	26	407	32
	Row %	36		37		11		14		2		100	
Low	N	178	38	125	27	31	23	33	20	9	26	376	30
	Row %	(47		33)[c]		8		9		3		100	
Total	N	469	100	455	100	135	100	163	100	35	100	1,257	100
	Row %	37		36		11		13		3		100	
Potential AFROTC Navigators													
High	N	20	40	21	37	8	32	5	22	2	67	56	35
	Row %	36		37		14		(9		4)[b]		100	
Medium	N	14	28	21	37	13	52	13	56	0	0	61	39
	Row %	23		35		21		21		0		100	
Low	N	16	32	15	26	4	16	5	22	1	33	41	26
	Row %	(39		37)[c]		10		12		2		100	
Total	N	50	100	57	100	25	100	23	100	3	100	158	100
	Row %	32		36		16		14		2		100	
Potential AFROTC Non-Rated S&E Officers													
High	N	40	36	63	33	49	41	97	43	48	47	297	40
	Row %	13		21		17		(33		16)[b]		100	
Medium	N	35	31	77	40	42	35	79	35	33	33	266	35
	Row %	13		29		16		30		12		100	
Low	N	37	33	53	27	29	24	52	23	20	20	191	25
	Row %	(19		28)[c]		15		27		11		100	
Total	N	112	100	193	100	120	100	228	100	101	100	754	100
	Row %	15		26		16		30		13		100	
Potential AFROTC Non-Rated, Non-S&E Officers													
High	N	62	34	99	34	62	41	121	41	60	53	404	39
	Row %	15		25		15		(30		15)[b]		100	
Medium	N	62	34	108	37	55	37	117	40	38	34	380	37
	Row %	16		28		15		31		10		100	
Low	N	58	32	84	29	33	22	58	19	15	13	248	24
	Row %	(24		33)[c]		13		24		6		100	
Total	N	182	100	291	100	150	100	296	100	113	100	1,032	100
	Row %	18		28		14		29		11		100	

[a]Draft vulnerability groups are based on draft lottery numbers:
High vulnerability - numbers 1-122
Medium vulnerability - numbers 123-244
Low vulnerability - numbers 245-366

[b]Those cadets in brackets are defined as draft-motivated group.

[c]Those cadets in brackets are defined as self-motivated group.

definitely or probably would have entered officer training in an all-volunteer situation and had little or no draft vulnerability. Included in the draft-motivated group were cadets who stated that they definitely or probably would not have entered officer training in a zero-draft environment and had high draft vulnerability. The significance of group differences between self- and draft-motivated cadets was determined by computing chi square analyses or t-tests where appropriate.

III. RESULTS AND DISCUSSION

Draft Motivation Among AFROTC Cadets

The first question to be addressed by the study is whether or not significant proportions of AFROTC cadets are draft-induced to enter the training program. If there is no evidence of perceived draft pressure, the impact of an all-volunteer force on AFROTC officer procurement would be minimal or non-existent, and no problem in obtaining a sufficient number of junior officers from this source would be anticipated.

Table 1 categorizes the total sample and various subgroups of advanced AFROTC cadets utilizing the dual criterion of draft vulnerability and expressed intent toward entering military service in the absence of the draft. It should be noted that while both juniors and seniors were aware of their draft vulnerability at the time of the survey, only juniors had received their lottery number prior to entering advanced AFROTC training. However, since the distributions for these two groups were so similar with regard to both expressed attitude and vulnerability composition based on lottery numbers, they were combined to reflect the characteristics and attitudes of the advanced cadet population.

From the Total column of Table 1 for the total AFROTC cadet sample, it appears that actual or perceived draft pressure does play a significant role in motivating AFROTC enrollment. Disregarding draft vulnerability category, the total row figures show that 30 percent of all AFROTC cadets indicated they definitely or probably would not have entered military service under zero-draft conditions, and 56 percent expressed definite or probable intent toward true volunteerism.

