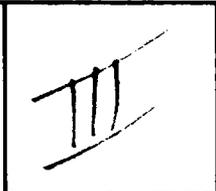


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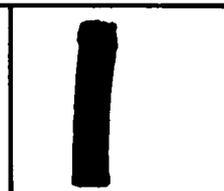
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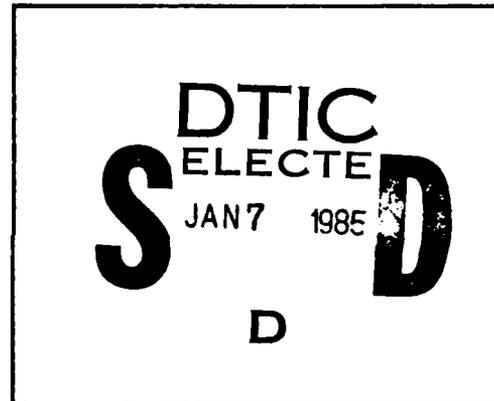
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A STUDY OF ISSUES RELATED TO
ACCESSION AND RETENTION OF
ENLISTED PERSONNEL IN THE
RESERVE COMPONENTS

*Spring
1977*

Volume II

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PHILADELPHIA, PENNSYLVANIA

ASSOCIATES FOR RESEARCH IN BEHAVIOR, INC.

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(215) 387-5300*

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Volume II of the 1977 RCAS contains sections, each of which provides additional information concerning methodological practices or results presented in Volume I.

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INTRODUCTION

This is Volume II of a report titled A Survey of Issues Related to Accession and Retention of Enlisted Personnel in the Reserve Components.

Volume I contains the major findings, the conclusions, and the recommendations.

Volume III contains the responses to each question broken out by initial enlistment/extension of enlistment propensity, copies of the questionnaires used with each of the four major samples and a Table to Questionnaire Conversion Key.

Volume IV contains the responses to each question cross-tabulated by each of the four major samples -- Non-Prior Service (Sample A), Veterans (Sample B), Army National Guard (Sample C), Other Reserve Components (Sample D). It also includes the responses to each question cross-tabulated by each of the five Guard and Reserve components constituting the Other Reserve Components sample -- Air National Guard, Army Reserve, Navy Reserve, Marine Corps Reserve, Air Force Reserve.

This volume, Volume II, contains the methodological appendices and supplementary and supporting analyses for Volume I.

Volume II is not meant to be read independently of Volume I and should not be considered an integrated document. Rather each section of Volume II can be read independently of every other section. Each section of Volume II provides additional information concerning methodological practices or results presented in Volume I.

TABLE OF CONTENTS

	<u>Page</u>
Introduction	
1.0 Sampling Approach and Methodology	1
1.1 Considerations Affecting Sample Design	1
1.2 The Sample Design	6
1.3 Sampling Methods	7
1.3.1 Sampling Plan for Samples B, C and D	7
1.3.2 Sampling Plan for Sample A	13
2.0 Interviewing and Telephone Procedures	16
2.1 Respondent Notification	16
2.2 Interviewing Location	16
2.3 Interviewer Training	16
2.4 Respondent Tracking Procedures	18
2.5 Callback Procedures	18
2.6 Call Records	19
2.7 Completed Field Forms	21
2.8 Questionnaire Editing at Interviewing Site	21
3.0 Data Handling	22
3.1 Sample Control and Monitoring	22
3.2 Editing and Coding Procedures	23
3.2.1 Coder Training	23
3.2.2 Initial Editing	24
3.2.3 Coding	24
3.2.4 Key punching	27
3.2.5 Consistency Checks	27
4.0 Questionnaire Design	28
4.1 Questionnaire Versions	28
4.2 Comparability of Questions	29
4.3 Questionnaire Length and Structure	29
4.4 Questionnaire Pre-tests	30
4.5 Suggestions for Questionnaire Improvement	31

TABLE OF CONTENTS (CONT'D)

	<u>Page</u>
5.0 Representativeness of the Sample	33
5.1 Representativeness of the First Stage Sample	33
5.2 Representativeness of the Second Stage Sample	33
5.2.1 Analytical Approach	33
5.2.2 Summary of Comparisons	35
6.0 Procedures to Detect Unreliable Respondents	40
6.1 Response Instability	40
6.2 Logical Inconsistency	41
6.3 Description of Unreliable Respondents	41
7.0 Completion Rates	43
7.1 Overall Results	43
7.2 Calculation of Completion Rates	43
7.3 Effect of Ineligible Respondents	44
7.4 Effect of Rigorous Callback Procedures	45
8.0 Quality of List Evaluation	53
9.0 Propensity to Enlist/Extend Enlistment	57
9.1 Propensity of Accession of Potential Enlistees	57
9.1.1 Propensity to Enlist of Non-Prior Service Sample	57
9.1.2 Propensity to Enlist of the Veterans Sample	58
9.2 Propensity to Extend Enlistment of Current Reservists -- Propensity to Extend Enlistment of Other Reserve Components Sample	60
9.3 Comparison of Samples on Propensity to Enlist/Extend Enlistment	60
10.0 The Effect of Various Benefits on Propensity to Enlist/Extend Enlistment	63
10.1 Preliminary Checks on Extraneous Factors Influencing Reactions to the Benefits	63
10.2 The Effect of the Current Level of Benefits in Some States	67
10.3 Reactions to Possible Benefits by Potential Enlistees	68
10.3.1 Effects of Possible Benefits on Enlistment Propensity of Non-Prior Service Sample	68
10.3.2 Effects of Possible Benefits on Enlistment Propensity of Veterans Sample	75

TABLE OF CONTENTS (CONT'D)

	<u>Page</u>
10.4 Reactions to Possible Benefits by Current Reservists	82
10.4.1 Effect of Possible Benefits on the Extension of Enlistment Propensity of the Army National Guard Sample	82
10.4.2 Effect of Possible Benefits on the Extension of Enlistment Propensity of the Other Reserve Components Sample	90
11.0 The Effect of the Questionnaire on Propensity to Enlist/Extend Enlistment	97
12.0 The Effect of Various Events on Propensity to Enlist/Extend	104
12.1 The Effect of Various Events on Accession of Potential Enlistees	104
12.1.1 Non-Prior Service Sample	104
12.1.2 Veterans Sample	109
12.2 The Effect of Various Events on Propensity to Extend Enlistment of Current Reservists	109
12.2.1 Army National Guard Sample	109
12.2.2 Other Reserve Components	113
12.3 Comparison of Samples on Propensity to Enlist/Extend	117
12.4 Demographics -- What Types of Men are More Likely to Enlist/Extend in the Case of Each Event	133
13.0 Perceptual, Attitudinal and Motivational Variables Analysis	138
13.1 Life Goals	138
13.1.1 Life Goal Achievability and Importance -- Correlation and Multiple Regression Analyses	138
13.1.2 Life Goals -- Factor Analysis	144
13.1.3 Life Goals -- FHID Analysis	148
13.2 Reasons for Joining the Guard/Reserve	152
13.2.1 Reasons for Joining the Guard/Reserve -- Correlation and Multiple Regression Analyses	152
13.2.2 Reasons for Joining the Guard/Reserve -- Factor Analysis and FHID Analyses	158
13.3 Achievability of Life Goals and Reasons for Joining the Guard/Reserve -- FHID Analysis	158

TABLE OF CONTENTS (CONT'D)

	<u>Page</u>
13.4 Likelihood of Situations Occurring in the Guard/Reserve	162
13.4.1 Likelihood of Situations Occurring in the Guard/ Reserve -- Correlation and Multiple Regression Analyses	162
13.4.2 Likelihood of Situations Occurring in the Guard/ Reserve -- Factor Analyses	165
13.4.3 Likelihood of Situations Occurring in the Guard/ Reserve -- FHID Analysis	168
13.5 Attitudes Towards Organizations and Groups	168
13.5.1 Attitudes Towards Organizations and Groups -- Correlation and Multiple Regressions Analyses	168
13.5.2 Attitudes Towards Organizations and Groups -- Factor Analyses	174
13.5.3 Attitudes Towards Organizations and Groups -- FHID Analysis	177
14.0 Problem of Inflated Propensity Responses to Benefit Questions	180
15.0 Recommendations for Future Research	182
16.0 Demographic Analyses	189
Appendix A	

LISTING OF TABLES

<u>Table</u>		<u>Page</u>
1-1	Geographic Ordering of States	8
1-2	Army National Guard Sample -- Sample C	10
1-3	Army Reserve Sample -- Sample D2	11
5-1	Contact vs. No Contact Comparison (C's vs. NC's)	36
5-2	Respondents vs. Refused/Terminated (R's vs. R/T's)	37
7-1	Detailed Analysis of Attempted Calls for Non-Prior Service, Veterans and Army National Guard Samples	46
7-2	Detailed Analysis of Attempted Calls for Other Reserve Components Sample	48
7-3	Completion Rates of Non-Prior Service, Veterans and Army National Guard Samples before Relaxation of Callback Procedures	51
7-4	Completion Rates of Other Reserve Components Sample before Relaxation of Callback Procedures	52
8-1	Quality of List Analysis -- Veterans and Army National Guard Samples	55
8-2	Quality of List Analysis -- Other Reserve Components Sample	56
9-1	Repeated Measures Analysis for Differences in Propensity to Enlist in Each Component for the Non-Prior Service Sample	57
9-2	Repeated Measures Analysis for Differences in Propensity to Enlist in Each Component for the Veterans Sample	58
9-3	Enlistment Propensity for Each Service Branch as a Function of Prior Service Branch for Veterans Sample	59
9-4	ANOVA of Propensity to Enlist/Extend Enlistment Among the Four Samples	60
9-5	t-Test of the Difference Between the Mean Propensity to Enlist in the Guard and the Mean Propensity to Enlist in the Reserve for the Non-Prior Service and Veterans Samples	61
9-6	Intensity Measures of Extension of Enlistment for the Army National Guard and Other Reserve Components Samples	62

LISTING OF TABLES (CONT'D)

<u>Table</u>		<u>Page</u>
10-1	Analysis of Covariance of Presentation Order and Propensity to Enlist/Extend at Each Level of the Education Benefit (Covarying Out Initial Propensity to Enlist/Extend) for the Non-Prior Service, Veterans, Army National Guard, and Other Reserve Components Samples	64
10-2	Analysis of Covariance of Presentation Order and Propensity to Enlist/Extend at Each Level of the Bonus Benefit (Covarying Out Initial Propensity to Enlist/Extend) for the Non-Prior Service, Veterans, Army National Guard, and Other Reserve Components Samples	65
10-3	Analysis of Covariance of Presentation Order and Propensity to Enlist/Extend at Each Level of the Pay Benefit (Covarying Out Initial Propensity to Enlist/Extend) for the Non-Prior Service, Veterans, Army National Guard, and Other Reserve Components Samples	66
10-4	Analysis of Covariance of Presentation Order and Propensity to Enlist/Extend at Each Level of the Length of Enlistment (Covarying Out Initial Propensity to Enlist/Extend) for the Non-Prior Service and Veterans Samples	67
10-5	Repeated Measures Analysis of Variance of Propensity to Enlist Across All Levels of the Education Benefit for the Non-Prior Service Sample	68
10-6	Likelihood of Using the Education Benefit if 100% of Cost of Education Assistance Were Offered for the Non-Prior Service Sample	70
10-7	Repeated Measures Analysis of Variance of Propensity to Enlist at Each Level of the Bonus Benefit for the Non-Prior Service Sample	70
10-8	Repeated Measures Analysis of Variance of Propensity to Enlist at Each Level of the Pay Benefit for the Non-Prior Service Sample	71
10-9	Repeated Measures Analysis of Variance of Propensity to Enlist at Each Level of Length of Initial Enlistment for the Non-Prior Service Sample	72
10-10	Effect of Belief about the Length of Initial Enlistment on Initial Propensity for the Non-Prior Service Sample	73

LISTING OF TABLES (CONT'D)

<u>Table</u>	<u>Page</u>
10-11 Beliefs about Each of the Possible Benefits by the Non-Prior Service Sample	74
10-12 Repeated Measures Analysis of Variance of Propensity to Enlist at Each Level of the Education Benefit for the Veterans Sample	75
10-13 Likelihood of Using the Education Benefit if 100% of the Cost of Education Assistance Were Offered for the Veterans Sample	76
10-14 Repeated Measures Analysis of Variance on Propensity to Enlist at Each Level of the Bonus Benefit for the Veterans Sample	77
10-15 Repeated Measures Analysis of Variance of Propensity to Enlist at Each Level of the Pay Benefit for the Veterans Sample	78
10-16 Repeated Measures Analysis of Variance on Propensity to Enlist at Each Level of Length of Initial Enlistment for the Veterans Sample	79
10-17 Effect of Belief about the Pay Benefit on Initial Propensity for the Veterans Sample	80
10-18 Effect of Belief about the Length of Initial Enlistment on Initial Propensity for the Veterans Sample	80
10-19 Beliefs about Each of the Possible Benefits for the Veterans Sample	81
10-20 Repeated Measures Analysis of Variance of Propensity to Extend Enlistment at Each Level of the Education Benefit for the Army National Guard Sample	82
10-21 Likelihood of Using the Education Benefit for Army National Guard Respondents who Had a Favorable Propensity to Extend when Offered 100% Educational Assistance	83
10-22 Repeated Measures Analysis of Variance of Propensity to Extend Enlistment at Each Level of the Bonus Benefit for the Army National Guard Sample	84
10-23 Repeated Measures Analysis of Variance of Propensity to Extend Enlistment at Each Level of the Pay Benefit for the Army National Guard Sample	85

LISTING OF TABLES (CONT'D)

<u>Table</u>	<u>Page</u>
10-24 Relation Between Respondents' Beliefs about Availability of Education Benefit and Level of Education Benefit in State in which Respondent Resides	86
10-25 Relation Between Claimed Usage of Education Benefit and Level of Education Benefit in State in which Respondent Resides	86
10-26 Propensity to Extend Enlistment in the Army National Guard as a Function of Use of Education Benefit and Level of Benefit Provided by State	87
10-27 Effect of Beliefs about the Education Benefit on Initial Propensity to Extend for the Army National Guard Sample	87
10-28 Effect of Belief about the Bonus Benefit on Initial Propensity to Extend for the Army National Guard Sample	88
10-29 Propensity to Extend Enlistment as a Function of Belief in the Existence of an Education Benefit and a Cash Bonus for Army National Guard Sample	88
10-30 Most Important Inducement for Extending Enlistment for the Army National Guard Sample	89
10-31 Propensity to Extend Enlistment for Those Respondents who Did and Did Not Mention "More Pay" as an Important Inducement for Extension of Enlistment for the Army National Guard Sample	89
10-32 Propensity of Respondents who Mentioned and Respondents who Did Not Mention "More Pay" as an Inducement for Extension of Enlistment at Each Level of Pay Benefit for the Army National Guard Sample	90
10-33 Repeated Measures Analysis of Variance of Propensity to Extend at Each Level of the Education Benefit for the Other Reserve Components Sample	90
10-34 Likelihood of Using the Education Benefit if 100% of Cost of Education Were Offered for the Other Reserve Components Sample	91
10-35 Repeated Measures Analysis of Variance of Propensity to Extend Enlistment at Each Level of the Bonus Benefit for the Other Reserve Components Sample	92
10-36 Repeated Measures Analysis of Variance of Propensity to Extend Enlistment at Each Level of the Pay Benefit for the Other Reserve Components Sample	93
10-37 Relation Between Belief about the Bonus Benefit and Propensity to Extend Enlistment for the Other Reserve Components Sample	94

LISTING OF TABLES (CONT'D)

<u>Table</u>	<u>Page</u>
10-38 Most Important Inducement for Extending Enlistment for the Other Reserve Components Sample	95
10-39 Propensity to Extend Enlistment for Those Respondents who Did and Did Not Mention "More Pay" as an Important Inducement for Extension of Enlistment for the Other Reserve Components Sample	96
10-40 Comparison of Propensity for Respondents who Mentioned and Respondents who Did Not Mention "More Pay" as an Inducement for Extension of Enlistment at Each Level of the Pay Benefit for the Other Reserve Components Sample	96
11-1 Correlations Between the Change in Propensity (Initial Propensity -- Terminal Propensity) and the Propensity for Each Benefit Level for the Four Samples	98
11-2 Comparison of Propensity with the Education Benefit for Men who Enlisted after December, 1972 and Men who Enlisted Prior to January, 1973 for the Army National Guard and Other Reserve Components Samples	99
11-3 Change in Percent of Respondents who had a Favorable Propensity at each Benefit Level as a Function of Percent of Respondents who Could Change for the Non-Prior Service Sample	100
11-4 Change in Percent of Respondents who Had a Favorable Propensity at Each Benefit Level as a Function of Percent of Respondents who Could Change for the Veterans Sample	101
11-5 Change in Percent of Respondents who Had a Favorable Propensity at Each Benefit Level as a Function of Percent of Respondents who Could Change for the Army National Guard Sample	102
11-6 Change in Percent of Respondents who Had a Favorable Propensity at Each Benefit Level as a Function of Percent of Respondents who Could Change for the Other Reserve Components Sample	103
12-1 Propensity to Enlist for the Three Events for the Non-Prior Service Sample	105
12-2 Mean Propensity in the Event of Reinstatement of the Draft by Initial Propensity Level for the Non-Prior Service Sample	106
12-3 Mean Propensity in the Event of Possible War by Initial Propensity Level for the Non-Prior Service Sample	108

LISTING OF TABLES (CONT'D)

<u>Table</u>		<u>Page</u>
12-4	Mean Propensity in the Event of Actual War by Initial Propensity Level for the Non-Prior Service Sample	108
12-5	Propensity to Enlist for the Two Events for the Veterans Sample	110
12-6	Mean Propensity in the Event of Possible War by Initial Propensity Level for the Veterans Sample	111
12-7	Mean Propensity in the Event of Actual War by Initial Propensity Level for the Veterans Sample	111
12-8	Propensity to Enlist for the Two Events for the Army National Guard Sample	112
12-9	Mean Propensity in the Event of Possible War by Initial Propensity Level for the Army National Guard Sample	114
12-10	Mean Propensity in the Event of Actual War by Initial Propensity Level for the Army National Guard Sample	114
12-11	Propensity to Enlist for the Two Events for the Other Reserve Components Sample	115
12-12	Mean Propensity in the Event of Possible War by Initial Propensity Level for the Other Reserve Components Sample	116
12-13	Mean Propensity in the Event of Actual War by Initial Propensity Level for the Other Reserve Components Sample	116
12-14	Percent of Respondents in Each Demographic Category Having a Positive Enlistment Propensity -- Non-Prior Service Sample	134
12-15	Percent of Respondents in Each Demographic Category Having a Positive Enlistment Propensity -- Veterans Sample	135
12-16	Percent of Respondents in Each Demographic Category Having a Positive Extension of Enlistment Propensity -- Army National Guard Sample	136
12-17	Percent of Respondents in Each Demographic Category Having a Positive Extension of Enlistment Propensity -- Other Reserve Components Sample	137
13-1	Correlations of Life Goal Achievability with Enlistment/ Extension of Enlistment Propensity	139

LISTING OF TABLES (CONT'D)

<u>Table</u>		<u>Page</u>
13-2	Correlations of Life Goal Importance with Enlistment/ Extension of Enlistment Propensity	140
13-3	Multiple Regression Analyses of Life Goals to Predict Enlistment/Extension of Enlistment Propensity	142
13-4	Results of Stepwise Multiple Regression Analyses for Life Goal Achievability	143
13-5	Three Factor Solution for Importance of Life Goals	145
13-6	Two Factor Solution for Achievability of Life Goals	146
13-7	Three Factor Solution for Achievability of Life Goals	147
13-8	Results of FHID Analyses of Life Goal Importance	149
13-9	Results of FHID Analyses of Achievability of Life Goals	150
13-10	Results of FHID Analysis of Achievability Weighted by Importance	151
13-11	Correlations Between Achievability of Reasons for Joining Guard/Reserve and Enlistment/Extension of Enlistment Propensity	153
13-12	Correlations Between Importance of Reasons for Joining Guard/ Reserve and Enlistment/Extension of Enlistment Propensity	154
13-13	Multiple Regression Analyses of Reasons for Joining Guard/ Reserve to Predict Enlistment/Extension of Enlistment Propensity	156
13-14	Results of Stepwise Multiple Regression Analyses of Reason Achievability for Joining Guard/Reserve	158
13-15	Two Factor Solution for Achievability of Reasons for Joining the Guard/Reserve	159
13-16	Results of FHID Analysis of Achievability of Reasons for Joining Guard/Reserve	160
13-17	Results of FHID Analysis of Achievability of Life Goals and Reasons for Joining Guard/Reserve	161
13-18	Correlations of Likelihood of Situations Occurring in Guard/ Reserve with Enlistment/Extension of Enlistment Propensity	163

LISTING OF TABLES (CONT'D)

<u>Table</u>	<u>Page</u>
13-19 Multiple Regression Analyses of Likelihood of Situations Occurring in the Guard/Reserve to Predict Enlistment/Extension of Enlistment Propensity	164
13-20 Results of Stepwise Multiple Regression Analyses of Likelihood of Situations Occurring in the Guard/Reserve	166
13-21 Three Factor Solutions for Likelihood of Situations Occurring in the Guard/Reserve	167
13-22 Results of FHID Analysis of Likelihood of Situations Occurring in the Guard/Reserve	169
13-23 Correlations of Attitudes Towards Organizations and Groups with Enlistment/Extension of Enlistment Propensity	170
13-24 Multiple Regression Analyses of Attitudes Toward Organizations to Predict Enlistment/Extension of Enlistment Propensity	172
13-25 Results of Stepwise Multiple Regression Analyses for Attitudes Toward Organizations and Groups	173
13-26 Three Factor Solutions for Attitudes Toward Organizations and Groups for the NPS and Veterans Samples	175
13-27 Three Factor Solutions for Attitudes Toward Organizations and Groups for the ARNG and ORC Samples	176
13-28 Results of FHID Analysis of Attitudes Toward Organizations and Groups -- NPS and Veterans	178
13-29 Results of FHID Analysis of Attitudes Toward Organizations and Groups -- ARNG and ORC	179
15-1 Mean Propensity Scores for Each Benefit Level According to Order of Presentation	184
15-2 Percentage of Respondents who Showed One or Two or More Reverse (Illogical) Shifts in Propensity Examined According to Two Different Basis -- Initial Propensity and Current Level of Benefit Propensity for the Non-Prior Service Sample	185
15-3 Percentage of Respondents Who Showed One or Two or More Reverse (Illogical) Shifts in Propensity Examined According to Two Different Basis -- Initial Propensity and Current Level of Benefit Propensity for the Veterans Sample	186

LISTING OF TABLES (CONT'D)

<u>Table</u>		<u>Page</u>
15-4	Percentage of Respondents Who Showed One or Two or More Reverse (Illogical) Shifts in Propensity Examined According to Two Different Basis -- Initial Propensity and Current Level of Benefit Propensity for the Army National Guard Sample	187
15-5	Percentage of Respondents Who Showed One or Two or More Reverse (Illogical) Shifts in Propensity Examined According to Two Different Basis -- Initial Propensity and Current Level of Benefit Propensity for the Other Reserve Components Sample	188
16-1	Number and Percent of Respondents in Each Demographic Category	190
16-2	Description of Demographic Categories by Sample	191

LISTING OF FIGURES

<u>Figure</u>	<u>Page</u>
1-1 Letter Describing Specifications for Sample	2
1-2 Further Details of Sampling Procedure for Sample B	5a
2-1 Letter Sent by DoD to Veterans and Guard and Reserve Samples	17
2-2 Sample Call Record Cards	20
3-1 Computation of the SES Index	25
12-1 Likelihood of Enlisting in the Guard or Reserve if the Draft Were Reinstated for Those Whose Initial Propensity is Definitely Enlist	118
12-2 Likelihood of Enlisting in the Guard or Reserve if the Draft Were Reinstated for Those Whose Initial Propensity is Probably Enlist	119
12-3 Likelihood of Enlisting in the Guard or Reserve if the Draft Were Reinstated for Those Whose Initial Propensity is Might Enlist	120
12-4 Likelihood of Enlisting in the Guard or Reserve if the Draft Were Reinstated for Those Whose Initial Propensity is Probably Not Enlist	121
12-5 Likelihood of Enlisting in the Guard or Reserve if the Draft Were Reinstated for Those Whose Initial Propensity is Definitely Not Enlist	122
12-6 Likelihood of Enlisting/Extending Enlistment in the Guard or Reserve if There Were a Possibility of War for Those Whose Initial Propensity is Definitely Enlist/Extend	123
12-7 Likelihood of Enlisting/Extending Enlistment in the Guard or Reserve if There Were a Possibility of War for Those Whose Initial Propensity is Probably Enlist/Extend	124
12-8 Likelihood of Enlisting/Extending Enlistment in the Guard or Reserve if There Were a Possibility of War for Those Whose Initial Propensity is Might Enlist/Extend	125
12-9 Likelihood of Enlisting/Extending Enlistment in the Guard or Reserve if There Were a Possibility of War for Those Whose Initial Propensity is Probably Not Enlist/Extend	126

LISTING OF FIGURES (CONT'D)

<u>Figure</u>		<u>Page</u>
12-10	Likelihood of Enlisting/Extending Enlistment in the Guard or Reserve if There Were a Possibility of War for Those Whose Initial Propensity is Definitely Not Enlist/Extend	127
12-11	Likelihood of Enlisting/Extending Enlistment in the Guard or Reserve if There Were an Actual War for Those Whose Initial Propensity is Definitely Enlist/Extend	128
12-12	Likelihood of Enlisting/Extending Enlistment in the Guard or Reserve if There Were an Actual War for Those Whose Initial Propensity is Probably Enlist/Extend	129
12-13	Likelihood of Enlisting/Extending Enlistment in the Guard or Reserve if There Were an Actual War for Those Whose Initial Propensity is Might Enlist/Extend	130
12-14	Likelihood of Enlisting/Extending Enlistment in the Guard or Reserve if There Were an Actual War for Those Whose Initial Propensity is Probably Not Enlist/Extend	131
12-15	Likelihood of Enlisting/Extending Enlistment in the Guard or Reserve if There Were an Actual War for Those Whose Initial Propensity is Definitely Not Enlist/Extend	132

1.0 SAMPLING APPROACH AND METHODOLOGY

1.1 Considerations Affecting Sample Design

The study called for the investigation of four population groups, Group A -- Non-Prior Service males, 17½ to 26 years of age with no college degree; Group B -- males with prior service and remaining Reserve obligations; Group C -- Army National Guardsmen; and Group D -- males in other Reserve components in fourth, fifth or sixth year of initial enlistment or paid drill status. Groups C and D represent members of the current National Guard and Reserve forces whose files are maintained by DoD. DoD also maintains files on the Veterans who comprise Group B. It was hypothesized that the files for Groups C and D would be the most complete and accurate.

A master sample of approximately 6,000 names was drawn from Group B by DMDC. The details of this selection are provided in a letter from Dr. Ray Schucker to Dr. Wallace H. Wallace dated November 18, 1976 and shown in Figure 1-1. Further details are provided in Figure 1-2. Another approximately 14,900 names were drawn by the respective National Guard and Reserve components in accordance with the instructions given in the above cited letter.

Computer tapes containing names, telephone numbers, addresses and selected information on the following numbers of men were received.

<u>Subgroup</u>	<u>Number</u>
Group B -- Veterans	6,146
Group C -- Army National Guard	6,040
Group D -- Air National Guard	1,658
Army Reserve	2,008
Navy Reserve	1,600
Marine Corps Reserve	1,600
Air Force Reserve	2,068

FIGURE 1-1.

Dr. Ray Schucker
Consultant
OASD(M&RA), DASD(MPP)
Room 2B269, Pentagon
Washington, D. C. 20301
November 18, 1976

Dr. Wallace H. Wallace
President
Associates for Research In Behavior
34th and Market Streets
Philadelphia, Pennsylvania 19104

Dear Wally,

Per our telephone conversation of Wednesday, November 17th, I am attaching the final specifications for sampling current reservists.

The veteran sample (Group B) will be drawn by MARDAC by zip code in proportion to the geographic dispersion of five-digit zip codes for Army Reservists. We chose the Army Reserve because it has the broadest geographic dispersion of drill units among the various Reserve components, and because it maintains zip code information based on member's residence. Other components either (a) keep only three-digit zip codes, (b) have zip codes for the member's drill unit only, or (3) have fewer drill units and thus are somewhat constrained geographically.

We anticipate that the comparison of responders and non-responders to the survey will be based, in part, on the selected file information of page 2.

Sincerely,

Ray Schucker
Ray Schucker
Consultant

Attachment

FIGURE 1-1. CONT'D

REVISION II:

SPECIFICATIONS FOR DRAWING RANDOM SAMPLES FOR RESERVES/GUARD SURVEY

Each sample to be drawn consists of male enlisted Reserve personnel in training/Pay Category A (RFC Codes S and G) in CONUS. Personnel will be in the 4th, 5th or 6th year of an initial six-year obligation and will not yet have reenlisted or extended for a subsequent term. 1/

Required Sample Sizes

Army National Guard	6,000
Army Reserve	2,000 ^{2/}
Marine Corps Reserve	1,600
Air Force Reserve	1,600
Navy Reserve	1,600
Air National Guard	1,600

Sample Selection Procedure. After application of the previously described screens, each sample is to be drawn from those qualified in each Service component in a manner such that every qualified individual has an equal probability of being selected. One way to achieve this is to divide the total number of qualifieds in the file by the required sample size. Designate this number as 'n'. Starting from any random place in the file of qualified individuals (such as a randomly selected social security number), pull every nth social security number.

Required Information from Files of Selected Reservists

1. From Immediate Files:

Name

Social Security Number

State Abbreviation

5-digit Zip Code of Member's Residence (Army Guard and Marine Corps Reserve to furnish unit zip code)

Reserve Component

1/ This revision removes the previous additional requirement of less than 24 months prior active duty.

2/ Army Reserve sample size increases to allow loss of some phone numbers from units not having full time civilian technicians.

Enclosure

FIGURE 1-1. CONT'D

Selected File Information --

Highest civilian education
Race
Ethnic Group Designation
Date of Birth
Pay Grade - -
Total Months of Active Duty
Marital Status
AFQT Percentile Score
Number of Dependents
Term of Present Enlistment
Source of Original Entry

2. From Local Unit Files (to be merged with above information):

Home Telephone Number (including Area Code).

Format for Data Output. Each Service is to provide a magnetic tape of file information, including telephone number, for selected reservists using Reserve Components Common Personnel Data System -- Master File Record Layout and the following tape format. Ten-digit telephone number may be started in Record Field 22 and completed in Record Field 37. 3/

9 track tape

1600 bytes/inch

IBM standard labels

EBCDIC Character

Immediately on drawing the Army Reserve sample and while obtaining home telephone numbers from local units, a magnetic tape containing the five-digit zip codes of the selected Army Reserve sample is to be prepared and sent to:

Manpower Research and Data Analysis Center (MARDAC)
550 Camino El Estero
Monterey, California 93940
ATTN: Mr. Lou Pales

3/ Alternative record layouts are acceptable with documentation.

FIGURE 1-1. CONT'D

A memorandum of transmittal should also be sent to:

Dr. John R. Goral
Manpower Research and Data Analysis Center (MARDAC)
300 North Washington Street
Alexandria, Virginia 22314

Final tapes with telephone numbers are to be sent to:

Dr. Wallace H. Wallace
Associates for Research on Behavior
34th and Market Streets
Philadelphia, Pennsylvania 19104 --

together with a memorandum of transmittal to Dr. John Goral (MARDAC).

Timing

1. The sample of names and addresses is to be drawn within one week.
2. Home telephone numbers are to be returned from local units and merged with other file data within 45 days.

Questions regarding the translation of above sample requirements to the characteristics of the individual Service files should be referred to Dr. Goral (MARDAC), (703) 325-0540.

Note that recently a sample of 3,000 Army Guard members was drawn nationally for a survey study. As many as 9,000 additional names may also have been drawn for future contact in this project. These names should be excluded from the sample described in this specification.

FIGURE 1-2. FURTHER DETAILS OF SAMPLING PROCEDURE FOR SAMPLE B*

The detailed procedure for selecting Sample B was as follows:

1. The population consisted of persons who had been in active service in the Army, Navy, Marine Corps and Air Force.
2. These lists were combined.
3. The number of men to be chosen from each state was determined by the proportion of the men presently in the Army Reserve from that state.
4. The file was examined for men who came from a designated state.
5. These men were then included or excluded from the sample based on the following qualifiers:
 - . First, whether they had been discharged from active service and were eligible for reenlistment.
 - . Secondly, whether they had served 2, 3 or 4 years of active duty and had time remaining under their 6 year obligation.
6. From each qualified state list, the predetermined number of men was chosen, using a random start procedure.

* From telephone conversation between Dr. John Goral and Associates

From these groups, the following sample sizes were selected:

Group B -- 1,000

Group C -- 2,000

Group D -- 2,000, allocating 400 to each Reserve component and the Air National Guard.

1.2 The Sample Design

The final sample was in reality a second stage sample; the first stage sample was the master sample provided by DoD, which served as the sampling frame for the second stage sample. Since the drawing of the first stage was the responsibility of the agencies maintaining the original files, the discussion in this section focuses on the second stage sample. The design employed is referred to as Interpenetrating Subsamples Design by C.R. Rao, also termed Replicated Samples Design, by W.L. Deming. This method organizes the sampling frame into a fixed number of sampling units or zones along lines efficient for the research. Next, a series of systematic samples is drawn by selecting a random unit in the first zone and systematically selecting corresponding units in the remaining zones.

Each Group, A, B, C and D, was sampled separately. Within Group D, each National Guard and Reserve component was sampled separately.

Each sampling frame was organized into 20 zones geographically. Zone sizes varied to accommodate the differing sizes of the sampling frames. The only exception to this was Group A for which no frame was available.

For Groups B through D, each zone contained a fixed number of sampling units determined by the size of the sampling frame. This approach yielded broad and even geographic coverage, constant probability of selection in each sample and direct, simple estimates of national totals and proportions in Groups B through D.

To obtain some degree of matching between the Group A (Non-Prior Service) sample and the other groups, a method of randomizing the last two digits of the Groups C and D samples telephone numbers was used. Subscribers to a common telephone exchange are more likely to share access to Reserve component training centers, live in the same geographic locality and have similar socio-economic characteristics. Consequently, improvement in the comparability of the data was anticipated.

1.3 Sampling Methods

1.3.1 Sampling Plan for Samples B, C and D

For Samples B, C and each subsample of D (D1 -- Air National Guard, D2 -- Army Reserve, D3 -- Navy Reserve, D4 -- Marine Corps Reserve, D5 -- Air Force Reserve), the following procedure was used to draw the sample from the names supplied by DMDC and the National Guard and Reserve components.

The names were sorted by state and then by zip code in ascending order within state. The states were then arranged in geographic order. See Table 1-1. A zone structure was created in which zones consisted of a number of contiguous states.

Zone Structure for Samples C and D

Zone size was determined by dividing the total sample, e.g., 6,040 for the Army National Guard into 20 equal parts. In the case of the Army National Guard, or Sample C, the first 20th of the sample or 302 persons became Zone 1. The second 20th of the sample became Zone 2, and so on. For Sample D, the number of names in each zone of the sample varied according to the total n for the respective National Guard and Reserve components in Sample D. By composing the zones in this manner, and with the states being arranged in geographic order, all persons in each zone were geographically proximal.

TABLE 1-1. GEOGRAPHIC ORDERING OF STATES

<u>ZONE #</u>	
1	California, Washington
2	Washington, Oregon, Idaho, Arizona, Nevada, New Mexico,
3	Utah, Colorado, Wyoming, Montana, North Dakota, Nebraska, Kansas
4	Kansas, Oklahoma, Texas
5	Texas, Louisiana
6	Louisiana, Arkansas, Missouri, Iowa
7	Iowa, Minnesota
8	Minnesota, Wisconsin, Michigan
9	Michigan, Indiana, Illinois
10	Illinois, Ohio
11	Ohio, Alabama
12	Alabama, Kentucky, Tennessee
13	Tennessee, Mississippi, Georgia
14	Georgia, Florida, North Carolina
15	North Carolina, South Carolina
16	South Carolina, Virginia, West Virginia, District of Columbia, Delaware, Maryland
17	Maryland, New Jersey
18	New Jersey, Pennsylvania
19	Pennsylvania, New York, Massachusetts
20	Massachusetts, Connecticut, Maine, New Hampshire, Rhode Island, Vermont

Note: The order of states should be read across then down; ignore repeats.

Thus all sections of the country, weighted according to the current contribution to the National Guard and Reserve forces, would have an equal chance of contributing to the sample.

Selection of the Sample Within Zone for Samples C and D

More names than required were contained in each sample submitted by DMDC and by the National Guard and Reserve components. Therefore, more names than required fell into each zone. To obtain the required number of names from each zone, an equal number of randomly selected names had to be obtained from each zone. For Sample C, an initial 100 names were selected at random from the total names in Zone 1. These 100 names then served as the start for the sample to generate the additional names from the remaining 19 zones. Since each subsample was selected systematically, i.e., every "kth" sampling after the first entered the sample, if the zone size was 302 sampling units and unit number 6 was drawn at random from the zone, then units numbered 308, 610, 912, ..., $6+k(302)$, ..., 5,744 were in the sample.

Table 1-2, containing one-fifth of the total Sample C, illustrates how this process worked. The table is composed of zones (or columns) and blocks (or rows). Note that Zone 1 contains the random numbers in ascending order.

The same procedure was followed to develop the sample for each of the components of Sample D. There were 20 zones created. The zone sizes differed depending on the size of the sample submitted by the respective National Guard and Reserve components. Thus, the zone sizes were as follows: D1 -- 98, D2 -- 100, D3 -- 80, D4 -- 80, D5 -- 103. For each component, 20 numbers were chosen at random from the initial list of names in Zone 1. Successive zones were created by adding the appropriate zone size to each contiguous number, e.g., Table 1-3, for D2, the random number chosen for Zone 1 was 2, the value for Zone 2 is thus 102, for Zone 3 it is 202, etc. Four hundred numbers were chosen for each of the five components of Sample D, or 2,000 total.

