



MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS-1963-A



## NPRDC Special Report 83-38

## EVALUATION OF A TAILORED DIRECT-MAIL MARKETING STRATEGY FOR RECRUITING THE 19- TO 23-YEAR-OLD MARKET

Kathleen Fernandes Navy Personnel Research and Development Center

> Alan P. Romanczuk Barry E. Goodstadt Charles L. Colby Westat, Inc. Rockville, Maryland 20850

> > Reviewed by Edwin G. Aiken

Released by James F. Kelly, Jr. Commanding Officer

Navy Personnel Research and Development Center San Diego, California 92152

## May 1983

NPRDC SR 83-38       Ap. AI-9860         ITTLE (and Bubilitie)       EVALUATION OF A TAILORED DIRECT-MAIL         MARKETING STRATEGY FOR RECRUITING THE       19- TO 23-YEAR-OLD MARKET         19- TO 23-YEAR-OLD MARKET       Inc.         AuthOR(a)       Kathleen Fernandes       Alan P. Romanczuk       Westat, Inc.         NAVPERSRANDCEN       Barry E. Goodstadt Charles L. Colby       Inc.         PERFORMING ORGANIZATION NAME AND ADDRESS       Inc.       Navy Personnel Research and Development Center         San Diego, California 92152       Inc.       Navy Personnel Research and Development Center         San Diego, California 92152       Inc.       Navy Personnel Research and Development Center         San Diego, California 92152       Inc.       Navy Personnel Research and Development Center         San Diego, California 92152       Inc.       Navy Personnel Research and Development Center         San Diego, California 92152       Inc.       Navy Personnel Research and Development Center         San Diego, California 92152       Inc.       Navy Persony Pe	READ INSTRUCTIONS BEFORE COMPLETING FORM ECIFIENT'S CATALOS NUMBER VPE OF REPORT & PERIOD COVERED Decial Report
NPRDC SR 83-38       Ac.AI-9.860         TITLE (and Subilito)       *.5         EVALUATION OF A TAILORED DIRECT-MAIL MARKETING STRATEGY FOR RECRUITING THE       *.5         19-TO 23-YEAR-OLD MARKET       *.1         .AuTMOR(a)       *.6         Kathleen Fernandes       Alan P. Romanczuk NAVPERSRANDCEN       Westat, Inc.         PERPORMING ORGANIZATION HAME AND ADDRESS       *.6         Navy Personnel Research and Development Center San Diego, California 92152 and       *.6         Westat, Inc., Rockville, Maryland 20850       *.7         .CONTROLLING OFFICE NAME AND ADDRESS       *.7         Navy Personnel Research and Development Center San Diego, California 92152       *.7         .CONTROLLING OFFICE NAME AND ADDRESS       *.7         Navy Personnel Research and Development Center       *.7         San Diego, California 92152       *.7         .Autoritorinia 92152       *.7         .CONTROLLING OFFICE NAME & ADDRESS(II different from Controlling Office)       *.7         .CONTROLLING AGENCY NAME & ADDRESS(II different from Controlling Office)       *.7         .DISTRIBUTION STATEMENT (of the obstract entered in Block 20, II different from Reserver       *.7	ECIPIENTS CATALOS NUMBER
TITLE (and Sublitie)     TITLE (and Sublitie)     EVALUATION OF A TAILORED DIRECT-MAIL     MARKETING STRATEGY FOR RECRUITING THE     IP-TO 23-YEAR-OLD MARKET     AUTHOR(s)     Kathleen Fernandes Alan P. Romanczuk Westat,     Inc.,     Control Barry E. Goodstadt Charles L. Colby     Inc.     PERFORMING ORGANIZATION NAME AND ADDRESS     Navy Personnel Research and Development Center     San Diego, California 92152 and     Westat, Inc., Rockville, Maryland 20850     Controlling OFFICE NAME AND ADDRESS     Navy Personnel Research and Development Center     San Diego, California 92152     MonitoRing AGENCY NAME & ADDRESS     Navy Personnel Research and Development Center     San Diego, California 92152     LostRibution Statement (of this Report)     Distribution statement (of this Report)     Approved for public release; distribution unlimited.     DISTRIBUTION STATEMENT (of the abstract entered in Block 20, If different images     SupplementArry Notes     SupplementArry Notes     SupplementArry Notes     Additional in reverse side if necessary and identify by Meek number)     Marketing strategies     Direct-mail campaign, materials tailored to the intere     re distributed to subscribers of five selected automobile a     th a high proportion of readership in this age group. The	YPE OF REPORT & PERIOD COVERED