In addition to the overall indication of draft pressure among advanced AFROTC cadets, a further breakdown of the total sample was made based on anticipated assignment for their first tour of active duty, presence or absence of specific AFOQT aptitude composite scores, and college major. A potential pilot subgroup was composed of cadets who indicated that they believed their first active duty assignment would be pilot training and had an AFOQT pilot aptitude score recorded on their survey form. A navigator subgroup was identified by those who indicated that they were scheduled for navigator training and had an AFOQT navigator aptitude score recorded. The remaining cadets, classified as potential non-rated personnel, were further subdivided on the basis of college major. Those with engineering and physical science majors were identified as potential candidates for Scientific and Engineering (S&E) assignments; the remainder of the non-rated personnel were identified as potential non-rated, non-S&E personnel.

Compared with the total sample, a much smaller percentage of potential pilots indicated draft motivation while a much greater percentage indicated true volunteerism. Overall, only 16 percent of the pilot subgroup indicated that they were probably or definitely draft-motivated, while 73 percent of this group indicated that they could be considered true volunteers. These same trends were evidenced for the navigator group although the small number of potential navigators makes definitive comparisons impossible.

For the two non-rated subgroups shown in Table 1, it appears that in both non-rated subgroups, a much larger percentage indicated draft motivation and less true volunteerism than was evidenced either among the potential rated personnel or in the total group. Compared to all other groups, the non-rated S&E group had the largest percentage (43 percent) indicating draft motivation and the smallest percentage (41 percent) indicating that they could be considered true volunteers. In the non-rated, non-S&E group, 40 percent indicated they probably or definitely were not volunteers while 46 percent could be considered true volunteers.

In comparing the number and percentage of those cadets expressing a favorable or unfavorable attitude toward voluntary military service, it appears that those selected for one of the rated officer training programs evidenced a higher degree of true volunteerism. However, it should be realized that the numbers of volunteers and non-volunteers in each subgroup were based on current AFROTC enrollments where limitations on maximum enrollment, particularly for the non-rated subgroups, may have excluded potential

Table 2. **Comparison of Self-Motivated and Draft-Motivated Cadet Samples and Total Sample Across Survey Items**

Survey Item	Percentage Distribution: Self-Motivated N=566	Draft-Motivated N=422	Total Sample N=3,201
Reason for Entering Program			
Opportunity to gain experience in field of choice	7	7	9
Unable to obtain type of civilian job desired	1	1	0
Desire to become a pilot or navigator	49	11	34
Financial reasons: pay, allowances, flight pay, fringe benefits	5	4	5
Prestige and status of being an AF officer	2	2	3
Patriotism: opportunity to serve country	11	2	7
Opportunity for travel and excitement	3	1	3
Stability in employment and job security	6	3	5
Opportunity for advanced education, technical or professional training	4	8	5
Avoid draft pressure	0	50	15
Opportunity to learn a trade or skill which would be valuable in civilian life	1	1	1
To become more mature and independent	3	2	3
Interest in aviation, aerospace, and missile systems	4	2	3
Qualify for GI educational benefits after separation	0	6	0
Other	4	1	7
College Major			
Humanities	6	6	7
Fine and Applied Arts	2	1	1
Biological Sciences	11	9	9
Social Sciences	19	16	18
Business and Commerce	21	18	21
Engineering	26	31	27
Physical Sciences	11	12	13
Professions	1	5	2
Miscellaneous	3	2	2