TABLE 1-2. ARMY NATIONAL GUARD SAMPLE -- SAMPLE C

<u>BLOCK #</u>	<u>Zone</u>									
	1	2	3	4	5	6	7	8	9	10
1	3	305	607	909	1211	1513	1815	2117	2419	2721
2	5	307	609	911	1213	1515	1817	2119	2421	2723
3	6	308	610	912	1214	1516	1818	2120	2422	2724
4	8	310	612	914	1216	1518	1820	2122	2424	2726
5	11	313	615	917	1219	1521	1823	2125	2427	2729
6	13	315	617	919	1221	1523	1825	2127	2429	2731
7	14	316	618	920	1222	1524	1826	2128	2430	2732
8	20	322	624	926	1228	1530	1832	2134	2436	2738
9	22	324	626	928	1230	1532	1834	2136	2438	2740
10	23	325	627	929	1231	1533	1835	2137	2439	2741
11	24	326	628	930	1232	1534	1836	2138	2440	2742
12	25	327	629	931	1233	1535	1837	2139	2441	2743
13	32	334	636	938	1240	1542	1844	2146	2448	2750
14	36	338	640	942	1244	1546	1848	2150	2452	2754
15	37	339	641	943	1245	1547	1849	2151	2453	2755
16	38	340	642	944	1246	1548	1850	2152	2454	2756
17	41	343	645	947	1249	1551	1853	2155	2457	2759
18	43	345	647	949	1251	1553	1855	2157	2459	2761
19	48	350	652	954	1256	1558	1860	2162	2464	2766
20	49	351	653	955	1257	1559	1861	2163	2465	2767

<u>BLOCK #</u>	<u>Zone</u>									
	11	12	13	14	15	16	17	18	19	20
1	3023	3325	3627	3929	4231	4533	4835	5137	5439	5741
2	3025	3327	3629	3931	4233	4535	4837	5139	5441	5743
3	3026	3328	3630	3932	4234	4536	4838	5140	5442	5744
4	3028	3330	3632	3934	4236	4538	4840	5142	5444	5746
5	3031	3333	3635	3937	4239	4541	4843	5145	5447	5749
6	3033	3335	3637	3939	4241	4543	4845	5147	5449	5751
7	3034	3336	3638	3940	4242	4544	4846	5148	5450	5752
8	3040	3342	3644	3946	4248	4550	4852	5154	5456	5758
9	3042	3344	3646	3948	4250	4552	4854	5156	5458	5760
10	3043	3345	3647	3949	4251	4553	4855	5157	5459	5761
11	3044	3346	3648	3950	4252	4554	4856	5158	5460	5762
12	3045	3347	3649	3951	4253	4555	4857	5159	5461	5763
13	3052	3354	3656	3958	4260	4562	4864	5166	5468	5770
14	3056	3358	3660	3962	4264	4566	4868	5170	5472	5774
15	3057	3359	3661	3963	4265	4567	4869	5171	5473	5775
16	3058	3360	3662	3964	4266	4568	4870	5172	5474	5776
17	3061	3363	3665	3967	4269	4571	4873	5175	5477	5779
18	3063	3365	3667	3969	4271	4573	4875	5177	5479	5781
19	3068	3370	3672	3974	4276	4578	4880	5182	5484	5786
20	3069	3371	3673	3975	4277	4579	4881	5183	5485	5787

TABLE 1-3. ARMY RESERVE SAMPLE -- SAMPLE D-2

<u>BLOCK #</u>	<u>Zone</u>									
	1	2	3	4	5	6	7	8	9	10
1	2	102	202	302	402	502	602	702	802	902
2	7	107	207	307	407	507	607	707	807	907
3	8	108	208	308	408	508	608	708	808	908
4	13	113	213	313	413	513	613	713	813	913
5	18	118	218	318	418	518	618	718	818	918
6	20	120	220	320	420	520	620	720	820	920
7	30	130	230	330	430	530	630	730	830	930
8	32	132	232	332	432	532	632	732	832	932
9	36	136	236	336	436	536	636	736	836	936
10	40	140	240	340	440	540	640	740	840	940
11	46	146	246	346	446	546	646	746	846	946
12	47	147	247	347	447	547	647	747	847	947
13	54	154	254	354	454	554	654	754	854	954
14	56	156	256	356	456	556	656	756	856	956
15	64	164	264	364	464	564	664	764	864	964
16	85	185	285	385	485	585	685	785	885	985
17	87	187	287	387	487	587	687	787	887	987
18	91	191	291	391	491	591	691	791	891	991
19	96	196	296	396	496	596	696	796	896	996
20	99	199	299	399	499	599	699	799	899	999

<u>BLOCK #</u>	<u>Zone</u>									
	11	12	13	14	15	16	17	18	19	20
1	1002	1102	1202	1302	1402	1502	1602	1702	1802	1902
2	1007	1107	1207	1307	1407	1507	1607	1707	1807	1907
3	1008	1108	1208	1308	1408	1508	1608	1708	1808	1908
4	1013	1113	1213	1313	1413	1513	1613	1713	1813	1913
5	1018	1118	1218	1318	1418	1518	1618	1718	1818	1918
6	1020	1120	1220	1320	1420	1520	1620	1720	1820	1920
7	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930
8	1032	1132	1232	1332	1432	1532	1632	1732	1832	1932
9	1036	1136	1236	1336	1436	1536	1636	1736	1836	1936
10	1040	1140	1240	1340	1440	1540	1640	1740	1840	1940
11	1046	1146	1246	1346	1446	1546	1646	1746	1846	1946
12	1047	1147	1247	1347	1447	1547	1647	1747	1847	1947
13	1054	1154	1254	1354	1454	1554	1654	1754	1854	1954
14	1056	1156	1256	1356	1456	1556	1656	1756	1856	1956
15	1064	1164	1264	1364	1464	1564	1664	1764	1864	1964
16	1085	1185	1285	1385	1485	1585	1685	1785	1885	1985
17	1087	1187	1287	1387	1487	1587	1687	1787	1887	1987
18	1091	1191	1291	1391	1491	1591	1691	1791	1891	1991
19	1096	1196	1296	1396	1496	1596	1696	1796	1896	1996
20	1099	1199	1299	1399	1499	1599	1699	1799	1899	1999

Selection of Backup Numbers for Non-Responders Within Zones for Samples C and D

While it is desirable to be able to interview all of the persons whose numbers were chosen by the sampling procedure described above, inevitably some persons will be unreachable and some numbers will be unusable for a variety of reasons. Therefore, backup numbers are required. Each sample unit was matched at the outset with two potential backups so that non-responders would not alter the balance of the sample. Backup numbers were selected by the same process as the numbers for the original sample and at the same time. That is, a new set of random numbers was drawn from the master list excluding the originally drawn set of random numbers (100 for Sample C, and 20 for each of the components of Sample D) for Zone 1. The blocks were completed as before.

Sampling Plan, Zone Structure and Sampling Within Zone for Sample B

The basic procedure for developing the sample from the pool of numbers supplied by DMDC was the same as previously described for Samples C and D. The master sample consisted of 6,146 names. Twenty-one zones were created with 300 numbers in each zone. Zone 21 contained 154 empty sampling units. Forty-eight numbers were chosen randomly from Zone 1 and used to generate the rest of their respective blocks using a zone size of 300. Zone size considerations in the case of this sample led to allocating the last number for Blocks 27 - 48 by random selection of numbers left in the total number pool. Telephone numbers were not provided for Sample B, therefore, more unusable names were anticipated in the original sample. Four backups were therefore created for each number in Sample B compared to the two backups created for the components of Sample D. With the four backups, a total of 5,040 of the 6,146 names provided by DMDC were drawn.

1.3.2 Sampling Plan for Sample A

The samples drawn from the National Guard and Reserve components (Samples C and D) were used as the basis of a random number generating system to develop Sample A, men with no prior service experience. The rationale for this procedure was to obtain a representation of geographic areas similar to the representation in Samples C and D. The procedure was as follows:

1. All telephone numbers for Sample C and each of the five components of Sample D were keypunched. They were arranged by state and within state by zip code. The available telephone numbers equalled 4,004.
2. From each National Guard and Reserve component, two adjacent numbers within a block were paired to form a set (or sub-block) of Sample A. Thus, in Table 1-2, the telephone number of person #3 was paired with the telephone number of person #305. The telephone number of person #607 was paired with the telephone number of person #909. This procedure, when executed over all the National Guard and Reserve components, yielded 2,003 sets of telephone numbers.

The exact pairing with components is given below:

Sample C	--	2,000 numbers	=	1,000 sets
Sample D1	--	400 numbers	=	200 sets
Sample D2	--	403 numbers	=	202 sets
Sample D3	--	400 numbers	=	200 sets
Sample D4	--	401 numbers	=	201 sets
Sample D5	--	400 numbers	=	200 sets

In Samples D1 and D3, the last sets contained only 50 numbers.

3. Each of the pairs in each set was then assigned to a first or second position in the set by toss of dice.
4. Two sets of ten random digits (0-9) and two sets of five random digits (0-9) were then generated. The first set of ten random digits was paired with the first set of five random digits to create 50 pairs of random digits. An example of this process is given on the next page.

Set of Five Random Digits

1
8
5
3
6

Set of Ten Random Digits

6
3
1
8
5
4
2
9
7
0

Two Sets of Digits Combined to Form Fifty-Two Digit Sets

16	86	56	36	66
13	83	53	33	63
11	81	51	31	61
18	88	58	38	68
15	85	55	35	65
14	84	54	34	64
12	82	52	32	62
19	89	59	39	69
17	87	57	37	67
10	80	50	30	60

These 50 pairs were then substituted for the last two digits of the first telephone number in each set to create 50 new numbers. The second set of ten digits and the second set of five digits were then paired in the manner explained above to create another set of 50 pairs of digits and substituted for the last two digits of the second number in the set. Thus, a set consisted of 100 different telephone numbers, 50 of which had one five-digit stem and 50 of which had another five-digit stem.

5. To complete Sample A, one interview had to be completed within each set. Thus, interviewing started with the first number in each set and proceeded sequentially until a completed interview was obtained. However, a few of the sets contained a large proportion of unusable numbers (e.g., business numbers and dead numbers). Thus, the 100 numbers available became exhausted before a valid interview could be obtained. In these cases, a telephone number from the same component with the same area code from a set in which an interview had been completed in the first five numbers, was used.

2.0 INTERVIEWING AND TELEPHONE PROCEDURES

2.1 Respondent Notification

Several weeks prior to initiation of interviewing, letters were sent to all 14,400 men chosen to form the respondent pool for Samples B, C and D. This letter informed them of the purpose of the study, DoD's sponsorship and the voluntary nature of participation. A copy of the letter is included as Figure 2-1.

2.2 Interviewing Location

All interviewing for this study was conducted by Valley Forge Information Services (VFIS) at their controlled, central location WATS facility in suburban Philadelphia. The operations center for VFIS is located in the Burlington Industrial complex in the Valley Forge Corporate Center, Valley Forge, Pennsylvania. VFIS has the modern equipment and facilities needed to run an efficient interviewing operation at that location. The center of interviewing and field control was the telephone room with sound-proof booths, monitoring equipment and a control room. Adjacent to the telephone room were interviewer training rooms and the sampling and editing departments. The proximity of the Valley Forge Center to both Associates' main office and the Interviewing Services office made working closely together very practicable.

2.3 Interviewer Training

Every interviewer assigned to the study was given detailed briefings on interviewing procedures in general and on the particular requirements of this study. In addition to general briefings, training sessions were conducted on the questionnaires themselves. Each question was covered in detail in these sessions. The purpose of the question and how it was to be handled during the

FIGURE 2-1. LETTER SENT BY DoD TO VETERANS AND GUARD AND RESERVE SAMPLES



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D. C. 20301

MANPOWER AND
RESERVE AFFAIRS
(Military Personnel Policy)

You may be contacted in the near future to participate in a telephone survey of attitudes and opinions about various occupations, including the military Reserve forces. The survey is sponsored by the Department of Defense, and authority for requesting the information is contained in 10 U.S.C. 136.

The purpose of the survey is to evaluate and make changes in the personnel policies of the Reserve forces. The information you provide will be combined with the responses of others and may be used by the Department of Defense. However, your identity will in no way be associated with the information you give.

Participation in the survey is voluntary, and there will be no consequences for failure to respond to any particular questions. This study provides you a channel for communicating your own personal opinions about many aspects of the military Reserve forces. Your opinions can help bring about change, and participation is encouraged.

Sincerely,

W. G. Womack
Colonel, USAF
Deputy Director
Accession and Retention

Enclosure 2



interviewing process was explained. Questions from interviewers were encouraged. Each training session continued until all of the interviewers attending understood every question thoroughly. An Associates' staff member attended some of these training sessions.

Interviewers then conducted practice interviews with each other to familiarize themselves with the questionnaire. When actual interviewing began, the first interviews of each interviewer were carefully monitored by the floor supervisor to ensure that they were being conducted correctly. Any help needed by the interviewer was immediately given by the supervisor, who also corrected deficient interviewing techniques as they became apparent.

After the interviewing supervisor was satisfied with an interviewer's performance, periodic monitorings were made of that interviewer's work. These monitorings continued throughout the study. In addition, tape recordings of interviews were made on Valley Forge's automatic recording system. The project supervisor also monitored interviews during the course of the field work, as did staff members from Associates.

2.4 Respondent Tracking Procedures

During the interviewing, every attempt was made to locate respondents who were not at the phone number supplied. By seeking the cooperation of the person answering the phone, interviewers were often able to track down the person they were trying to interview. It was not uncommon for an interviewer to try two, three or four numbers before finally locating the respondent, sometimes in a distant state. In smaller towns, the cooperation of relatives and friends was enlisted by calling people with the same last name in locating respondents who were not at the phone number provided.

2.5 Callback Procedures

The survey design required that an original call and three callbacks be made to a number. In actual practice, as many as 10 calls were made in an

attempt to reach the desired respondent. No answers, busies and not-at-homes were re-sampled at a later date in an attempt to contact these hard-to-reach men.

Whenever possible, interviewers attempted to determine the best time to find the respondent at home and to make the callbacks then. In cases where the best time to make the callback could not be determined, callbacks were made on different days of the week and at different times from the original call. If a respondent could not be reached on Tuesday evening at 6:00, for example, the next call was made on Wednesday at a later time -- 7, 8 or 9 o'clock. If the respondent was still not reached, the next callback was made on the weekend when the likelihood of finding him at home would be enhanced.

2.6 Call Records

Specially designed call record cards were used to keep track of the outcome of each call attempted. Samples of these cards, which were separately designed for the various samples, are shown in Figure 2-2. Labels with names and/or phone numbers were attached to each card.

In addition to recording the name of the interviewer and the date and time of the call, records were kept to show the outcome of each attempted call:

- 1 Non-working number
 - 2 Disconnected number
 - 3 Business listing
 - 4 Changed to an unpublished or unlisted number
 - 5 Refusal before it was determined if the respondent qualified for interview. Whenever possible, the person doing the refusing was recorded, e.g., the respondent, his wife, mother, father, brother, etc.
 - 6 Refusal after determining that the respondent was qualified. The person doing the refusing was recorded, e.g., the respondent, his wife, etc.
- NA No answer

FIGURE 2-2. SAMPLE CALL RECORD CARDS

426946287
R9CYM481026 E05005M2746G 3799

MS 38701
6013352974

JOB #8147 GROUP C SAMPLE SEGMENT

	Call 1	Call 2	Call 3	Call 4
Date	5-28	5-29	5-30	
Time	4:25	3:30	6:57	
Int.	DD	ML	FW	
Result	NA	NA	M	

Effective Number:

- NA = No answer
- BY = Busy
- CB = Not at home (record appt. below)

DATE / TIME

DATE / TIME

- O = Other Eff. Number (specify)

- (13) C-43
- 1 = NW #
 - 2 = Disc.
 - 3 = Business
 - 4 = Resp. not at #
- RESP. NOT REACHED:
- 5 = Ref. by someone else, (who?) _____
 - 6 = Resp. ref. _____
 - 7 = Other non-eff. # (specify) _____
- P = Term. q. 1
 - M = Term. q. 2
 - R = Term. q. 3
 - T = Term. q. 4
 - E = Term. q. 5
 - D = Term. q. 6
 - I = Incomplete Int.
 - X = Completed Int.

1325 N SUPERIOR ST
APPLETON WI 54911 2134

041 91820 7307 024 7107

JOB #8147 GROUP B SAMPLE SEGMENT

	Call 1	Call 2	Call 3	Call 4
Date	5-8	5-20	5-20	5-21
Time	2:06	7:40	7:43	4:33
Int.	PN	MF	MF	BR
Result	NA	O	NA	I

Effective Number:

- NA = No answer
- BY = Busy
- CB = Not at home (record appt. below)

DATE / TIME

DATE / TIME

- O = Other Eff. Number (specify)

- 2133 414- 7336794 (2) 9-2-9
- NON EFFECTIVE #:
- 1 = NW #
 - 2 = Disc.
 - 3 = Business
 - 4 = Resp. not at #
- RESP. NOT REACHED:
- 5 = Ref. by someone else, (who?) _____
 - 6 = Resp. ref. _____
 - 7 = Other non-eff. # (specify) _____
- NOT ELIGIBLE:
- P = Term. q. 1
 - M = Term. q. 2
 - R = Term. q. 3
 - T = Term. q. 4
 - E = Term. q. 5
 - D = Term. q. 6
 - I = Incomplete Int.
 - X = Completed Int.

Term.
444-671-0304

- BY Busy
- CB Respondent not at home
- O Respondent away for survey period, respondent ill, respondent deceased, language barrier
- P/M Respondent not eligible. Reasons for ineligibility were noted R/T/E/D.
- I Incompleted interview
- X Completed interview

A detailed analysis of these calls is presented in Section 7.0 on Completion Rates.

2.7 Completed Field Forms

Three types of materials were turned in by the interviewers:

1. Questionnaires with attached screeners and call record cards for completed interviews or interviews that were incomplete because the respondent refused to continue.
2. Screeners and call records for those men who did not qualify for the interview or who terminated before getting into the main questionnaire.
3. Call record cards for no listings, non-working or disconnected numbers, etc. or where there was no eligible person in the household.

2.8 Questionnaire Editing at Interviewing Site

All questionnaires were given a thorough field editing by the VFIS editing staff to determine if the correct respondent had been interviewed, the completeness of the questionnaire, and the clarity and consistency of the respondent's answers. Where necessary, respondents were called back to obtain missing information or to clarify inconsistent or unclear answers. Certain questions, for example, the initial propensity to enlist question could not be asked by recalling the respondent because information he may have learned during and subsequent to the interview would probably influence his answers.

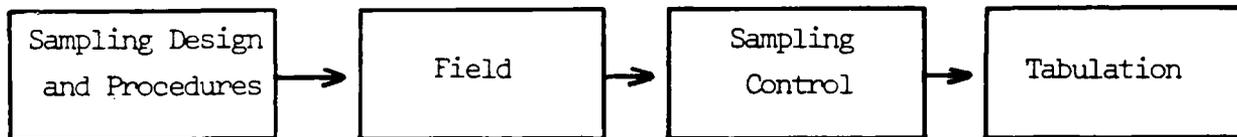
3.0 DATA HANDLING

3.1 Sample Control and Monitoring

Rigid controls were employed to monitor the execution of the survey samples. Each of the eight samples was controlled separately. Attempts were made to contact a total of 59,314 men and each of these attempted calls was checked to ensure that it was handled in conformance with the sample design.

The basis of the control system was the master list of names or telephone numbers. All checking was done against this master list which was kept by individual sample. Within each sample, the list was organized by zone; within zone, the list was arranged by block.

Materials flowed as follows throughout the course of the field work:



The sampling department provided both the field and sampling control staff with identical lists of names or, in the case of the NPS sample, of random phone numbers. For purposes of sampling control, these names or phone numbers were given identification numbers.

Daily shipments of materials were received from the field by sampling control. These materials included call record cards, screeners and questionnaires.

All materials returned by the field were subjected to a three-stage checking procedure. First, the questionnaire, screener or call record card was checked against the master control list to be sure it had the proper zone and block number assigned to it. (See Section 1.0 on Sampling Plan for details of this assignment.) Second, all names or numbers within a block that

were attempted were meticulously checked to ensure that they were called in the prescribed order and that there were no deviations from the sample plan. Third, checks were made to be certain that the proper person had been contacted for the interview. This was an especially critical check in the Non-Prior Service sample -- the random digit dialing sample -- where the order in which to attempt to interview various household members within the desired age group was predetermined. (See Screener for Non-Prior Service males in Volume III.)

In a few cases, the assigned order of calling was not adhered to and the appropriate names or numbers were sent back to the field for interviewing. And, in rare instances, an extra interview was completed within a block and had to be discarded.

A separate check-in form was set up for each of the four samples to record completed interviews. This form was organized by zone and, within zone, by block. The respondent number of each completed interview was recorded in the appropriate zone and block. These records were cross-checked daily with the field department to ensure that the field records and the sample control records showed the same blocks as complete or incomplete, allowing, of course, for the lag in getting completed interviews to sample control.

After this exhaustive checking procedure, completed interviews were turned over to the tabulation department and incomplete interviews, screeners and call record cards were held for use in preparing the data needed to compute completion rates.

3.2 Editing and Coding Procedures

3.2.1 Coder Training

All coders working on the study were given detailed, thorough training on the coding process by Associates' tabulation supervisor. The work of each coder was checked completely by the supervisor at the beginning of the coding until the coder reached the desired level of accuracy. After that point was reached, a sample of each coder's work was checked throughout the coding process to ensure accuracy and a consistent interpretation of the codes.

3.2.2 Initial Editing

Each questionnaire was first edited from a tabulation standpoint, ensuring that all questions which were supposed to have been answered were, that questions which should not have been answered were not, and that all answers were clear and consistent. Very few problems were discovered during the tabulation editing and most of the few that were found could be resolved by the editors. In a small number of cases, questionnaires had to be sent back to the field for clarification or to obtain missing information.

3.2.3 Coding

Most of the questions on the questionnaires were closed-end questions that required no coding.

Codes for the open-ended questions, such as conditions under which the person would enlist or extend his enlistment, were developed using a sample of questionnaires from each of the eight samples and a spread of replies from various geographic regions of the country. Additional codes were added, as necessary, as more questionnaires were received from the field.

Questionnaires then went through coding, with individual coders assigned to questionnaires from a single sample to reduce the chance of errors occurring due to differences in the various sample questionnaires.

All MOS, AFSC and Specialty Ratings were handled separately by a coder especially trained in coding these items. Some respondents did not cite their MOS, AFSC or Specialty Rating in the standard way, so deviant answers had to be checked against the comprehensive list of MOS, AFSC and Specialty Rating categories supplied by DoD.

The Socio-Economic Status Index of the respondent and his father was also handled separately by specially trained coders so that computations of the Index would be comparable across all questionnaires. Instructions for computation of Index codes are given in Figure 3-1.

FIGURE 3-1. COMPUTATION OF THE SES INDEX*

Step 1: Respondent's occupation is scored according to the following scale:

- 1 = Higher Executive, Proprietors of Large Concerns, and Major Professionals.
- 2 = Business Managers, Proprietors of Medium Sized Businesses, and Lesser Professionals.
- 3 = Administrative Personnel, Proprietors of Small Independent Businesses, and Lesser Professionals.
- 4 = Clerical and Sales Workers, Technicians, and Owners of Little Businesses.
- 5 = Skilled Manual Employees.
- 6 = Machine Operators and Semi-skilled Employees.
- 7 = Unskilled Employees.

Step 2: Respondent's education is scored according to the following scale:

- 1 = Graduate professional schooling.
- 2 = Standard College or University Graduate.
- 3 = Partial College Training.
- 4 = High School Graduate.
- 5 = Partial High School.
- 6 = Junior High School.
- 7 = Less than Seven Years of School.

FIGURE 3-1. CONT'D

Step 3: The factors of Occupation and Education are combined by weighting individual scores obtained from the scale positions. The weights for each factor were determined by multiple correlation techniques. The weight for each factor is:

<u>Factor</u>	<u>Factor Weight</u>
Occupation	7
Education	4

To calculate the Index of Social Position score for an individual, the scale value for Occupation is multiplied by the factor weight for Occupation, and the scale value for Education is multiplied by the factor weight for Education. For example, John Smith is the manager of a chain supermarket. He completed high school and one year of business college. His Index of Social Position score is computed as follows:

<u>Factor</u>	<u>Scale Score</u>	<u>Factor Weight</u>	<u>Score X Weight</u>
Occupation	3	7	21
Education	3	4	<u>12</u>
Index of Social Position Score			33

Step 4: To convert the numerical index to class values, the following system is used:

<u>Social Class</u>	<u>Range of Computed Scores</u>
I	11 - 17
II	18 - 27
III	28 - 43
IV	44 - 60
V	61 - 77

* Abstracted from paper by Hollingshead, A.B., Two Factor Index of Social Position, 1957.

3.2.4 Keypunching

The questionnaires required four cards per respondent. Thus, a total of approximately 21,000 cards was keypunched and 100 percent of them were key verified to detect any keypunching errors.

3.2.5 Consistency Checks

A series of consistency checks was developed separately for the questionnaires from each sample. Two types of checks were used. The first type was designed to identify coding or keypunching errors and the second to identify illogical answers given by the respondent, e.g., a person who is not currently attending college citing the type of degree he is working on. These checks were carried out in addition to the procedures described in Section 5.0.

More specifically, these consistency checks were developed to identify impossible codes, ineligibility and eligibility to answer particular questions and the consistency of answers given by the respondent to related questions.

The verified card decks were computer analyzed using Associates' consistency check program. The output was a list of cards with consistency check errors, identifying the check which the card had failed. Corrections were made in the small number of cards with errors by referring to the original questionnaire. No corrections were made automatically or mechanically when consistency check errors were discovered.

After all the cards were corrected, the set of consistency checks was re-run to ascertain that no errors were uncovered as a result of the corrections made. No additional errors were discovered at this stage but, if they had been, they would have been corrected and the deck re-run for consistency checks until no errors were discovered.

And, finally, checks were made on the zone and block numbers assigned to each respondent. This was cross-checked with the sampling department to be certain that each respondent was in fact assigned his correct zone and block numbers.

4.0 QUESTIONNAIRE DESIGN

This section briefly describes the versions of the questionnaires, their structure, and pretests to refine them. One version of the questionnaire is included for general reference (Appendix A).

All versions of the questionnaire and the tables containing the responses of each sample to each question are contained in Volumes III and IV.

4.1 Questionnaire Versions

This study required that eight basic versions of the questionnaire be used, one for each of the following samples:

- . Non-Prior Service males
- . Veterans
- . Army National Guard
- . Army Reserve
- . Air Force Reserve
- . Air National Guard
- . Navy Reserve
- . Marine Corps Reserve

In addition to the eight basic questionnaires, there was a special version of the Army National Guard questionnaire for use in states that currently offer educational and training benefits.

Rotation of the alternatives to each of the benefit questions also required special questionnaire versions. Two versions of order were used -- from best to worst (or high to low) and vice versa.

The order of questions regarding the propensity to join the various components was also rotated but this was accomplished by a starting point arrow system.

4.2 Comparability of Questions

The questionnaires generally covered the same topics and, wherever possible, identical wording was used in all versions in order to ensure comparability of results.

Each of the individual questionnaire versions, however, was designed for the particular sample using language and terminology appropriate to that sample. In addition, certain topic areas (for example, military background and experience) were appropriate only to specific samples.

4.3 Questionnaire Length and Structure

The questionnaires went through five major drafts and several minor drafts in the design process, with each draft refining and sharpening the previous one. Because of interview length constraints, shifts in emphasis of various content areas had to be made during the various draftings of the questionnaire. Interview length was limited to one-half hour.

Less critical content areas were deleted or diminished in emphasis to allow time in the interview for the most critical topics of concern. In the process, the interview length was decreased from close to one hour to its half hour maximum. Throughout the questionnaire design phase of the project, Associates met with and was in telephone contact with DoD personnel for guidance and approval of the changes and shifts in emphasis.

Every effort was made to keep the questions as brief as possible to facilitate respondent cooperation and interest, and the simplest possible conversational language was used to aid in respondent comprehension.

The question sequence was structured so that the simplest, factual information was asked first, with the more difficult or sensitive information coming later in the interview. Care was also taken with the placement of questions in the interview so that answers to a question did not bias answers to subsequent questions.

The following topic areas were contained in the final questionnaire:

- . Demographic characteristics and background -- education, employment status, etc.
- . Propensity to enlist or to extend enlistment
- . Influencers on enlisting or extending enlistment
- . Knowledge of enlistment or extension of enlistment requirements and current benefits
- . Effect of proposed benefits on enlistment or extension of enlistment
- . Life goals
- . Incentives to enlist or extend enlistment
- . Disincentives to enlist or extend enlistment
- . Father's demographics

Finally, special attention was given to interviewer instructions on the questionnaire so that all of the information the interviewer needed to conduct the interview was contained on the questionnaire itself. Thus, the interviewer did not have to refer to another document, which would have interfered with the question flow or even have reduced respondent cooperation.

4.4 Questionnaire Pre-tests

Each of the questionnaire drafts was pre-tested with appropriate respondents using several techniques. First, some pre-test interviews were conducted in person with an Associates' staff member observing the interviews behind a one-way mirror. The purpose of this was to ensure that respondents understood the questions they were being asked and could give meaningful answers. (Respondents will almost always answer any question asked of them but this does not necessarily mean they understand the question.) By having a trained observer watch the interviews, it was possible to determine just how much the respondents did and did not understand. Necessary changes were made in the questionnaire wording and sequence as a result of these observed pre-test interviews.

A second procedure used after the personal pre-testing was telephone pre-testing of the questionnaires. This was done to determine how well the questionnaire flowed on the telephone, the level of respondent comprehension on the phone, and the length of time required to administer the interview. Most of the questionnaire changes required as a result of the telephone pre-testing work were deletions in order to keep the interview within the 30-minute time limit.

4.5 Suggestions for Questionnaire Improvement

The questionnaires used in this study proved to be practical to administer as evidenced by the successful accomplishment of the study objectives. However, the following improvements in the questionnaire should be considered if future studies are to be undertaken.

1. The introduction to the interview should be kept as brief as possible. Lengthy introductions only serve to confuse some respondents and to raise doubts in the minds of others about the possible purpose of the survey.

A lengthier introduction could be included on the questionnaire for use with those few respondents who may require a more detailed explanation of the study.

This suggestion was incorporated into the questionnaire used in this study to some extent. The introduction required by the Privacy Act was divided into two sections, with the first sentences only used for the introduction to the Screening Questionnaire. The remainder of the required introduction was read to the respondent before starting the main questionnaire.

2. The life goals, incentive and disincentive alternatives should be shortened. Respondents wearied at long lists of seemingly identical questions; the majority of the interview terminations occurred during one of these sections of the questionnaire.

3. Shorten the interview length, if at all possible without compromising the integrity of the study. Virtually all of the terminated interviews occurred late in the interview as respondents became impatient or disinterested in the interview.

5.0 REPRESENTATIVENESS OF THE SAMPLE

5.1 Representativeness of the First Stage Sample

The first stage sampling, i.e., drawing names from files of respective DoD agencies, was performed by DMDC and the respective National Guard and Reserve components under instruction from DoD. Sampling procedures are given in Section 1.0. Upon receipt of the data tapes, Associates was able to compare the geographic distribution of the sample with the geographic distribution of the population of each of the National Guard and Reserve components. The population data were derived from the Official Guard and Reserve Manpower Strengths and Statistics of 30 June, 1976. No comparable data were available for comparing the Veterans, or Sample B draw; the Non-Prior Service sample, or Sample A, was to be drawn at random. The comparison of the percentage of men in each National Guard and Reserve component sample coming from a given state showed that the samples reflected the geographic distribution of the population quite well. The analysis was performed by calculating the expected population percentage confidence intervals at the .05 level for each Guard and Reserve component within each state, based on the obtained sample percentage of the respective n 's. The number of states falling inside the calculated state population confidence intervals ranged from 32 for the Air National Guard to 40 for the Army National Guard. This can be regarded as a reasonably good fit given a six to eight month time lapse between the sample draw and the calculation of the population statistics.

5.2 Representativeness of the Second Stage Sample

5.2.1 Analytical Approach

It had originally been intended to compare the sample drawn for interviewing with the total sample obtained from DoD to determine the effectiveness of the sampling plan. Because of the poor quality of the names provided, it

was necessary to use a large percentage of the sample provided by DMDC and each National Guard and Reserve component. The percentages of the DMDC samples that were used were: Veterans = 76%; Army National Guard = 91%; Army Reserve = 59%; Air Force Reserve = 71%; Air National Guard = 82%; Navy Reserve = 84%; Marine Corps Reserve = 94%. Consequently, the intended comparison was meaningless. A more meaningful comparison was that between those people with whom contact was made and those with whom contact was never made. The former group consisted of people who were interviewed plus those who refused or terminated. The latter group consisted of those with whom attempted contacts were unsuccessful and the small percentage whom no attempt was made to contact. Another relevant comparison was between those respondents who refused to be interviewed or terminated their interviews and those respondents who completed their interviews.

Thus for purposes of determining how well the obtained sample reflects the population, two comparisons were made.

Comparison 1. Respondents who were contacted vs. men who were not contacted.

Comparison 2. Respondents vs. Refusers/Terminators

The purpose of these comparisons was to try to detect any significant differences between how the ultimate sample used in the analysis responded and how the population as a whole would respond. Since it was not practical to determine how men who were not in the sample or refused or terminated would respond to the interview items, it was necessary to look for indicators that might suggest the direction of their responsiveness. DoD made available a number of demographic variables from the sample data files that have some influential bearing on potential enlistment and extension of enlistment. These were education, race, pay grade, state of residence, number of dependents, age, months of prior active service, AFQT scores, and marital status. They were all used in the analyses.

The analyses were performed separately for Samples B, C and D1 - D5, as each sample was drawn separately by the respective DoD agency. The statistical analysis was handled in two ways. First, each comparison was analyzed by t test or χ^2 , depending upon the metric involved. Secondly, if a t test was used,

and the difference proved significant, ω^2 was applied to determine the amount of variance accounted for. If χ^2 was used, and the difference was significant, λ was calculated to determine the predictive strength of the relationship. Both ω^2 and λ are considered measures of statistical utility, i.e., measures of the utility of the significant relationships. Their use here was intended to permit a judgement regarding the strength of potentially real sources of bias, as indicated by a statistically significant difference. If a potential source of bias exists, but it is very weak, there is no merit in speculating about its effects. The use of these statistics also corrected for two factors which tend to inflate the probability of obtaining significant statistical differences. First, χ^2 is highly sensitive to minor deviations in cell frequencies. Secondly, both t and χ^2 are extremely sensitive with large n 's.

The Contact vs. No Contact comparison and the Respondent vs. Refusers/Terminators comparison, as analyzed by means of these statistics, are given in Table 5-1 and Table 5-2. The direction of a statistically significant difference, the utility and the p -value are given for each comparison. An empty cell means that no statistically significant difference was found for that comparison.

5.2.2 Summary of Comparisons

Respondents Who Were Contacted vs. Men Who Were Not Contacted (C's vs. NC's).

Considering the 58 possible comparisons for which data were available, over 46% were not statistically significant. Of the remaining 54%, none approached a level of statistical utility which would indicate that the variable would have even a modest amount of biasing effect. None of the ω^2 indicated that a significant variable accounted for even 2% of the variance, and none of the λ 's indicated that knowledge of a person's being in the Contacted vs. a Not Contacted group would predict whether a person possesses a greater or lesser degree of any of the demographic characteristics. Most λ 's were equal to 0 or close to 0. (Perfect predictability = 1, perfect non-predictability = 0.) In sum then, certain demographic differences between the respondents who were

TABLE 5-1. CONTACT VS. NO CONTACT COMPARISON (C's VS. NC's)

	Sample B Veterans	Sample C Army National Guard	Sample D1	Sample D2	Sample D3	Sample D4	Sample D5
EDUCATION	C's <u>better</u> educated $p < .000$ $\lambda = 0.0$	C's <u>better</u> educated $p < .000$ $\lambda = 0.0$	C's <u>less</u> educated $p < .03$ $\lambda = 0.0$	C's <u>better</u> educated $p < .03$ $\lambda = 0.0$	C's <u>better</u> educated $p < .000$ $\lambda = 0.0$		C's <u>better</u> educated $p < .008$ $\lambda = 0.0$
RACE	<u>Fewer black</u> C's $p < .000$ $\lambda = 0.0$	<u>Fewer black</u> C's $p < .000$ $\lambda = 0.0$			<u>Fewer black</u> C's $p < .02$ $\lambda = 0.0$	<u>Fewer black</u> C's $p < .005$ $\lambda = 0.0$	<u>Fewer black</u> C's $p < .008$ $\lambda = 0.0$
PAY GRADE	Significant/ unclear pattern $p < .000$ $\lambda = 0.0$	<u>Higher grades</u> in C $p < .000$ $\lambda = 0.0$			<u>Higher grades</u> in C $p < .000$ $\lambda = 0.0$	<u>Higher grades</u> in C $p < .002$ $\lambda = 0.0$	
GEOGRAPHIC DISTRIBUTION				Significant/ unclear pattern $p < .05$ $\lambda = 0.0$			
NUMBER OF DEPENDENTS	No Data Available	C's have <u>more</u> $p_2 = .02$ $w^2 = .001$	No Data Available			C's have <u>more</u> $p_2 < .03$ $w^2 = .002$	
AGE	C's <u>older</u> $p_2 < .000$ $w^2 = .001$	C's <u>younger</u> $p_2 < .000$ $w^2 = .005$		C's <u>older</u> $p_2 < .03$ $w^2 = .003$	C's <u>older</u> $p_2 < .000$ $w^2 = .012$		
MONTHS IN ACTIVE SERVICE	C's in <u>longer</u> $p_2 = .004$ $w^2 = .001$					No Data Available	No Data Available
AFQT	C's <u>higher</u> $p_2 < .000$ $w^2 = .004$			C's <u>higher</u> $p_2 < .05$ $w^2 = .003$	C's <u>higher</u> $p_2 < .000$ $w^2 = .014$	C's <u>higher</u> $p_2 < .02$ $w^2 = .003$	
MARITAL STATUS	No Data Available	<u>More married</u> C's $p < .000$ $\lambda = 0.0$		<u>More married</u> C's $p < .002$ $\lambda = 0.0$	<u>More married</u> C's $p < .000$ $\lambda = 0.07$	<u>More married</u> C's $p < .005$ $\lambda = 0.0$	

NOTE: C's = respondents who were contacted.
 NC's = respondents who were not contacted.
 Blank Cells = no statistically significant difference.

TABLE 5-2. RESPONDENTS VS. REFUSED/TERMINATED (R's VS. R/T's)

	Sample B Veterans	Sample C Army National Guard	Sample D1	Sample D2	Sample D3	Sample D4	Sample D5
EDUCATION	R's better educated $p < .05$ $\lambda = 0.0$	Significant/ unclear pattern $p < .000$ $\lambda = 0.0$	R's better educated $p < .002$ $\lambda = 0.0$	R's better educated $p < .000$ $\lambda = 0.0$	R's less educated $p < .000$ $\lambda = 0.0$		
RACE	Fewer blacks in R's $p < .000$ $\lambda = 0.0$	Fewer blacks in R's $p < .02$ $\lambda = 0.0$	Fewer blacks in R's $p < .000$ $\lambda = 0.0$			Fewer blacks in R's $p < .01$ $\lambda = 0.0$	
PAY GRADE	Higher grades in R's $p < .000$ $\lambda = 0.0$	Significant/ unclear pattern $p < .000$ $\lambda = 0.0$			Significant/ unclear pattern $p = .004$ $\lambda = .07$	Higher grades in R's $p < .000$ $\lambda = 0.002$	Higher grades in R's $p < .000$ $\lambda = 0.0$
GEOGRAPHIC DISTRIBUTION	More R's in E., M. Atl. E & W Central States $p < .05$ $\lambda = 0.0$	More R's in S. Atl. & E. Central States $p < .03$ $\lambda = 0.0$					More R's in E., W., & S. Central States $p < .05$ $\lambda = 0.0$
NUMBER OF DEPENDENTS	No Data Available			No Data Available			
AGE	R's <u>older</u> $p_2 < .04$ $w_2 = .003$	R's <u>younger</u> $p_2 < .000$ $w_2 = .005$	R's <u>older</u> $p_2 < .007$ $w_2 = .01$		R's <u>younger</u> $p_2 < .000$ $w_2 = .02$		
MONTHS IN ACTIVE SERVICE	R's in <u>longer</u> $p_2 < .001$ $w_2 = .03$		R's in <u>less</u> $p_2 < .000$ $w_2 = .099$	R's in <u>longer</u> $p_2 < .001$ $w_2 = .016$		No Data Available	No Data Available
AFQT	R's <u>higher</u> $p_2 < .03$ $w_2 = .003$		R's <u>higher</u> $p_2 < .000$ $w_2 = .019$	R's <u>higher</u> $p_2 < .000$ $w_2 = .049$			
MARITAL STATUS	No Data Available			More R's married $p < .002$ $\lambda = 0.0$			

NOTE: R = respondents who were interviewed.