Author(a) Kathleen Fernandes Alan P. Romanczuk Kathleen Fernandes Alan P. Romanczuk NAVPERSRANDCEN Barry E. Goodstadt Inc. NAVPERSRANDCEN Barry E. Goodstadt Inc. Navy Personnel Research and Development Center San Diego, California 92152 and Westat, Inc., Rockville, Maryland 20850 Controlling office NAME AND ADDRESS Navy Personnel Research and Development Center San Diego, California 92152  A MONITORING AGENCY NAME & ADDRESS Control Research and Development Center San Diego, California 92152  A MONITORING AGENCY NAME & ADDRESS(II different from Controlling Office)  C DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.  C DISTRIBUTION STATEMENT (of the ebstreet entered in Block 20, II different from Reg Control Continue on reverse side If necessary and identify by Meek number) Marketing strategies Direct-mail mark ecruiting C Approvent to subscribers of five selected automobile a ith a high proportion of readership in this age group. The	ct 1980-Sep 1982
Kathleen Fernandes       Alan P. Romanczuk       Westat, Charles L. Goodstadt       N         NAVPERSRANDCEN       Barry E. Goodstadt Charles L. Colby       Inc.       N         PERFORMING ORGANIZATION NAME AND ADDRESS       18.         Navy Personnel Research and Development Center       Z         San Diego, California 92152 and       12.         Vestat, Inc., Rockville, Maryland 20850       12.         Navy Personnel Research and Development Center       13.         San Diego, California 92152       12.         Navy Personnel Research and Development Center       13.         San Diego, California 92152       12.         Navy Personnel Research and Development Center       13.         Navy Personnel Research and Development Center       13.         Navy Personnel Research and Development Center       14.         Navy Personnel Research and Development Center       14.         Value Office NAME & ADDRESS(II different from Controlling Office)       14.         Costraisuution statement (of the Report)       14.         Approved for public release; distribution unlimited.       15.         Supple EMENTARY NOTES       16.         Supple EMENTARY NOTES       16.         Supple EMENTARY NOTES       16.         KEY WORDS (Continue on reverse side If necescary and id	RAFORMING ORG. REPORT NUMBER
Navy Personnel Research and Development Center       Z         San Diego, California 92152 and       Westat, Inc., Rockville, Maryland 20850         Novy Personnel Research and Development Center       Navy Personnel Research and Development Center         San Diego, California 92152       Navy Personnel Research and Development Center         San Diego, California 92152       Navy Personnel Research and Development Center         San Diego, California 92152       Navy Personnel Research and Development Center         San Diego, California 92152       Navy Personnel Research and Development Center         San Diego, California 92152       Navy Personnel Research and Development Center         San Diego, California 92152       Navy Personnel Research and Development Center         San Diego, California 92152       Navy Personnel Research and Development Center         San Diego, California 92152       Navy Personnel Research and Development Center         San Diego, California 92152       Navy Personnel Research and Identify Balance         Mapproved for public release; distribution unlimited.       Navy Personnel Research and Personnel Research and Identify Balance Research Research and Identify Balance Research and Identify Balance Research and Identify Balance Research Research Research Research Research Research Research	5NTRACT ON GRANT NUMBER(*) 00123-79-C-1511