Survey Item	Percentage Distribution: Self-Motivated N=566	Draft-Motivated N=422	Total Sample N=3,201
Annual Salary of Major Wage Earner			
$3,000 and below	3	1	2
$3,000-6,000	9	10	9
$6,000-10,000	30	28	30
$10,000-20,000	44	45	44
$20,000-30,000	10	10	10
$30,000-40,000	2	3	3
$40,000-50,000	1	1	1
Over $50,000	1	2	1
Principal Job of Major Wage Earner			
Laborer	2	2	3
Craftsman, foreman	12	15	13
Service worker	5	3	4
Farmer, farm manager	9	8	7
Operative	1	1	1
Sales worker	5	7	6
Clerical worker	3	2	3
Manager, official, proprietor	25	27	24
Military service	13	5	11
Semi-professional	10	10	9
Professional, technical	9	13	12
Other or don't know	6	7	7
Expected Earning Capacity on First Civilian Job			
Below $200	0	0	0
$200-300	1	0	1
$300-400	3	1	2
$400-500	7	3	5
$500-600	12	8	11
$600-700	19	11	16
$700-800	22	21	20
$800-900	19	24	21
$900-1,000	10	15	13
Over $1,000	7	17	11
Attitude Toward Military Career Compared to Civilian Occupation			
More Desirable	27	2	17
Equally Desirable	46	24	40
Less Desirable	12	54	26
No Opinion	15	20	17
Expressed Career Intent			
Definitely yes	10	0	5
Probably yes	28	5	19
Undecided	50	44	50
Probably no	10	36	20
Definitely no	2	15	6

applicants who could be available for an all-volunteer force. In addition, the relative number of volunteers in the various subgroups may be influenced in the future by the civilian job market. Current trends would indicate that a greater number of individuals with an S&E background might find a career in the military more desirable in the future than they now express.

Comparison of Draft- and Self-Motivated Cadets

Results of chi square analyses indicate that in all but one of the comparisons made, the differences between the two primary interest groups (self- and draft-motivated cadets in the total sample) were statistically significant at or beyond the .01 level of significance. Specific group differences between primary interest groups and between primary interest and the total group are discussed by content area. Comparisons of the groups across various survey items are shown in Table 2.

Reason for entering an AFROTC program. Forty-nine percent of the self-motivated cadets selected "desire to become a pilot or navigator" as their most important reason; 11 percent chose "patriotism: opportunity to serve my country." For the draft-motivated group, over 50 percent selected "to avoid draft pressure" as their most important reason while 11 percent indicated "desire to become a pilot or navigator." For the total group the popularity of becoming a rated officer was similar to that of the self-motivated group. On the other hand, a larger proportion of the total group evidenced draft pressure than the self-motivated group but the proportion did not approach that of the draft-motivated. While numbers of self-motivated and total group who entered service in order to qualify for GI educational benefits were negligible, six percent of the draft-motivated indicated that this was their primary motivation. More than likely these are officers who plan to obtain advanced degrees after separation from service.

Academic background. Differences in academic background between the primary interest groups are apparent in Table 2. Although the relative ranking of the three college majors having the largest percentages were the same for the two primary interest groups, significant differences in percentages were found between groups. Self-motivated cadets showed a tendency to have more business and commerce, biological, and social science majors. The draft-motivated group had proportionately more engineering, professional, and physical science majors. Overall, the self-motivated group more nearly reflected the percentages in academic categories for the total group than did the draft-motivated. Comparisons between the self-motivated group and the total group indicated only slight differences in the areas of greatest difference between the primary interest groups; however, even these slight differences may reflect some additional difficulty in securing sufficient numbers of personnel for S&E, medical, and legal specialties in a draft-free environment.

Socioeconomic factors. The results of comparisons between draft- and self-motivated cadets on a number of socioeconomic factors indicate that differences between the groups in average family income were not significant. However, the economic backgrounds of self- and draft-motivated cadets did differ with respect to the occupation of the major wage earner of the family. Thirteen percent of the self-motivated cadets reported that the principal wage earner in their family was in military service as compared with only five percent in the draft-motivated group. The groups also differed noticeably in the relative proportion of cadets coming from families in which the major wage earner engaged in a professional or technical career.

One of the survey items asked respondents to estimate the salary they would expect to receive on their first job provided they could return to civilian status following graduation. In general, draft-motivated cadets had much higher wage earning expectations than did self-motivated cadets although a sizable proportion of the self-motivated group fell in the higher salary range. The results of these comparisons are particularly noteworthy because they offer fairly definite policy implications. Substantial increases in military pay have been described as a basic step in the transition to an all-volunteer force. Provisions of the 1971 military pay bill adjust the pay of newly commissioned officers to the $600-700 per month bracket. However, the distribution of salary expectations reveals that 58 percent of the true volunteers believed their earning power exceeds this amount. Such findings suggest that monetary incentives alone may not be completely adequate in motivating a volunteer officer force. The data also seem to emphasize the necessity for exploring a full range of non-monetary incentives which may eventually prove to be as influential as pay (if not more so) while being considerably more economical to implement.