R/T = respondents who refused to be interviewed or terminated during the interview.

Blank Cells = no statistically significant difference.

contacted and the men who were not contacted did exist. The practical effects, however, were so small that it is unlikely that the differing demographics would interfere with the ability to generalize, nor would they suggest psychological properties unique to the contacted sample that would inhibit generalization.

The cases where specific demographic variables differentiated between contacted or non-contacted groups within each sample are given in Table 5-1. Also in this table, the reader can see the pattern of significant demographic differences within samples. The reader should bear in mind that these differences are very slight. Some trends to note are:

- Education, Pay Grade and AFQT tended to be slightly higher among the contacted groups. Also, there were slightly more married men and fewer blacks in the contacted sample.
- Geographic Distribution, Months in Active Service and Number of Dependents did not seem to differentiate the contacted from non-contacted groups.
- The individual samples differed widely in the demographic variables that differentiated the contacted from the not contacted groups. Samples B, C and D3 contained more significantly different variables.

Responders vs. Refusers/Terminators

Considering all 58 comparisons for which data were available, over 52% were not statistically significant. Of the remaining 48%, less than 2% of the comparisons reached a level of statistical utility which would indicate that the variable might have a significant biasing effect. In Sample D1, there was a significant difference in number of Months in Active Service which accounted for close to 10% of the variance. In five other cases, the amount of variance accounted for was between 2% and 5%. None of the λ 's indicated that knowledge of a person's belonging to the Responders vs. the Refusers/Terminators groups would predict whether a respondent possessed a greater or lesser degree of any

demographic characteristics. In sum then, while 6 (10%) of the comparisons that were statistically significant were able to account for variance above 1%, except in one case the amount of variance accounted for was still low. As the remainder of the statistically significant comparisons had exceedingly low statistical utilities, it is safe to say that the differing demographics would not interfere with generalization, nor would they suggest any psychological properties unique to the respondent sample.

The cases where specific demographic variables significantly differentiated between Responders and Refusers/Terminators groups within each sample are given in Table 5-2. Also in this table the reader can see the pattern of significant demographic differences across samples. The reader must bear in mind that these differences are slight. Some trends to note are:

- In three of the samples (Samples B, D1, D2), the responders were better educated; in one sample (Sample D3), the responders were less educated; and in two samples (Samples D4, D5), education made no difference. There were fewer blacks in Samples B, C, D1, D4.
- In Samples B, D4 and D5, the respondents had higher pay grades. The effect of age is mixed; respondents were older in Samples B and D1 and younger in Samples C and D3. Similarly, Months in Active Service yields a mixed result. Respondents were in longer in Samples B and D2, and a shorter time in Sample D1. Respondents, however, had higher AFQT scores in Samples B, D1 and D2.
- The individual samples differed widely with respect to which demographics were statistically significant. Interestingly, Sample B, with the largest n, differs on every demographic for which data were available.

6.0 PROCEDURES TO DETECT UNRELIABLE RESPONDENTS

In telephone surveys of this type, it is possible that some respondents may not cooperate as fully as desired. If the lack of cooperation is extreme, the meaningfulness of the survey results will be enhanced by the identification and removal of these respondents from the sample. Two methods were used to identify such respondents: 1) examining the degree of response instability across the five life goal items that appear twice in each questionnaire, and 2) determining the extent of logical inconsistency present in the enlistment/extension of enlistment incentive questions.

6.1 Response Instability

For the response instability measure, five questions relating to the achievability of particular goals in the Guard/Reserve vs. another part-time job/activity ("work that is challenging", "recognition and status", "developing my potential", "working for a better society" and "learning as much as I can") were repeated in a later section of the questionnaire. To determine whether a respondent's answers were unstable across each pair of items, the difference between the two responses was calculated and squared, then these squared differences were summed across all five item pairs. Undetermined responses ("don't know" or refusals to respond) were handled in the following way: 1) if the response to either or both items in a pair was undetermined, the difference score for the pair was set to 0, 2) the summed squared differences score for respondents with undetermined responses for one or more item pairs was scaled up by multiplying it by a factor of 5 divided by the number of item pairs for which responses could be determined, and 3) the thirty respondents who had undetermined responses on at least one item in all five item pairs were dropped from the response instability analysis and were therefore left in the sample.

Respondents whose summed squared differences score exceeded 33 were eliminated from the sample. This criterion was determined from the mean score plus three standard deviations.

6.2 Logical Inconsistency

The procedure based on logical inconsistency utilized the four incentive questions (financial assistance for education, a cash bonus for enlistment/extension of enlistment, shorter length of enlistment required, and a pay increase). It was assumed that a rational person would respond to increasing payoff levels of the incentive with a monotonically increasing enlistment/extension of enlistment propensity. Any deviation from this monotonic increase (known as an "inversion" of the scale) can be considered as representing a logical inconsistency.

To form a measure of logical inconsistency, the number of inversions for a respondent was calculated by subtracting his enlistment/extension of enlistment propensity under one level of the incentive (e.g., 25% education financial assistance) from his propensity under the next higher level of that incentive (e.g., 50% education financial assistance). For these calculations, the respondent's propensity under the next higher level of the incentive was substituted for undetermined responses. If the respondent's propensity decreased, an inversion of the monotonically increasing scale had occurred; if his propensity remained the same or increased, no inversion had taken place.

The respondent's total inversion score was obtained by counting the number of inversions occurring over the 14 pairs of incentive items. Because Samples C and D, the National Guard and Reserve samples, did not receive the length of enlistment incentive question (i.e., they received only 11 of the possible 14 incentive pairs), their total inversion scores were scaled up by a factor of 1.2727 to make their scores comparable to the Non-Prior Service and Veterans samples. The ineligibility criterion for the total inversion score was 3 or greater, representing the mean score plus three standard deviations.

6.3 Description of Unreliable Respondents

A total of 217 respondents was eliminated from the sample using both the response instability and logical consistency criteria. The distribution of unreliable respondents was as follows:

- . 99 respondents or 4.94% of the Non-Prior Service sample
- . 21 respondents or 2.10% of the Veterans sample
- . 54 respondents or 2.71% of the Army National Guard sample
- . 43 respondents or 2.18% of the Other Reserve Components sample

Only five respondents (four Non-Prior Service and one Army National Guard) were excluded by both criteria. The remaining 212 respondents failed only one of the two unreliability measures. Thus there would appear to be two types of uncooperative responders and a different type of procedure is required to detect each type.

7.0 COMPLETION RATES

As a result of rigorous callback procedures and diligent work on the part of the field staff in locating desired respondents and in maintaining respondent cooperation during the interview, completion rates for the study were quite high, ranging from 77.2 percent for the Non-Prior Service sample (the random digit dialing) to 56.3 percent for the Air National Guard.

7.1 Overall Results

The following completion rates for each of the samples used in this study were achieved:

Non-Prior Service	77.2%
Army National Guard	72.3
Veterans	71.3
Other Reserve Components	<u>62.2</u>
Marine Corps Reserve	70.5
Army Reserve	63.1
Navy Reserve	62.4
Air Force Reserve	59.7
Air National Guard	56.3

7.2 Calculation of Completion Rates

These rates were derived by using the following formula:

$$CR = \frac{U}{U + V + W + Y - \left(\frac{Z}{U + V + Z} \times W \right) - \left(\frac{Z}{U + V + Z} \times Y \right)}$$

U = number of completed interviews
V = refusal by qualified respondents
W = no answer, busy, not at home
Y = refusal before determination
Z = not eligible, no qualified respondent in household

This formula uses the number of completed interviews as the numerator of the fraction. The denominator is the sum of 1) completed interviews, 2) refusals by eligible respondents, 3) no answers, busies, not at homes, and 4) refusals before determination of eligibility, less the portion of 3) and 4) that were estimated to be ineligible for inclusion in the study.

The estimator for determining the number of ineligible respondents among the no answers, busies, not at homes and pre-eligibility determination refusals is obtained by dividing the number of ineligible respondents by the sum of the respondents whose eligibility is known -- completed interviews, refusals by qualified respondents and the ineligible respondents. This, then, is the fraction of ineligible respondents that would be expected in the group of people whose eligibility remained undetermined at the completion of the field work. The appropriate portion of these non-reached groups was subtracted from the denominator in the completion rate formula.

This is a conservative formula for computing completion rate because a large portion of the numbers to which the above estimator was applied were no answers after repeated calls. In fact, many of these are non-working or disconnected numbers which did not have an automatic recording attached to them advising the caller of the status of that number. In addition, some of these no answers were doubtless business phones which were not answered during the evening hours and weekends when the interviewing was done.

7.3 Effect of Ineligible Respondents

An analysis of the individual completion rates shows that the excellent completion rate for the Non-Prior Service sample was achieved because of the large number of households with no eligible respondent compared with the number

of no answers, busies, not at homes and refusals before determination of respondent eligibility. Of the 42,379 numbers attempted, 21,150 had no eligible respondent in the household -- 49.9 percent of all numbers attempted and 70.6 percent of the 29,947 numbers called that were not disconnected or non-working numbers.

Among the Veterans and the National Guard and Reserve Component samples, the portion of non-eligible respondents was, as would be expected, much lower with resultant lower completion rates.

A detailed analysis of the final results of the calls attempted is presented in Tables 7-1 and 7-2.

7.4 Effect of Rigorous Callback Procedures

This study was designed to have rigorous callback procedures, detailed in another section, which maximized the likelihood of contacting the desired respondent. This procedure was followed on all interviews completed before June 16, 1977. At that time, with the approval of DoD, the callback procedure was relaxed in order to complete the study by the date required by DoD. This relaxation did not reduce the number of callbacks, but allowed for callbacks to be made within a shorter time period and without the weekday/weekend time constraint.

Computation of the completion rates for only those interviews completed before the relaxation of the original callback procedures shows in every case that a higher completion rate can be obtained when a strict callback procedure is adhered to. Following are the completion rates achieved when the rigorous system was in effect:

Veterans	89.6%
Army National Guard	88.9
Non-Prior Service males	87.1
Other Reserve Components	<u>76.3</u>

TABLE 7-1. DETAILED ANALYSIS OF ATTEMPTED CALLS FOR NON-PRIOR SERVICE, VETERANS AND ARMY NATIONAL GUARD SAMPLES

FINAL RESULT OF ATTEMPTED CALLS	Non-Prior Service	Veterans	Army National Guard
Total number of phone numbers tried	42,379	4,647	5,484
Unusable numbers	12,432	2,581	1,470
Non-working number	4,486	64	321
Disconnected number	4,800	80	365
Business	3,024	9	67
No listing/non-published	87*	1,777	11
Respondent not at number given	--	649	701
Undetermined	35	2	5
Refused-don't know if respondents eligible by:	1,459	104	126
Respondent	498	69	78
Wife	35	7	14
Aunt	0	1	0
Mother	117	6	9
Sister	1	1	0
Mother-in-law	0	0	0
Woman (unidentified)	247	6	12
Father	32	3	3
Brother	1	0	0
Man (unidentified)	53	0	2
Undetermined	475	11	8
Refused - respondent eligible, by:	24	6	8
Respondent	24	6	8
No answer, busy, not at home	5,022	464	966
No answer	4,529	290	664
Busy	404	31	38
Respondent not at home	89	143	264
Respondent away for survey period	7	8	5
Respondent ill	21	1	1
Respondent deceased	-	9	0
Respondent works 7 days/never home	3	0	0
Language barrier	116	0	3

(Cont'd)

TABLE 7-1. CONT'D

FINAL RESULT OF ATTEMPTED CALLS	Non- Prior Service	Veterans	Army National Guard
Respondent not eligible	757	433	892
Not current member	-	-	516
Not first term of enlistment	-	-	134
Not in paid drill status	-	-	19
Not in 4th, 5th, 6th year	-	-	223
Never in service	-	84	-
Currently in military	-	88	-
Currently in paid drill status/Reserves	-	80	-
In military less than 2 years	-	109	-
In military longer than 6 years	-	72	-
Not citizen, not eligible for service	6	-	-
In military, Reserves/Guard in past	451	-	-
College graduate	300	-	-
Household not eligible (no men 17½-26)	20,393	-	-
Incompleted interview	143	40	24
Completed interview	2,002	1,001	1,989

* Number listed changed to unpublished, unlisted number.

TABLE 7-2. DETAILED ANALYSIS OF ATTEMPTED CALLS FOR OTHER RESERVE COMPONENTS SAMPLE

FINAL RESULT OF ATTEMPTED CALLS	Army Reserve	Navy Reserve	Marine Reserve	Air Force Reserve	Air National Guard	Total
Total number of phone numbers tried	1,189	1,347	1,499	1,464	1,305	6,804
Unusable numbers	248	339	565	374	300	1,832
Non-working number	42	67	79	58	49	295
Disconnected number	70	71	139	100	68	448
Business	15	15	18	9	9	66
No listing/non-published	1	8	4	4	13	30
Respondent not at number given	120	178	325	203	167	993
Refused - don't know if respondent eligible by:	34	25	49	50	45	203
Respondent	17	16	21	32	36	122
Wife	6	0	8	5	1	20
Mother	1	4	4	4	2	15
Mother-in-law	0	0	0	1	0	1
Grandmother	1	0	0	0	0	1
Woman (unidentified)	3	2	5	3	3	16
Father	3	1	0	3	0	7
Brother	0	0	1	1	0	2
Man (unidentified)	0	1	2	1	0	4
Undetermined	3	1	8	0	3	15
Refused - respondent eligible, by:	3	3	2	8	5	21
Respondent	3	3	2	8	4	20
Mother	0	0	0	0	1	1
No answer, busy, not at home	303	342	217	369	377	1,608
Busy	30	34	13	36	27	140
Respondent not at home	52	75	48	58	80	313
No answer	221	233	156	275	270	1,155
Respondent away for survey period	1	2	5	2	3	13
Respondent ill	1	0	1	1	1	4
Respondent deceased	1	1	0	0	0	2
Language barrier	1	0	6	1	1	9
Respondent not eligible	183	220	259	253	157	1,072
Not current member	81	97	143	86	72	480
Not first term of enlistment	45	21	34	68	20	188
Not in paid drill status	4	25	12	13	9	63
Not in 4th, 5th, 6th year	52	77	70	86	56	341
Incompleted interview	14	17	11	13	13	68
Completed interview	400	398	384	393	397	1,972

Navy Reserve	78.8
Army Reserve	78.4
Air National Guard	76.2
Marine Corps Reserve	75.1
Air Force Reserve	73.0

Using the rigorous callback procedure clearly had a marked effect on completion rate. As can be seen in the table below, in most cases completion rate increased almost 15 percentage points over that achieved for the total sample.

	<u>Percentage Point Difference</u>	<u>With Rigorous Control</u>	<u>Total Sample</u>
Veterans	+18.3	89.6%	71.3%
Army National Guard	+16.6	88.9	72.3
Non-Prior Service males	+9.9	87.1	77.2
Other Reserve Components	+14.1	<u>76.3</u>	<u>62.2</u>
Navy Reserve	+16.4	78.8	62.4
Army Reserve	+15.3	78.4	63.1
Air National Guard	+19.9	76.2	56.3
Marine Corps Reserve	+4.6	75.1	70.5
Air Force Reserve	+13.3	73.0	59.7

The principal effect that the rigorous callback procedure had on the disposition of the sample numbers was to reduce the percentage of numbers attempted that resulted in no answers, busies, or not at homes. The resultant difference is dramatic.

	<u>Percent of total calls resulting in no answers, busies, not at homes</u>	
	<u>With Rigorous Procedure</u>	<u>Total Sample</u>
Veterans	1.8%	10.0%
Non-Prior Service males	4.5	11.9
Army National Guard	5.0	17.6
Other Reserve Components	12.2	23.6

A detailed analysis of completion rates prior to relaxation of callback procedures is shown in Tables 7-3 and 7-4.

If future studies are undertaken, the more rigorous callback procedure should be used throughout the entire interviewing period. This would, of course, extend the time required to complete the field work and should be taken into account in planning the time schedule for the study.

TABLE 7-3. COMPLETION RATES OF NON-PRIOR SERVICE, VETERANS AND ARMY NATIONAL GUARD SAMPLES BEFORE RELAXATION OF CALLBACK PROCEDURES

FINAL RESULT OF ATTEMPTED CALLS	Non- Prior Service	Veterans	Army National Guard
Total number of phone numbers tried	22,414	3,582	3,719
Non-working, disconnect, no listing, etc.	6,962	2,358	1,058
Refused, don't know if respondent eligible	851	53	98
By someone else	530	18	39
By respondent	321	35	59
No answer, busy, not at home	1,017	65	185
Respondent deceased, ill, away, LB	84	8	1
Respondent eligible but refused	8	4	7
By respondent	8	4	7
By someone else	0	0	0
Not eligible, no eligible respondent	12,331	342	811
Incompleted interview	89	31	20
Completed interview	1,072	721	1,539
Completion rate	87.1%	89.6%	88.9%

TABLE 7-4. COMPLETION RATES OF OTHER RESERVE COMPONENTS SAMPLE BEFORE RELAXATION OF CALLBACK PROCEDURES

FINAL RESULT OF ATTEMPTED CALLS	Army Reserve	Navy Reserve	Marine Corps Reserve	Air Force Reserve	Air National Guard	Total
Total number of phone numbers tried	857	921	992	977	845	4,592
Non-working, disconnect, no listing, etc.	190	234	377	253	219	1,273
Refused -- don't know if respondent eligible	33	24	38	43	43	181
By someone else	16	9	17	15	7	64
By respondent	17	15	21	28	36	117
No answer, busy, not at home	104	114	109	135	96	558
Respondent deceased, ill, away, LB	3	2	5	3	3	16
Respondent eligible but refused	3	3	2	8	5	21
By respondent	3	3	2	8	4	20
By someone else	0	0	0	0	1	1
Not eligible	153	187	161	202	121	824
Incompleted interview	11	11	10	11	12	55
Completed interview	360	346	290	322	346	1,664
Completion rate	78.4%	78.8%	75.1%	73.0%	76.2%	76.3%

8.0 QUALITY OF LIST EVALUATION

This section reports on the quality of the lists supplied to Associates by the various National Guard and Reserve components and DMDC.

Among the National Guard and Reserve components, the portion of men who could not be reached by telephone or who did not meet the eligibility requirements of the study ranged from 55 percent for the Marine Corps Reserve to 35 percent for the Air National Guard. Most of these were unusable numbers -- disconnected, non-working, changed to an unpublished number or the man was not at the number supplied and no number could be obtained for him. The remaining portion of the lists that was unusable was men who were not eligible to be interviewed in the study.

	<u>Percent of list that was unusable</u>		
	<u>Total</u>	<u>Non-working, disconnects, not at that number, etc.</u>	<u>Not Eligible</u>
Marine Corps Reserve	55.0%	37.7%	17.3%
Army National Guard	43.1	26.8	16.3
Air Force Reserve	42.8	25.5	17.3
Navy Reserve	41.5	25.2	16.3
Army Reserve	36.3	20.9	15.4
Air National Guard	35.4	23.4	12.0

More than a third of the numbers supplied by the Marine Corps Reserve were bad numbers; about one-quarter of those supplied by the Army National Guard, the Air Force Reserve and the Navy Reserve proved to be bad numbers.

Tables 8-1 and 8-2 detail the percentages of unusable numbers and the reasons the numbers were unusable for the Veterans and National Guard and Reserve samples.

TABLE 8-1. QUALITY OF LIST ANALYSIS -- VETERANS AND ARMY NATIONAL GUARD SAMPLES

REASON	Veterans		Army National Guard	
	Number	Percent	Number	Percent
Total numbers attempted	4,647	100.0	5,484	100.0
Non-working, disconnected, no listing, etc.	2,581	55.5	1,470	26.8
Not eligible	433	9.3	892	16.3
Never in service	84	1.8	-	-
Currently in military	88	1.9	-	-
Currently in paid drill/Reserves	80	1.7	-	-
In military less than 2 years	109	2.4	-	-
In military longer than 6 years	72	1.5	-	-
Not current member	-	-	516	9.5
Not first term of enlistment	-	-	134	2.4
Not in paid drill status	-	-	19	0.3
Not in 4th, 5th, 6th year	-	-	223	4.1
Total unusable numbers *	3,014	64.8	2,362	43.1

* Excludes numbers which were repeated no answers and which, in fact, could be non-working or disconnected numbers.

TABLE 8-2. QUALITY OF LIST ANALYSIS -- OTHER RESERVE COMPONENT'S SAMPLE.

REASON	Army Reserve		Navy Reserve		Marine Corps Reserve		Air Force Reserve		Air National Guard		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Total numbers attempted	1,189	100.0	1,347	100.0	1,499	100.0	1,464	100.0	1,305	100.0	6,804	100.0
Non-working, disconnected, no listing, etc.	248	20.9	339	25.2	565	37.7	374	23.5	306	23.4	1,832	26.9
Not eligible	183	15.4	220	16.3	259	17.3	253	17.3	157	12.0	1,072	15.8
Not current member	82	6.9	97	7.1	143	9.5	86	5.9	72	5.5	480	7.1
Not first term of enlistment	45	3.8	21	1.6	34	2.3	68	4.6	80	1.5	188	2.8
Not in paid drill status	4	0.3	25	1.9	12	0.8	13	0.9	9	0.7	63	0.9
Not in 4th, 5th, 6th year	52	4.4	77	5.7	70	4.7	86	5.9	56	4.3	341	5.0
Total unusable numbers *	431	36.3	559	41.5	824	55.0	627	42.8	463	35.4	2,904	42.7

* Excludes numbers which were repeated no answers and which, in fact, could be non-working or disconnected numbers.

9.0 PROPENSITY TO ENLIST/EXTEND ENLISTMENT

9.1 Propensity of Accession of Potential Enlistees

9.1.1 Propensity to Enlist of Non-Prior Service Sample

An analysis of variance (ANOVA) was performed to determine if the NPS sample showed a preference for any specific component of the Reserve/Guard. The results are shown in Table 9-1 below.

TABLE 9-1. REPEATED MEASURES ANALYSIS FOR DIFFERENCES IN PROPENSITY TO ENLIST IN EACH COMPONENT FOR THE NON-PRIOR SERVICE SAMPLE

<u>SOURCE</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between (people)	1883	3.30		
Within (propensity scores)	6	6.93	20.73	< .01
Error	11298	.33		

A Scheffe post hoc analysis was performed on the mean propensity scores for each component to determine where the statistically significant differences existed. The significant differences ($p < .01$) are presented in the matrix below. N.S. indicates any difference with a probability of occurring more than one time in a hundred.

	AFR	ANG	ARNG	NR	CGR	AR	MCR
AFR	X						
ANG	n.s.	X					
ARNG	n.s.	n.s.	X				
NR	n.s.	n.s.	n.s.	X			
CGR	<.01	n.s.	n.s.	n.s.	X		
AR	<.01	n.s.	n.s.	n.s.	n.s.	X	
MCR	<.01	.01	<.01	.01	.01	n.s.	X

9.1.2 Propensity to Enlist of the Veterans Sample

The ANOVA performed on the propensity scores for the Veterans sample is presented in Table 9-2.

TABLE 9-2. REPEATED MEASURES ANALYSIS FOR DIFFERENCES IN PROPENSITY TO ENLIST IN EACH COMPONENT FOR THE VETERANS SAMPLE

<u>SOURCE</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between (people)	974	1.76		
Within (propensity scores)	6	5.08	20.34	<.01
Error	5844	.25		

A Scheffe post hoc analysis was used to determine where there were statistically significant differences between the means. The significant differences ($p < .01$) are presented in the matrix below.

	AFR	ANG	ARNG	NR	CGR	AR	MCR
AFR	X						
ANG	n.s.	X					
ARNG	n.s.	n.s.	X				
NR	n.s.	n.s.	n.s.	X			
CGR	<.01	n.s.	n.s.	n.s.	X		
AR	n.s.	n.s.	n.s.	n.s.	n.s.	X	
MCP	<.01	<.01	<.01	<.01	n.s.	<.01	X

Table 9-3 indicates the propensity for each component according to the branch in which the Veteran served. As was stated in Volume I, there is a clear indication that the Veterans sample would prefer to remain in their own branch of service if they were to enter the Guard or Reserve.

TABLE 9-3. ENLISTMENT PROPENSITY FOR EACH SERVICE BRANCH AS A FUNCTION OF PRIOR SERVICE BRANCH FOR VETERANS SAMPLE

ENLISTMENT BRANCH	Prior Service Branch					
	Air Force			Army		
	Percent Favorable	Mean ¹⁾	n	Percent Favorable	Mean ¹⁾	n
Army National Guard	4.0	4.69	225	10.4	4.54	450
Air National Guard	13.8	4.42	225	6.2	4.64	449
Army Reserve	2.7	4.69	225	14.3	4.45	449
Air Force Reserve	16.4	4.32	225	5.3	4.65	451
Coast Guard Reserve	4.4	4.72	225	4.2	4.70	451
Marine Corps Reserve	.4	4.82	225	2.0	4.82	451
Navy Reserve	1.3	4.75	225	3.8	4.74	450

ENLISTMENT BRANCH	Prior Service Branch					
	Marine Corps			Navy		
	Percent Favorable	Mean ¹⁾	n	Percent Favorable	Mean ¹⁾	n
Army National Guard	8.4	4.58	95	6.2	4.66	209
Air National Guard	10.5	4.54	95	7.2	4.64	209
Army Reserve	4.2	4.71	95	2.9	4.72	209
Air Force Reserve	9.6	4.57	94	5.3	4.65	209
Coast Guard Reserve	5.3	4.65	95	8.6	4.61	209
Marine Corps Reserve	22.1	4.23	95	0	4.87	209
Navy Reserve	4.2	4.70	95	20.1	4.31	209

Note: Respondents with undetermined responses are not included.

- 1) 1 = Definitely enlist
- 2 = Probably enlist
- 3 = Might enlist
- 4 = Probably not enlist
- 5 = Definitely not enlist

9.2 Propensity to Extend Enlistment of Current Reservists -- Propensity to Extend Enlistment of Other Reserve Components Sample

An ANOVA was performed on the intention to extend enlistment for each of the components of the ORC sample. The resulting F score was not statistically significant at the .01 level.

9.3 Comparison of Samples on Propensity to Enlist/Extend Enlistment

An ANOVA was performed on the propensity to enlist/extend enlistment for the four samples. The results are presented in Table 9-4.

TABLE 9-4. ANOVA OF PROPENSITY TO ENLIST/EXTEND ENLISTMENT AMONG THE FOUR SAMPLES

<u>SOURCE</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between samples	3	99.49	61.29	< .01
Error	6722	1.62		

To determine which samples were significantly different from each other, a Scheffe post hoc analysis was performed. The significant differences ($p < .01$) are presented in the matrix below.

	NPS	VETS	ARNG	ORC
NPS	X			
VETS	< .01			
ARNG	< .01	< .01		
ORC	. .01	< .01	n.s.	X

A t-test was performed on the propensity to enlist in the Guard vs. the Reserve for both the NPS and the Veterans samples. The results of the test are presented in Table 9-5. The results were statistically significant. However, the amount of variance accounted for by the Reserve/Guard variable was extremely small.

TABLE 9-5. t-TEST OF THE DIFFERENCE BETWEEN THE MEAN PROPENSITY TO ENLIST IN THE GUARD AND THE MEAN PROPENSITY TO ENLIST IN THE RESERVE FOR THE NON-PRIOR SERVICE AND VETERANS SAMPLES

	Mean Propensity <u>Guard</u>	Mean Propensity <u>Reserve</u>	<u>"t"</u>	<u>df</u>	<u>p</u>	<u>ω</u> ²
NPS Sample	4.25	4.30	-4.22	1833	.01	.004
Veterans Sample	4.60	4.65	-4.26	974	.01	.010

Intensity scores (defined as the product of the extension propensity and length of extension.) were calculated for both the ARNG and ORC samples. The results are presented in Table 9-6.

10.0 THE EFFECT OF VARIOUS BENEFITS ON PROPENSITY TO ENLIST/EXTEND ENLISTMENT

10.1 Preliminary Checks on Extraneous Factors Influencing Reactions to the Benefits

To determine if the order (ascending or descending) in which the respondent received a benefit was important, an analysis of covariance (COANOV) was performed. The covariate was the initial propensity score.

The analysis of the effect of order for the education benefit for all four samples is presented in Table 10-1. Table 10-1 indicates that all main effects and interactions were significant. Thus, for the education benefit, there was an effect due to the order in which the benefit was presented to the respondent.

The results of the COANOV for the bonus benefit are presented in Table 10-2. The COANOV shows that the main effect due to presentation order is significant for all four samples. However, for the Veterans and ORC samples, the interaction between presentation order and propensity is not significant.

Table 10-3 shows the results of the COANOV for the pay benefit. The COANOV shows the main effect of presentation order was significant for only the APNS and ORC samples. However, for the NPS and Veterans samples, there is a significant interaction between presentation order and propensity.

The COANOV for the length of initial enlistment benefit is presented in Table 10-4. The analysis indicates that presentation order was not a significant factor.

TABLE 10-1. ANALYSIS OF COVARIANCE OF PRESENTATION ORDER AND PROPENSITY TO ENLIST/EXTEND AT EACH LEVEL OF THE EDUCATION BENEFIT (COVARYING OUT INITIAL PROPENSITY TO ENLIST/EXTEND) FOR THE NON-PRIOR SERVICE, VETERANS, ARMY NATIONAL GUARD, AND OTHER RESERVE COMPONENTS SAMPLES

	NPS			Veterans		
	<u>df</u>	<u>MS</u>	<u>F</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between						
Presentation order (0)	1	354.54	106.79*	1	27.96	38.87*
Covariate: initial propensity	1	2637.07	794.30*	1	1439.45	1593.50*
Error	1901	3.32		977	3.35	
Within						
Propensity with education						
benefit (A)	3	464.52	1280.67*	3	199.02	1061.80*
A x 0	3	4.12	11.36*	3	1.88	12.23*
Error	5706	.36		2934	.43	

	ARNG			ORC		
	<u>df</u>	<u>MS</u>	<u>F</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between						
Presentation order (0)	1	234.77	67.03*	1	145.98	38.87*
Covariate: initial propensity	1	5928.07	1692.57*	1	5984.71	1593.50*
Error	1932	3.50		1926	3.76	
Within						
Propensity with education						
benefit (A)	3	430.53	1064.20*	3	411.77	1061.80*
A x 0	3	3.34	8.26*	3	4.74	12.83*
Error	5799	.40		5781	.39	

* $p < .01$.

TABLE 10-2. ANALYSIS OF COVARIANCE OF PRESENTATION ORDER AND PROPENSITY TO ENLIST/EXTEND AT EACH LEVEL OF THE BONUS BENEFIT (COVARYING OUT INITIAL PROPENSITY TO ENLIST/EXTEND) FOR THE NON-PRIOR SERVICE, VETERANS, ARMY NATIONAL GUARD, AND OTHER RESERVE COMPONENTS SAMPLES

	NPS			Veterans		
	<u>df</u>	<u>MS</u>	<u>F</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between						
Presentation order (O)	1	346.26	114.20*	1	53.62	21.93*
Covariate: initial propensity	1	1857.82	612.70*	1	969.48	396.52*
Error	1901	3.03		977	2.44	
Within						
Propensity with bonus						
benefit (E)	3	236.06	782.67*	3	94.15	337.96*
B x O	3	3.77	12.50*	3	.01	.05
Error	5719	.30		2934	.28	
	ARNG			ORC		
	<u>df</u>	<u>MS</u>	<u>F</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between						
Presentation order (O)	1	231.97	70.92*	1	198.04	67.88*
Covariate: initial propensity	1	6248.11	1910.21*	1	7287.55	2497.86*
Error	1932	3.27		1926	2.92	
Within						
Propensity with bonus						
benefit (B)	3	410.51	1015.52*	3	364.61	980.41*
B x O	3	3.87	9.57*	3	.93	2.37
Error	5799	.40		5781	.39	

* $p < .01$.

TABLE 10-3. ANALYSIS OF COVARIANCE OF PRESENTATION ORDER AND PROPENSITY TO ENLIST/EXTEND AT EACH LEVEL OF THE PAY BENEFIT (COVARYING OUT INITIAL PROPENSITY TO ENLIST/EXTEND) FOR THE NON-PRIOR SERVICE, VETERANS, ARMY NATIONAL GUARD, AND OTHER RESERVE COMPONENTS SAMPLES

	NPS			Veterans		
	<u>df</u>	<u>MS</u>	<u>F</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between						
Presentation order (O)	1	11.92	4.87	1	1.94	1.02
Covariate: initial propensity	1	1701.17	695.69*	1	842.76	443.61*
Error	1901	2.45		977	1.90	
Within						
Propensity with pay						
benefit (P)	2	68.80	383.89*	2	26.40	152.93*
P x O	2	3.14	17.54*	2	2.50	14.47*
Error	3804	.18		1956	.17	
	ARNG			ORC		
	<u>df</u>	<u>MS</u>	<u>F</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between						
Presentation order (O)	1	78.47	45.99*	1	100.93	60.71*
Covariate: initial propensity	1	6601.62	3868.75*	1	6852.63	4122.30*
Error	1932	1.71		1926	1.66	
Within						
Propensity with pay						
benefit (P)	2	322.27	967.08*	2	326.85	990.84*
P x O	2	.15	.45	2	.13	.38
Error	3866	.33		3854	.33	

* p < .01

TABLE 10-4. ANALYSIS OF COVARIANCE OF PRESENTATION ORDER AND PROPENSITY TO ENLIST/EXTEND AT EACH LEVEL OF THE LENGTH OF ENLISTMENT (COVARYING OUT INITIAL PROPENSITY TO ENLIST/EXTEND) FOR THE NON-PRIOR SERVICE AND VETERANS SAMPLES

	NPS			Veteran		
	<u>df</u>	<u>MS</u>	<u>F</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between						
Presentation order (0)	1	2.50	.98	1	.09	.05
Covariate: initial propensity	1	1871.95	733.69*	1	704.55	395.99*
Error	1901	2.55		977	1.78	
Within						
Propensity with length of enlistment (L)	2	288.76	851.95*	2	99.05	323.15*
L x O	2	.24	.78	2	.74	2.40
Error	3804	.34		1956	.31	

10.2 The Effect of the Current Level of Benefits in Some States

A t test was performed on the initial propensity to enlist/extend for those respondents who came from states where the National Guard offered educational benefits vs. those respondents who came from states where the National Guard did not offer educational benefits. Tests were performed on the data for the Non-Prior Service, Veterans, and Army National Guard samples. The results for all three samples were not significant.

* $p < .01$

10.3 Reactions to Possible Benefits by Potential Enlistees

10.3.1 Effects of Possible Benefits on Enlistment Propensity of Non-Prior Service Sample

Education Benefit

A repeated measures ANOVA was used to examine the effect of the levels of the education benefit on propensity for the NPS sample. The results are shown in Table 10-5.

TABLE 10-5. REPEATED MEASURES ANALYSIS OF VARIANCE OF PROPENSITY TO ENLIST ACROSS ALL LEVELS OF THE EDUCATION BENEFIT FOR THE NON-PRIOR SERVICE SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between people	1884	4.86		
Within				
Benefit levels	4	674.00	1435.10	<.01
Error	7552	.47		

A Scheffe post hoc analysis was performed to indicate which levels were significantly different from one another. The tests were performed only on the differences between each successive level of the benefit.

The significant results ($p < .01$) were as follows:

- 1) Current level vs. 25% education benefit
- 2) 25% education benefit vs. 50% education benefit
- 3) 50% education benefit vs. 75% education benefit
- 4) 75% education benefit vs. 100% education benefit

In Volume I it was reported that a 48% education benefit would result in 50% of the NPS sample having a positive propensity. The following formula was used to calculate this result:

Step 1. Find the amount of benefit needed to increase the percent favorable by 1% between the two benefit levels that result in less than 50% of the respondents favorable and 50% or more of the respondents favorable. In this case, the 50% benefit level resulted in 51.4% of the respondents with a positive propensity and the 25% benefit level resulted in 33.5% of the respondents with a favorable propensity. Thus,

$$\frac{50\% \text{ level} - 25\% \text{ level}}{51.4\% \text{ favorable} - 33.5\% \text{ favorable}} = 1.40\% \text{ in benefit needed to increase favorability by } 1\%$$

Step 2. Find the percentage needed to raise percent favorable to 50%.

$$50\% - 33.5\% = 16.5\%$$

Step 3. Multiply the results of Step 1 and Step 2.

$$1.40 \times 16.5 = 23.1\%$$

Step 4. Add the result of Step 3 to the benefit level prior to 50% of the respondents being favorable.

$$23.1\% + 25\% = 48.1\%$$

Table 10-6 provides the breakdown of those respondents from the NPS sample with a positive propensity at the 100% benefit level according to the probability of using the benefit.

TABLE 10-6 LIKELIHOOD OF USING THE EDUCATION BENEFIT IF 100% OF COST OF EDUCATION ASSISTANCE WERE OFFERED FOR THE NON-PRIOR SERVICE SAMPLE

<u>LIKELIHOOD OF USE OF EDUCATION BENEFIT AT 100% LEVEL</u>	<u>PERCENT OF SAMPLE WHO HAD A POSITIVE PROPENSITY AT 100% BENEFIT LEVEL</u>	<u>PERCENT OF TOTAL SAMPLE</u>
N	1,385	1,902
Definitely use	62.4	45.4
Probably use	26.7	19.4
Might use	8.7	6.4
Probably not use	1.9	1.4
Definitely not use	.2	.2
Have negative propensity	--	27.2

Bonus Benefit

Table 10-7 reports the repeated ANOVA used to test the propensity reactions to each level of the bonus benefit for the NPS sample.

TABLE 10-7. REPEATED MEASURES ANALYSIS OF VARIANCE OF PROPENSITY TO ENLIST AT EACH LEVEL OF THE BONUS BENEFIT FOR THE NON-PRIOR SERVICE SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between people	1892	4.51		
Within				
Benefit levels	4	232.82	624.58	<.01
Error	7568	.37		

The Scheffe post hoc analysis was used to determine which benefit levels were significantly different ($p < .01$) from one another. The significant

differences were as follows:

- 1) \$250 vs. \$500
- 2) \$500 vs. \$1,100
- 3) \$1,100 vs. \$2,200

It was estimated that a bonus of \$1,836 was required for 50% of the NPS sample to have a favorable propensity. This value was determined as follows:

$$\text{Step 1. } \frac{\$2,200 - \$1,100}{53.9\% - 42.1\%} = \$93.22$$

$$\text{Step 2. } 50\% - 42.1\% = 7.9\%$$

$$\text{Step 3. } 93.22 \times 7.9 = \$736.44$$

$$\text{Step 4. } \$1,100 + \$736.44 = \$1,836.44$$

Pay Benefit

The repeated measures ANOVA used to examine the propensity to enlist at each of the levels of the pay benefit is reported in Table 10-8.