Navy Personnel Research and Development Center       Navy Personnel Research and Development Center         San Diego, California 92152       18.         II. MONITORING AGENCY NAME & ADDRESS(II different from Controlling Office)       18.         II. MONITORING AGENCY NAME & ADDRESS(II different from Controlling Office)       18.         III. MONITORING AGENCY NAME & ADDRESS(II different from Controlling Office)       18.         III. MONITORING AGENCY NAME & ADDRESS(II different from Controlling Office)       18.         III. DISTRIBUTION STATEMENT (of this Report)       Approved for public release; distribution unlimited.         III. DISTRIBUTION STATEMENT (of the obstract entered in Block 20, II different from Report)       Identify by block number)         III. SUPPLEMENTARY NOTES       Identify by block number)       Marketing strategies         Direct-mail mark ecruiting       In a direct-mail campaign, materials tailored to the intere ere distributed to subscribers of five selected automobile a ith a high proportion of readership in this age group. The	ROGRAM EL EMENT, PROJECT, TAK REA & WORK UNIT NUMBERS 1252-PN.01
ABSTRACT (Continue on reverse elde 11 necessary and identify by block number)     Marketing strategies     Direct-mail mark     ecruiting     ABSTRACT (Continue on reverse elde 11 necessary and identify by block number)     In a direct-mail campaign, materials tailored to the intere     ere distributed to subscribers of five selected automobile a     ith a high proportion of readership in this age group. The	ay 1983
4. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.  17. DISTRIBUTION STATEMENT (of the obstract entered in Block 20, If different frem Rep  18. SUPPLEMENTARY NOTES  19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Marketing strategies Direct-mail mark ecruiting  ABSTRACT (Continue on reverse side if necessary and identify by block number) In a direct-mail campaign, materials tailored to the interee ere distributed to subscribers of five selected automobile a ith a high proportion of readership in this age group. The	
<b>B.</b> DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited. <b>17.</b> DISTRIBUTION STATEMENT (of the obstract entered in Block 20, II different from Report) <b>18.</b> SUPPLEMENTARY NOTES <b>9.</b> KEY WORDS (Continue on reverse olds if necessary and identify by block number) Marketing strategies Direct-mail mark ecruiting <b>1.</b> A direct-mail campaign, materials tailored to the interest of five selected automobile a ith a high proportion of readership in this age group. The	ECURITY CLASS. (of this report)
Approved for public release; distribution unlimited. 7. DISTRIBUTION STATEMENT (of the obstract entered in Block 20, 11 different from Ref 18. SUPPLEMENTARY NOTES 18. SUPPLEMENTARY NOTES 19. KEY WORDS (Continue on reverse olds if necessary and identify by block number) Marketing strategies Direct-mail mark ecruiting 10. ABSTRACT (Continue on reverse olds if necessary and identify by block number) In a direct-mail campaign, materials tailored to the intere ere distributed to subscribers of five selected automobile a ith a high proportion of readership in this age group. The	NCLASSIFIED DECLASSIFICATION/DOWNGRADING SCHEDULE
Marketing strategies Direct-mail mark ecruiting ABSTRACT (Continue on reverse elde it necessary and identify by block number) In a direct-mail campaign, materials tailored to the intere- ere distributed to subscribers of five selected automobile a with a high proportion of readership in this age group. The	
Direct-mail mark ecruiting N./ABSTRACT (Continue on reverse olds it necessary and identify by block miniber) In a direct-mail campaign, materials tailored to the intere- vere distributed to subscribers of five selected automobile a with a high proportion of readership in this age group. The	
VIn a direct-mail campaign, materials tailored to the intere- vere distributed to subscribers of five selected automobile a with a high proportion of readership in this age group. The	~
omparing the number of enlistments in this group of sub- roduced in a group who did not receive the materials. The dir ave a significant impact on enlistment rates and was not eff arget population of 19- to 23-year-olds. Factors considered	nd motorcycle magazines
D 1 JAN 73 1473 EDITION OF 1 NOV 65 18 OBSOLETE UNCLAS 5/N 0102- LF- 014- 6601 SECURITY CLASSIFI	cribers with the number ect-mail campaign did not ective in appealing to the