Career intent and retention. One of the most important by-products of the proposed conversion to an all-volunteer force is an anticipated increase in personnel retainability. In theory, a highly retainable self-motivated force would offset, to a degree, the expected decline in the overall number of persons entering the service and, further, would reduce the training costs associated with the relatively high turnover in the current force.

Several items in the survey were designed to reflect the attitudes of AFROTC cadets toward a military career. In one item, respondents were asked to compare the desirability of a military

Table 3. **Distribution of Career Intent Responses for 1964 and 1971 AFROTC Cadet Samples**

Career Intent Response	1964 Cadet Sample N=3,338		1971 Total Cadet Sample N=3,201		1971 Self-Motivated Cadet Sample N=566	
	Response Percentage	Proportion in service after 5 years	Response percentage	Estimated proportion in service after 5 years[a]	Response percentage	Estimated proportion in service after 5 years[a]
	A	B	C	D	E	F
Definitely Career	12	.76	5	-	10	-
Probably Career	27	.68	19	-	28	-
Uncertain	45	.59	50	-	50	-
Probably Not Career	15	.49	20	-	10	-
Definitely Not Career	2	.53	6	-	2	-
Total	100	.62	100	.59	100	.62

[a]1964 proportions for each response category were applied to number in 1971 samples in same response category.

career with a civilian occupation. Seventy-three percent of the self-motivated group considered a military career either equally as desirable or more desirable than a civilian counterpart. In contrast, only 26 percent of the draft-motivated group and 59 percent of the total group held a similar opinion of a military career. A negative view toward military life was expressed by 12 percent of the self-motivated group as compared to 54 percent of the draft-motivated cadets and 26 percent of the total group. These percentages suggest that a majority of potential volunteer AFROTC officers enter the Air Force with a positive outlook toward a military career. One would expect a higher retention rate to be the result of such a favorable attitude.

AFROTC cadets were also asked to indicate their career intent on a five-point continuum ranging from an indication of definite intention to remain on active duty after completion of an initial commitment to definite intention to leave the service. Thirty-eight percent of the self-motivated cadets indicated that they had definite or probable career intent prior to commissioning while only five percent of the draft-motivated stated a comparable inclination. While 51 percent of the draft-motivated group expressed negative feelings toward an Air Force career, only 12 percent of the self-motivated group were included in this category. However, of greater concern is the 50 percent of the self-motivated group who indicated uncertainty toward a career commitment. These individuals represent a probable loss to the Air Force at the end of their initial tour.

While the proportions of cadets expressing a particular career intent give some indication of probable loss or retention, more definitive information can be obtained by comparing the relationship between career intent and actual career decision. To provide a basis for comparison, the responses of the 1971 AFROTC sample were compared with those of a similar sample taken in 1964. Response distributions for both samples are given in Table 3, together with in versus out-of-service statistics[2] for the 1964 sample. The in-out ratios for each level of career intent response were applied to the 1971 total and self-motivated samples of AFROTC cadets in order to project anticipated retention rates under draft and no-draft conditions. These estimates are shown in the last row of Columns D and F of Table 3.

A comparison of the response distributions for the total 1964 and 1971 samples reveals an apparent overall decline in positive career intentions among AFROTC cadets during the seven-year period. Those indicating definite or probable intent to remain in service decreased from 12 to 5 percent and 27 to 19 percent, respectively. Provided the proportions in service at each response level remain relatively constant, the changes could contribute to a slight (3 percent) decrease in AFROTC officer retention when the 1971 sample completes five years of active duty. Quite unexpectedly, the projected rate for the

[2]Remaining in service as of December 1969.