TABLE 10-8. REPEATED MEASURES ANALYSIS OF VARIANCE OF PROPENSITY TO ENLIST AT EACH LEVEL OF THE PAY BENEFIT FOR THE NON-PRIOR SERVICE SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between people	1895	4.01		
Within				
Benefit levels	3	88.01	427.72	< .01
Error	5685	.21		

The significant results ($p < .01$) of the Scheffe post hoc analysis of the differences between each benefit level are as follows:

- 1) Current level vs. 10% pay increase
- 2) 10% pay increase vs. 20% pay increase
- 3) 20% pay increase vs. 50% pay increase

The following computation was performed to determine that a 67% pay increase was required in order to have 50% of the NPS sample express a favorable propensity:

$$\text{Step 1. } \frac{50\% - 20\%^{1)}}{43.8 - 32.7} = 2.70\%$$

$$\text{Step 2. } 50\% - 43.8\% = 6.2\%$$

$$\text{Step 3. } 6.2 \times 2.70 = 16.74\%$$

$$\text{Step 4. } 50\% + 16.74\% = 66.74\%$$

Length of Initial Enlistment

The repeated measures ANOVA of the propensity to enlist at each level of length of initial enlistment is reported in Table 10-9.

TABLE 10-9. REPEATED MEASURES ANALYSIS OF VARIANCE OF PROPENSITY TO ENLIST AT EACH LEVEL OF LENGTH OF INITIAL ENLISTMENT FOR THE NON-PRIOR SERVICE SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between people	1897	3.75		
Within				
Benefit levels	3	417.74	1099.98	<.01
Error	5691	.38		

1) Because 50% favorability was never obtained, the change in benefit per 1% favorability increase was determined using the highest two benefit levels.

The Scheffe post hoc analysis was used to determine whether there were statistically significant differences between successive levels of length of enlistment. The significant differences ($p < .01$) were as follows:

- 1) Current level vs. 4 year enlistment
- 2) 4 year enlistment vs. 2 year enlistment
- 3) 2 year enlistment vs. 1 year enlistment

The determination that 50% of the NPS sample would have a favorable propensity if the initial enlistment were one- and two-thirds years was obtained as follows:

$$\text{Step 1. } \frac{1 \text{ year} - 2 \text{ years}}{55.7\% - 47.3\%} = -.12$$

$$\text{Step 2. } 50\% - 47.3\% = 2.7\%$$

$$\text{Step 3. } -.12 \times 2.7 = -.32$$

$$\text{Step 4. } 2 + (-.32) = 1.68$$

Beliefs about Existence of Benefits

An ANOVA was performed to test the effect of beliefs about the existence of each benefit on initial propensity for the NPS sample. The only belief which significantly affected propensity concerned the length of initial enlistment. This ANOVA is presented in Table 10-10.

TABLE 10-10. EFFECT OF BELIEF ABOUT THE LENGTH OF INITIAL ENLISTMENT ON INITIAL PROPENSITY FOR THE NON-PRIOR SERVICE SAMPLE

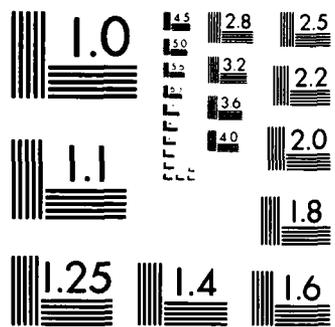
	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between				
Belief about length of enlistment	2	8.24	6.29	< .01
Error	1894	1.31		

In order to determine if the belief about the existence of a benefit affected propensity to enlist, a Scheffe post hoc analysis with contrast weighting was performed. The mean propensity score for those who underestimated the length of enlistment was higher than those who overestimated the length of enlistment combined with those who said they didn't know. The mean propensity scores at each level of each benefit are presented in Table 10-11.

TABLE 10-11. BELIEFS ABOUT EACH OF THE POSSIBLE BENEFITS BY THE NON-PRIOR SERVICE SAMPLE

	<u>N</u>	<u>Mean Propensity</u> 1)
<u>Educational Assistance</u>		
Yes, there is educational assistance	1238	3.84
Don't know	488	3.72
No, there is no educational assistance	171	3.71
<u>Cash Bonus</u>		
Yes, there is a cash bonus	385	3.75
Don't know	932	3.78
No, there is no cash bonus	603	3.85
<u>Pay Increase</u>		
Overestimated	486	3.73
Don't know	1258	3.82
Underestimated	153	3.88
<u>Length of Enlistment</u>		
Correct or overestimated	292	3.92
Don't know	471	3.91
Underestimated	1134	3.72

- 1) 1 = Definitely enlist
2 = Probably enlist
3 = Might enlist
4 = Probably not enlist
5 = Definitely not enlist



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ANOVA's were also performed using the propensity to enlist at the current level of the benefit as the dependent variable with the beliefs about benefits as the independent variable. This was done for all four benefits. The results of these four tests were all non-significant. They were not reported in Volume I.

10.3.2 Effects of Possible Benefits on Enlistment Propensity of Veterans Sample

Education Benefit

A repeated measures ANOVA was used to examine the propensity to enlist at each level of the education benefit for the Veterans sample. The results are shown in Table 10-12.

TABLE 10-12. REPEATED MEASURES ANALYSIS OF VARIANCE OF PROPENSITY TO ENLIST AT EACH LEVEL OF THE EDUCATION BENEFIT FOR THE VETERANS SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Between people	977	4.89		
Within				
Benefit levels	4	256.16	522.76	<.01
Error	3908	.49		

To determine which successive levels of the benefit were significantly different, a Scheffe post hoc analysis was performed. The significant results ($p < .01$) were as follows:

- 1) Current level vs. 25% education benefit
- 2) 25% education benefit vs. 50% education benefit
- 3) 50% education benefit vs. 75% education benefit
- 4) 75% education benefit vs. 100% education benefit

Eighty-two percent (82%) of the educational expenses paid would result in 50% of the Veterans sample having a positive propensity. This figure was determined as follows:

$$\text{Step 1. } \frac{100\% - 75\%}{57.3\% - 47.3\%} = 2.5\%$$

$$\text{Step 2. } 50\% - 47.3\% = 2.7\%$$

$$\text{Step 3. } 2.5 \times 2.7 = 6.75\%$$

$$\text{Step 4. } 75\% + 6.75\% = 81.75\%$$

Table 10-13 provides the breakdown of those Veterans with a positive propensity at the 100% benefit level according to the probability of using the benefit.

TABLE 10-13. LIKELIHOOD OF USING THE EDUCATION BENEFIT IF 100% OF THE COST OF EDUCATION ASSISTANCE WERE OFFERED FOR THE VETERANS SAMPLE

<u>LIKELIHOOD OF USE OF EDUCATION BENEFIT AT 100% LEVEL</u>	<u>PERCENT OF SAMPLE WHO HAD A POSITIVE PROPENSITY AT 100% BENEFIT LEVEL</u>	<u>PERCENT OF TOTAL SAMPLE</u>
N	561	980
Definitely use	64.7	37.0
Probably use	24.8	14.2
Might use	8.0	4.6
Probably not use	2.1	1.2
Definitely not use	.4	.2
Have negative propensity	--	42.8

Bonus Benefit

The repeated measures ANOVA testing the propensity to enlist at each level of the bonus benefit for the Veterans sample is reported in Table 10-14.

TABLE 10-14. REPEATED MEASURES ANALYSIS OF VARIANCE ON PROPENSITY TO ENLIST AT EACH LEVEL OF THE BONUS BENEFIT FOR THE VETERANS SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Between people	975	3.77		
Within				
Benefit levels	4	81.39	257.06	<.01
Error	3900	.32		

The Scheffe post hoc analysis was performed to determine which successive bonus levels were significantly different. The following significant differences were found:

- 1) \$250 vs. \$500
- 2) \$500 vs. \$1,100
- 3) \$1,100 vs. \$2,200

A bonus of approximately \$3,650 is needed for 50% of the Veterans to have a positive propensity to enlist. This figure was calculated as follows:

$$\text{Step 1. } \frac{\$2,200 - \$1,100}{37.2\% - 27.5\%} = \$113.40$$

$$\text{Step 2. } 50\% - 37.2\% = 12.8\%$$

$$\text{Step 3. } \$113.40 \times 12.8 = 1451.52$$

$$\text{Step 4. } \$2,200 + 1451.52 = 3651.52$$

Pay Benefit

Table 10-15 reports the repeated measures ANOVA used to examine propensity to enlist at each level of the pay benefit.

TABLE 10-15. REPEATED MEASURES ANALYSIS OF VARIANCE OF PROPENSITY TO ENLIST AT EACH LEVEL OF THE PAY BENEFIT FOR THE VETERANS SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between people	977	3.16		
Within				
Benefit levels	3	35.72	181.88	<.01
Error	2931	.20		

To determine which successive pay benefit levels were significantly different from one another, a Scheffe post hoc analysis was performed. The statistically significant ($p < .01$) results were as follows:

- 1) Current level vs. 10% pay increase
- 2) 10% pay increase vs. 20% pay increase
- 3) 20% pay increase vs. 50% pay increase

A 106% pay increase was required for 50% of the Veterans sample to have a favorable propensity. This figure was determined as follows:

$$\text{Step 1. } \frac{50\% - 20\%}{31.6\% - 21.8\%} = 3.06\%$$

$$\text{Step 2. } 50\% - 31.6\% = 18.4\%$$

$$\text{Step 3. } 3.06 \times 18.4 = 56.30\%$$

$$\text{Step 4. } 50\% + 56.30\% = 106.30\%$$

Length of Initial Enlistment

The repeated measures ANOVA was performed on the propensity to enlist at each level of the initial length of enlistment. The results are reported in Table 10-16.

TABLE 10-16. REPEATED MEASURES ANALYSIS OF VARIANCE ON PROPENSITY TO ENLIST AT EACH LEVEL OF LENGTH OF INITIAL ENLISTMENT FOR THE VETERANS SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between people	976	2.62		
Within				
Benefit levels	3	110.05	354.43	<.01
Error	2928	.31		

To determine which successive length of enlistment levels were significantly different from one another, a Scheffe post hoc analysis ($p < .01$) was performed. The results were as follows:

- 1) Current level vs. 4 year enlistment
- 2) 4 year enlistment vs. 2 year enlistment
- 3) 2 year enlistment vs. 1 year enlistment

The calculations to determine the length of initial enlistment needed to result in 50% of the Veterans sample having a positive propensity to enlist resulted in a negative number. Thus, it was not considered possible to obtain 50% favorability for the Veterans by varying the initial length of enlistment.

Beliefs about Existence of Benefits

The effect of beliefs about each benefit on initial propensity for the Veterans sample was investigated in four separate ANOVA's. The ANOVA's of pay and length of enlistment showed statistically significant results and they are reported in Tables 10-17 and 10-18.

TABLE 10-17. EFFECT OF BELIEF ABOUT THE PAY BENEFIT ON INITIAL PROPENSITY FOR THE VETERANS SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Between				
Belief about pay benefit	2	7.83	7.15	<.01
Error	977	1.09		

The Scheffe post hoc analysis indicated that those respondents who underestimated pay were more favorable ($p < .01$) than those respondents who answered "don't know."

TABLE 10-18. EFFECT OF BELIEF ABOUT THE LENGTH OF INITIAL ENLISTMENT ON INITIAL PROPENSITY FOR THE VETERANS SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Between				
Belief about length of enlistment	2	9.02	8.26	<.01
Error	977	1.09		

The Scheffe post hoc analysis indicated that the respondents who underestimated the length of enlistment were more favorable ($p < .01$) than those who overestimated the length of enlistment.

The mean propensity scores at each level of each belief are presented in Table 10-19 for each benefit.

TABLE 10-19. BELIEFS ABOUT EACH OF THE POSSIBLE BENEFITS FOR THE VETERANS SAMPLE

<u>BENEFIT/BELIEF</u>	<u>N</u>	<u>Mean Propensity</u> ¹⁾
<u>Educational Assistance</u>		
Yes, there is educational assistance	532	4.27
Don't know	297	4.13
No, there is no educational assistance	151	4.17
<u>Cash Bonus</u>		
Yes, there is a cash bonus	98	4.49
Don't know	383	4.17
No, there is no cash bonus	499	4.18
<u>Pay Increase</u>		
Overestimated	237	4.25
Don't know	489	4.30
Underestimated	254	4.00
<u>Length of Enlistment</u>		
Correct or overestimated	173	4.42
Don't know	216	3.34
Underestimated	591	4.10

- 1) 1 = Definitely enlist
 2 = Probably enlist
 3 = Might enlist
 4 = Probably not enlist
 5 = Definitely not enlist

10.4 Reactions to Possible Benefits by Current Reservists

10.4.1 Effect of Possible Benefits on the Extension of Enlistment Propensity of the Army National Guard Sample

Education Benefit

The repeated measures ANOVA used to examine the propensity of the ARNG sample to extend enlistment at each level of the education benefit is reported in Table 10-20.

TABLE 10-20. REPEATED MEASURES ANALYSIS OF VARIANCE OF PROPENSITY TO EXTEND ENLISTMENT AT EACH LEVEL OF THE EDUCATION BENEFIT FOR THE ARMY NATIONAL GUARD SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between people	1908	7.43		
Within				
Benefit level	4	596.79	1146.82	< .01
Error	7632	.52		

To determine which successive levels of the education benefit significantly differed from one another, a Scheffe post hoc analysis was performed. The statistically significant results ($p < .01$) are as follows:

- 1) Current level vs. 25% education benefit
- 2) 25% education benefit vs. 50% education benefit
- 3) 50% education benefit vs. 75% education benefit
- 4) 75% education benefit vs. 100% education benefit

A 33.4% education benefit was required for 50% of the ARNG sample to have a favorable propensity. This figure was determined

as follows:

- Step 1. $\frac{50\% - 25\%}{61.2\% - 44.3\%} = 1.48\%$
- Step 2. $50\% - 44.3\% = 5.7\%$
- Step 3. $1.48 \times 5.7 = 8.44\%$
- Step 4. $25\% + 8.44\% = 33.44\%$

Table 10-21 gives the likelihood of using the education benefit by respondents who had a favorable propensity to extend their enlistment when offered an education benefit.

TABLE 10-21. LIKELIHOOD OF USING THE EDUCATION BENEFIT FOR ARMY NATIONAL GUARD RESPONDENTS WHO HAD A FAVORABLE PROPENSITY TO EXTEND WHEN OFFERED 100% EDUCATION ASSISTANCE

<u>LIKELIHOOD OF USE OF EDUCATION BENEFIT AT 100% LEVEL</u>	<u>PERCENT OF SAMPLE WHO HAD A POSITIVE PROPENSITY AT 100% BENEFIT LEVEL</u>	<u>PERCENT OF TOTAL SAMPLE</u>
N	1,445	1,932
Definitely use	55.5	41.5
Probably use	28.3	21.2
Might use	9.8	7.3
Probably not use	4.9	3.7
Definitely not use	1.5	1.1
Have negative propensity	--	25.2

Bonus Benefit

The repeated measures ANOVA of propensity to extend enlistment at each level of the bonus benefit for the ARNG sample is shown in Table 10-22.

TABLE 10-22. REPEATED MEASURES ANALYSIS OF VARIANCE OF PROPENSITY TO EXTEND ENLISTMENT AT EACH LEVEL OF THE BONUS BENEFIT FOR THE ARMY NATIONAL GUARD SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between people	1928	7.31		
Within				
Benefit levels	4	340.71	654.03	<.01
Error	7712	.52		

To determine which successive levels of a bonus benefit were significantly different from one another, a Scheffe post hoc analysis was performed. The significant ($p < .01$) results were as follows:

- 1) Current level vs. \$250
- 2) \$250 vs. \$500
- 3) \$500 vs. \$1,100
- 4) \$1,100 vs. \$2,200

The difference between the current level and \$250, while significant, was negative. That is, there was a lower mean propensity to extend enlistment for the \$250 bonus.

A bonus of \$1,196 would result in 50% of the ARNG sample having a favorable propensity. This figure was determined as follows:

$$\begin{aligned} \text{Step 1. } & \frac{\$2,200 - \$1,100}{61.5\% - 48.9\%} = \$87.30 \\ \text{Step 2. } & 50\% - 48.9\% = 1.1\% \\ \text{Step 3. } & 87.30 \times 1.1 = \$96.03 \\ \text{Step 4. } & \$1,100 + \$96.03 = \$1,196.03 \end{aligned}$$

Pay Benefit

The repeated measures ANOVA used to examine the propensity of the ARNG sample to extend enlistment at each level of the pay benefit is reported in Table 10-23.

TABLE 10-23. REPEATED MEASURES ANALYSIS OF VARIANCE OF PROPENSITY TO EXTEND ENLISTMENT AT EACH LEVEL OF THE PAY BENEFIT FOR THE ARMY NATIONAL GUARD SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between people	1932	6.41		
Within				
Benefit level	3	335.37	946.06	<.01
Error	5796	.35		

To determine which successive levels of the pay benefit were significantly different from one another, a Scheffe post hoc analysis was performed.

The significant results were as follows:

- 1) Current level vs. 10% pay increase
- 2) 10% pay increase vs. 20% pay increase
- 3) 20% pay increase vs. 50% pay increase

A 21% pay increase would result in 50% of the ARNG sample having a favorable propensity. This figure was calculated as follows:

$$\text{Step 1. } \frac{50\% - 20\%}{67.5\% - 49.5\%} = 1.67\%$$

$$\text{Step 2. } 50\% - 49.5\% = .5\%$$

$$\text{Step 3. } 1.67 \times .5 = .84\%$$

$$\text{Step 4. } 20\% + .84\% = 20.84\%$$

Beliefs about Existence of Benefits

A chi square (χ^2) analysis was performed to determine if there was any relation between the level of the education benefit in the state which an ARNG respondent resided and the belief that the ARNG offered an education benefit. Four education levels were defined. Statistically significant results were obtained ($p < .01$, $df = 3$, $\chi^2 = 364.29$). Table 10-24 shows these data.

TABLE 10-24. RELATION BETWEEN RESPONDENTS' BELIEFS ABOUT AVAILABILITY OF EDUCATION BENEFIT AND LEVEL OF EDUCATION BENEFIT IN STATE IN WHICH RESPONDENT RESIDES

<u>BELIEF ABOUT EXISTENCE</u>	<u>Benefit Level</u>			
	<u>High</u>	<u>Low</u>	<u>Irrelevant</u>	<u>No Benefit</u>
Exists	169	136	127	224
Does not exist	45	68	187	853
Total N	214	204	314	1077

A chi square test failed to show a statistically significant relation between claimed usage of education benefit and the level of education benefit in the state in which the ARNG respondent resided. Table 10-25 presents the crosstab of these two variables.

TABLE 10-25. RELATION BETWEEN CLAIMED USAGE OF EDUCATION BENEFIT AND LEVEL OF EDUCATION BENEFIT IN STATE IN WHICH RESPONDENT RESIDES

<u>CLAIMED USAGE</u>	<u>Benefit Level</u>			
	<u>High</u>	<u>Low</u>	<u>Irrelevant</u>	<u>No Benefit</u>
Use	22 ¹⁾	16	10	22
Don't use	147	120	117	201
Total N	169	136	227	223

¹⁾ Usage question was asked only of those who responded that education benefits existed.

Table 10-26 examines the relation between reported usage of the education benefit and propensity to extend enlistment as a function of type of benefit existing in the state. These data were not reported in Volume I.

TABLE 10-26. PROPENSITY TO EXTEND ENLISTMENT IN THE ARMY NATIONAL GUARD AS A FUNCTION OF USE OF EDUCATION BENEFIT AND LEVEL OF BENEFIT PROVIDED BY STATE

<u>USAGE</u>	<u>Level of Benefit</u>			
	<u>High</u>	<u>Low</u>	<u>Irrelevant</u>	<u>No Benefit</u>
Use Benefit				
N	22	16	10	21
Mean propensity	3.09	2.88	2.90	2.95
Percent favorable	59.1	62.5	80.00	71.4
Don't Use Benefit				
N	147	120	117	201
Mean propensity	3.53	3.22	3.44	3.59
Percent favorable	43.5	55.00	47.9	42.8

The effects of beliefs about the education and bonus benefits on the ARNG sample's initial propensity to extend was analyzed by ANOVA. In both cases, the results were significant. The analyses are shown in Tables 10-27 and 10-28.

TABLE 10-27. EFFECT OF BELIEF ABOUT THE EDUCATION BENEFIT ON INITIAL PROPENSITY TO EXTEND FOR THE ARMY NATIONAL GUARD SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between				
Belief about availability of				
assistance	2	14.70	7.98	< .01
Error	1923	1.84		

A Scheffe post hoc analysis ($p < .01$) indicated that those who did not believe the education benefit existed were less likely to extend their enlistment than those respondents who believed that a benefit did exist.

TABLE 10-28. EFFECT OF BELIEF ABOUT THE BONUS BENEFIT ON INITIAL PROPENSITY TO EXTEND FOR THE ARMY NATIONAL GUARD SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Between				
Belief about bonus benefit	2	9.54	5.16	< .01
Error	1923	1.85		

The Scheffe post hoc analysis ($p < .01$), however, failed to find any significant differences. Both pairwise and contrast grouping tests were used.

The mean propensity to extend enlistment as a function of beliefs about the education and bonus benefits is presented in Table 10-29.

TABLE 10-29. PROPENSITY TO EXTEND ENLISTMENT AS A FUNCTION OF BELIEF IN THE EXISTENCE OF AN EDUCATION BENEFIT AND A CASH BONUS FOR ARMY NATIONAL GUARD SAMPLE

	<u>N</u>	<u>Mean Propensity</u> ¹⁾
<u>Educational Assistance</u>		
Yes, there is educational assistance	665	3.42
Don't know	80	3.48
No, there is no educational assistance	1181	3.68
<u>Cash Bonus</u>		
Yes, there is a cash bonus	111	3.77
Don't know	163	3.86
No, there is no cash bonus	1652	3.54

1) 1 = Definitely extend; 5 = Definitely not extend

ANOVA's were also performed using the propensity to extend at the current level of the benefit as the dependent variable with the beliefs about education and bonus benefits as the independent variable. A significant F value was obtained regarding the belief about education assistance, but not for the belief about a bonus. The original ANOVA regarding the bonus benefit included all the states regardless of whether a benefit actually existed. When those states which have a benefit are eliminated from the analysis, the resulting ANOVA analysis is non-significant. (These analyses are not reported in Volume I.)

Table 10-30 shows that the most important inducement to extend enlistment (of those who mentioned an inducement) is pay.

TABLE 10-30. MOST IMPORTANT INDUCEMENT FOR EXTENDING ENLISTMENT FOR THE ARMY NATIONAL GUARD SAMPLE

<u>Inducement</u>	<u>Percent Mentioned</u>
N1)	1,536
More pay	36.3
Benefits	16.9
Job promotion	7.7
War	7.2

Table 10-31 shows the initial propensity and the propensity at the different pay benefit levels for those respondents who mentioned pay as an inducement and for those respondents who did not mention pay as an inducement.

TABLE 10-31. PROPENSITY TO EXTEND ENLISTMENT FOR THOSE RESPONDENTS WHO DID AND DID NOT MENTION "MORE PAY" AS AN IMPORTANT INDUCEMENT FOR EXTENSION OF ENLISTMENT FOR THE ARMY NATIONAL GUARD SAMPLE

	<u>Mentioned "More Pay"</u>		<u>Did Not Mention "More Pay"</u>	
	<u>Percent Favorable</u>	<u>Mean²⁾</u>	<u>Percent Favorable</u>	<u>Mean²⁾</u>
Initial propensity	53.9	3.27	39.0	3.71
Current pay	44.8	3.55	32.5	3.92
10% increase	51.3	3.41	36.3	3.78
20% increase	62.9	3.06	44.0	3.55
50% increase	82.4	2.42	61.4	3.05

1) N consists of only those respondents who mentioned an inducement.

2) 1 = definitely extend; 5 = definitely not extend

The difference in propensity to extend enlistment between the two groups at each level of pay benefit was analyzed by a t test. The results are shown in Table 10-32.

TABLE 10-32. PROPENSITY OF RESPONDENTS WHO MENTIONED AND RESPONDENTS WHO DID NOT MENTION "MORE PAY" AS AN INDUCEMENT FOR EXTENSION OF ENLISTMENT AT EACH LEVEL OF PAY BENEFIT FOR THE ARMY NATIONAL GUARD SAMPLE

	<u>\bar{X} Mention</u>	<u>\bar{X} Did Not Mention</u>	<u>df</u>	<u>t</u>
Initial propensity	3.27	3.71	1924	-6.46*
Current level	3.55	3.92	1933	-5.71*
10% increase	3.41	3.78	1931	-5.62*
20% increase	3.06	3.55	1933	-7.19*
50% increase	2.42	3.06	1185	-9.39*

10.4.2 Effect of Possible Benefits on the Extension of Enlistment Propensity of the Other Reserve Components Sample

The repeated measures ANOVA was used to examine the effect of each level of the education benefit on propensity to extend enlistment for the ORC sample. The results are reported in Table 10-33.

TABLE 10-33. REPEATED MEASURES ANALYSIS OF VARIANCE OF PROPENSITY TO EXTEND AT EACH LEVEL OF THE EDUCATION BENEFIT FOR THE OTHER RESERVE COMPONENTS SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between people	1902	7.70		
Within				
Across benefit levels	4	637.31	1149.75	<.01
Error	7608	.55		

* $p < .01$

To determine which successive levels of the education benefit were significantly different from one another, a Scheffe post hoc analysis was performed. The significant results were as follows:

- 1) Current level vs. 25% education benefit
- 2) 25% education benefit vs. 50% education benefit
- 3) 50% education benefit vs. 75% education benefit
- 4) 75% education benefit vs. 100% education benefit

A 29.1% education benefit would result in 50% of the ORC sample having a favorable propensity to extend enlistment. This figure was determined as follows:

$$\text{Step 1. } \frac{50\% - 25\%}{63.3\% - 47.4\%} = 1.57\%$$

$$\text{Step 2. } 50\% - 47.4\% = 2.6\%$$

$$\text{Step 3. } 1.57 \times 2.6 = 4.08\%$$

$$\text{Step 4. } 25\% + 4.08\% = 29.08\%$$

Table 10-34 shows the likelihood of using the education benefit by respondents who had a favorable propensity to extend enlistment when offered an education benefit.

TABLE 10-34. LIKELIHOOD OF USING THE EDUCATION BENEFIT IF 100% OF COST OF EDUCATION WERE OFFERED FOR THE OTHER RESERVE COMPONENT'S SAMPLE

<u>LIKELIHOOD OF USE OF EDUCATION BENEFIT AT 100% LEVEL</u>	<u>PERCENT OF SAMPLE WHO HAD A POSITIVE PROPENSITY AT 100% BENEFIT LEVEL</u>	<u>PERCENT OF TOTAL SAMPLE</u>
N	1,454	1,919
Definitely use	68.4	51.8
Probably use	22.0	16.7
Might use	6.6	5.0
Probably not use	2.3	1.8
Definitely not use	.7	.5
Have negative propensity	--	24.2

Cash Bonus

The repeated measures ANOVA of propensity to extend enlistment at each level of the bonus benefit for the ORC sample is shown in Table 10-35.

TABLE 10-35. REPEATED MEASURES ANALYSIS OF VARIANCE OF PROPENSITY TO EXTEND ENLISTMENT AT EACH LEVEL OF THE BONUS BENEFIT FOR THE OTHER RESERVE COMPONENTS SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between people	1921	7.78		
Within				
Between benefit levels	4	324.75	710.58	< .01
Error	7684	.46		

To determine which successive levels of the bonus benefit were significantly different, a Scheffe post hoc analysis was performed. The significant results ($p < .01$) were as follows:

- 1) Current level vs. \$250
- 2) \$250 vs. \$500
- 3) \$500 vs. \$1,100
- 4) \$1,100 vs. \$2,200

The difference between the current level and \$250, while significant, was negative. That is, there was a lower mean extension to enlist propensity for the \$250 bonus compared to the current or \$0 bonus level.

A bonus of \$1,096 would result in 50% of the ORC sample having a favorable propensity to extend enlistment. This figure was determined

as follows:

- Step 1. $\frac{\$1,100 - \$500}{50.1\% - 35.7\%} = \41.67
- Step 2. $50\% - 35.7\% = 14.3\%$
- Step 3. $41.67 \times 14.3 = \$595.88$
- Step 4. $\$500 + \$595.88 = \$1,095.88$

Pay Benefit

The repeated measures ANOVA used to examine the propensity of the ORC sample to extend enlistment at each level of the pay benefit is reported in Table 10-36.

TABLE 10-36. REPEATED MEASURES ANALYSIS OF VARIANCE OF PROPENSITY TO EXTEND ENLISTMENT AT EACH LEVEL OF THE PAY BENEFIT FOR THE OTHER RESERVE COMPONENT'S SAMPLE

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Between people	1923	6.56		
Within				
Across benefit levels	3	316.85	949.58	<.01
Error	5769	.33		

To determine which successive levels of the pay benefit were significantly different from one another, a Scheffe post hoc analysis was performed.

The significant results were as follows:

- 1) Current level vs. 10% pay increase
- 2) 10% pay increase vs. 20% pay increase
- 3) 20% pay increase vs. 50% pay increase

A 25% pay increase was found to result in 50% of the ORC sample having a positive propensity. This figure was determined as follows:

$$\text{Step 1. } \frac{50\% - 20\%}{64.8\% - 46.7\%} = 1.66\%$$

$$\text{Step 2. } 50\% - 46.7\% = 3.3\%$$

$$\text{Step 3. } 1.66 \times 3.3 = 5.48\%$$

$$\text{Step 4. } 20\% + 5.48\% = 25.48\%$$

Beliefs about Existence of Benefits

A separate ANOVA was performed on the beliefs about the bonus benefit and their effect on initial propensity to extend enlistment for the ORC sample. The results were not significant.

The mean propensity scores for each of the beliefs about the bonus benefit are presented in Table 10-37.

TABLE 10-37. RELATION BETWEEN BELIEFS ABOUT THE BONUS BENEFIT AND PROPENSITY TO EXTEND ENLISTMENT FOR THE OTHER RESERVE COMPONENTS SAMPLE

	<u>N</u>	<u>Mean Propensity</u> 1)
<u>Cash Bonus</u>		
Yes, there is a cash bonus	61	4.08
Don't know	257	3.71
No, there is no cash bonus	1605	3.59

An ANOVA was also performed using the propensity to extend at the current level of the benefit as the dependent variable with the beliefs about the benefit as the independent variable. A significant F value was obtained.

1) 1 = Definitely extend; 5 = Definitely not extend

The original ANOVA regarding the bonus benefit used all the states, this analysis excluded Ohio (which offers a benefit). These analyses are not reported in Volume I.

Table 10-38 shows that the most important inducement to extend enlistment is pay (for those respondents who mentioned an inducement).

TABLE 10-38. MOST IMPORTANT INDUCEMENT FOR EXTENDING ENLISTMENT FOR THE OTHER RESERVE COMPONENTS SAMPLE

<u>INDUCEMENT</u>	<u>Percent Mentioned</u>
N ¹⁾	1,573
More pay	27.4
Benefits	16.9
War	9.3
Promotion	7.8

Table 10-39 shows the initial propensity and propensity at the different pay benefit levels for those respondents who mentioned pay as an inducement and those respondents who did not mention pay as an inducement.

1) N consists only of those respondents who mentioned an inducement.

TABLE 10-39. PROPENSITY TO EXTEND ENLISTMENT FOR THOSE RESPONDENTS WHO DID AND DID NOT MENTION "MORE PAY" AS AN IMPORTANT INDUCEMENT FOR EXTENSION OF ENLISTMENT FOR THE OTHER RESERVE COMPONENTS SAMPLE

	<u>Mentioned "More Pay"</u>		<u>Did Not Mention "More Pay"</u>	
	<u>Percent Favorable</u>	<u>Mean¹⁾</u>	<u>Percent Favorable</u>	<u>Mean¹⁾</u>
Initial propensity	54.2	3.29	39.1	3.72
Current pay	45.9	3.52	32.1	3.93
10% increase	48.5	3.42	35.5	3.83
20% increase	58.7	3.16	43.2	3.59
50% increase	81.4	2.46	60.0	3.07

The difference between the two groups at each level of pay benefit was analyzed by t-test. The results are shown in Table 10-40.

TABLE 10-40. COMPARISON OF PROPENSITY FOR RESPONDENTS WHO MENTIONED AND RESPONDENTS WHO DID NOT MENTION "MORE PAY" AS AN INDUCEMENT FOR EXTENSION OF ENLISTMENT AT EACH LEVEL OF THE PAY BENEFIT FOR THE OTHER RESERVE COMPONENTS SAMPLE

	<u>\bar{X} Mention</u>	<u>\bar{X} Not Mention</u>	<u>df</u>	<u>t</u>
Initial propensity	3.28	3.72	1921	-5.87*
Current level	3.52	3.93	1924	-5.84*
10% pay increase	3.42	3.83	1926	-5.63*
20% pay increase	3.16	3.58	1925	-5.65*
50% pay increase	2.46	3.07	816	-8.44*

1) 1 = definitely extend; 5 = definitely not extend

* $p < .01$

11.0 THE EFFECT OF THE QUESTIONNAIRE ON PROPENSITY TO ENLIST/EXTEND ENLISTMENT

To test impact of the questionnaire on propensity to enlist/extend enlistment, the initial and terminal propensity questions were compared. Repeated measures ANOVA's were used for all four samples. The four ANOVA's all produced a significant F value ($p < .01$). Scheffe post hoc tests were used to analyze differences between successively asked questions. While there were some significant differences, all four samples failed to show significant differences between the terminal and initial propensity questions.

A t test was also used to examine the difference between the mean propensity scores of the initial and terminal propensity questions. Only the ARNG sample showed a significant difference (the terminal questions indicated a greater propensity). However, further examination showed that this result accounted for less than 1% of the group's variance.

The change in propensity between the initial and terminal propensity questions was calculated. Correlations between this change in propensity and the propensity at each level of the benefits were calculated. The results are shown in Table 11-1.

To determine if the date of enlistment for the Current Reservists had an effect on how the Reservists reacted to each level of the education benefit, a t test was used. The results of the t test are presented in Table 11-2.

Tables 11-3 to 11-6 present the change in percent of respondents who had a favorable propensity at each benefit level as a function of the percent of respondents who could change. For example, for the NPS sample, the increase in positive propensity between the 25% and 50% levels of the education benefit was 17.9%. However, since 33.5% of the respondents already had a positive propensity, only 66.5% of the respondents could change their propensity from negative to positive. Thus, 26.9% of the respondents who did not previously have a positive propensity changed. Also included in Tables 11-3 through 11-6 are the benefits needed to change 1% of the respondents from negative propensity to positive propensity.

TABLE 11-1 CORRELATIONS BETWEEN THE CHANGE IN PROPENSITY (INITIAL PROPENSITY --
 TERMINAL PROPENSITY) AND THE PROPENSITY FOR EACH BENEFIT LEVEL FOR
 THE FOUR SAMPLES

BENEFIT	NPS		Veterans		ARNG		ORC	
	r	p	r	p	r	p	r	p
<u>Education</u>								
25%	-.022	ns	.050	ns	.055	ns	.027	ns
50%	.001	ns	.017	ns	.028	ns	.008	ns
75%	.017	ns	.017	ns	.009	ns	-.023	ns
100%	.013	ns	-.002	ns	.001	ns	-.017	ns
<u>Bonus</u>								
\$250	-.037	ns	-.001	ns	-.067	.002	.028	ns
\$500	-.007	ns	-.019	ns	-.076	.001	.013	ns
\$1,100	-.020	ns	-.040	ns	-.074	.001	.006	ns
\$2,200	-.011	ns	.008	ns	-.060	.004	.000	ns
<u>Pay Increase</u>								
10%	-.002	ns	.004	ns	-.041	ns	.017	ns
20%	-.003	ns	.013	ns	-.058	.005	.010	ns
50%	-.004	ns	.037	ns	-.047	ns	-.012	ns
<u>Length of Enlistment</u>								
4 years	.008	ns	.009	ns	--	--	--	--
2 years	.007	ns	.027	ns	--	--	--	--
1 year	.007	ns	-.013	ns	--	--	--	--

TABLE 11-2 COMPARISON OF PROPENSITY WITH THE EDUCATION BENEFIT FOR MEN WHO ENLISTED AFTER DECEMBER 1972 AND MEN WHO ENLISTED PRIOR TO JANUARY 1973 FOR THE ARMY NATIONAL GUARD AND OTHER RESERVE COMPONENTS SAMPLES

BENEFIT LEVEL	Enlisted after December 1972		Enlisted prior to January 1973		df	t	p	ω^2
	\bar{X} ¹⁾	n	\bar{X}	n				
Initial propensity	3.04	430	3.67	3419	3847	-8.99	.001	.020
Current	3.37	430	3.83	3404	516	-6.35	.001	.010
25%	2.96	432	3.53	3396	526	-7.64	.001	.015
50%	2.50	432	3.09	3392	3822	-8.23	.001	.017
75%	2.20	432	2.72	3399	3829	-7.06	.001	.013
100%	1.90	432	2.45	3403	584	-8.24	.001	.017

1) 1 = Definitely extend; 5 = Definitely not extend

TABLE 11-3 CHANGE IN PERCENT OF RESPONDENTS WHO HAD A FAVORABLE PROPENSITY AT EACH BENEFIT LEVEL AS A FUNCTION OF PERCENT OF RESPONDENTS WHO COULD CHANGE FOR THE NON-PRICER SERVICE SAMPLE

<u>BENEFIT LEVEL</u>	<u>% changed</u>	<u>% of respondents who could change</u>	<u>% changed of those respondents who could change</u>	<u>Amount of benefit needed to change 1% of respondents</u>
<u>Education</u>				
25 - 50%	17.9	66.5	25.9	.93%
50 - 75%	13.6	48.6	28.0	.89%
75 - 100%	8.1	35.0	23.1	1.08%
<u>Bonus</u>				
\$250 - \$500	5.7	78.5	7.3	\$34.25
\$500 - \$1,100	14.9	72.8	20.6	\$29.13
\$1,100 - \$2,200	11.8	57.9	20.4	\$53.92
<u>Pay Increase</u>				
10 - 20%	5.4	72.7	7.4	1.35%
20 - 50%	11.1	67.3	16.5	1.82%
<u>Length of Enlistment</u>				
4 - 2 years	23.7	76.4	31.0	-.06 yrs.
2 - 1 years	8.4	52.7	15.9	-.06 yrs.