ģ.

Timpact were the size of the direct-mail campaign, the type of design used to evaluate impact, the extent to which the materials appealed to target group members, and the recruiting environment in which the field test was conducted.  $\gamma_1$ 

5/N 0102- LF- 014- 6601

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PASE(When Date Untered)

## FOREWORD

This research was performed under engineering development subproject Z1252-PN.01 (Revised Recruiting Systems). It was sponsored by the Chief of Naval Operations Counter Attrition Task Force. The objective of the subproject was to develop and test marketing strategies for recruiting a target population of 19- to 23-year-old, unmarried, nonprior-service, male high school graduates.

This is the third of three reports that describe the development and evaluation of recruiting techniques designed to reach the 19- to 23-year-old age group. The first report (NPRDC SR 82-22) identified peer networking and direct-mail marketing as two promising strategies. The second report (NPRDC SR 83-11) described the peer networking strategy based on expanded use of the Navy's Recruiting Assistance Program. This report describes the test and evaluation of the direct-mail marketing strategy in recruiting 19-to 23-year-olds into the Navy.

Test and evaluation of the direct-mail strategy were conducted under contract N00123-79-C-1511 with Westat, Inc. The contract officer's technical representatives were Raye Newmen and Kathleen Fernandes.

JAMES F. KELLY, JR. Commanding Officer JAMES W. TWEEDDALE Technical Director



LANK-ME TIM

### SUMMARY

### Problem

The Navy recruiting environment in the 1980s is one in which the supply of 17- and 18-year-olds is steadily declining, while the number of ships that must be manned is increasing. One way to expand the supply of recruits is to direct recruiting efforts at an older market consisting of 19- to 23-year-olds. To take advantage of this source of manpower, recruiting techniques effective in enlisting this segment of the population need to be explored.

### Objective

The objective of this effort was to evaluate the effectiveness of a tailored directmail marketing strategy for recruiting 19- to 23-year-old, unmarried, nonprior-service males who have received high school diplomas. This effort was not designed to evaluate direct-mail marketing in general, but rather to determine the extent to which the strategy could be effective in appealing to a somewhat older audience.

### Approach

A direct-mail campaign was designed in which mailing lists and campaign materials were directed towards the interests of the 19- to 23-year-old age group. Mailing lists were obtained from automobile and motorcycle magazines with a high proportion of readership in this age range. Tailored direct-mail materials were developed and tested for their appeal to target group members. The materials were distributed in February and May 1981 to about 32,000 magazine subscribers in the recruiting territory surrounding selected recruiting stations in Navy Recruiting Districts (NRDs) San Francisco and Seattle. Subscribers interested in learning more about the Navy mailed back a reply card that was checked for age eligibility and forwarded to the appropriate recruiting station for follow-up. The effectiveness of the direct-mail strategy was determined by comparing the numbers of enlistments produced in this group of subscribers with the number produced in a group who did not receive the materials.

### Results

Of the 367 reply cards received, 177 were forwarded as leads for recruiter follow-up. Only 24 percent of the leads were in the 19- to 23-year-old age group. This figure was less than the percentage of their subscribers that the magazines estimated to be in the target group and less than the percentage of enlistees in the two NRDs during the field test period who were 19- to 23-years old. The conversion rate of eligible leads enlisting in the Navy during the field test period was lower than but not significantly different from the conversion rate for national leads in Navy Recruiting Area Eight during FY81. In addition, the enlistment rate for subscribers who participated in the direct-mail campaign was lower than but not significantly different from the rate for subscribers who did not receive the materials.

#### Discussion

The following factors should be considered in interpreting the lack of impact of the direct-mail campaign on enlistments:

1. The size of the direct-mail campaign and/or the number of magazine subscribers in the target population may have been insufficient to provide a fair test of the strategy. 2. The manner in which the evaluation of the campaign was constructed may have been inappropriate for measuring its impact on enlistments.

3. The content of the direct-mail letter may not have appealed to members of the target population.

4. Given the positive recruiting environment during the field test period, recruiters may have believed that direct-mail leads were unlikely to produce enlistments and so assigned them a low priority for follow-up.

Although the direct-mail strategy was not effective in enlisting 19- to 23-year-olds, the procedures used to calculate enlistment and conversion rates may be applicable to other direct-mail evaluations. A comparison of these measures with those used by the Navy Recruiting Command could provide information on the validity of both measurement techniques that might lead to enhancement of the methods used to evaluate direct-mail efforts.

### Conclusions

The direct-mail campaign did not have a significant impact upon enlistment rates and was not effective in appealing to the target population of 19- to 23-year-olds.