Table 4. **Percentage Distributions, Means, and Standard Deviations of AFOQT Officer Quality Composite Scores for Self-Motivated and Draft-Motivated Cadet Samples, Total Sample, and 1971 AFROTC Graduates**

AFOQT Percentile	Percentage Distribution			
	Self-Motivated	Draft-Motivated	Total Sample	1971 Graduates
Below 30	7	2	6	4
30-39	14	11	12	11
40-49	9	5	8	9
50-59	10	10	10	10
60-69	12	8	10	11
70-79	13	12	13	13
80-89	14	17	14	15
90-99	21	34	27	27
	100	100	100	100
Valid N[a]	564	420	3,188	4,415
Mean	63.65	71.54	66 63	67.83
SD	23.21	22.14	23.36	22.58

[a]Scores not available for all subjects.

self-motivated cadets alone appears to be no higher that that obtained for the 1964 sample. These data lend little support to the assumption that an all-volunteer officer force will necessarily be more career-oriented than is the current mixed force.

Selection test performance. Another important facet to be considered in a draft-free environment is the quality of the true volunteer, that is, to determine whether any change in overall aptitude level is to be experienced in a zero-draft situation. Tables 4 and 5 reflect the percentage distributions and descriptive statistics for three AFOQT composites: officer quality, verbal, and quantitative. Overall, significant differences in mean performance between self- and draft-motivated cadets were found in each of the three composites.

Table 4 presents a comparison of officer quality performance between the primary interest groups and the total group. To provide for additional comparisons, officer quality composite data for all 1971 AFROTC graduates are included in the table. The percentage of self-motivated cadets in the low and medium-low levels of officer quality scores (below the 50th percentile) was somewhat greater than that of the other groups. Thirty percent of the self-motivated were in this category, compared to 18, 26, and 24 percent for the other groups. For the higher levels of aptitude (80th percentile and above), the reverse was true. Only 35 percent of the self-motivated were included in the upper category, while 41 percent or more of the other

Table 5. **Percentage Distributions, Means, and Standard Deviations of AFOQT Quantitative and Verbal Composite Scores for Self-Motivated and Draft-Motivated Cadet Samples and Total Sample**

AFOQT Percentile	Percentage Distribution		
	Self-Motivated	Draft-Motivated	Total Sample
AFOQT Quantitative Composite			
Below 30	16	13	16
30-39	12	8	10
40-49	10	7	8
50-59	6	8	7
60-69	10	6	8
70-79	14	16	14
80-89	13	12	14
90-99	19	30	23
	100	100	100
Valid N[a]	541	405	3,058
Mean	59.29	65.61	60.98
SD	26.92	27.19	27.40
AFOQT Verbal Composite			
Below 30	16	14	15
30-39	11	6	10
40-49	12	8	10
50-59	11	11	10
60-69	12	13	13
70-79	17	18	19
80-89	15	19	16
90-99	6	11	7
	100	100	100
Valid N[a]	541	405	3,058
Mean	55.02	60.84	57.25
SD	23.93	23.64	23.69

[a]Scores not available for all subjects.

groups were included. The 7-percent difference between the self-motivated group and the 1971 accessions at the high-aptitude levels, as well as the overall difference in mean performance between these two groups, tends to suggest some decrement in overall officer quality may be experienced in the all-volunteer situation.

For the quantitative comparisons, shown in Table 5, much the same trend appeared although to a lesser extent. Included in the low, medium-low range of aptitude were 38 percent of the self-motivated group and only 28 percent of the draft-motivated. The upper aptitude range included 32 percent of the self-motivated group as compared to 42 percent of the draft-motivated. While the differences in primary interest groups were quite

distinct, comparison of percentages at the various aptitude levels between self-motivated and total group reflected only a 2-percent difference in the low, medium-low levels and a 5-percent difference at the upper level. Although the mean difference between primary interest groups reached a significant level, the difference in mean performance between the self-motivated and total group was less than 2 percentile points.