TABLE 11-4 CHANGE IN PERCENT OF RESPONDENTS WHO HAD A FAVORABLE PROPENSITY AT EACH BENEFIT LEVEL AS A FUNCTION OF PERCENT OF RESPONDENTS WHO COULD CHANGE FOR THE VETERANS SAMPLE

<u>BENEFIT LEVEL</u>	<u>% changed</u>	<u>% of respondents who could change</u>	<u>% changed of those respondents who could change</u>	<u>Amount of benefit needed to change 1% of respondents</u>
<u>Education</u>				
25 - 50%	12.3	79.3	15.5	1.61%
50 - 75%	14.3	67.0	21.3	1.17%
75 - 100%	10.0	52.7	19.0	1.32%
<u>Bonus</u>				
\$250 - \$500	3.3	87.2	3.8	\$65.79
\$500 - \$1,100	11.4	83.9	13.6	\$44.12
\$1,100 - \$2,200	9.7	72.5	13.4	\$82.09
<u>Pay Increase</u>				
10 - 20%	4.6	82.8	5.6	1.79%
20 - 50%	9.8	78.2	12.5	2.40%
<u>Length of Enlistment</u>				
4 - 2 years	14.7	90.6	16.2	-.12 yrs.
2 - 1 years	12.0	75.9	15.8	-.06 yrs.

TABLE 11-5 CHANGE IN PERCENT OF RESPONDENTS WHO HAD A FAVORABLE PROPENSITY AT EACH BENEFIT LEVEL AS A FUNCTION OF PERCENT OF RESPONDENTS WHO COULD CHANGE FOR THE ARMY NATIONAL GUARD SAMPLE

<u>BENEFIT LEVEL</u>	<u>% changed</u>	<u>% of respondents who could change</u>	<u>% changed of those respondents who could change</u>	<u>Amount of benefit needed to change 1% of respondents</u>
<u>Education</u>				
25 - 50%	16.9	55.7	30.3	.83%
50 - 75%	10.0	38.8	25.8	.97%
75 - 100%	4.2	28.8	14.6	1.71%
<u>Bonus</u>				
\$250 - \$500	6.1	72.0	8.5	\$29.41
\$500 - \$1,100	14.8	65.9	22.5	\$26.67
\$1,100 - \$2,200	12.6	51.1	24.7	\$44.53
<u>Pay Increase</u>				
10 - 20%	8.9	59.4	15.0	.67%
20 - 50%	18.0	50.5	35.6	.84%

TABLE 11-6 CHANGE IN PERCENT OF RESPONDENTS WHO HAD A FAVORABLE PROPENSITY AT EACH BENEFIT LEVEL AS A FUNCTION OF PERCENT OF RESPONDENTS WHO COULD CHANGE FOR THE OTHER RESERVE COMPONENTS SAMPLE

<u>BENEFIT LEVEL</u>	<u>% changed</u>	<u>% of respondents who could change</u>	<u>% changed of those respondents who could change</u>	<u>Amount of benefit needed to change 1% of respondents</u>
<u>Education</u>				
25 - 50%	15.9	52.6	30.2	.83%
50 - 75%	8.2	36.7	22.3	1.12%
75 - 100%	4.9	28.5	17.2	1.45%
<u>Bonus</u>				
\$250 - \$500	5.4	69.7	7.7	\$32.47
\$500 - \$1,100	14.4	64.3	22.4	\$26.79
\$1,100 - \$2,200	11.3	49.9	22.6	\$48.67
<u>Pay Increase</u>				
10 - 20%	8.3	61.6	13.5	.74%
20 - 50%	18.1	53.3	34.0	.88%

12.0 THE EFFECT OF VARIOUS EVENTS ON PROPENSITY TO ENLIST/EXTEND

The effect of three potentially important events on Non-Prior Service men's propensity to enlist was measured. They were:

- Reinstatement of the draft
- Possibility of war
- Actual war

The effect of the latter two events on the propensity to enlist/extend of Veterans and Current Reservists was also measured.

12.1 The Effect of Various Events on Accession of Potential Enlistees

12.1.1 Non-Prior Service Sample

Table 12-1 presents the data on the propensity to enlist of the Non-Prior Service sample if there were: 1) reinstatement of the draft, 2) possibility of war, and 3) actual war.

The NPS sample's propensity to enlist increased significantly when they considered the potential reinstatement of the draft, $t(1879)^{1)} = 9.40$, $p < .001$. The percent of those with a favorable propensity increased by about 9 percentage points, from 36% favorable in response to the initial propensity measure to 45% favorable. The correlation between the initial propensity to enlist and propensity to enlist if the draft were reinstated was .45 ($p < .001$). Table 12-2 shows the propensity level in the event of the reinstatement of the draft as a function of initial propensity level.

1) Degrees of freedom are in parentheses.

TABLE 12-1. PROPENSITY TO ENLIST FOR THE THREE EVENTS FOR THE NON-PRIOR SERVICE SAMPLE

<u>Propensity</u>	<u>Reinstatement of Draft</u>		<u>Possible War</u>		<u>Actual War</u>	
	<u>N</u>	<u>Percent</u>	<u>N</u>	<u>Percent</u>	<u>N</u>	<u>Percent</u>
Sample ¹⁾	1885	100.0 ²⁾	1864	100.0 ²⁾	1885	100.0 ²⁾
Definitely enlist	92	4.9	231	12.4	425	22.9
Possibly enlist	396	21.0	553	29.7	530	28.6
Might enlist	362	19.2	419	22.5	355	19.1
Probably not enlist	504	26.7	330	17.7	264	14.2
Definitely not enlist	531	28.2	331	17.8	281	15.1
Mean ³⁾	3.523		2.988		2.701	
Standard error	.028		.030		.032	
Standard deviation	1.236		1.296		1.365	

1) Respondents with undetermined responses are not included.

2) Percentages may not add to 100.0 due to rounding.

3) 1 = Definitely enlist

2 = Probably enlist

3 = Might enlist

4 = Probably not enlist

5 = Definitely not enlist

TABLE 12-2 -- MEAN PROPENSITY IN THE EVENT OF REINSTATEMENT OF THE DRAFT BY INITIAL PROPENSITY LEVEL FOR THE NON-PRIOR SERVICE SAMPLE

<u>Initial Propensity</u>	<u>Reinstatement of the Draft</u>	
	<u>N</u>	<u>Mean Propensity¹⁾</u>
Definitely enlist	55	2.07
Probably enlist	253	2.86
Might enlist	377	3.07
Probably not enlist	526	3.49
Definitely not enlist	669	4.18

-
- 1) 1 = Definitely enlist
2 = Probably enlist
3 = Might enlist
4 = Probably not enlist
5 = Definitely not enlist

In the event of possible war, about 65% of the NPS sample had a positive propensity. This was an increase of 29 percentage points over the initial enlistment propensity and was statistically significant ($t(1858) = 24.65$, $p < .001$). The correlation between initial propensity to enlist and propensity to enlist if there were a possibility of war was .35 ($p < .001$). Table 12-3 shows the propensity level in the event of possible war as a function of initial propensity level. As with the reinstatement of the draft, those respondents whose propensities were initially low increased, and those respondents whose propensities were initially high declined slightly.

In the event of actual war, about 71% of the NPS sample had a positive propensity. This was an increase of 34 percentage points over the initial enlistment propensity and was statistically significant ($t(1848) = 30.66$, $p < .001$). The correlation between initial propensity to enlist and propensity to enlist given an actual war is .28 ($p < .001$). Table 12-4 shows the initial propensity level and the propensity level in the event of actual war for the NPS sample.

TABLE 12-3 -- MEAN PROPENSITY IN THE EVENT OF POSSIBLE WAR BY INITIAL PROPENSITY LEVEL FOR THE NON-PRIOR SERVICE SAMPLE

<u>Initial Propensity</u>	<u>Possibility of War</u>	
	<u>N</u>	<u>Mean Propensity</u> ¹⁾
Definitely enlist	56	2.14
Probably enlist	252	2.28
Might enlist	374	2.67
Probably not enlist	522	2.99
Definitely not enlist	655	3.52

TABLE 12-4 -- MEAN PROPENSITY IN THE EVENT OF ACTUAL WAR BY INITIAL PROPENSITY LEVEL FOR THE NON-PRIOR SERVICE SAMPLE

<u>Initial Propensity</u>	<u>Actual War</u>	
	<u>N</u>	<u>Mean Propensity</u> ¹⁾
Definitely enlist	56	1.91
Probably enlist	252	2.14
Might enlist	373	2.44
Probably not enlist	519	2.67
Definitely not enlist	649	3.17

- 1) 1 = Definitely enlist
2 = Probably enlist
3 = Might enlist
4 = Probably not enlist
5 = Definitely not enlist

12.1.2 Veterans Sample

Table 12-5 presents the data on propensity to enlist in the event of possible war or actual war.

The Veterans sample's propensity to enlist increased significantly with the possibility of war, $t(963) = 19.19, p < .001$. The percent of the sample with a favorable propensity increased about 30 percentage points, from 23% favorable for the initial propensity question to 53% favorable in the event of possible war. The correlation between the initial propensity to enlist and propensity to enlist if there was a possibility of war was $.38 (p < .001)$.

Table 12-6 shows how the Veterans sample shifted from initial enlistment propensity. Those respondents with high initial propensity scores showed downward movement and those respondents with low initial propensity showed an increase in favorability.

In the event of actual war, about 66% of the Veterans sample had a positive propensity. This was an increase of 43 percentage points and was statistically significant, $t(958) = 27.01, p < .001$. Table 12-7 shows how the Veterans sample shifted propensity from their initial enlistment propensity.

12.2 The Effect of Various Events on Propensity to Extend Enlistment of Current Reservists

12.2.1 Army National Guard Sample

Table 12-8 presents the data on propensity to extend enlistment for the Army National Guard sample in the event of possible war or actual war. There was a significant increase in the percent of the sample who had a positive propensity if there was a possibility of war, $t(1874) = 5.35, p < .001$. The percent of those with a favorable propensity increased about 6 percentage points, from 43% to 49%. The correlation between the initial propensity to extend and propensity to extend if there was a possibility of war was $.52 (p < .001)$. Table 12-9 shows how the ARNG sample shifted from the initial propensity levels in the event of a possible war.

TABLE 12-5 -- PROPENSITY TO ENLIST FOR THE TWO EVENTS FOR THE VETERANS SAMPLE

<u>Propensity</u>	<u>Possibility of War</u>		<u>Actual War</u>	
	<u>N</u>	<u>Percent</u>	<u>N</u>	<u>Percent</u>
Sample ¹⁾	964	100.0	959	100.0
Definitely enlist	80	8.3	168	17.5
Probably enlist	220	22.8	273	28.5
Might enlist	213	22.1	194	20.2
Probably not enlist	165	17.1	120	12.5
Definitely not enlist	286	29.7	204	21.3
Mean ²⁾		3.370		2.916
Standard error		.043		.045
Standard deviation		1.335		1.339

1) Respondents with undetermined responses are not included.

2) 1 = Definitely enlist

2 = Probably enlist

3 = Might enlist

4 = Probably not enlist

5 = Definitely not enlist

TABLE 12-6 -- MEAN PROPENSITY IN THE EVENT OF POSSIBLE WAR BY INITIAL PROPENSITY LEVEL FOR THE VETERANS SAMPLE

<u>Initial Propensity</u>	<u>Possibility of War</u>	
	<u>N</u>	<u>Mean Propensity</u> ¹⁾
Definitely enlist	18	2.33
Probably enlist	73	2.38
Might enlist	131	2.76
Probably not enlist	212	3.08
Definitely not enlist	530	3.81

TABLE 12-7 -- MEAN PROPENSITY IN THE EVENT OF ACTUAL WAR BY INITIAL PROPENSITY LEVEL FOR THE VETERANS SAMPLE

<u>Initial Propensity</u>	<u>Actual War</u>	
	<u>N</u>	<u>Mean Propensity</u> ¹⁾
Definitely enlist	18	2.00
Probably enlist	73	2.19
Might enlist	128	2.38
Probably not enlist	212	2.64
Definitely not enlist	528	3.29

- 1) 1 = Definitely enlist
2 = Probably enlist
3 = Might enlist
4 = Probably not enlist
5 = Definitely not enlist

TABLE 12-8 -- PROPENSITY TO EXTEND ENLISTMENT FOR THE TWO EVENTS FOR THE ARMY NATIONAL GUARD SAMPLE

<u>Propensity</u>	<u>Possibility of War</u>		<u>Actual War</u>	
	<u>N</u>	<u>Percent</u>	<u>N</u>	<u>Percent</u>
Sample ¹⁾	1882	100.0	1873	100.0
Definitely extend	172	9.1	311	16.6
Probably extend	416	22.1	467	24.9
Might extend	338	18.0	314	16.8
Probably not extend	369	19.6	296	15.8
Definitely not extend	587	31.2	485	25.9
Mean ²⁾	3.416		3.095	
Standard error	.031		.033	
Standard deviation	1.363		1.449	

1) Respondents with undetermined responses are not included.

- 2) 1 = Definitely extend
2 = Probably extend
3 = Might extend
4 = Probably not extend
5 = Definitely not extend

In the event of an actual war, the ARNG sample's positive propensity increased significantly, $t(1865) = 13.09$, $p < .001$. The percent of those with a favorable propensity increased about 15 percentage points, from 43% to 58%. The correlation between initial propensity to extend and propensity to extend if there actually was a war was $.38$ ($p < .001$). Table 12-10 shows how the ARNG sample shifted from their initial propensity levels in the event of actual war.

12.2.2 Other Reserve Components

Table 12-11 presents the propensity data for the Other Reserve Components sample in the event of possible war and actual war. The increase in percent of the ORC sample who had a positive propensity in the event of possible war was statistically significant, $t(1882) = 8.60$, $p < .001$. The percent of those with a favorable propensity increased by 8 percentage points, from 43% favorable in response to the initial propensity measure to 51% favorable in the event of possible war. Table 12-12 shows how the ORC sample shifted from their initial propensity levels in the event of possible war.

In the event of an actual war, the ORC sample's propensity to extend increased significantly, $t(1857) = 19.14$, $p < .001$. The percent of those with a favorable propensity increased by 22 percentage points, from 43% favorable to 65% favorable in the event of an actual war. The correlation between initial extension propensity and actual war propensity was $.37$ ($p < .001$).

Table 12-13 shows how the sample shifted in their propensity as a function of initial extension propensity.

TABLE 12-9 -- MEAN PROPENSITY IN THE EVENT OF POSSIBLE WAR BY INITIAL PROPENSITY LEVEL FOR THE ARMY NATIONAL GUARD SAMPLE

<u>Initial Propensity</u>	<u>Possibility of War</u>	
	<u>N</u>	<u>Mean Propensity</u> ¹⁾
Definitely extend	190	1.96
Probably extend	268	2.68
Might extend	351	3.14
Probably not extend	394	3.66
Definitely not extend	672	4.12

TABLE 12-10 -- MEAN PROPENSITY IN THE EVENT OF ACTUAL WAR BY INITIAL PROPENSITY LEVEL FOR THE ARMY NATIONAL GUARD SAMPLE

<u>Initial Propensity</u>	<u>Actual War</u>	
	<u>N</u>	<u>Mean Propensity</u> ¹⁾
Definitely extend	192	1.90
Probably extend	266	2.58
Might extend	354	2.91
Probably not extend	388	3.30
Definitely not extend	666	3.63

- 1) 1 = Definitely extend
 2 = Probably extend
 3 = Might extend
 4 = Probably not extend
 5 = Definitely not extend

TABLE 12-11 -- PROPENSITY TO EXTEND FOR THE TWO EVENTS FOR THE OTHER RESERVE COMPONENTS SAMPLE

<u>Propensity</u>	<u>Possibility of War</u>		<u>Actual War</u>	
	<u>N</u>	<u>Percent</u>	<u>N</u>	<u>Percent</u>
Sample	1885	100.0	1862	100.0
Definitely extend	203	10.8	375	20.1
Probably extend	420	22.3	513	27.6
Might extend	343	18.2	323	17.3
Probably not extend	354	18.8	236	12.7
Definitely not extend	565	30.0	415	22.3
Mean		3.349		2.894
Standard error		.032		.033
Standard deviation		1.385		1.445

TABLE 12-12 -- MEAN PROPENSITY IN THE EVENT OF POSSIBLE WAR BY INITIAL PROPENSITY LEVEL FOR THE OTHER RESERVE COMPONENTS SAMPLE

<u>Initial Propensity</u>	<u>Possibility of War</u>	
	<u>N</u>	<u>Mean Propensity</u> ¹⁾
Definitely extend	203	1.89
Probably extend	266	2.49
Might extend	338	3.07
Probably not extend	326	3.57
Definitely not extend	750	4.08

TABLE 12-13 -- MEAN PROPENSITY IN THE EVENT OF ACTUAL WAR BY INITIAL PROPENSITY LEVEL FOR THE OTHER RESERVE COMPONENTS SAMPLE

<u>Initial Propensity</u>	<u>Possibility of War</u>	
	<u>N</u>	<u>Mean Propensity</u> ¹⁾
Definitely extend	202	1.75
Probably extend	267	2.39
Might extend	330	2.73
Probably not extend	320	3.05
Definitely not extend	739	3.40

- 1) 1 = Definitely extend
2 = Probably extend
3 = Might extend
4 = Probably not extend
5 = Definitely not extend

12.3 Comparison of Samples on Propensity to Enlist/Extend

The overall results may be briefly summarized:

- With every event, with every sample, the enlistment/extension propensity increased significantly from the initial propensity level ($p < .001$).
- Actual war produced the greatest increase in all cases. Reinstatement of the draft produced the least increase for the NPS sample.

Figures 12-1 to 12-15 show the propensity for each potential event as a function of initial enlistment/extension propensity for all four samples.

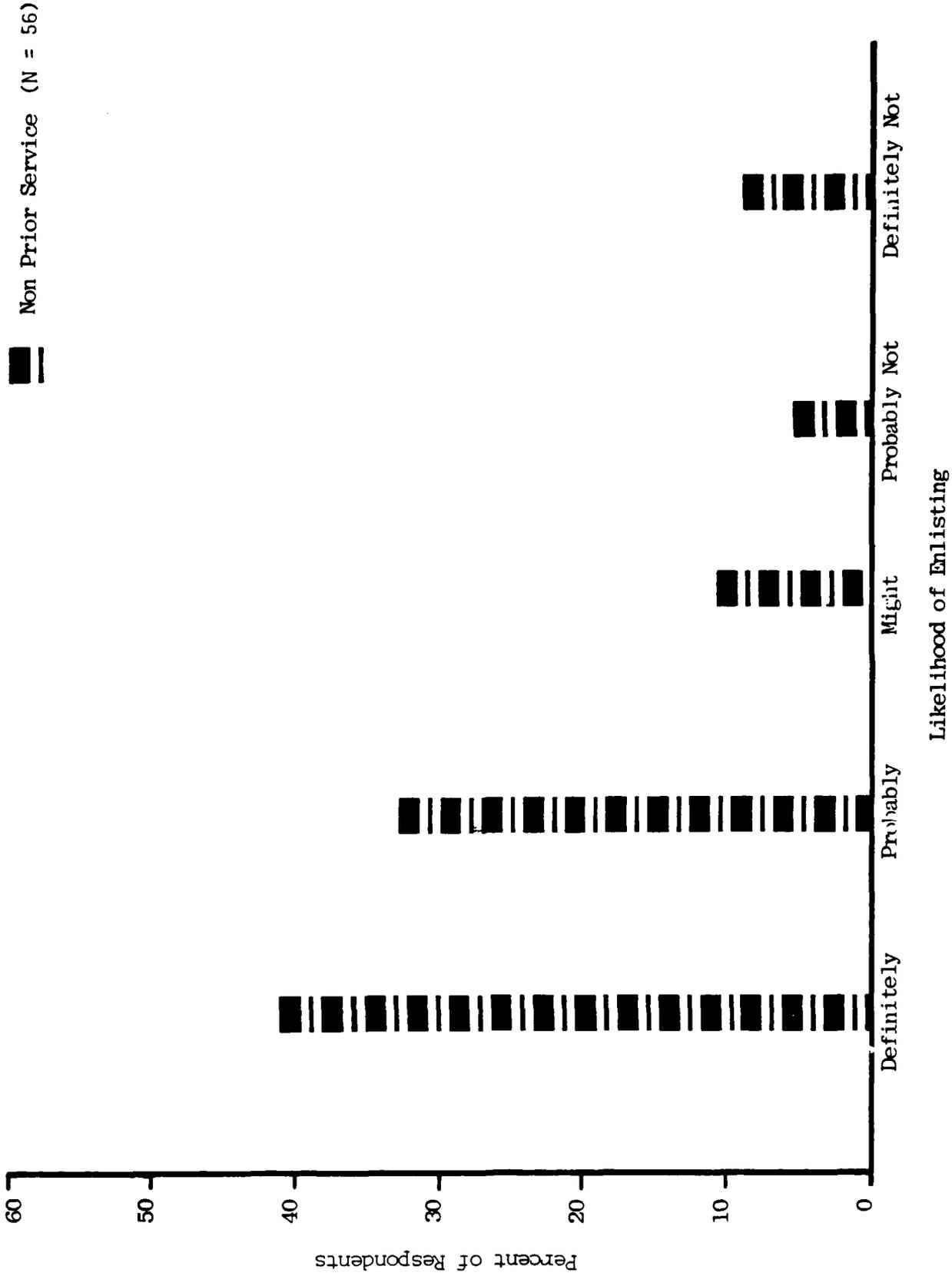


FIGURE 12-1. LIKELIHOOD OF ENLISTING IN THE GUARD OR RESERVE IF THE DRAFT WERE REINSTATED FOR THOSE WHOSE INITIAL PROPENSITY IS DEFINITELY ENLIST

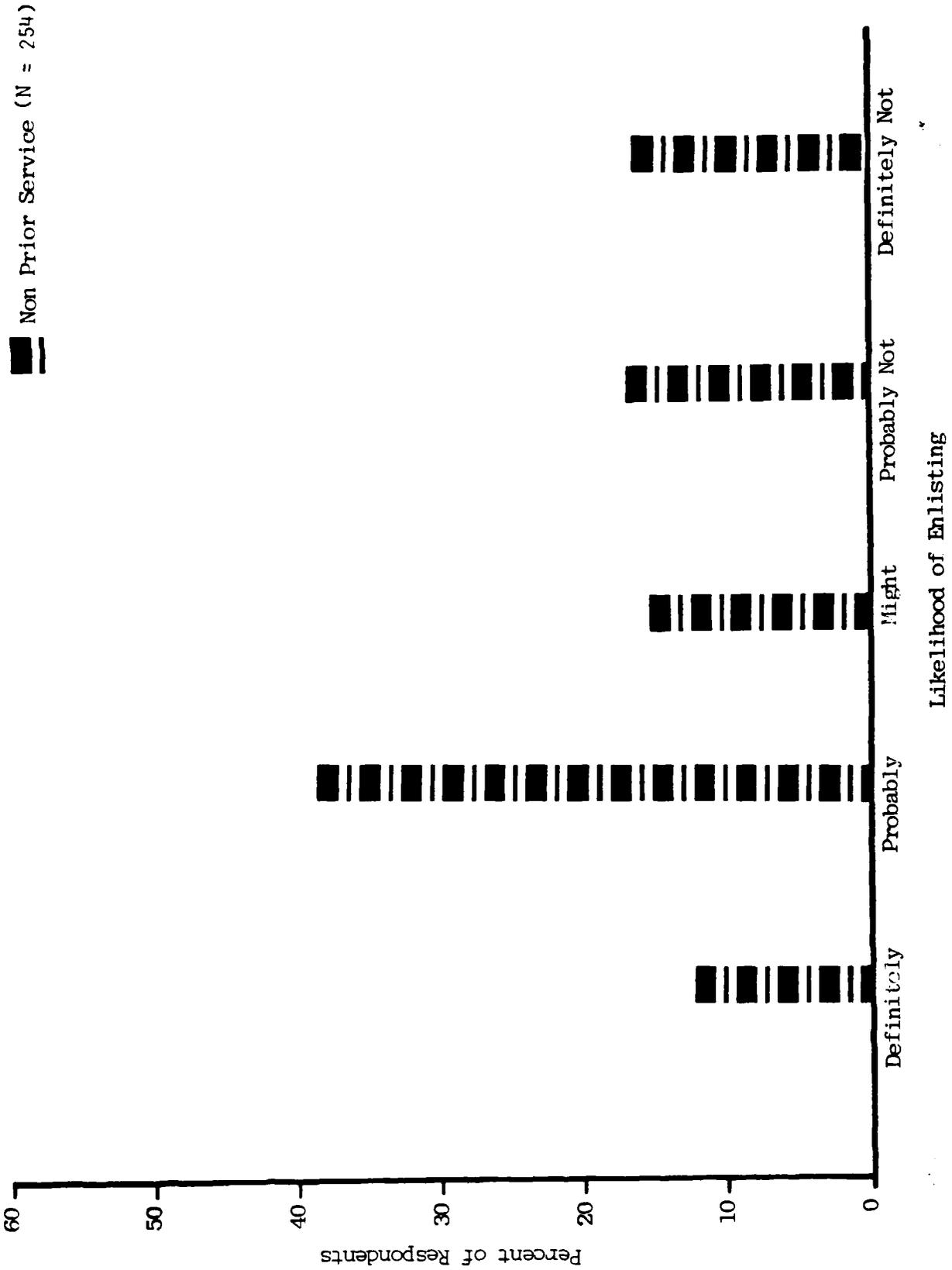


FIGURE 12-2. LIKELIHOOD OF ENLISTING IN THE GUARD OR RESERVE IF THE DRAFT WERE REINSTATED FOR THOSE WHOSE INITIAL PROPENSITY IS PROBABLY ENLIST

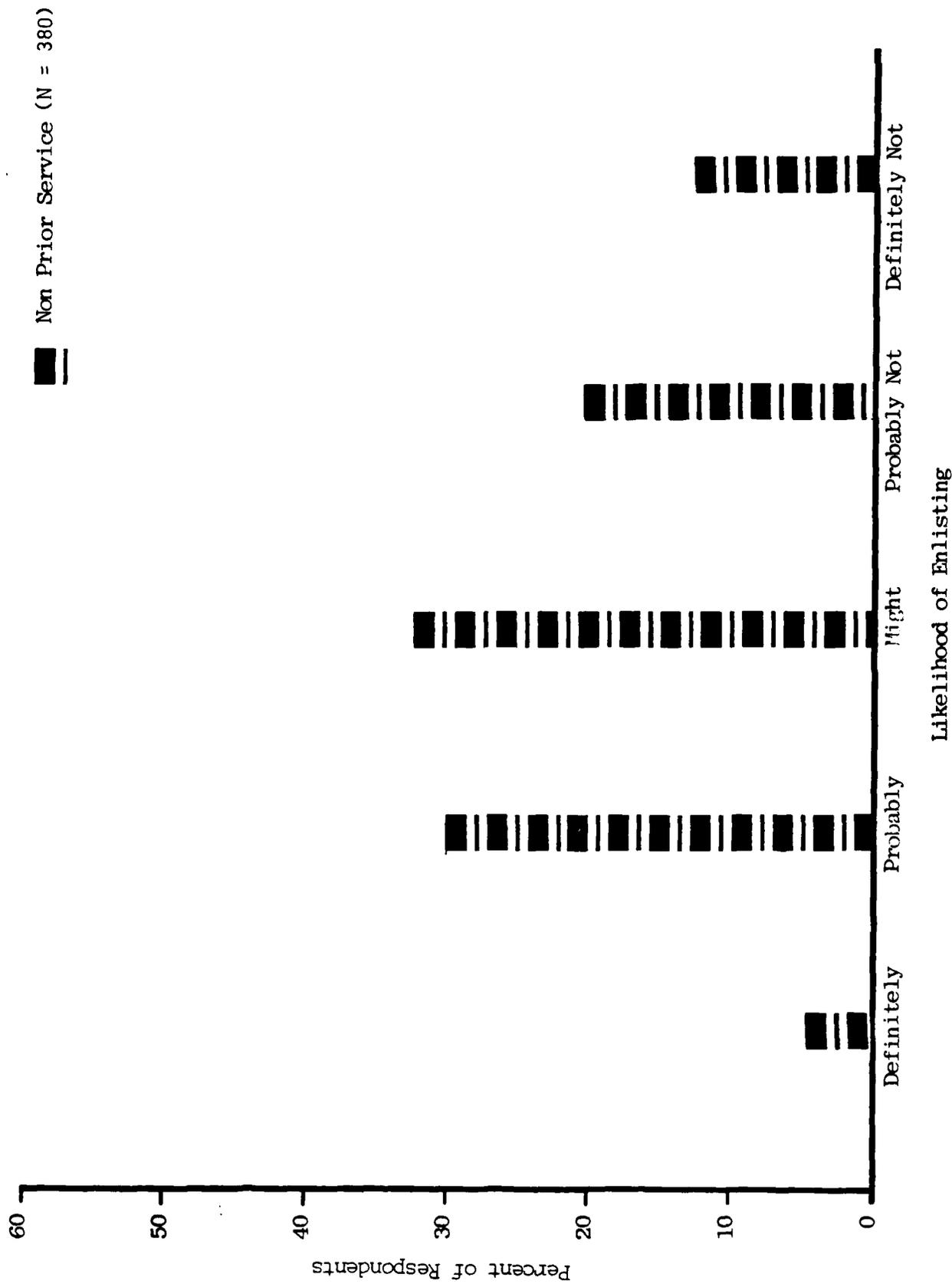


FIGURE 12-3. LIKELIHOOD OF ENLISTING IN THE GUARD OR RESERVE IF THE DRAFT WERE REINSTATED FOR THOSE WHOSE INITIAL PROPENSITY IS MIGHT ENLIST

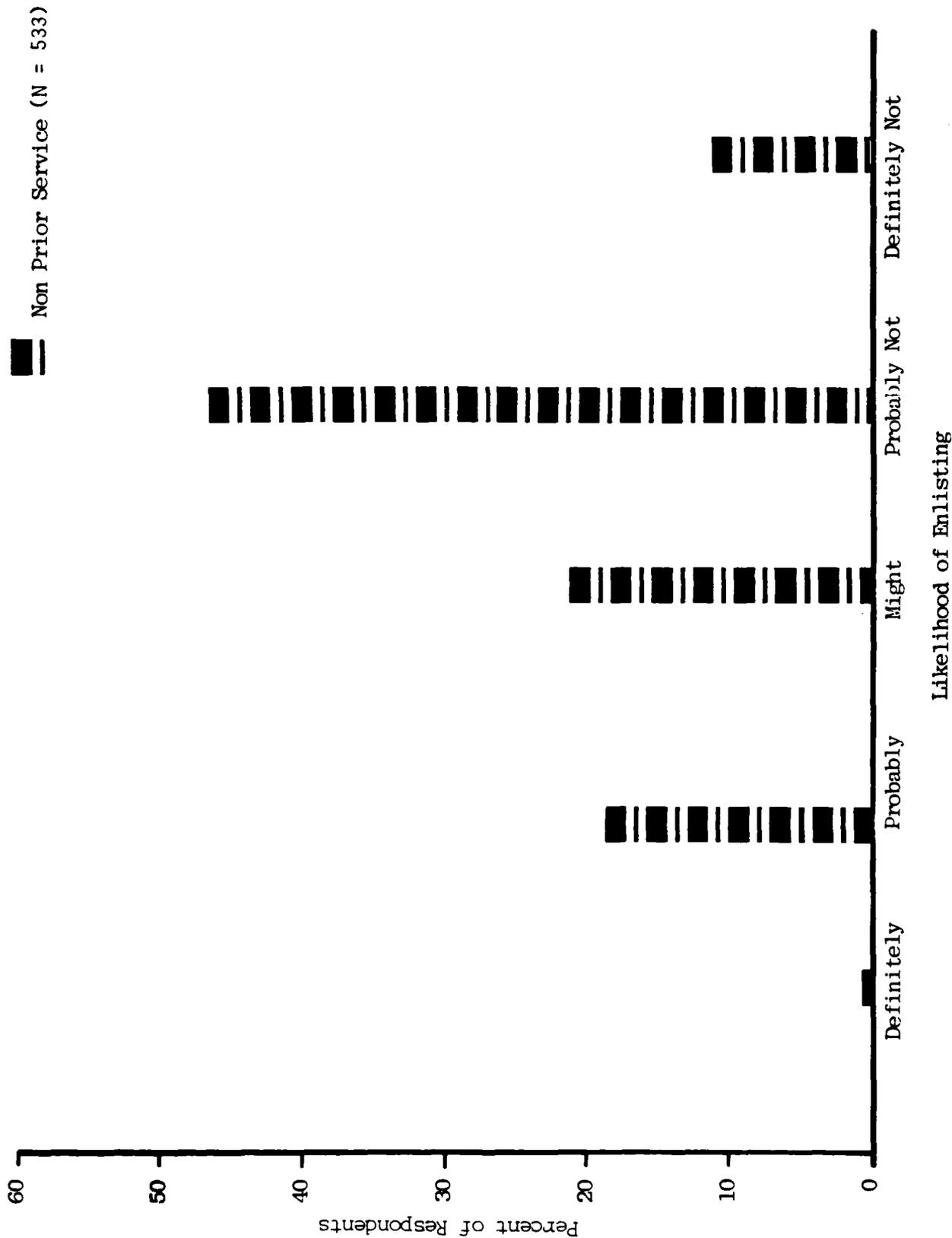


FIGURE 12-4. LIKELIHOOD OF ENLISTING IN THE GUARD OR RESERVE IF THE DRAFT WERE REINSTATED FOR THOSE WHOSE INITIAL PROPENSITY IS PROBABLY NOT ENLIST

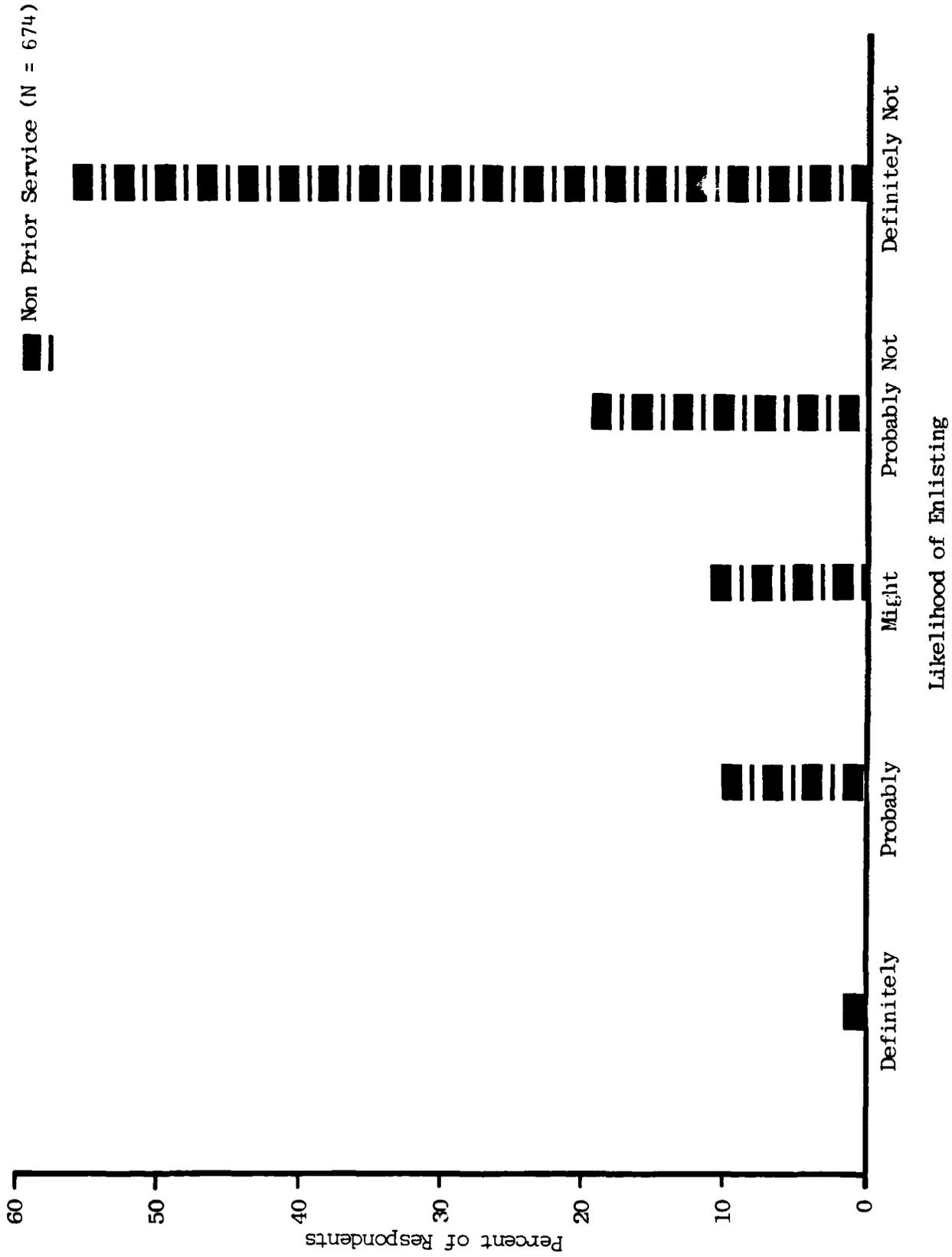


FIGURE 12-5. LIKELIHOOD OF ENLISTING IN THE GUARD OR RESERVE IF THE DRAFT WERE REINSTATED FOR THOSE WHOSE INITIAL PROPENSITY IS DEFINITELY NOT ENLIST