فللفاق المساعدة بالمتناطقة المتحية والتراع ال

# CONTENTS

																													Page
INTRODUCTIO	Ν.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
Problem		•	•	•				•	•	•		•	•		•	•		•	•		•	•	•	•	•	•		•	1
Objective .		•	•		•	•	•	•	•				•	•			•				•		•		•	•	•	•	1
Background	• •	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
APPROACH .	••	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
Experimental	De	sigi	n	•	•		•			•	•		•	•	•		•	•	•		•						•	•	1
Development	of t	:he	D	ire	ct	-m	nai	I I	Let	tte	er	•	•	•							•		•	•	•	•	•		2
Selection and	Ad	iust	tm	en	ts	of	M	ai	lin	g	Lis	sts																	2
Field Test Pr	oced	lur	es										-					-	-										23
Evaluation .				·		Ì	·		Ī	·			·					Ī	Ţ		·	÷	Ż	Ţ		·			4
Impact Ass																													4
Qualitative																													5
Quantarive	: 70	ary	3C:	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	•	•	•	•	•	•	,
RESULTS	•••	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	•	6
Effectiveness	of	the	D	ire	ect	:-n	na	il (	Ca	m	ра	igr	۱.															•	6
Qualitative A	nal	/se	s	1							-	-0.	••	-	-								-		-				7
Quantanie			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	,
DISCUSSION .	•••	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	9
CONCLUSIONS	• •	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	9
APPENDIX-M	٩TE	RI/	٩L	S I	JS	EĽ	) I	N	FI	EL	.D	TE	EST	r /	٩N	D	E١	/A	LL	JA	TI	NC	1.	•	•	•	•		A-0
DISTRIBUTION																													

# LIST OF TABLES

1.	Size of Experimental Group After Removal of Institutional/ Military Names and Estimated Size of Control Group	3
2.	Frequency and Rate of Eligible Returns by Mailing List	6
3.	Number of Enlistments and Enlistment Rates by Mailing List	7
4.	Age and Education of Leads Generated in the Field Test and Enlistments in the Experimental and Control Groups and in the Two NRDs	8

### INTRODUCTION

#### Problem

In today's recruiting environment, the pool of high-school age youth is beginning to decline. At the same time, the Navy is facing increased manpower demands under plans to expand the size of the fleet. One method of expanding the pool of potential Navy recruits would be to direct recruiting efforts at the 19- to 23-year-old age group. Through most of the 1980s, the size of this group will be expanding as the large pool of high-school age youth that existed in the 1970s becomes older. Given the potential importance of this somewhat older age group to recruiting, techniques need to be developed to enlist a larger proportion of this population in the Navy.<sup>1</sup>

## Objective

The objective of this effort was to evaluate the effectiveness of a tailored directmail marketing strategy for recruiting 19- to 23-year-old, unmarried, nonprior-service males who have received high school diplomas. This effort was not designed to evaluate direct-mail marketing in general, but rather to determine the extent to which the strategy could be effective in appealing to a somewhat older audience.

#### Background

During an earlier phase of the current effort,<sup>2</sup> direct-mail marketing was identified as a strategy that had promise for attracting members of the target group into the Navy and should be tested. In that phase, it was concluded that the direct-mail campaign should be targeted to the 19- to 23-year-old age group by using mailing lists and campaign materials directed towards the interests of this group. Because 19- to 23-year-old males are very interested in all sorts of motor vehicles and subscribe to vehicle specialty magazines, it was recommended that the mailing lists be selected from those automobile and motorcycle magazines with a high proportion of readership in this target group. In addition, it was recommended that the materials used in the direct-mail campaign be tailored to the target population by testing their appeal to members of the 19- to 23-yearold age group.

#### APPROACH

#### Experimental Design

Sixty-seven recruiting stations, 50 in the California portion of Navy Recruiting District (NRD) San Francisco and 17 in the Washington portion of NRD Seattle, were randomly assigned to experimental or control groups for the test. Minor adjustments were made in the assignments to accommodate NRD consolidation of several recruiting

<sup>1</sup>These techniques focus on accessions acquired through the standard recruitment process and do not consider accessions generated through lateral entry programs.

<sup>2</sup>Romanczuk, A. P., Goodstadt, B. E., Colby, C. L., & Fernandes, K. <u>Identification of strategies for penetrating the 19- to 23-year-old recruiting market (NPRDC SR 82-22)</u>. San Diego: Navy Personnel Research and Development Center, April 1982. (AD-A114 261)

1

stations and to match experimental and control stations on average recruiter productivity.