Trends for the verbal composite scores, also shown in Table 5, were similar to the quantitative distribution. Thirty-nine percent of the self-motivated group were included in the low, medium-low range of verbal aptitude as compared to 28 percent of the draft-motivated and 35 percent of the total group. At the higher levels of verbal aptitude, 21 percent of the self-motivated were included compared to 30 percent of the draft-motivated and 23 percent of the total group. Comparison of mean performance reflected a significant difference between primary interest groups, although only a relatively small difference between total group and self-motivated mean performance was indicated.

IV. GENERAL CONCLUSIONS

Several conclusions regarding future AFROTC procurement can be drawn from the data obtained in the present study. First, it can be assumed that a certain proportion of AFROTC advanced cadets are draft-motivated. Moreover, the number of true volunteers varies among subgroups of potential rated and non-rated personnel.

Comparisons between self- and draft-motivated cadets reveal important trends and insights into the composition of an all-volunteer officer force which might be useful in volunteer procurement efforts. It appears that the offer of becoming a rated pilot or navigator is an effective motivating device for potential volunteer cadets. Findings regarding their expected earning power in the civilian sector indicate that over half of this true-volunteer group feel that their beginning salary could exceed that amount provided by the new military pay increase. Such information emphasizes the importance of identifying incentive programs other than pay which could be used effectively under zero-draft conditions. Although an increase in personnel retainability has been anticipated as a by-product of an all-volunteer force, 50 percent of the self-motivated group indicated uncertainty concerning their future military career plans. In addition, projected retention of these volunteers, when compared to another AFROTC sample that has already reached the career decision point, suggests that no measurable increase in retainability of volunteer officers will be experienced. These results further underscore the need to develop improved career incentive programs to minimize the loss of qualified officers.

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Table 6. **Number of Survey Respondents by AFROTC Detachment**

Detachment Location	State	Detachment Number	Number of Cadet Respondents
Bowling Green State University	Ohio	620	70
Brigham Young University	Utah	855	133
Capital University	Ohio	646	10
Colorado State University	Colorado	090	69
Cornell University	New York	520	24
East Carolina University	North Carolina	600	45
Florida State University	Florida	145	69
Fordham University	New York	525	15
Gettysburg College	Pennsylvania	710	18
Grove City College	Pennsylvania	745	81
Illinois Institute of Techology	Illinois	195	23
Kansas State University	Kansas	270	130
Louisiana State University	Louisiana	310	87
Massachusetts Institute of Technology	Massachusetts	365	27
Miami University	Ohio	640	48
Michigan State University	Michigan	380	63
Mississippi State University	Mississippi	425	63
New Mexico State University	New Mexico	505	33
North Carolina State University	North Carolina	595	59
North Texas State University	Texas	835	47
Ohio State University	Ohio	645	117
Ohio Wesleyan University	Ohio	655	21
Oklahoma State University	Oklahoma	670	119
Oregon State University	Oregon	685	39
Purdue University	Indiana	220	112
San Francisco State College	California	080	17
South Dakota State University	South Dakota	780	82
Southern Illinois University	Illinois	205	78
Southern Methodist University	Texas	815	34
Syracuse University	New York	535	57
Texas A&M University	Texas	805	234
University of Akron	Ohio	660	54
University of Illinois	Illinois	190	59
University of Iowa	Iowa	255	75
University of Kentucky	Kentucky	290	37
University of Maryland	Maryland	330	52
University of Minnesota	Minnesota	415	45
University of Missouri	Missouri	440	72
University of Nebraska	Nebraska	465	68
University of North Dakota	North Dakota	615	49
University of Notre Dame	Indiana	225	76
University of Oklahoma	Oklahoma	675	90
University of Southwest Louisiana	Louisiana	315	65
University of Southern California	California	060	82
University of Tennessee	Tennessee	800	61
University of Virginia	Virginia	890	45
University of Washington	Washington	91	66
University of Wisconsin	Wisconsin	925	37
Wichita State University	Kansas	275	46
Total			1,214[a]

[a]13 surveys had incomplete data and were eliminated from survey analysis.