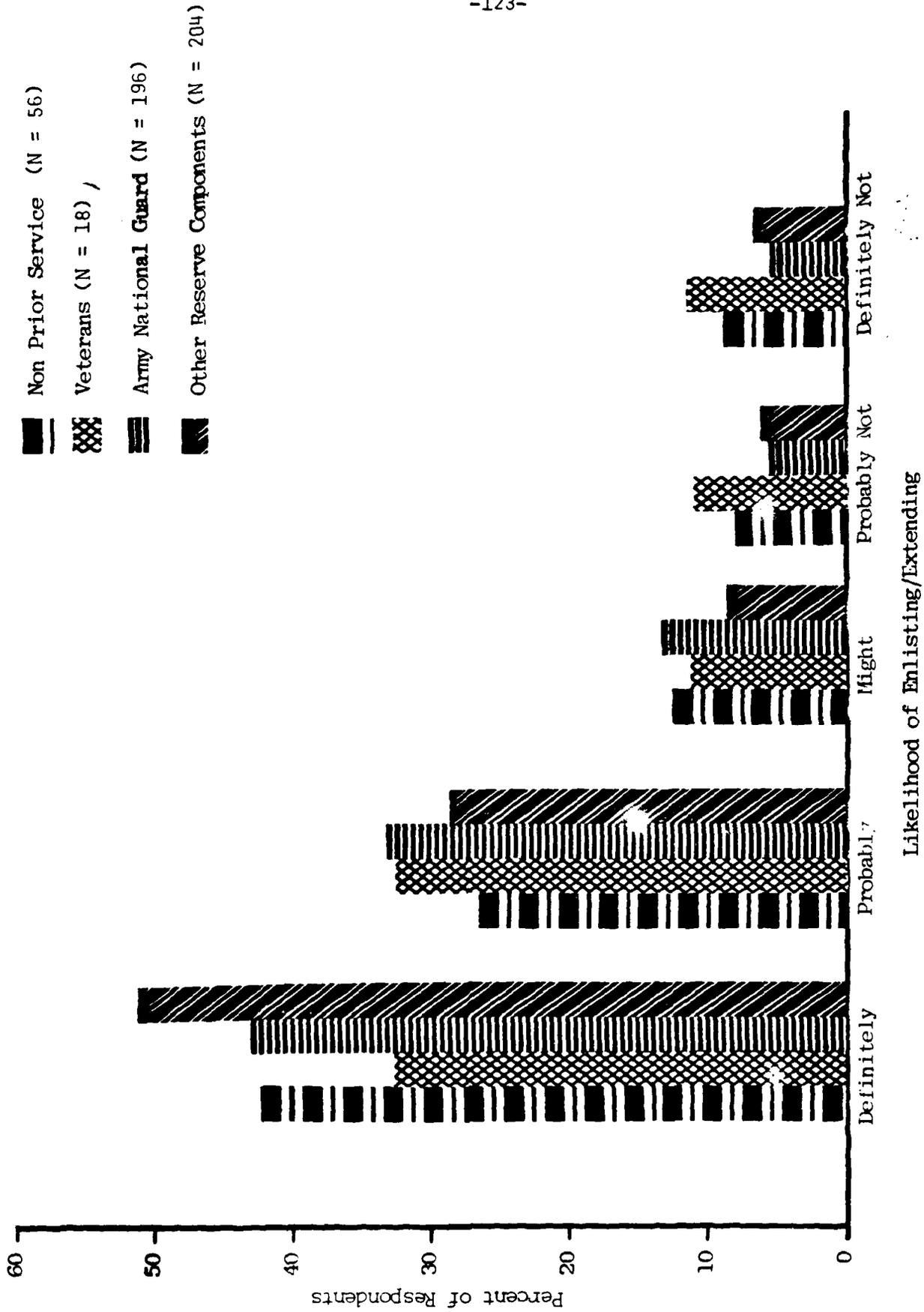
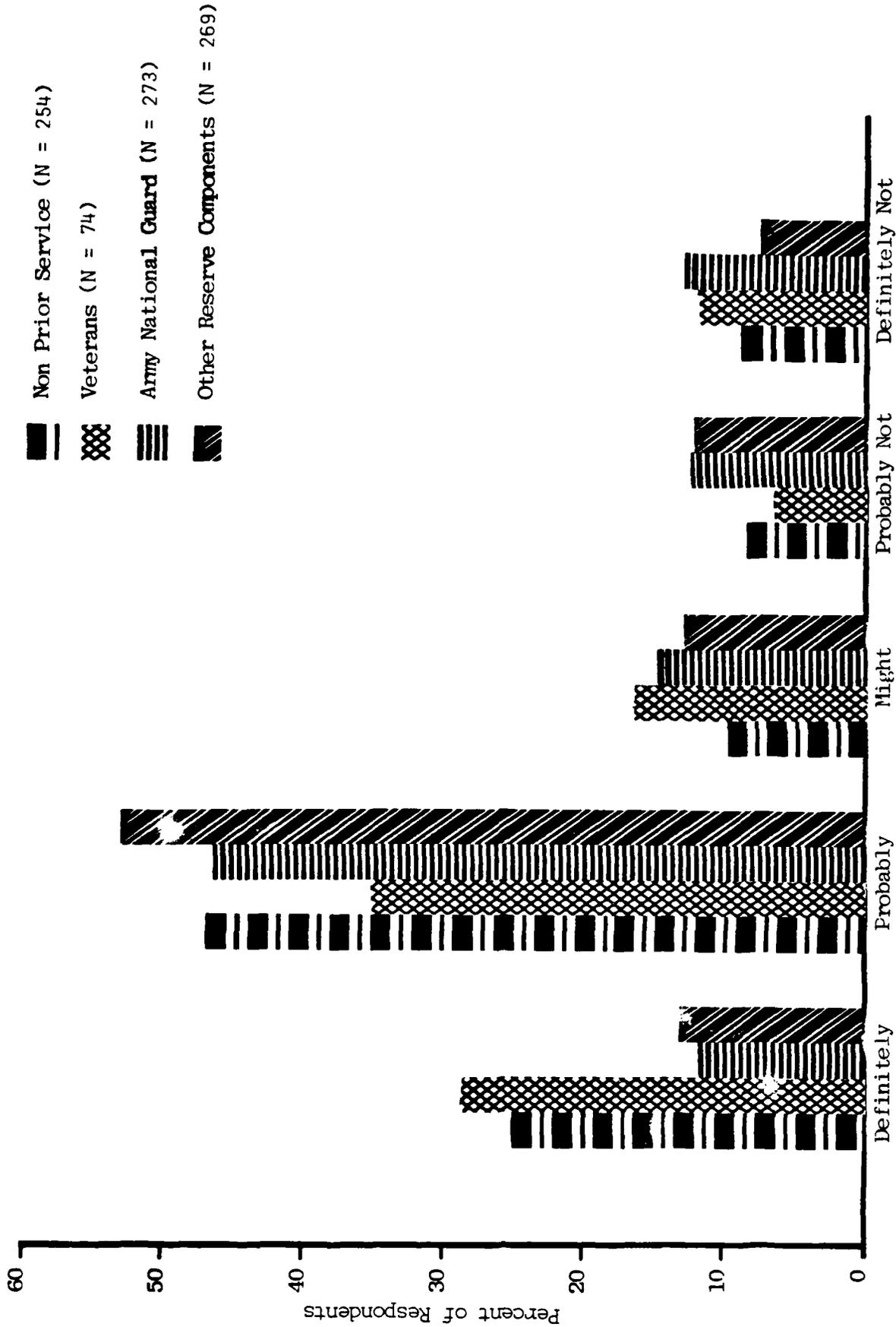


FIGURE 12-6. LIKELIHOOD OF ENLISTING/EXTENDING IN THE GUARD OR RESERVE IF THERE WERE A POSSIBILITY OF WAR FOR THOSE WHOSE INITIAL PROPENSITY IS DEFINITELY ENLIST/EXTEND



Likelihood of Enlisting/Extending

FIGURE 12-7. LIKELIHOOD OF ENLISTING/EXTENDING ENLISTMENT IN THE GUARD OR RESERVE IF THERE WERE A POSSIBILITY OF WAR FOR THOSE WHOSE INITIAL PROPENSITY IS PROBABLY ENLIST/EXTEND

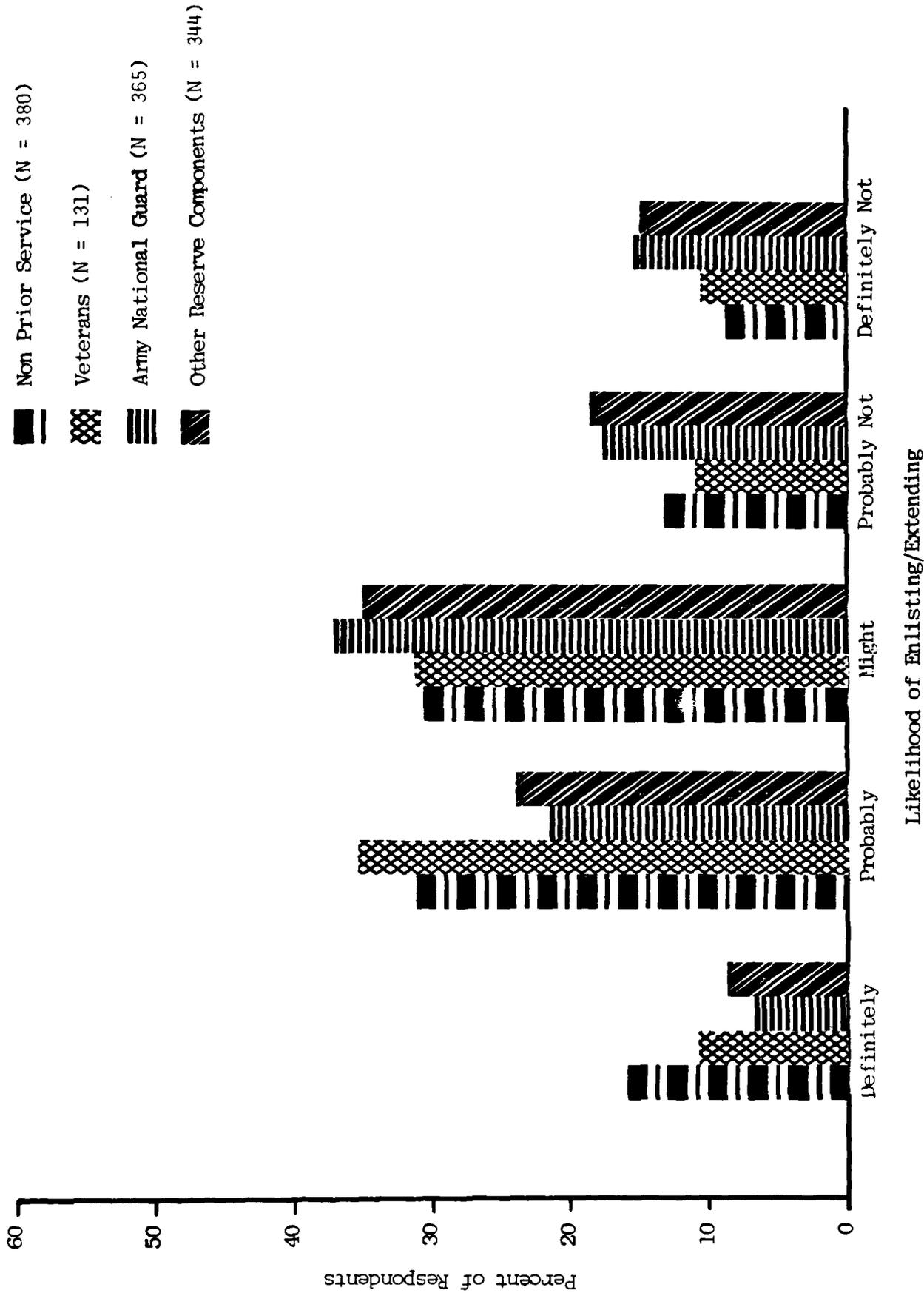


FIGURE 12-8. LIKELIHOOD OF ENLISTING/EXTENDING IN THE GUARD OR RESERVE IF THERE WERE A POSSIBILITY OF WAR FOR THOSE WHOSE INITIAL PROPENSITY IS MIGHT ENLIST/EXTEND

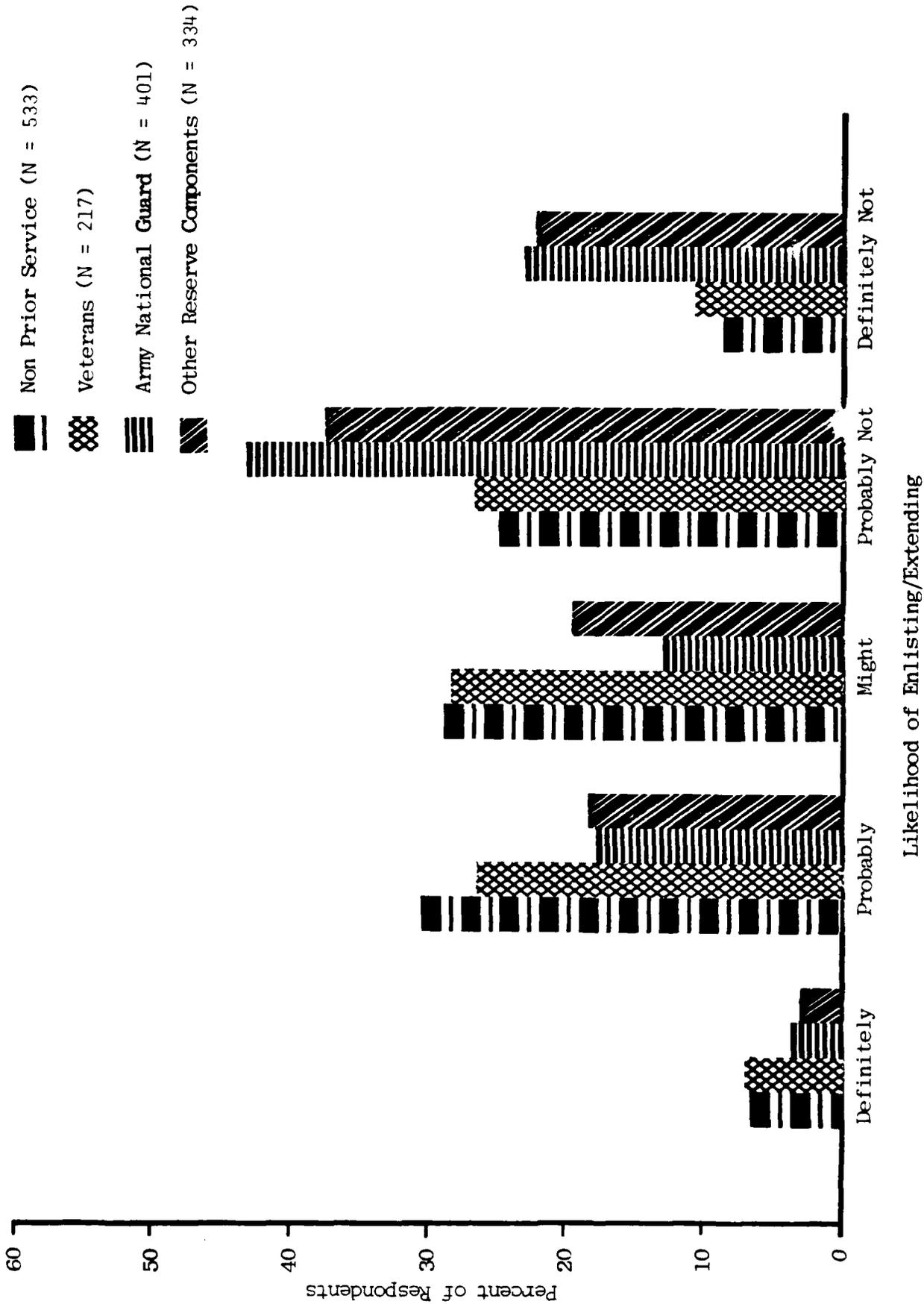


FIGURE 12-9. LIKELIHOOD OF ENLISTING/EXTENDING ENLISTMENT IN THE GUARD OR RESERVE IF THERE WERE A POSSIBILITY OF WAR FOR THOSE WHOSE INITIAL PROPENSITY IS PROBABLY NOT ENLIST/EXTEND

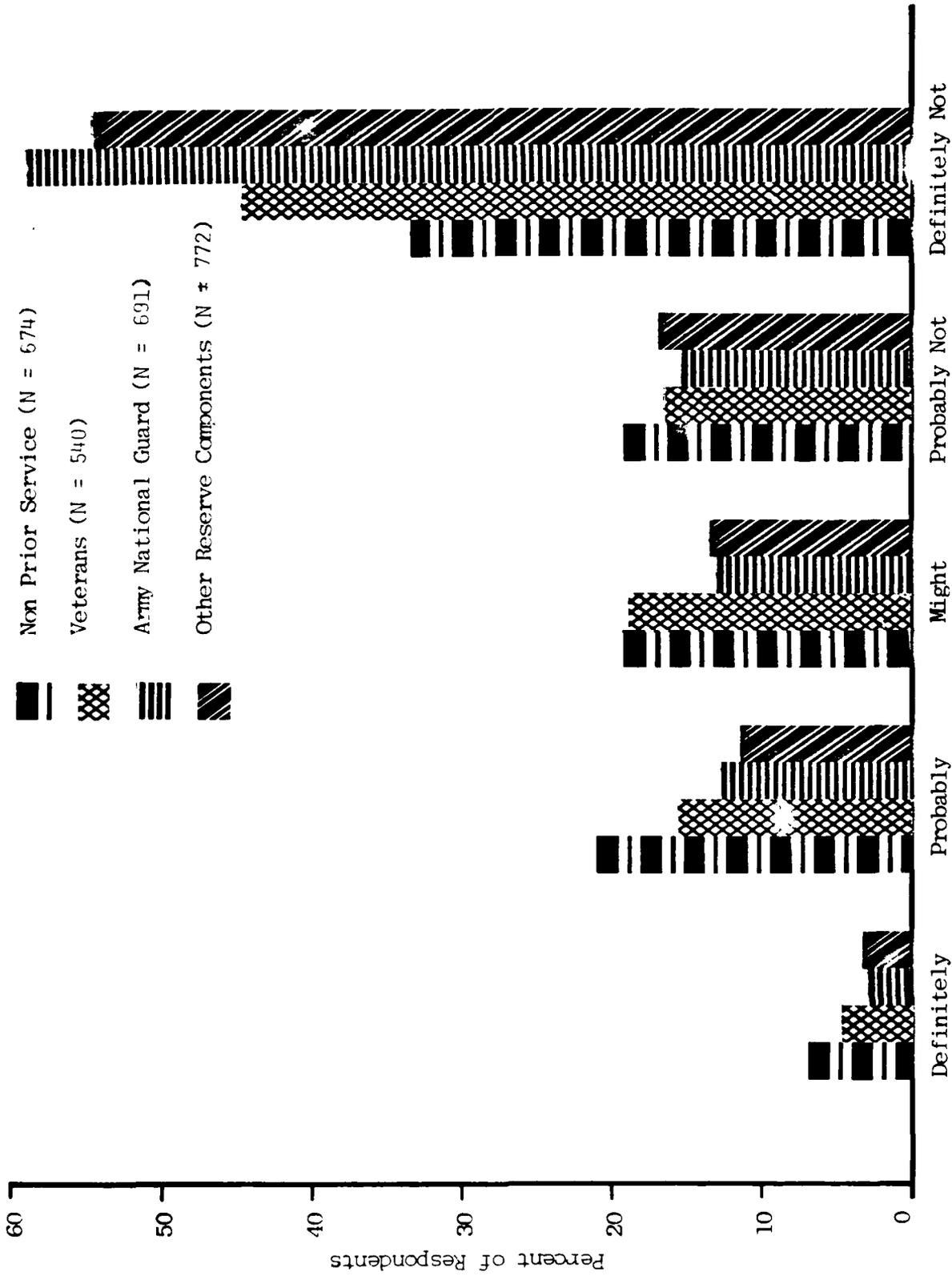


FIGURE 12-10. LIKELIHOOD OF ENLISTING/EXTENDING ENLISTMENT IN THE GUARD OR RESERVE IF THERE WERE A POSSIBILITY OF WAR FOR THOSE WHOSE INITIAL PROPENSITY IS DEFINITELY NOT ENLIST/EXTEND

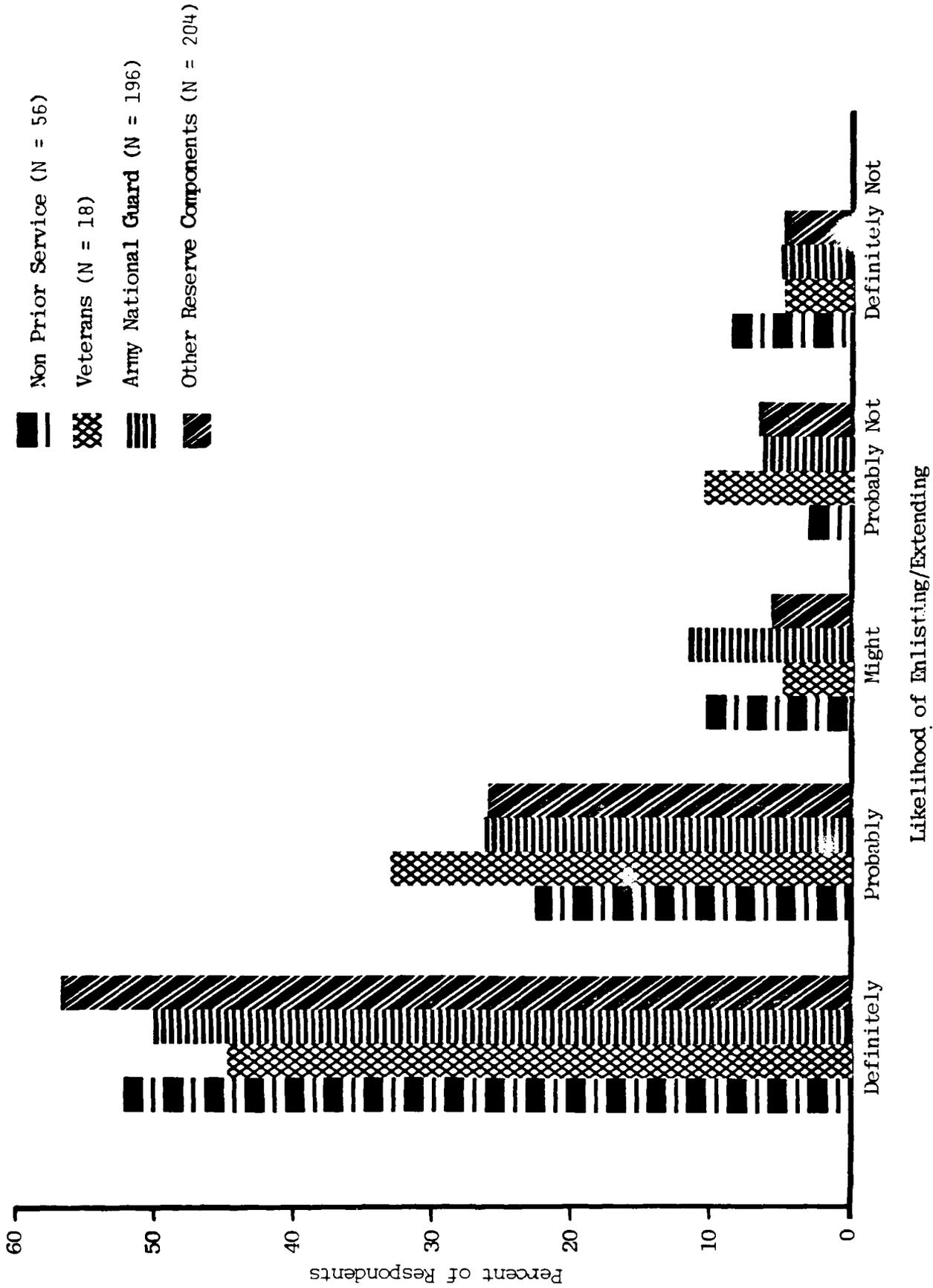


FIGURE 12-11. LIKELIHOOD OF ENLISTING/EXTENDING ENLISTMENT IN THE GUARD OR RESERVE IF THERE WERE AN ACTUAL WAR FOR THOSE WHOSE INITIAL PROPENSITY IS DEFINITELY ENLIST/EXTEND

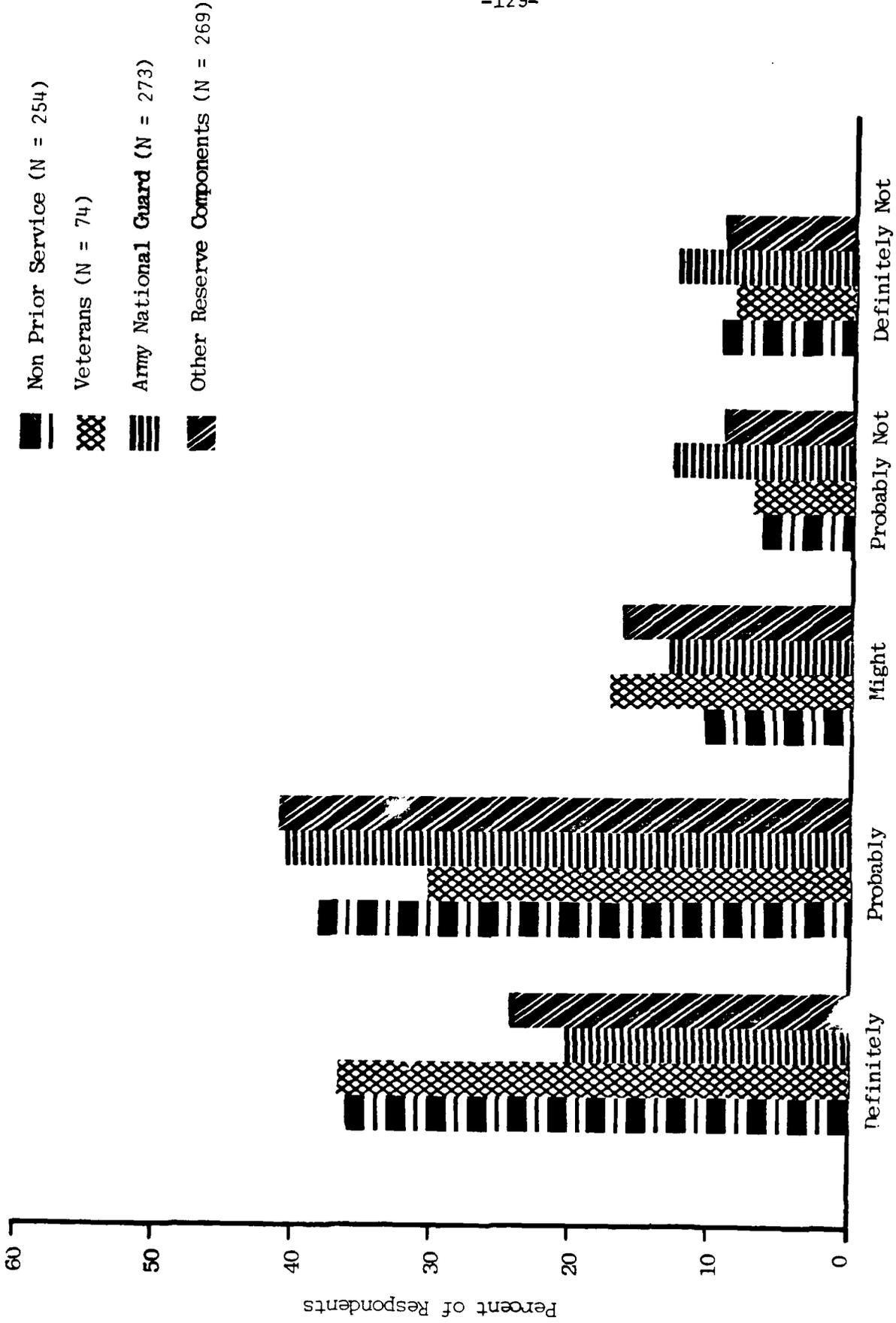


FIGURE 12-12. LIKELIHOOD OF ENLISTING/EXTENDING ENLISTMENT IN THE GUARD OR RESERVE IF THERE WERE AN ACTUAL WAR FOR THOSE WHOSE INITIAL PROPENSITY IS PROBABLY ENLIST/EXTEND

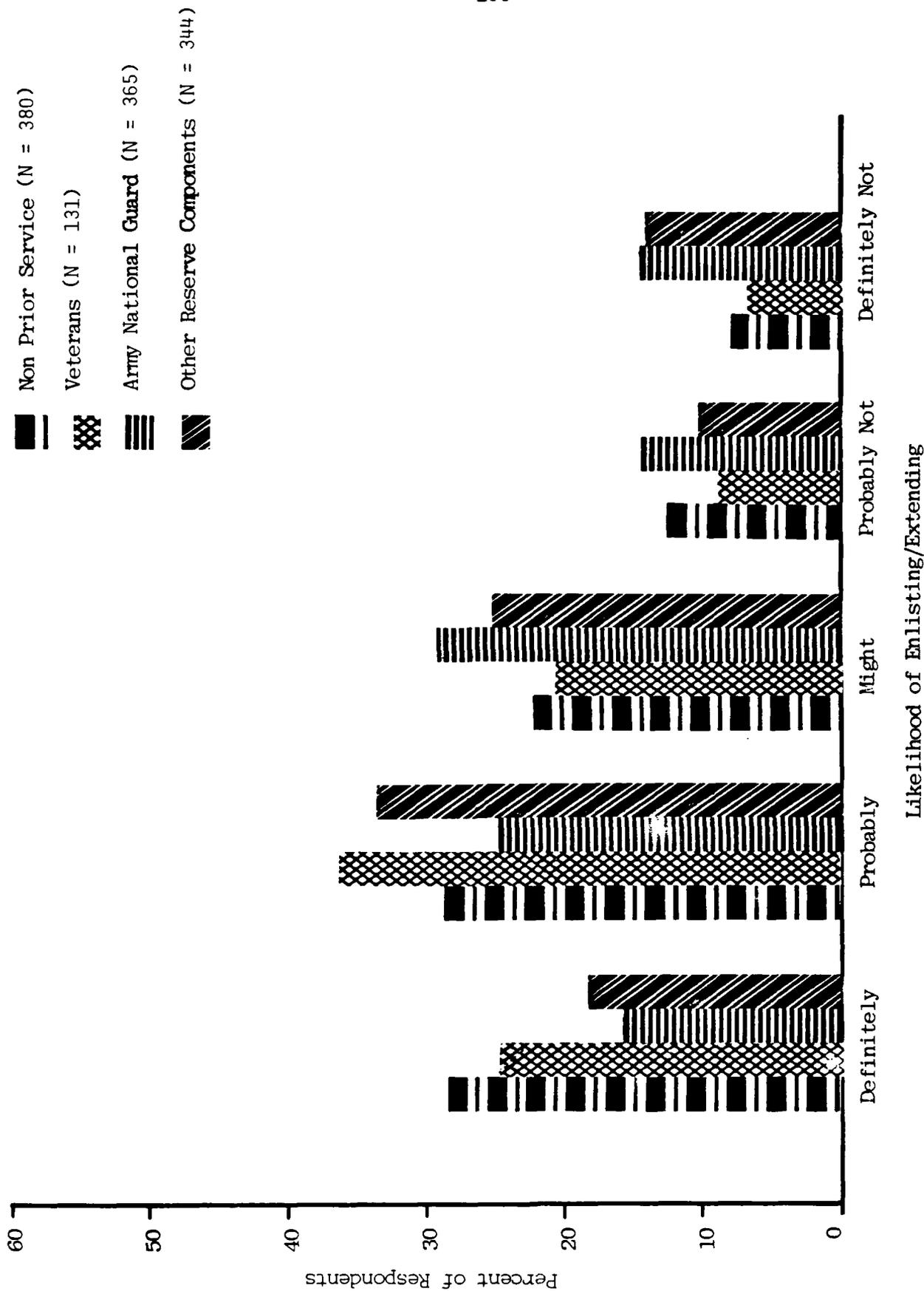


FIGURE 12-13 LIKELIHOOD OF ENLISTING/EXTENDING ENLISTMENT IN THE GUARD OR RESERVE IF THERE WERE AN ACTUAL WAR FOR THOSE WHOSE INITIAL PROPENSITY IS MIGHT ENLIST/EXTEND

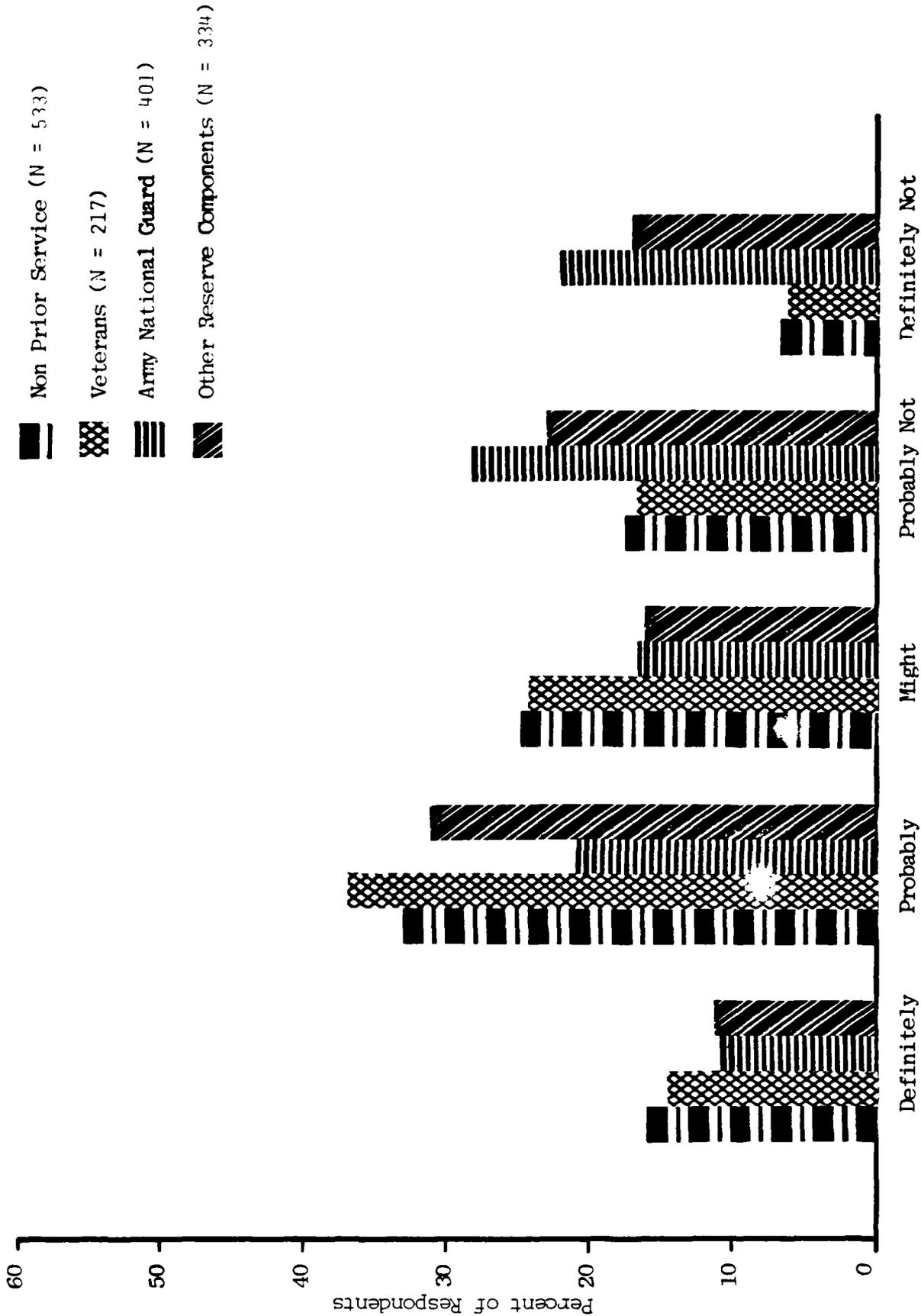


FIGURE 12-14. LIKELIHOOD OF ENLISTING/EXTENDING IN THE GUARD OR RESERVE IF THERE WERE AN ACTUAL WAR FOR THOSE WHOSE INITIAL PROPENSITY IS PROBABLY NOT ENLIST/EXTEND

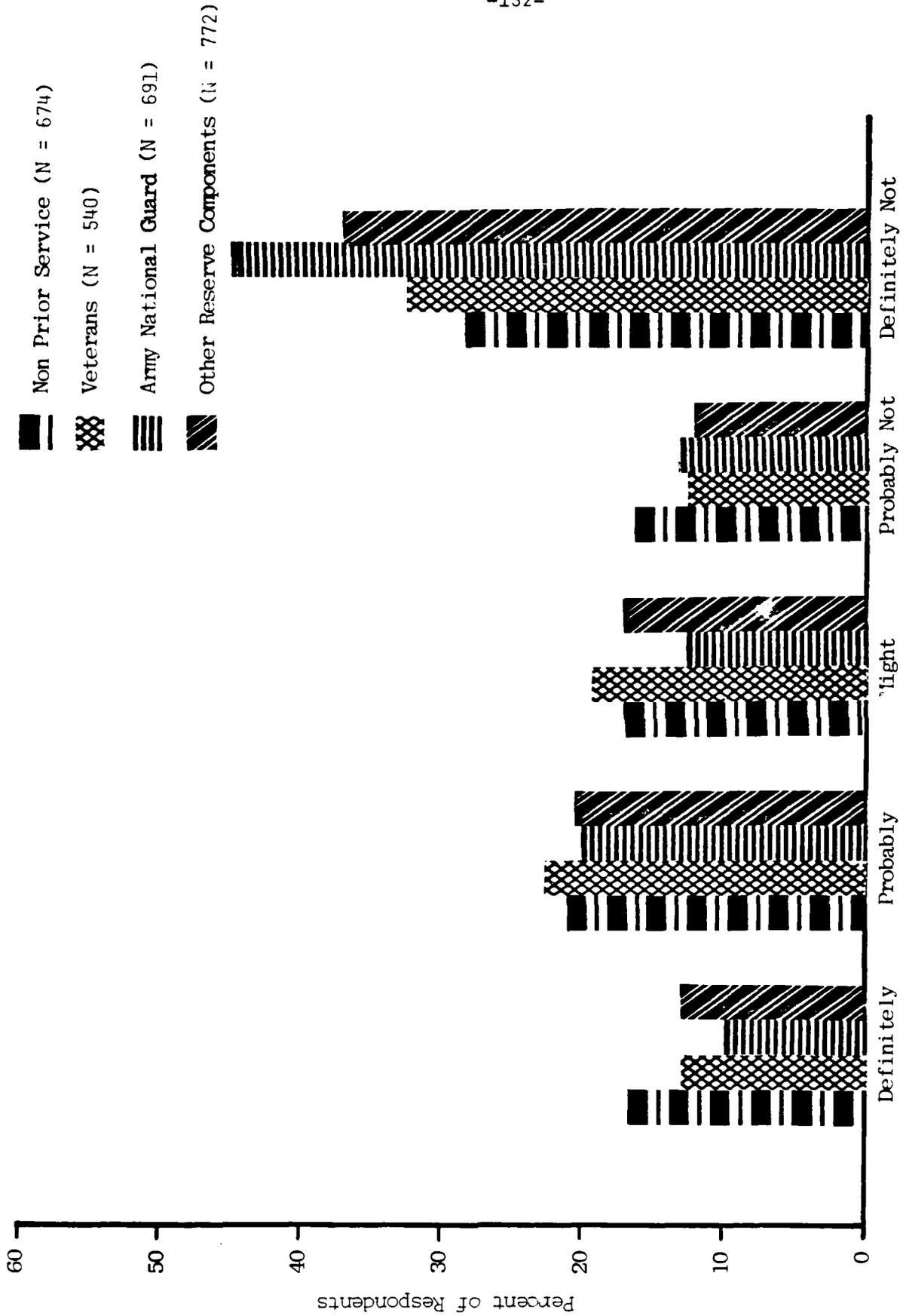


FIGURE 12-15. LIKELIHOOD OF ENLISTING/EXTENDING IN THE GUARD OR RESERVE IF THERE WERE AN ACTUAL WAR FOR THOSE WHOSE INITIAL PROPENSITY IS DEFINITELY NOT ENLIST/EXTEND

12.4 Demographics -- What Types of Men are More Likely to Enlist/Extend in the Case of Each Event

Tables 12-14 to 12-17 present the demographic profiles of men from each sample who show favorable propensities toward enlisting/extending enlistment in the Guard/Reserve in the case of each event: 1) reinstatement of the draft; 2) the possibility of war; and 3) actual war. Demographic data for men with favorable initial enlistment propensities have also been included on each table so that differences between present and hypothetical propensities may be easily compared. (For a discussion of the demographic characteristics of men with positive initial enlistment propensities and an explanation of the demographic variables, see Section 3.2.5 in Volume I and Section 16.0 of this volume.)

TABLE 12-14 -- PERCENT OF RESPONDENTS IN EACH DEMOGRAPHIC CATEGORY HAVING A POSITIVE ENLISTMENT PROPENSITY -- NON-PRIOR SERVICE SAMPLE

CATEGORY	Events			
	Initial enlistment propensity	Draft reinstated	Possibility of war	Actual war
High school (n = 1247)	41.4	47.6	65.5	70.2
College (n = 657)	26.5	39.1	58.8	66.1
Younger (n = 1012)	47.3	54.2	69.0	73.1
Older (n = 892)	23.7	33.9	56.6	63.9
Married (n = 474)	22.4	32.5	57.0	64.1
Not married (n = 1429)	40.9	48.6	65.3	70.4
Low employment index (n = 950)	44.2	49.5	65.8	71.2
High employment index (n = 954)	28.3	39.8	60.6	66.5
Low socio-economic status (n = 1198)	37.2	45.3	63.8	68.9
High socio-economic status (n = 511)	29.2	43.5	60.5	67.9
No school commitment (n = 735)	29.1	38.8	59.0	65.3
Planning to attend school (n = 499)	40.7	47.5	66.9	71.5
Attending school (n = 662)	40.8	48.8	65.0	70.5

TABLE 12-15 -- PERCENT OF RESPONDENTS IN EACH DEMOGRAPHIC CATEGORY HAVING A POSITIVE ENLISTMENT PROPENSITY -- VETERANS SAMPLE

CATEGORY	Events		
	Initial Enlistment propensity	Possibility of war	Actual war
High school (n = 484)	25.6	55.4	68.4
College (n = 496)	20.0	49.4	61.3
Younger (n = 654)	26.0	54.0	66.8
Older (n = 325)	16.0	49.2	60.9
Married (n = 526)	20.5	52.7	65.0
Not married (n = 453)	25.4	52.1	64.7
Low employment index (n = 479)	29.0	57.6	68.7
High employment index (n = 501)	16.8	47.3	61.1
Low socio-economic status (n = 591)	25.7	55.8	67.3
High socio-economic status (n = 305)	15.7	46.2	61.0
No school commitment (n = 281)	15.3	49.1	62.3
Planning to attend school (n = 304)	26.6	57.2	69.1
Attending school (n = 386)	24.9	50.8	63.5

TABLE 12-16 -- PERCENT OF RESPONDENTS IN EACH DEMOGRAPHIC CATEGORY HAVING A POSITIVE EXTENSION OF ENLISTMENT PROPENSITY -- ARMY NATIONAL GUARD SAMPLE

CATEGORY	Events		
	Initial enlistment propensity	Possibility of war	Actual war
High school (n = 974)	49.8	54.0	59.7
College (n = 958)	36.2	41.5	53.1
Younger (n = 941)	48.4	51.2	57.2
Older (n = 991)	38.0	44.6	55.7
Married (n = 1417)	43.8	47.4	56.7
Not married (n = 518)	41.3	49.0	55.8
Low employment index (n = 982)	46.1	50.3	57.7
High employment index (n = 953)	40.0	45.3	55.1
Low socio-economic status (n = 1025)	48.6	52.5	59.9
High socio-economic status (n = 853)	36.2	41.3	51.3
No school commitment (n = 1241)	40.9	46.0	55.8
Planning to attend school (n = 460)	48.9	55.7	62.6
Attending school (n = 220)	41.8	41.8	47.3

TABLE 12-17 -- PERCENT OF RESPONDENTS IN EACH DEMOGRAPHIC CATEGORY HAVING A POSITIVE EXTENSION OF ENLISTMENT PROPENSITY -- OTHER RESERVE COMPONENTS SAMPLE

CATEGORY	Events		
	Initial enlistment propensity	Possibility of war	Actual war
High school (n = 739)	44.7	54.9	64.5
College (n = 1188)	41.0	47.1	61.8
Younger (n = 977)	45.9	54.2	64.3
Older (n = 951)	38.8	45.8	61.3
Married (n = 1268)	41.5	48.7	61.9
Not married (n = 659)	44.2	52.8	64.6
Low employment index (n = 1005)	47.5	55.0	65.9
High employment index (n = 924)	36.8	44.7	59.4
Low socio-economic status (n = 1008)	45.2	55.4	66.0
High socio-economic status (n = 845)	38.0	42.8	58.3
No school commitment (n = 884)	34.3	45.4	58.9
Planning to attend school (n = 551)	51.7	54.6	65.9
Attending school (n = 475)	46.1	53.5	66.9

13.0 PERCEPTUAL, ATTITUDINAL AND MOTIVATIONAL VARIABLES ANALYSIS

13.1 Life Goals

13.1.1 Life Goal Achievability and Importance -- Correlation and Multiple Regression Analyses

Table 13-1 shows the correlations of the achievability rating of each life goal with enlistment/extension of enlistment propensity by sample. Overall, the correlations for the NPS and Veterans samples appeared to be very similar and lower than those for the ARNG and ORC samples. With one exception, none of the correlations observed exceeded .50.

Demonstrating moderate ($.30 < r < .40$) correlations for the NPS sample were "work that is challenging", "being able to make my own decisions on the job", "developing my potential", "learning as much as I can", and "recognition and status". Only "participating in activities that are exciting and adventurous" and "developing my potential" demonstrated moderate correlations in the Veterans sample. All of the life goals, except "job security -- a steady job" demonstrated at least moderate correlations for the ARNG sample. For the ORC sample, all of the life goals except "making good money", "job security -- a steady job" and "a country protected from attack" also demonstrated at least moderate correlations. A correlation greater than .50 was observed only for "work that is challenging" in the ORC sample.

Table 13-2 shows the correlations of the importance rating of each life goal with enlistment/extension of enlistment propensity by sample. None of the correlations were observed to be high enough to show even a moderate relationship between life goal importance and propensity to enlist/extend enlistment.

TABLE 13-1. CORRELATIONS OF LIFE GOAL ACHIEVABILITY WITH ENLISTMENT/
EXTENSION OF ENLISTMENT PROPENSITY

LIFE GOAL	NPS	VETERANS	ARNG	ORC
Work that is challenging	.33	.27	.47	.53
Participating in activities that are exciting and adventurous	.24	.30	.47	.44
Making good money	.23	.20	.39	.29
Being able to make my own decisions on the job	.32	.27	.43	.47
Obedience	.25	.21	.38	.32
A warm, happy family life	.27	.23	.44	.43
Being patient and working a long time to get what I want	.24	.13	.40	.40
Developing my potential	.33	.30	.50	.47
Job security -- a steady job	.21	.23	.25	.27
Working for a better society	.26	.25	.39	.41
Learning as much as I can	.31	.28	.48	.46
Recognition and status	.31	.25	.48	.50
A comfortable life without a lot of problems	.28	.23	.39	.38
A country protected from attack	.16	.21	.32	.28

TABLE 13-2. CORRELATIONS OF LIFE GOAL IMPORTANCE WITH ENLISTMENT/
EXTENSION OF ENLISTMENT PROPENSITY

LIFE GOAL	NPS	VETERANS	ARNG	ORC
Work that is challenging	.03	.02	.06	.07
Participating in activities that are exciting and adventurous	.14	.13	.15	.12
Making good money	.08	.07	.10	.06
Being able to make my own decisions on the job	.00	.03	.05	.00
Obedience	.14	.12	.12	.17
A warm, happy family life	.05	.03	.05	-.02
Being patient and working a long time to get what I want	.12	.09	.10	.09
Developing my potential	.06	.06	.05	.03
Job security -- a steady job	.08	.09	.10	.12
Working for a better society	.10	.05	.12	.10
Learning as much as I can	.07	-.02	.06	.08
Recognition and status	.13	.09	.12	.14
A comfortable life without a lot of problems	.10	.08	.09	.09
A country protected from attack	.12	.09	.15	.14

Three split-half multiple regression analyses were conducted on each sample. These were on life goal (1) importance, (2) achievability, and (3) achievability weighted (multiplicatively) by importance. Table shows the results of these analyses. Since the achievability data were uniformly observed across samples to be the best predictors of enlistment/extension of enlistment propensity, a double cross-validation of those equations was done. Table 13-3 shows that the initial multiple R's held up well under this procedure.

Table 13-4 shows the results of the stepwise multiple regression analyses for the equations showing the highest split sample cross-validation r's for each sample. The variables are presented in order of entry into the multiple regression equation up to increases in the R^2 value of at least .01. It should be noted that because a stepwise procedure was used, some unlisted variables may have had a higher simple correlation with enlistment/extension of enlistment propensity than those that are listed. The first variable entered into the equation, however, had the highest simple correlation with enlistment/extension of enlistment propensity.

It is clear that the enlistment/extension of enlistment propensity predictions from life goal achievability data were reasonably good for the NPS and Veterans samples and quite good for the ARNG and ORC samples. For each sample, one variable, the first variable entered, seemed to represent most of the variance accounted for by the equations. For the NPS, Veteran and ARNG samples, this variable was "developing my potential". For the ORC sample, it was "work that is challenging". It might be noted, however, that "work that is challenging" was highly correlated for all samples with "developing my potential" (for NPS, $r = .57$; for Veterans, $r = .58$; for ARNG, $r = .62$; for ORC, $r = .62$). "Developing my potential" was rated as the most or second most important life goal for all samples.

TABLE 13-3. MULTIPLE REGRESSION ANALYSES OF LIFE GOALS TO PREDICT ENLISTMENT/
EXTENSION OF ENLISTMENT PROPENSITY

	<u>Importance of Life Goals</u>		<u>Achievability of Life Goals</u>	
	<u>Multiple R</u>	<u>Cross- validation</u>	<u>Multiple R</u>	<u>Cross- validation</u>
NPS				
Subsample 1	.26	--	.45	.40
Subsample 2	.23	--	.44	.39
Veterans				
Subsample 1	.20	--	.41	.37
Subsample 2	.24	--	.48	.43
ARNG				
Subsample 1	.23	--	.65	.63
Subsample 2	.23	--	.62	.60
ORC				
Subsample 1	.31	--	.65	.63
Subsample 2	.26	--	.64	.63

	<u>Life Goal Achievability Weighted by Importance</u>	
	<u>Multiple R</u>	<u>Cross- validation</u>
NPS		
Subsample 1	.38	--
Subsample 2	.38	--
Veterans		
Subsample 1	.35	--
Subsample 2	.39	--
ARNG		
Subsample 1	.52	--
Subsample 2	.49	--
ORC		
Subsample 1	.55	--
Subsample 2	.50	--

TABLE 13-4. RESULTS OF STEPWISE MULTIPLE REGRESSION ANALYSES FOR LIFE GOAL ACHIEVABILITY

NPS

<u>Variable</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
Developing my potential	.33	.11	.08
Being able to make my own decisions on the job	.39	.15	.13
Work that is challenging	.41	.17	.10
A comfortable life without a lot of problems	.42	.18	.08
A warm, happy family life	.43	.18	.08

VETERANS

<u>Variable</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
Developing my potential	.30	.09	.07
Making good money	.35	.12	.11
Being able to make my own decisions on the job	.37	.14	.11
Job security -- a steady job	.39	.15	.08

ARNG

<u>Variable</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
Developing my potential	.50	.25	.08
Making good money	.55	.30	.13
Gaining recognition and status	.58	.33	.11
A warm, happy family life	.59	.35	.09
A country protected from attack	.60	.36	.10
Being patient and working a long time to get what I want	.61	.37	.08
Being able to make my own decisions on the job	.61	.37	.07

ORC

<u>Variable</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
Work that is challenging	.53	.28	.19
Gaining recognition and status	.58	.34	.16
Being able to make my own decisions on the job	.61	.37	.16
A warm, happy family life	.62	.38	.08
A country protected from attack	.63	.40	.07
Being patient and working a long time to get what I want	.63	.40	.06

13.1.2 Life Goals -- Factor Analysis

It would be expected that the fourteen life goals actually may only represent two or three more basic underlying constructs. Split-half principle components factor analyses were run for each sample. The split-half technique was used to insure that the factors which emerged were reliable and not a statistical artifact, as demonstrated by their presence with a similar pattern of loadings in both split-half analyses. A minimum value of one was set as the criterion for rotation using a varimax procedure.

A three factor solution, accounting for slightly less than 50% of the variance in all samples, was viewed as appropriate. Table 13-5 shows the variables best representing each of the three factors which emerged. Variables were selected on the basis of their high loadings on a single factor across both split samples. These same variables were observed to best represent each factor for all four samples, indicating a relatively homogeneous belief structure for life goal importance. The three factors which emerged were Factor I -- money and status goals, Factor II -- long term personal and societal goals, and Factor III -- on-the-job actualizing goals.

Table 13-6 shows the results of the factor analyses for life goal achievability, while Table 13-7 presents the factors resulting from weighting the achievability data by the importance of the goal.

TABLE 13-5. THREE FACTOR SOLUTION FOR IMPORTANCE OF LIFE GOALS

Factor I -- Money and Status Goals

Making good money

Recognition and status

A comfortable life without a lot of problems

Factor II -- Long-Term Personal and Societal Goals

A warm, happy family life

Being patient and working a long time to get what I want

Working for a better society

Factor III -- On-the-Job Actualizing Goals

Work that is challenging

Participating in activities that are exciting and adventurous

Being able to make my own decisions on the job

TABLE 13-6. TWO FACTOR SOLUTION FOR ACHIEVABILITY OF LIFE GOALS

Factor IA -- Job Status and Money Goals -- NPS, Veterans

Recognition and status

Making good money

Being able to make my own decisions on the job

Factor 1B -- Job Status and Actualization Goals -- ARNG, ORC

Recognition and status

Work that is challenging

Being able to make my own decisions on the job

Developing my potential

Factor II -- Security/Obedience

Obedience

Job security -- a steady job

A country protected from attack

TABLE 13-7. THREE FACTOR SOLUTION FOR ACHIEVABILITY OF LIFE GOALS

Factor I -- Money and Status Goals

Making good money

Recognition and status

A comfortable life without a lot of problems

Factor II -- Long-Term Personal and Societal Goals

A warm, happy family life

Being patient and working a long time to get what I want

Working for a better society

Factor III -- On-the-Job Actualizing Goals

Work that is challenging

Participating in activities that are exciting and adventurous

Being able to make my own decisions on the job

13.1.3 Life Goals -- FHID Analysis

Comrey (1961; 1966) developed a procedure for constructing scales using factorially homogeneous item dimensions (FHID'S) -- that is, items which are determined factor analytically to cluster together. The items best representing a factor are used to form a scale. An individual's "score" on each item is weighted by the factor loading of the item and all items composing the FHID are then summed, giving that individual a scale score for that factor. Since single item answers may be unreliable, this procedure was applied here in an attempt to predict enlistment/extension of enlistment propensity.

Table 13-8 shows the three life goal importance FHID's and the variables composing them which were used in a three "variable" multiple regression analysis to predict enlistment/extension of enlistment propensity. It can be easily seen that the procedure was not particularly useful as the multiple R values obtained were all quite low.

Table 13-9 shows the results of the life goal achievability FHID analysis.

Table 13-10 shows the results of the FHID analysis for the life goal achievability data weighted by the importance data.

TABLE 13-8. RESULTS OF FHID ANALYSIS OF LIFE GOAL IMPORTANCE

	<u>NPS</u>	<u>VETERANS</u>	<u>ARNG</u>	<u>ORC</u>
FHID 1 -- Money and Status Goals				
FHID Beta Weights	.10	.05	.09	.13
Variables:				
Making good money	.74*	.74	.62	.59
Recognition and status	.65	.54	.66	.65
A comfortable life without a lot of problems	.66	.70	.71	.76
FHID 2 -- Long-Term Personal and Societal Goals				
FHID Beta Weights	.10	.06	.08	.06
Variables:				
A warm happy family life	.58	.54	.53	.66
Being patient and working a long time to get what I want	.68	.74	.65	.65
Working for a better society	.65	.56	.60	.67
FHID 3 -- On-the-Job Actualizing Goals				
FHID Beta Weights	.01	.05	.05	.06
Variables:				
Work that is challenging	.70	.72	.75	.76
Participating in activities that are exciting and adventurous	.64	.57	.67	.66
Being able to make my own decisions on the job	.48	.55	.64	.59
MULTIPLE R	.17	.12	.16	.18

* Indicates factor loadings used to develop FHID's

TABLE 13-9. RESULTS OF FHID ANALYSIS OF ACHIEVABILITY OF LIFE GOALS

	<u>NPS</u>	<u>VETERANS</u>	<u>ARNG</u>	<u>ORC</u>
FHID 1A -- Job Status and Money Goals -- NPS, Veterans				
Importance Weights	.31	.30	--	--
Variables:				
Recognition and status	.63*	.64	--	--
Making good money	.87	.58	--	--
Being able to make my own decisions on the job	.74	.70	--	--
FHID 1B -- Job Status and Actuali- zation Goals - ARNG, ORC				
Importance Weights	--	--	.52	.55
Variables:				
Recognition and status	--	--	.68	.71
Work that is challenging	--	--	.77	.80
Being able to make my own decisions on the job	--	--	.75	.70
Developing my potential	--	--	.80	.81
FHID 2 -- Security/Obedience				
Importance Weights	.13	.14	.14	.12
Variables:				
Obedience	.77	.74	.63	.66
Job security -- a steady job	.63	.78	.64	.76
A country protected from attack	.74	.74	.80	.62
MULTIPLE R	.38	.38	.60	.62

* Indicates factor loadings used to develop FHID's

TABLE 13-10. RESULTS OF FHID ANALYSIS OF ACHIEVABILITY WEIGHTED BY IMPORTANCE

	<u>NPS</u>	<u>VETERANS</u>	<u>ARNG</u>	<u>ORC</u>
FHID 1 -- Money and Status Goals				
FHID Beta Weights	.16	.10	.16	.17
Variables:				
Making good money	.74*	.74	.62	.59
Recognition and status	.65	.54	.66	.65
A comfortable life without a lot of problems	.66	.70	.71	.76
FHID 2 -- Long-Term Personal and Societal Goals				
FHID Beta Weights	.14	.09	.18	.18
Variables:				
A warm happy family life	.56	.54	.53	.66
Being patient and working a long time to get what I want	.68	.74	.65	.65
Working for a better society	.66	.56	.60	.67
FHID 3 -- On-the-Job Actualizing Goals				
FHID Beta Weights	.14	.20	.23	.25
Variables:				
Work that is challenging	.70	.72	.75	.76
Participating in activities that are exciting and adventurous	.48	.55	.64	.59
Being able to make my own decisions on the job	.48	.55	.64	.59
MULTIPLE R	.34	.31	.47	.49

* Indicates factor loadings used to develop FHID's

13.2 Reasons for Joining the Guard/Reserve

13.2.1 Reasons for Joining the Guard/Reserve -- Correlation and Multiple Regression Analyses

Table 13-11 shows the correlations of the achievability of each reason for joining the Guard/Reserve with enlistment/extension of enlistment propensity. As with the life goals, the correlations for the NPS and Veterans samples appeared to be very similar and lower than those for the ARNG and ORC samples. None of the correlations for the NPS and Veterans samples exceeded .40, while only one of those for the ARNG sample ("serving my country") and two of those for the ORC sample ("making good money" and "serving my country") were under .40.

Table 13-12 shows the correlations of the ratings of the importance of the reasons for joining the Guard/Reserve and enlistment/extension of enlistment propensity. As observed in the life goal analysis and in the reason achievability analysis, the correlations of the NPS and Veterans samples appeared to be very similar and lower in magnitude than those observed for the ARNG and ORC samples. Unlike the life goals, several of the importance rating correlations exceeded their corresponding achievability ratings. No correlations demonstrating even a moderate ($.30 < r < .40$) relationship were observed for the NPS sample. For the Veterans sample, four reasons were observed to demonstrate moderate correlations -- "opportunity to earn extra income", "being a member of a team", "develop my potential" and "chance to maintain my grade".

All of the importance ratings for the reasons were observed to exhibit a moderate to strong ($.30 < r < .50$) relationship to extension of enlistment propensity for the ARNG and ORC samples.

TABLE 13-11. CORRELATIONS BETWEEN ACHIEVABILITY OF REASONS FOR JOINING
GUARD/RESERVES AND ENLISTMENT/EXTENSION OF ENLISTMENT
PROPENSITY

REASON	NPS	VETERANS	AFNG	ORC
Doing work that is challenging	.30	.31	.49	.53
Being a member of a team	.26	.25	.47	.44
Learning as much as I can	.30	.28	.50	.45
Making good money	.22	.27	.42	.39
Serving my country	.16	.23	.32	.33
Making good friends	.31	.25	.42	.43
Serving my community	.20	.23	.40	.40
Having good benefits	.26	.25	.44	.40
Developing my potential	.32	.31	.48	.51
Having a chance to use my hobbies or interests	.31	.32	.46	.44
Gaining recognition and status	.33	.31	.50	.49
Working for a better society	.23	.29	.45	.51

TABLE 13-12. CORRELATIONS BETWEEN IMPORTANCE OF REASONS FOR JOINING GUARD/
RESERVE AND ENLISTMENT/EXTENSION OF ENLISTMENT PROPENSITY

REASON	NPS	VETERANS	ARNG	ORC
Training to prepare me for a civilian job	.19	.23	--	--
Opportunity to earn extra income	.24	.31	.47	.46
Opportunity to serve my country	.29	.29	.38	.36
Opportunity to make good friends	.22	.27	.34	.31
Chance to use my hobbies or interests	.23	.22	.37	.34
Opportunity to serve my community	.25	.25	.38	.36
Being a member of a team	.28	.33	.48	.42
Develop my potential	.25	.30	.41	.38
For good benefits	.24	.27	.42	.39
Chance to maintain my grade	--	.31	--	--
Chance to maintain my MOS	--	.27	--	--

Three split-half multiple regression analyses were conducted on each sample to predict enlistment/extension of enlistment propensity. These were run on reasons for enlisting/extending (1) importance, (2) achievability, and (3) achievability weighted (multiplicatively) by importance. Table shows the results of these analyses. Since the achievability data were, once again, uniformly observed to be the best predictors of enlistment/extension of enlistment propensity, a double cross-validation of the equations was done. Table 13-13 shows that, as before, the multiple regression coefficients held up exceptionally well. The prediction was observed to be much better for the ARNG and ORC samples -- a finding like that for the life goals.

Table 13-14 shows the results of the stepwise multiple regressions for the equations demonstrating the highest split sample cross-validation r's. The variables are presented in order of entry into the multiple regression equation up to increases in the R^2 value of at least .01.

As with the life goals, one variable seemed to represent most of the variance accounted for by the equations; and, four or five variables tended to represent all of the variance which could be accounted for.

In interpreting the results of this analysis, it should be recalled that each sample perceived certain reasons as more achievable in the Guard/Reserve than in a civilian job. This analysis was designed to identify which combination of reasons best predicted enlistment/extension of enlistment propensity. Obviously, certain reasons, while viewed as more achievable in the Guard/Reserve, may not correlate with enlistment/extension of enlistment propensity.

TABLE 13-13. MULTIPLE REGRESSION ANALYSES OF REASONS FOR JOINING GUARD/RESERVE TO PREDICT ENLISTMENT/EXTENSION OF ENLISTMENT PROPENSITY

	<u>Importance of Reasons for Joining Guard/Reserve</u>		<u>Achievability of Reasons</u>	
	<u>Multiple R</u>	<u>Cross validation</u>	<u>Multiple R</u>	<u>Cross validation</u>
NPS				
Subsample 1	.38	--	.42	.39
Subsample 2	.35	--	.41	.37
Veterans				
Subsample 1	.39	--	.42	.37
Subsample 2	.36	--	.49	.45
ARNG				
Subsample 1	.54	--	.63	.62
Subsample 2	.56	--	.61	.60
ORC				
Subsample 1	.53	--	.63	.61
Subsample 2	.55	--	.63	.61

	<u>Reason Achievability Weighted by Importance</u>	
	<u>Multiple R</u>	<u>Cross validation</u>
NPS		
Subsample 1	.40	--
Subsample 2	.36	--
Veterans		
Subsample 1	.40	--
Subsample 2	.38	--
ARNG		
Subsample 1	.58	--
Subsample 2	.59	--
ORC		
Subsample 1	.57	--
Subsample 2	.57	--

TABLE 13-14. RESULTS OF STEPWISE MULTIPLE REGRESSION ANALYSES OF REASON ACHIEVABILITY FOR JOINING GUARD/RESERVE

NPS

<u>Variable</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
Gaining recognition and status	.33	.11	.14
Having a chance to use my hobbies or interests	.37	.14	.11
Being a member of a team	.39	.15	.09
Developing my potential	.40	.16	.08

VETERANS

<u>Variable</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
Having a chance to use my hobbies or interests	.32	.10	.15
Making good money	.37	.14	.15
Gaining recognition and status	.41	.16	.10
Being a member of a team	.41	.17	.04

ARNG

<u>Variable</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
Learning as much as I can	.50	.25	.09
Being a member of a team	.56	.31	.14
Gaining recognition and status	.58	.33	.11
Making good money	.59	.35	.09
Having a chance to use my hobbies or interests	.60	.36	.11

ORC

<u>Variable</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
Doing work that is challenging	.53	.28	.22
Working for a better society	.59	.35	.15
Developing my potential	.60	.36	.10
Serving my country	.61	.37	.07
Making good money	.61	.38	.08

13.2.2 Reasons for Joining the Guard/Reserve -- Factor Analysis and FHID Analyses

Split-half principle components factor analyses were run on the importance of reasons for each sample. In all cases for all samples, one factor solutions were obtained. As such, no further analyses, including FHID's were warranted on the importance of reasons data.

Table 13-15 shows the results of the split-half factor analysis for the achievability of reasons for joining the Guard/Reserve, while Table 13-16 presents the results for the FHID analysis.

13.3 Achievability of Life Goals and Reasons for Joining the Guard/Reserve -- FHID Analysis

In an attempt to both improve predictability of enlistment/extension of enlistment propensity and to better understand the underlying concepts, a single analysis was done combining the FHID's developed from the achievability of life goals and reasons for joining the Guard/Reserve. The results of this analysis appear in Table 13-17.

TABLE 13-15. TWO FACTOR SOLUTION FOR ACHIEVABILITY OF REASONS FOR JOINING THE GUARD/RESERVE

Factor I -- Job Actualization and Money Reasons

Making good money
Learning as much as I can
Work that is challenging
Developing my potential

Factor II -- Service

Serving my country
Serving my community

TABLE 13-16. RESULTS OF FHID ANALYSIS OF ACHIEVABILITY OF REASONS FOR JOINING
GUARD/RESERVE

	<u>NPS</u>	<u>VETERANS</u>	<u>ARNG</u>	<u>ORC</u>
FHID 1 -- Job Actualization and Money Reasons				
Importance Weights Variables:	.32	.33	.49	.47
Making good money				
Learning as much as I can				
Work that is challenging				
Developing my potential				
FHID 2 -- Service				
Importance Weights Variables:	.09	.15	.15	.19
Serving my country				
Serving my community				
MULTIPLE R	.37	.42	.59	.59

TABLE 13-17. RESULTS OF FHID ANALYSIS OF ACHIEVABILITY OF LIFE GOALS AND REASONS FOR JOINING GUARD/RESERVE

	<u>NPS</u>	<u>VETERANS</u>	<u>ARNG</u>	<u>ORC</u>
Life Goal FHID 1A -- Job Status and Money Goals				
Importance Weights	.17	.14	--	--
Life Goal FHID 1B -- Job Status and Actualization Goals				
Importance Weights	--	--	.31	.40
Life Goal FHID 2 -- Security/Obedience				
Importance Weights	.05	.01	.08	.07
Reasons FHID 1 -- Job Actualization and Money Goals				
Importance Weights	.20	.24	.23	.15
Reasons FHID 2 -- Service				
Importance Weights	.08	.14	.08	.11
MULTIPLE R	.41	.44	.62	.63

13.4 Likelihood of Situations Occurring in the Guard/Reserve

13.4.1 Likelihood of Situations Occurring in the Guard/Reserve -- Correlation and Multiple Regression Analyses

Table 13-18 shows the correlations of each likelihood situation with enlistment/extension of enlistment propensity by sample. As can be seen, for the NPS and Veterans samples, the correlations were quite low. Only "would take too much time away from your personal and social activities" for the NPS demonstrated even a weak negative relation with enlistment propensity.

The correlations for the ARNG and ORC samples, however, were much more substantial. Showing moderate ($-.30 \leq /r/ \leq -.40$) to strong ($-.40 \leq /r/ \leq -.50$) negative correlations for both samples were "would take too much time away from your family", "would attend drills that are a waste of time" and "would take too much time away from your personal and social activities". The issue of time perceived as spent wastefully thus appeared to be the strongest disincentive to extension of enlistment. Showing moderate to strong positive correlations with extension of enlistment were "good opportunity for promotions", "the instructors would be well qualified to teach their subjects", "unit training assemblies would prepare you to be combat ready", and "summer training camp would prepare you to be combat ready." Satisfaction with promotion and preparedness thus seem to be incentives and relate to positive extension of enlistment propensities.

Split-half multiple regression analyses were conducted on each sample to predict enlistment/extension of enlistment propensity. Table 13-19 shows the results of the analysis and a double cross-validation of the equations. As before, it can be seen that the multiple regression coefficients held up well. As they have in all previous analyses, predictions were observed to be much better for the ARNG and ORC samples.

TABLE 13-18. CORRELATIONS OF LIKELIHOOD OF SITUATIONS OCCURRING IN GUARD/RESERVE WITH ENLISTMENT/EXTENSION OF ENLISTMENT PROPENSITY

<u>SITUATIONS</u>	<u>NPS</u>	<u>VETERANS</u>	<u>ARNG</u>	<u>ORC</u>
A system of promotions that would be fair	.08	.15	.33	.26
Would take too much time away from your family	-.12	-.16	-.38	-.39
Would result in the chance of your being called to active duty in case of war or emergency	-.01	.01	--	--
Good opportunity for promotions	.12	.17	.34	.30
Having military supervisors who would hassle or harrass you	-.07	-.19	-.21	-.23
Would have your hair cut short	.07	-.02	--	--
Would attend drills that are a waste of time	-.13	-.22	-.38	-.43
Cause you problems with your job because of National Guard or Reserve obligations	-.14	-.07	-.29	-.30
The unit training assemblies would prepare you for mobilization for emergencies such as floods, riot patrols, etc.	--	--	.28	.23
The instructors would be well qualified to teach their subjects	--	--	.35	.33
You would have modern, up-to-date training equipment	--	--	.27	.26
Unit training assemblies would prepare you to be combat ready	--	--	.40	.37
Classes would be cancelled or scheduled at the last minute without much planning	--	--	-.19	-.20
You would be well informed by the Guard about general Guard information such as training schedules, changes, qualification tests, etc.	--	--	.30	.18
Summer training camp would prepare you to be combat ready	--	--	.41	.34
Would take too much time away from your personal and social activities	-.22	-.19	-.48	-.46

TABLE 13-19. MULTIPLE REGRESSION ANALYSES OF LIKELIHOOD OF SITUATIONS OCCURRING IN THE GUARD/RESERVE TO PREDICT ENLISTMENT/ EXTENSION OF ENLISTMENT PROPENSITY

	<u>Likelihood of Situations Occurring</u>	
	<u>Multiple R</u>	<u>Cross-Validation</u>
NPS		
Subsample 1	.27	.25
Subsample 2	.30	.27
VETERANS		
Subsample 1	.37	.33
Subsample 2	.33	.30
ARNG		
Subsample 1	.65	.63
Subsample 2	.63	.61
ORC		
Subsample 1	.62	.60
Subsample 2	.62	.61

Table 13-20 shows the results of the stepwise multiple regression analyses for the equations showing the highest split sample cross-validation r 's for each score. The variables are presented in order of entry into the multiple regression equation up to increases in the R^2 values of at least .01. The results indicate that for the NPS sample, no additional prediction could be obtained over and above that obtained with a single item. As with the other multiple regressions, the first variable entered seemed to account for most of the predictable variance. For three of the samples, this variable was "would take too much time away from your personal and social activities". For the other sample (Veterans), the first variable was "would attend drills that are a waste of time", while the second variable to enter the equation was "would take too much time away from your personal and social activities."

13.4.2 Likelihood of Situations Occurring in the Guard/Reserve -- Factor Analyses

Due to the diversity of the situations, it would be expected that a smaller number of situation types could be selected to represent the larger set, each type being relatively independent of the others. In the interest of reliability, split-half principle components factor analyses were conducted for each sample. A minimum eigenvalue of one was set as the criterion for rotation.

A three factor solution was judged as best representing the underlying structure of the situation likelihood data. Factor II for the NPS and Veterans groups related to compulsory actions/functions, while for the ARNG and ORC groups, it referred to training and preparedness. The three factor solutions accounted for slightly less than 50% of the variance in each of the analyses. Table 13-21 shows the variables best representing each of the factors which emerged. Variables were selected on the basis of their high loadings on a single factor across both split samples.

TABLE 13-20 . RESULTS OF STEPWISE MULTIPLE REGRESSION ANALYSES OF
LIKELIHOOD OF SITUATIONS OCCURRING IN THE GUARD/RESERVE

NPS

<u>Variable</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
Would take too much time away from your personal and social activities	.22	.05	-.17

VETERANS

<u>Variable</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
Would attend drills that are a waste of time	.22	.05	-.16
Would take too much time away from your personal and social activities	.27	.07	-.11
Good opportunities for promotions	.30	.09	.08

ARNG

<u>Variable</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
Would take too much time away from your personal and social activities	.48	.24	-.27
Unit training assemblies would prepare you to be combat ready	.57	.32	.12
Good opportunities for promotions	.59	.35	.10
Would take too much time away from your family	.61	.37	-.13

ORC

<u>Variable</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
Would take too much time away from your personal and social activities	.46	.21	-.23
Unit training assemblies would prepare you to be combat ready	.54	.29	.10
Would attend drills that are a waste of time	.57	.33	-.15
Good opportunities for promotions	.59	.34	.08
Would take too much time away from your family	.60	.36	-.13

TABLE 13-21 . THREE FACTOR SOLUTIONS FOR LIKELIHOOD OF SITUATIONS OCCURRING IN THE GUARD/RESERVE

Factor I -- Time Problems

Would take too much time away from your family
Cause you problems with your job because of National Guard or Reserve obligations
Would take too much time away from your personal and social activities

Factor II -- Compulsory Actions/Functions -- NPS and Veterans

Would have your hair cut short
Would attend drills that are a waste of time

Factor II -- Training and Preparedness -- ARNG and ORC

The unit training assemblies would prepare you for mobilization for emergencies such as floods, riot patrols, etc.
Unit training assemblies would prepare you to be combat ready
Summer camp would prepare you to be combat ready

Factor III -- Promotions

A system of promotions that would be fair
Good opportunities for promotions

13.4.3 Likelihood of Situations Occurring in the Guard/Reserve -- FHID Analysis

Comrey's (1961; 1966) procedure for construction of factorially homogeneous item dimensions (FHID's) was applied to the results of the factor analyses in an attempt to predict enlistment/extension of enlistment propensity. Table 13-22 shows the results of that analysis. As can be seen, the multiple regression weights compare very favorably to those shown in Table 13-22. The three constructs -- time problems, compulsory actions/functions, and training and preparedness -- thus seem reasonable and useful for predicting enlistment/extension of enlistment propensity, particularly for the ARNG and ORC samples.

13.5 Attitudes Towards Organizations and Groups

13.5.1 Attitudes Towards Organizations and Groups -- Correlation and Multiple Regression Analyses

Table 13-23 shows the correlations of each attitude statement with enlistment/extension of enlistment propensity by sample. Moderate to strong ($.30 \leq r \leq .50$) correlations were observed for the NPS and Veterans sample for "I would be proud to be a member of the National Guard or Reserve" and "I've always liked the idea of wearing a uniform". For the ARNG and ORC samples, moderate to strong correlations were obtained for "belonging to the National Guard or Reserve would give me a chance to get away from my everyday life for a while" and "the National Guard or Reserve offers an opportunity to become involved in projects in my community". Very strong relationships were observed for "I would be proud to be a member of the National Guard or Reserve" (for the ARNG $r = .57$; for the ORC, $r = .54$) and "I've always liked the idea of wearing a uniform (for the ARNG, $r = .52$). Thus, pride in the work of the National Guard or Reserve and the trappings of membership seem to have the strongest positive relations with enlistment/extension of enlistment propensity.

TABLE 13-22. RESULTS OF FHID ANALYSIS OF LIKELIHOOD OF SITUATIONS OCCURRING IN THE GUARD/RESERVE

	<u>NPS</u>	<u>VETERANS</u>	<u>ARNG</u>	<u>ORC</u>
FHID 1 -- Time and Job Problems				
Importance Weights	-.20	-.17	-.42	-.39
Variables:				
Would take too much time away from your family				
Cause you problems with your job because of National Guard or Reserve obligations				
Would take too much time away from your personal and social activities				
FHID 2A -- Compulsory Actions/Functions -- NPS and Veterans				
Importance Weights	.03	-.09	--	--
Variables:				
Would have your hair cut short				
Would attend drills that are a waste of time				
FHID 2B -- Training and Preparedness -- ARNG and ORC				
Importance Weights	--	--	.24	.23
Variables:				
The unit training assemblies would prepare you for mobilization for emergencies such as floods, riot patrols, etc.				
Unit training assemblies would prepare you to be combat ready				
Summer camp would prepare you to be combat ready				
FHID 3 -- Promotions				
Importance Weights	.12	.18	.17	.17
Variables:				
A system of promotions that would be fair				
Good opportunity for promotions				
MULTIPLE R	.24	.30	.62	.58

TABLE 13-23 . CORRELATIONS OF ATTITUDES TOWARDS ORGANIZATIONS AND GROUPS WITH ENLISTMENT/EXTENSION OF ENLISTMENT PROPENSITY

ATTITUDE	NPS	VETERANS	ARNG	ORC
The Reserve is highly respected in my community	.18	.22	--	.26
I like the idea of belonging to a group such as volunteer firemen or civil defense which helps people when they have trouble	.16	.19	.28	.23
I would be proud to be a member of the National Guard or Reserve	.36	.44	.57	.54
In my spare time, I prefer doing things with others rather than being by myself	.11	.15	.12	.11
I've always liked the idea of wearing a uniform	.31	.34	.52	.41
I like to belong to organizations or groups which help me find more interesting things to do than being on my own	.21	.28	.25	.21
The National Guard is highly respected in my community	.19	.23	.32	--
Our country is too militaristic	-.04	-.11	-.12	-.12
Belonging to the National Guard or Reserve would give me a chance to get away from my everyday life for a while	.24	.20	.44	.37
I like to become involved in projects in my community	.18	.14	.16	.11
The National Guard or Reserve is a place to meet good buddies and make lasting friendships	.25	.24	.28	.30
The National Guard or Reserve offers an opportunity to become involved in projects in my community	.17	.13	.39	.34

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A STUDY OF ISSUES RELATED TO ACCESSION AND RETENTION OF 3/3
ENLISTED PERSONNEL (U) THOMPSON (J WALTER) CO
WASHINGTON DC NOV 77 DMDC/MRB-TR-77/2-VOL-2

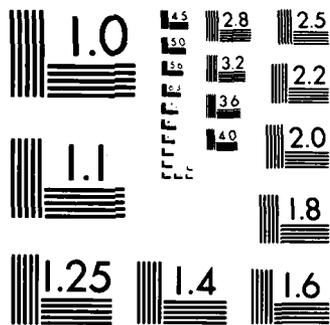
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NATIONAL BUREAU OF STANDARDS-1963-A

Split-half multiple regression runs were conducted on each sample. Table 13-24 shows the results of that analysis and a double cross-validation of the equations. All of the cross validation r values, except for those for the ARNG sample, showed very little shrinkage. The shrinkage which was observed was well within limits required to maintain confidence in the equations initially developed.

Table 13-25 presents the results of the stepwise multiple regression analyses for the equations showing the highest split sample cross-validation r's for each sample. As in all previous analyses, the variables are presented in order of entry into the multiple regression equation up to increases in the R^2 values of .01. Single variables seemed, once again, to account for almost all of the predictable variance. Only for the ARNG sample did adding a second variable seem to significantly increase predictability. It should be noted that maximum predictability was obtained by combining the key variables discussed in the correlational analysis. The concepts of pride in Guard/Reserve work and wearing a uniform, along with the idea of the Guard/Reserve as an escape from everyday work, once again emerged as dominant themes.

TABLE 13-24. MULTIPLE REGRESSION ANALYSES OF ATTITUDES TOWARD ORGANIZATIONS TO PREDICT ENLISTMENT/EXTENSION OF ENLISTMENT PROPENSITY

	<u>Attitudes toward organizations</u>	
	<u>Multiple R</u>	<u>Cross Validation</u>
NPS		
Subsample 1	.43	.40
Subsample 2	.46	.44
VETERANS		
Subsample 1	.49	.46
Subsample 2	.56	.53
ARNG		
Subsample 1	.64	.56
Subsample 2	.64	.54
ORC		
Subsample 1	.59	.58
Subsample 2	.63	.62

TABLE 13-25. RESULTS OF STEPWISE MULTIPLE REGRESSION ANALYSES FOR ATTITUDES TOWARD ORGANIZATIONS AND GROUPS

<u>VARIABLE</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Beta</u>
<u>NPS</u>			
I would be proud to be a member of the National Guard or Reserve	.36	.13	.22
I've always liked the idea of wearing a uniform	.40	.16	.15
Belonging to the National Guard or Reserve would give me a chance to get away from my everyday life for a while	.41	.17	.10
<u>VETERANS</u>			
I would be proud to be a member of the National Guard or Reserve	.44	.20	.31
I like to belong to organizations or groups which help me find more interesting things to do than being on my own	.47	.22	.14
I've always liked the idea of wearing a uniform	.48	.23	.11
<u>ARNG</u>			
I would be proud to be a member of the National Guard or Reserve	.57	.32	.30
I've always liked the idea of wearing a uniform	.62	.38	.23
Belonging to the National Guard or Reserve would give me a chance to get away from my everyday life for a while	.63	.40	.17
<u>ORC</u>			
I would be proud to be a member of the National Guard or Reserve	.54	.30	.37
Belonging to the National Guard or Reserve would give a chance to get away from my everyday life for a while	.57	.32	.14
I've always liked the idea of wearing a uniform	.58	.34	.13

13.5.2 Attitudes Towards Organizations and Groups -- Factor Analyses

Due to the wide diversity of content areas probed in the attitude section, it would be expected that a smaller number of attitudinal constructs can be developed which would represent the larger set, each construct being relatively independent of the others. In order to insure adequate reliability in the analyses, split-half principle components analyses were conducted. A minimum eigenvalue cutoff of 1.0 was set in the application of varimax rotations to the results of the analyses.

A three factor solution was judged as best representing the underlying structure of the attitude data. For all samples, this solution accounted for slightly more than 50% (50.9% to 55.6%) of the variance. Four factor solutions were also investigated but they seemed to be less interpretable than the three factor solutions. For the NPS and Veterans samples, Table 13-26 shows the variables best defining each of the three factors which emerged. Table 13-27 shows the best defining variables for the ARNG and ORC samples. Due to the non-uniform nature of the variables entering the analyses for the different samples, similar but separate solutions were obtained for the NPS and Veteran samples and for the ARNG and ORC samples. These variables were selected on the basis of their high loadings on a single factor across the split samples.

TABLE 13-26. THREE FACTOR SOLUTIONS FOR ATTITUDES TOWARD ORGANIZATIONS
AND GROUPS FOR THE NPS AND VETERANS SAMPLES

Factor I -- Community Respect

The Guard is highly respected in my community

The Reserve is highly respected in my community

Factor II -- Gregariousness

In my spare time, I prefer doing things with others, rather than
being by myself

I like to belong to organizations or groups which help me find
more interesting things to do than being on my own

Factor III -- New Work and Friendships

Belonging to the National Guard or Reserve would give me a chance
to get away from my everyday life for a while

The National Guard or Reserve is a place to meet good buddies and
make lasting friendships

TABLE 13-27. THREE FACTOR SOLUTIONS FOR ATTITUDES TOWARD ORGANIZATIONS
AND GROUPS FOR THE ARNG AND ORC SAMPLES

Factor I -- Pride in Work

I am proud to be a member of the Reserve/Guard
Belonging to the National Guard or Reserve would give me a chance
to get away from my everyday life for a while
I like to become involved in projects in my community

Factor II -- Gregariousness

In my spare time, I prefer doing things with others, rather than
being by myself
I like to belong to organizations or groups which help me to find more
interesting things to do than being on my own

Factor III -- Militarism

Our country is too militaristic

13.5.3 Attitudes Toward Organizations and Groups -- FHID Analysis

Comrey's (1961; 1966) procedure for FHID development was applied to the results of the attitudinal questions factor analyses in an attempt to relate that data to enlistment/extension of enlistment intentions. Table 13-28 shows the results of that analysis for the NPS and Veteran samples, and Table 13-29 shows the results for the ARNG and ORC samples. As can be seen, the multiple regression R's compared only reasonably well (see Table 13-24) for the NPS and Veteran samples, but did exceptionally well for the ARNG and ORC samples. The three constructs -- pride in work, gregariousness, and militarism -- thus seem reasonable and useful for predicting enlistment/extension of enlistment propensity for the ARNG and ORC samples. Interestingly, if one considers the Beta weight of the FHID as a measure of its importance, pride in work emerges as the most important construct in predicting enlistment/extension of enlistment.

TABLE 13-28. RESULTS OF FHID ANALYSIS OF ATTITUDES TOWARD ORGANIZATIONS AND GROUPS -- NPS AND VETERANS

	<u>NPS</u>	<u>VETERANS</u>
FHID 1 -- Community Respect		
FHID Beta Weights	.08	.11
Variables:		
The Guard is highly respected in my community	.87	.88
The Reserve is highly respected in my community	.87	.89
FHID 2 -- Gregariousness		
FHID Beta Weights	.10	.15
Variables:		
In my spare time, I prefer doing things with others, rather than being by myself	.75	.70
I like to belong to organizations or groups which help me find more interesting things to do than being on my own	.74	.73
FHID 3 -- New Friendships and Environment		
FHID Beta Weights	.24	.23
Variables:		
Belonging to the National Guard or Reserve would give me a chance to get away from my everyday life for a while	.64	.67
The National Guard or Reserve is a place to meet good buddies and make lasting friendships	.51	.44
MULTIPLE R	.32	.36

TABLE 13-29. RESULTS OF FHD ANALYSIS OF ATTITUDES TOWARD ORGANIZATIONS AND GROUPS -- ARNG AND ORC

	<u>ARNG</u>	<u>ORC</u>
FHD 1 -- Pride in Work		
FHD Beta Weights Variables	.56	.54
I am proud to be a member of the Reserve/Guard	.79	.79
Belonging to the National Guard or Reserve would give me a chance to get away from my everyday life for a while	.59	.59
I like to become involved in projects in my community	.78	.64
FHD 2 -- Gregariousness		
FHD Beta Weights Variables:	.07	-.06
In my spare time, I prefer doing things with others rather than being by myself	.69	.72
I like to belong to organizations and groups which help me find more interesting things to do than being on my own	.69	.72
FHD 3 -- Militarism		
FHD Beta Weights Variables:	.06	.05
Our country is too militaristic	.92	.76
MULTIPLE R	.60	.57

14.0 PROBLEM OF INFLATED PROPENSITY RESPONSES TO BENEFIT QUESTIONS

The problem of inflated propensity responses to the benefit questions was considered in Volume I. The conclusion that the respondents may have become more enthusiastic when directly asked about a given benefit was arrived at based on the data presented below. Unfortunately, data were not available for each benefit and for every sample. In addition, no tests of significance were used to analyze the trends reported. However, because of the consistency of the trends, the possibility of inflated propensity scores remains strong.

Education Benefit

The ARNG sample was asked if they believed whether or not education benefits presently existed. For those respondents who believed they existed, they were asked how much financial assistance was given. Of those who believed 50% assistance was offered, 55% had a positive initial propensity. The sample, as a whole, had 61% favorability for an education benefit of 50%. Of the respondents who felt that 100% assistance was given, 53% had a favorable initial propensity. For the 100% level of the education benefit, the percent of the sample who had a favorable propensity rose to 75%.

Pay Benefit

Similar results were found for both the NPS and Veterans samples. A 50% increase in base pay would result in a starting pay of \$1,248. Of the NPS respondents who believed the starting pay was \$3,000 or more, only 41.3% had a favorable initial propensity. The sample, as a whole, had about 44% favorability for the 50% pay increase (only \$1,248) benefit.

The Veterans sample, with a 50% pay increase, had about 32% favorability towards enlistment. However, for those respondents who believed the starting pay was between \$1,100 and \$1,300, only 25% had a favorable initial propensity.

Length of Enlistment

For the NPS sample, of the respondents who believed the enlistment length was one year, 34% had a favorable initial propensity. This figure can be compared to 55.7% of the sample being favorable to enlisting when the benefit level was one year. Of the respondents who believed two years enlistment was required, 37% had a favorable initial propensity. In the NPS sample was asked if they would enlist if the requirement was two years, 47.3% had a favorable propensity.

Thirty-six percent (36%) of the Veterans sample had a favorable propensity if enlistment was only one year, compared to 30% of the respondents who believed enlistment to be one year. The Veterans sample had 24% favorability when asked if they would enlist if the requirement was two years, while only 21% of those who believed two years was the requirement had a favorable initial propensity.

In every case outlined, the percent of the sample with a positive propensity for a given benefit is higher than the initial propensity of the respondents who had already claimed they believed the Guard/Reserve already offered that benefit. Thus, there are indications that there may be an inflation of propensity responses when presented with a potential benefit compared to the propensity responses when the benefit actually exists.

15.0 RECOMMENDATIONS FOR FUTURE RESEARCH

A close inspection of the data regarding the benefits analysis yields the following conclusions which are applicable to future research:

- 1) Presentation of the benefit levels should be in an ascending order, i.e., from the least benefit to the most benefit.
- 2) The base measure for comparison of propensities should be the propensity at the current level of the benefit.

In analyzing the effect of the benefits on propensity, the overall mean of the groups receiving the ascending and descending orders of presentation was used. The reasons for using the overall mean were:

- 1) It was an appropriate representation of the data.
- 2) Because of the experimental design, using either the ascending or descending presentation order would only include half the sample at all times. Thus, there could not be any accurate comparison of the different benefits.

Inspection of the significant interaction between propensity and order of presentation showed that the presentation of the benefit levels in the descending order was the main cause of the interaction. The mean propensity scores for each benefit level by presentation order are shown in Table 15-1. To remove this confounding in the experimental design, it is now suggested that future studies use only an ascending order of benefit level presentation.

Tables 15-2 through 15-5 show reverse or illogical shifts in propensity responses. A reverse shift is defined as a lower propensity for a given benefit level measure than for a base measure. For example, a respondent says that he will definitely enlist/extend for the initial propensity question, then for the current level of the education benefit he says that he might enlist/extend. This backward slide can be considered a reverse shift in propensity. The table reports shifts (in percentages of the sample)

of 1 position and 2 positions or more.

Visual inspection of these tables clearly indicates that there is less occurrence of reverse shifts when using the current level of the benefit as a base. Thus, the data become more meaningful when ascertaining the effect of each benefit level on the propensity to enlist/extend when propensity at the current level of the benefit rather than initial propensity is used for comparison.

TABLE 15-1, MEAN PROPENSITY SCORES FOR EACH BENEFIT LEVEL ACCORDING TO ORDER OF PRESENTATION

BENEFIT	NPS		Veterans		ARNG		ORC	
	Ascend	Descend	Ascend	Descend	Ascend	Descend	Ascend	Descend
<u>Education</u>								
25%	3.66	4.09	4.04	4.36	3.26	3.74	3.18	3.67
50%	3.24	3.68	3.77	3.99	2.83	3.25	2.82	3.18
75%	2.91	3.18	3.46	3.57	2.53	2.82	2.52	2.76
100%	2.59	2.86	3.07	3.24	2.24	2.57	2.20	2.52
<u>Bonus</u>								
\$250	3.81	4.35	4.36	4.57	3.84	4.18	3.80	4.08
\$500	3.64	4.21	4.27	4.47	3.64	4.00	3.65	3.90
\$1,100	3.30	3.83	3.97	4.17	3.20	3.57	3.24	3.45
\$2,200	3.11	3.48	3.68	3.88	2.88	3.07	2.85	3.04
<u>Pay Increase</u>								
10%	3.92	4.03	4.35	4.29	3.59	3.77	3.65	3.81
20%	3.80	3.93	4.23	4.22	3.22	3.52	3.41	3.56
50%	3.47	3.73	3.94	4.07	2.77	2.98	2.84	3.02
<u>Length of Enlistment</u>								
4 years	4.16	4.03	4.53	4.59	--	--	--	--
2 years	3.64	3.50	4.16	4.24	--	--	--	--
1 year	3.37	3.27	3.94	3.91	--	--	--	--

TABLE 15-2. PERCENTAGE OF RESPONDENTS WHO SHOWED ONE OR TWO OR MORE REVERSE (ILLOGICAL) SHIFTS IN PROPENSITY EXAMINED ACCORDING TO TWO DIFFERENT BASIS -- INITIAL PROPENSITY AND CURRENT LEVEL OF BENEFIT PROPENSITY FOR THE NON-PRIOR SERVICE SAMPLE

PROPENSITY	Education									
	Current		25%		50%		75%		100%	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	21.1	12.4	12.8	4.4	6.4	2.5	4.6	1.2	3.4	.7
Current	--	--	2.1	.4	1.6	.5	1.2	.2	.8	.2

PROPENSITY	Bonus									
	Current		\$250		\$500		\$1,100		\$2,200	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	20.0	14.6	15.6	11.7	12.9	9.2	8.6	5.9	7.6	4.9
Current	--	--	5.1	2.5	3.6	2.2	2.4	1.2	1.6	1.1

PROPENSITY	Length of Enlistment							
	Current		4 years		2 years		1 year	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	23.4	17.5	20.4	12.5	12.9	6.2	9.8	4.7
Current	--	--	.7	.1	.6	.3	.5	.5

PROPENSITY	Pay Increase							
	Current		10%		20%		50%	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	19.6	15.5	18.1	12.1	15.9	11.0	11.2	7.8
Current	--	--	.9	0.0	1.0	0.0	.9	.1

TABLE 15-3. PERCENTAGE OF RESPONDENTS WHO SHOWED ONE OR TWO OR MORE REVERSE (ILLOGICAL) SHIFTS IN PROPENSITY EXAMINED ACCORDING TO TWO DIFFERENT BASIS -- INITIAL PROPENSITY AND CURRENT LEVEL OF BENEFIT PROPENSITY FOR THE VETERANS SAMPLE

PROPENSITY	Education									
	Current		25%		50%		75%		100%	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	17.0	7.0	11.1	4.0	6.9	1.9	4.7	2.1	3.8	.8
Current	--	--	1.5	0.0	1.7	0.0	1.5	0.0	1.0	0.0

PROPENSITY	Bonus									
	Current		\$250		\$500		\$1,100		\$2,200	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	16.0	7.3	14.0	7.1	12.6	7.1	10.0	4.9	6.4	3.8
Current	--	--	4.3	2.4	3.1	2.4	2.7	2.2	2.4	1.4

PROPENSITY	Length of Enlistment							
	Current		4 years		2 years		1 year	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	20.9	13.7	19.3	11.8	14.4	6.4	10.3	4.6
Current	--	--	.4	0.0	.4	0.0	.2	.2

PROPENSITY	Pay Increase							
	Current		10%		20%		50%	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	14.9	8.4	13.3	7.0	11.5	6.2	7.6	4.5
Current	--	--	1.0	.2	1.4	0.0	.8	0.0

TABLE 15-4. PERCENTAGE OF RESPONDENTS WHO SHOWED ONE OR TWO OR MORE REVERSE (ILLOGICAL) SHIFTS IN PROPENSITY EXAMINED ACCORDING TO TWO DIFFERENT BASIS -- INITIAL PROPENSITY AND CURRENT LEVEL OF BENEFIT PROPENSITY FOR THE ARMY NATIONAL GUARD SAMPLE

PROPENSITY	Education									
	Current		25%		50%		75%		100%	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	15.6	8.4	9.8	3.5	5.8	1.1	3.2	.9	2.1	.7
Current	--	--	2.1	.2	1.0	.1	.7	.1	.9	.2

PROPENSITY	Bonus									
	Current		\$250		\$500		\$1,100		\$2,200	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	16.6	9.0	14.4	11.4	13.3	8.2	9.5	4.4	6.0	3.5
Current	--	--	7.9	6.3	6.3	5.0	4.5	3.5	3.2	.3

PROPENSITY	Pay Increase							
	Current		10%		20%		50%	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	16.2	7.2	12.3	3.8	8.7	2.5	3.7	.9
Current	--	--	.5	.2	.5	.1	.3	.1

TABLE 15-5. PERCENTAGE OF RESPONDENTS WHO SHOWED ONE OR TWO OR MORE REVERSE (ILLOGICAL) SHIFTS IN PROPENSITY EXAMINED ACCORDING TO TWO DIFFERENT BASIS -- INITIAL PROPENSITY AND CURRENT LEVEL OF BENEFIT PROPENSITY FOR THE OTHER RESERVE COMPONENTS SAMPLE

PROPENSITY	Education									
	Current		25%		50%		75%		100%	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	13.8	10.6	9.7	3.5	7.6	1.7	4.9	1.1	3.4	.8
Current	--	--	2.9	1.4	2.2	.7	1.5	.5	.8	.2

PROPENSITY	Bonus									
	Current		\$250		\$500		\$1,100		\$2,200	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	15.9	5.6	13.6	6.4	11.4	5.6	7.8	2.9	5.2	1.9
Current	--	--	5.1	4.7	5.3	3.6	3.7	2.4	.2	1.5

PROPENSITY	Pay Increase							
	Current		10%		20%		50%	
	One	Two or More	One	Two or More	One	Two or More	One	Two or More
Initial propensity	16.0	4.4	12.2	1.9	8.7	1.2	2.5	.4
Current	--	--	.2	0.0	.3	0.0	.1	0.0

16.0 DEMOGRAPHIC ANALYSES

The following demographic information was examined for each respondent:

- . Education (last year of school completed)
- . Age
- . Marital Status
- . Employment Index (a multiplicative index based on occupation, length of employment at present job, and whether the respondent has a full-time job, a part-time job, or both)
- . Socio-economic status
- . School commitment

The above variables were chosen because they were readily available from personnel files, job applications, etc. In order to determine who is more/less likely to enlist/extend enlistment in the Guard/Reserve, the median values for age, employment index, and socio-economic status were obtained for each of the four samples. Respondents were divided into "high" (or above the median) and "low" (or below the median) groups on these demographic variables so that propensities by demographic cluster could be examined.

When the median fell within a single value (e.g., upper lower class on the socio-economic scale), all respondents having that value were placed into one of the two categories. Although care was taken to make this placement such that the "above the median" and "below the median" groups were nearly equal, in some instances this was not entirely successful. Table 16-1 shows the exact sample sizes for each category.

Table 16-2 shows the descriptions of the high or "above the median" and the low or "below the median" groups for the Non-Prior Service, Veterans, Army National Guard, and Other Reserve Components samples. Two points should be noted about these descriptions:

- 1) In the past, because of functional differences in the military, analyses have tended to categorize enlistees as either having completed high school or having not completed high school. This split is

TABLE 16-1. NUMBER AND PERCENT OF RESPONDENTS IN EACH DEMOGRAPHIC CATEGORY

CATEGORY	Non-Prior Service		Veterans		Army National Guard		Other Reserve Components	
	#	%	#	%	#	%	#	%
High school	1247	65.5	484	49.4	974	50.4	739	38.3
College	657	34.4	496	50.6	958	49.6	1188	61.7
Younger	1012	53.2	654	66.8	941	48.7	977	50.7
Older	892	46.8	325	33.2	991	51.3	951	49.3
Married	474	24.9	526	53.7	1417	73.2	1268	65.8
Not married	1429	75.1	453	46.3	518	26.8	659	34.2
Low employment index	950	49.9	479	48.9	982	50.7	1005	52.1
High employment index	954	50.1	501	51.1	953	49.3	924	47.9
Low socio-economic status	1198	70.1	591	66.0	1025	54.6	1008	54.4
High socio-economic status	511	29.9	305	34.0	853	45.4	845	45.6
No school commitment	735	38.8	281	28.9	1241	64.6	884	46.3
Planning to attend school	499	26.3	304	31.3	460	23.9	551	28.8
Attending school	662	34.9	386	39.8	220	11.5	475	24.9

TABLE 16-2. DESCRIPTION OF DEMOGRAPHIC CATEGORIES BY SAMPLE

CATEGORY	Non-Prior Service	Veterans	Army National Guard	Other Reserve Components
<u>Education:</u>				
High school	High school, vocational school or less			
College	Some college (not college graduate)	One or more years of college	One or more years of college	One or more years of college
<u>Age:</u>				
Younger	17 $\frac{1}{2}$ - 20	24 or younger	21 - 24	21 - 24
Older	21 - 26	25 or older	25 - 40	25 - 40
<u>Marital Status:</u>				
Married	Married	Married	Married	Married
Not married	Single, widowed, divorced or separated			
<u>Employment Index:¹⁾</u>				
Low employment index	7 or lower	9 or lower	28 or lower	24 or lower
High employment index	8 or higher	10 or higher	29 or higher	25 or higher
<u>Socio-Economic Index:²⁾</u>				
Low socio-economic index	Group IV or lower			
High socio-economic index	Group III or higher			
<u>School Commitment:</u>				
No school commitment	Neither attending nor planning to attend			
Planning to attend school	Planning to attend within next year (not currently attending)	Planning to attend within next year (not currently attending)	Planning to attend within next year (not currently attending)	Planning to attend within next year (not currently attending)
Attending school	Currently attending	Currently attending	Currently attending	Currently attending

1) The Employment Index is an index of employment stability. It is a multiplicative index based on occupation, length of time on present job, and whether the job is full time or part time. Weights were assigned to these three variables as follows. Occupation was assigned a value from 1 - 10 based on standard Bureau of Census employment categories. If the respondent was at his present job more than six years, he was assigned a weight of 6; if he was at his present job less than six months, he was assigned a weight of 1. If the job was a full-time job and the respondent also held a part-time job, he was assigned a weight of 3; if he held only a part-time job, he was assigned a weight of 1; if he was not employed, he was assigned a weight of 0.

2) The Socio-Economic Index was computed using Hollingshead's procedure. Each respondent was assigned a value for his occupation and level of education. Occupation and education values ranged between 1 - 7. The assigned occupational value was weighted by 7 and the assigned educational value was weighted by 4. The weighted values were multiplied to obtain the index. The value of the index was used to assign each respondent to one of five ordered groups. The groups ranged from Group I - the highest socio-economic group, to Group V - the lowest socio-economic group.

inappropriate here because of the large proportion of respondents in the former category. The data on respondents not completing high school are summarized below:

	<u>Non-High School Graduates</u>	
	<u>Number</u>	<u>Percent</u>
Non-Prior Service	374	19.6%
Veterans	33	3.4%
Army National Guard	126	6.5%
Other Reserve Components	95	4.9%

Only the Non-Prior Service sample contains a substantial proportion of men who have not completed high school. When the plans to complete high school were examined for these respondents, it was apparent that many are still in high school, and that most are planning to complete their high school education. These data are shown below:

<u>Non-Prior Service</u>	<u>Number</u>
Completed high school	1530
Have not completed high school	<u>374</u>
Plan to complete high school	231
Do not plan to complete high school	143

Only 143, or 7.5% of the Non-Prior Service sample, have neither completed nor plan to complete their high school education. Because the sample sizes of non-high school graduates were so small, respondents who have not completed high school were grouped with the high school graduates. Men who have attended or are attending vocational school were also placed in this group, because they were more similar to the high school category than they were to respondents who have attended college. The second category consists of men who have had at least some college education. For

the sake of simplicity, these two demographic groups are referred to as "high school" and "college" respectively.

- 2) The relatively low employment index values (on a scale where "0" represents "unemployed", and "128" represents a full-time and a part-time job, professional, and working at present job for over six years) for the Non-Prior Service and Veterans samples are probably attributable to the comparative youth of the samples and/or the high proportion that are still attending school in these two samples. Therefore, little emphasis should be placed on between-sample comparisons for the employment index.

APPENDIX A

28a. If you extend your enlistment, for how many years do you have to extend your term of enlistment?

- 58- 1() One
- 2() Two
- 3() Three
- 4() Four
- 5() Five
- 6() Six
- 7() Other
- 8() Don't know

b. If you extend your enlistment in the Reserves, do you get a cash bonus?

- 59- 1() Yes
- 2() No
- 3() Don't know

29. Over the course of a year, how much pay, if any, do you lose from your regular job as a result of attending Reserve drills and summer camp?

- 60- 0() None
- 1() Less than \$100
- 2() \$100 - \$199
- 3() \$200 - \$299
- 4() \$300 - \$399
- 5() \$400 - \$499
- 6() \$500 or more

30. How much do you think you have to spend each year for car expenses, laundry, etc. to attend the Reserve drills and summer camp?

- 61- 1() Under \$100
- 2() \$100 - \$199
- 3() \$200 - \$299
- 4() \$300 - \$399
- 5() \$400 - \$499
- 6() \$500 - \$599
- 7() \$600 or more

31. You mentioned that you would (NAME ANSWER TO #13) extend your enlistment in the Reserve. These are some things the Reserve could do that might influence people's decisions to extend their enlistments or not. I would like your personal reactions to these ideas. First, if the Reserve offered (NAME ITEM), how likely would you be to extend your enlistment -- would you say you would be definitely likely to extend your enlistment, somewhat likely to extend your enlistment, you might extend your enlistment, probably not extend your enlistment, or definitely not extend your enlistment?

	Extend			Not Extend	
	Definitely	Probably	Might	Probably	Definitely
a. No financial educational assistance, which is currently the case.	62- 1()	2()	3()	4()	5()
b. 25% of your education or training after high school while you were in the Reserve.	63- 1()	2()	3()	4()	5()
c. 50% of your education or training after high school while you were in the Reserve.	64- 1()	2()	3()	4()	5()
d. 75% of your education or training after high school while you were in the Reserve.	65- 1()	2()	3()	4()	5()
e. 100% of your education or training after high school while you were in the Reserve.	66- 1()	2()	3()	4()	5()

32. Assuming that the Reserve were to pay for all your education or training after high school, how likely would you personally be to use the education or training assistance -- would you say you would:

- 67- 1() Definitely use the education or training assistance,
- 2() Probably use the education or training assistance,
- 3() Might use the education or training assistance,
- 4() Probably not use the education or training assistance, or
- 5() Definitely not use the education or training assistance?

33. Assuming that there is no education or training assistance beyond high school, if you got (NAME ITEM) bonus for extending your enlistment, how likely would you be to extend your enlistment -- definitely, probably, might, probably not, or definitely not?

	Extend			Not Extend	
	Definitely	Probably	Might	Probably	Definitely
a. No enlistment bonus, the current policy	68-1()	2()	3()	4()	5()
b. \$2200 for a 5 year enlistment payable in a lump sum in 3 or 4 months.	69-1()	2()	3()	4()	5()
c. \$1100 for a 6 year enlistment payable in a lump sum in 3 or 4 months.	70-1()	2()	3()	4()	5()
d. \$500 for a 5 year enlistment payable in a lump sum in 3 or 4 months.	71-1()	2()	3()	4()	5()
e. \$250 for a 5 year enlistment payable in a lump sum in 3 or 4 months.	72-1()	2()	3()	4()	5()

34. Assuming there is no education or training assistance and no enlistment bonus, if the pay were (NAME ITEM), how likely would you be to extend your enlistment -- definitely, probably, might, probably not, or definitely not?

	Extend			Not Extend	
	Definitely	Probably	Might	Probably	Definitely
a. The same as it is now.	73-1()	2()	3()	4()	5()
d. Increased 50%.	74-1()	2()	3()	4()	5()
c. Increased 20%.	75-1()	2()	3()	4()	5()
b. Increased 10%.	76-1()	2()	3()	4()	5()
	TYPE 77-				
	COL 80- (1)				

35. Different people have different ideas about what they want out of life and how to get it. As I read each statement, please tell me if it describes something that is very important to you personally, somewhat important to you personally, neither important nor unimportant, somewhat unimportant, or very unimportant to you personally:

	Important			Unimportant	
	Very	Somewhat	Neither	Somewhat	Very
a. Work that is challenging.	5-1()	2()	3()	4()	5()
b. Participating in activities that are exciting and adventurous.	6-1()	2()	3()	4()	5()
c. Making good money.	7-1()	2()	3()	4()	5()
d. Being able to make my own decisions on the job.	8-1()	2()	3()	4()	5()
e. Obedience.	9-1()	2()	3()	4()	5()
f. A warm, happy family life.	10-1()	2()	3()	4()	5()
g. Being patient and working a long time to get what I want.	11-1()	2()	3()	4()	5()
h. Developing my potential.	12-1()	2()	3()	4()	5()
i. Job security -- a steady job.	13-1()	2()	3()	4()	5()
j. Working for a better society.	14-1()	2()	3()	4()	5()
k. Learning as much as I can.	15-1()	2()	3()	4()	5()
l. Recognition and status.	16-1()	2()	3()	4()	5()
m. A comfortable life without a lot of problems.	17-1()	2()	3()	4()	5()
n. A country protected from attack.	18-1()	2()	3()	4()	5()

36. Now thinking about those things which we just discussed that people may want to get out of life, please tell me as I read each one if you think you can get this more by serving in the Reserve or more by having another type of part-time job or using your spare time in some other way. IF RESERVE OR OTHER: Would you say you are much more likely to get this in the Reserve/other job/activity or somewhat more likely to get this in the Reserve/other job/activity?

	Reserve			Other Part-Time Job/Activity	
	Much	Somewhat	Neither	Somewhat	Much
a. Recognition and status.	19- 1()	2()	3()	4()	5()
b. Work that is challenging.	20- 1()	2()	3()	4()	5()
c. Participating in activities that are exciting and adventurous.	21- 1()	2()	3()	4()	5()
d. Making good money.	22- 1()	2()	3()	4()	5()
e. Being able to make my own decisions on the job.	23- 1()	2()	3()	4()	5()
f. A warm, happy family life.	24- 1()	2()	3()	4()	5()
g. Obedience.	25- 1()	2()	3()	4()	5()
h. Being patient and working a long time to get what I want.	26- 1()	2()	3()	4()	5()
i. Job security -- a steady job.	27- 1()	2()	3()	4()	5()
j. Working for a better society.	28- 1()	2()	3()	4()	5()
k. Developing my potential.	29- 1()	2()	3()	4()	5()
l. A comfortable life without a lot of problems.	30- 1()	2()	3()	4()	5()
m. A country protected from attack.	31- 1()	2()	3()	4()	5()
n. Learning as much as I can.	32- 1()	2()	3()	4()	5()

37. Men give various reasons for wanting to be in the Reserve. As I read each one, please tell me how important or unimportant the reason is to you personally -- is it very important, somewhat important, neither important nor unimportant, somewhat unimportant, or very unimportant to you personally:

	Important			Unimportant	
	Very	Somewhat	Neither	Somewhat	Very
a. Opportunity to earn extra income.	33- 1()	2()	3()	4()	5()
b. Opportunity to serve my country.	34- 1()	2()	3()	4()	5()
c. Opportunity to make good friends.	35- 1()	2()	3()	4()	5()
d. Chance to use my hobbies or interests.	36- 1()	2()	3()	4()	5()
e. Opportunity to serve my community.	37- 1()	2()	3()	4()	5()
f. Being a member of a team.	38- 1()	2()	3()	4()	5()
g. Develop my potential.	39- 1()	2()	3()	4()	5()
h. For good benefits.	40- 1()	2()	3()	4()	5()

38. Now I'd like to read you a list of statements describing things you can get out of a part-time job or using your spare time in some other way. As I read each one, please tell me if you think you would be more likely to be (NAME ITEM) if you extended your enlistment in the Reserve or by another part-time job or using your spare time in some other way. Would Reserve/other job/activity be much more likely or somewhat more likely to offer this?

	Reserve			Other Part-Time Job/Activity	
	Much	Somewhat	Neither	Somewhat	Much
a. Doing work that is challenging.	41- 1()	2()	3()	4()	5()
b. A member of a team.	42- 1()	2()	3()	4()	5()
c. Learning as much as I can.	43- 1()	2()	3()	4()	5()
d. Making good money.	44- 1()	2()	3()	4()	5()
e. Serving my country.	45- 1()	2()	3()	4()	5()
f. Making good friends.	46- 1()	2()	3()	4()	5()
g. Serving my community.	47- 1()	2()	3()	4()	5()
h. Having good benefits.	48- 1()	2()	3()	4()	5()
i. Developing my potential.	49- 1()	2()	3()	4()	5()
j. Having a chance to use my hobbies or interests.	50- 1()	2()	3()	4()	5()
k. Gaining recognition and status.	51- 1()	2()	3()	4()	5()
l. Working for a better society.	52- 1()	2()	3()	4()	5()

39. Please tell me if you would be more likely (NAME ITEM) if you extended your enlistment or by another part-time job or using your spare time in another way. Would the Reserve/other job/activity be much more likely or somewhat more likely to enable you to do this?

	Reserve			Other Part-Time Job/Activity	
	Much	Somewhat	Neither	Somewhat	Much
a. To achieve your life's goals.	53- 1()	2()	3()	4()	5()
b. To live a productive life.	54- 1()	2()	3()	4()	5()

40. If you were to extend your enlistment in the Reserve, how likely or unlikely do you think the following things would be to occur? As I read each statement, please tell me if it would be very likely to exist or occur, somewhat likely, neither likely nor unlikely, somewhat unlikely, or very unlikely to exist or occur? READ LIST

	Likely		Neither	Unlikely		Q. 41a/b
	Very	Somewhat		Somewhat	Very	
a. A system of promotions that would be fair.	55-1()	2()	3()	4()	5()	_____
b. Would take too much time away from your family.	56-1()	2()	3()	4()	5()	_____
c. Good opportunity for promotions.	57-1()	2()	3()	4()	5()	_____
d. Having military supervisors who would hassle or harrass you.	58-1()	2()	3()	4()	5()	_____
e. Would attend drills that are a waste of time.	59-1()	2()	3()	4()	5()	_____ -E
f. Cause you problems with your job because of Reserve obligations.	60-1()	2()	3()	4()	5()	_____ -7
g. The drills would prepare you for mobilization for emergencies such as floods, etc.	61-1()	2()	3()	4()	5()	_____ -7
h. The instructors would be well qualified to teach their subjects.	62-1()	2()	3()	4()	5()	_____
i. You would have modern, up-to-date training equipment.	63-1()	2()	3()	4()	5()	_____
j. Drills would prepare you to be combat ready.	64-1()	2()	3()	4()	5()	_____
k. Classes would be cancelled or scheduled at the last minute without much planning.	65-1()	2()	3()	4()	5()	_____
l. You would be well informed by the Reserve about General Reserve information such as training schedules, changes, qualification tests, etc.	66-1()	2()	3()	4()	5()	_____
m. Summer training camp would prepare you to be combat ready.	67-1()	2()	3()	4()	5()	_____
n. Would take too much time away from your personal and social activities.	68-1()	2()	3()	4()	5()	_____

41a. Which one of these factors we just discussed is most important to you personally? RECORD "1" ON APPROPRIATE LINE ABOVE.

b. Which factor is second most important to you? RECORD "2" ON APPROPRIATE LINE ABOVE

42. Now I'd like to talk with you about how you feel about the Reserve now that you've been in for a while. How satisfied would you say you generally are with the Reserve -- would you say you are:

- 73- 1() Very satisfied with the Reserve,
 2() Somewhat satisfied,
 3() Neither satisfied nor dissatisfied,
 4() Somewhat dissatisfied, or
 5() Very dissatisfied with the Reserve?

43. Now I'm going to read you a list of statements. As I read each one, please tell me if you strongly agree with the statement, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree with the statement. READ LIST

	Agree		Neither	Disagree	
	Strongly	Somewhat		Somewhat	Strongly
a. The Reserve is highly respected in my community.	5- 1()	2()	3()	4()	5()
b. I like the idea of belonging to a group such as volunteer firemen or civil defense which help people when they have trouble.	6- 1()	2()	3()	4()	5()
c. I am proud to be a member of the Reserve.	7- 1()	2()	3()	4()	5()
d. In my spare time, I prefer doing things with others rather than being by myself.	8- 1()	2()	3()	4()	5()
e. I've always liked the idea of wearing a uniform.	9- 1()	2()	3()	4()	5()
f. I like to belong to organizations or groups which help me to find more interesting things to do than being on my own.	10- 1()	2()	3()	4()	5()
g. Our country is too militaristic.	11- 1()	2()	3()	4()	5()
h. Belonging to the Reserve gives me a chance to get away from my everyday life for a while.	12- 1()	2()	3()	4()	5()
i. I would like to get out of the Reserve right now.	13- 1()	2()	3()	4()	5()
j. I like to become involved in projects in my community.	14- 1()	2()	3()	4()	5()
k. The Reserve is a place to meet good buddies and make lasting friendships	15- 1()	2()	3()	4()	5()
l. The Reserve offers an opportunity to become involved in projects in my community.	16- 1()	2()	3()	4()	5()

44. Now we have talked about many specific details about the Reserve. All things considered, how likely would you say you would be to extend your enlistment in the Reserve -- would you say that you would:

- 17- 1() Definitely extend your enlistment,
- 2() Probably extend,
- 3() Might extend,
- 4() Probably not extend, or
- 5() Definitely not extend your enlistment?

45. And now a few questions for classification purposes. Are you:

- 18- 1() Married, (#48 NEXT)
- 2() Single, or
- 3() Widowed, divorced, separated? (#47 NEXT)

46. IF SINGLE:

Do you live at home with your parents?

- 19- 1() Yes
- 2() No

47. IF NOT MARRIED:

Do you have a steady girlfriend?

- 20- 1() Yes
- 2() No

48. What was the last grade of school or college your father completed?

- 21- 1() Less than high school graduate
- 2() High school graduate
- 3() Vocational/training school after high school
- 4() Some college
- 5() College graduate or more
- 6() Don't know

22- 49. What is/was your father's occupation? _____

50. And last, just to be sure we are representing all groups in this survey, please tell me whether you would describe yourself as:

- 23- 1() American Indian
- 2() Black
- 3() Oriental
- 4() White
- 5() Other _____

WRITE IN

RESPONDENT _____	PHONE _____
ADDRESS _____	-24
CITY _____ STATE _____	ZIP _____ -25
INTERVIEWER _____	DATE _____ -26
SAMPLE SECTENT _____	-27
	-28
	-29

END

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