Magazine subscription lists were obtained for the zip codes associated with the recruiting territory surrounding the 34 experimental and 33 control stations. The names on each mailing list were identified as belonging to the experimental or control group on the basis of the subscriber's zip code. The direct-mail materials were distributed to subscribers in the experimental group. The effectiveness of the direct-mail strategy was determined by comparing accessions produced in this group with accessions produced in the control group of subscribers who did not receive the materials.<sup>3</sup>

### Development of the Direct-mail Letter

Six direct-mail letters were tested in San Francisco and Seattle on 36 civilians having the characteristics of the target population (i.e., 19- to 23-year-old, unmarried males with high school diplomas, of various racial/ethnic backgrounds, who were in, or trying to enter, the labor force). The testing was done in June 1980 during focus group sessions that were conducted to determine how the 19- to 23-year-old age group was affected by current recruiting practices and appeals. Participants rated each letter on a variety of dimensions (e.g., convincing, easy to read) and selected the letter that would most make them want to "find out more about the Navy" (see footnote 2).

Based on participants' ratings, it was determined that two letters had the strongest potential for inducing information-seeking behavior; one emphasized the Navy as a "school" providing training and experience; and the other, world crises, America's weakening defense, and the individual taking of responsibility. The Commander, Navy Recruiting Command (COMNAVCRUITCOM) recommended against using the "crisis" letter because of its politically sensitive content. Therefore, following minor revision by COMNAVCRUITCOM, the "school" letter was approved for the test, printed on Navy letterhead, and signed by a member of the COMNAVCRUITCOM staff. A copy of the letter is included in the appendix.

### Selection and Adjustments of Mailing Lists

Demographic information on the readership of approximately 50 car and motorcycle publications was gathered to identify those with the highest proportion of readers who were 19- to 23-year-old males. Five magazines were selected: <u>Motor Trend</u>, <u>Motorcyclist</u>, <u>Cycle World</u>, <u>Car Craft</u>, and <u>Popular Hot Rodding</u>. Information obtained from the publishers indicated that between 25 and 50 percent of the subscribers to these magazines were persons between 18 and 24 years old (the closest breakout to the 19- to 23-year-old age group that could be obtained). Because of the lack of precision in these figures, it was difficult to determine the number of individuals on the mailing lists who were in the target population. In addition, female subscribers were not screened from the lists; it was

<sup>3</sup>The direct-mail test was part of a larger experiment designed to evaluate the effectiveness of two marketing strategies, singly and in combination, in recruiting a somewhat older population. The second strategy was peer networking based on expanded use of the Navy's Recruiting Assistance Program. The test of this strategy was cancelled, however, because of problems encountered during implementation of the field test, and the experiment was reduced to an evaluation of only the direct-mail strategy. (See Fernandes, K. <u>Evaluation of the Navy's Recruiting Assistance Program as a peer networking strategy for recruiting the 19- to 23-year-old market</u> (NPRDC SR 83-11). San Diego: Navy Personnel Research and Development Center, January 1983.)

assumed that their number would be small and that those who received the materials, if not interested in the Navy, might pass the letter on to a male friend or relative who was. Finally, the lists were not screened to eliminate individuals who were outside the 19- to 23-year-old group because the options available for removing them were either prohibitively expensive or of questionable reliability.

Because the mailing lists contained the names of institutions and military personnel, as well as duplicate subscribers, the following adjustments were made to each list:

1. For the experimental group, the names of institutions (e.g., schools, businesses, and libraries) and military personnel were identified and eliminated from the mailing lists to save mailing costs and obtain a more realistic base for the calculation of response rates. This process was expensive and time-consuming; consequently, it was not repeated for the control group where there were no mailing costs involved. Instead, adjustments were made by applying the percentage actually eliminated from each experimental group list to the number of names on the corresponding control list. The resulting figur were used when calculating control group response rates. Table 1 shows the number of names that remained on the experimental group mailing lists after institutional and litary names were removed and the estimated sizes of the control lists if the same produce had been used.

### Table 1

## Size of Experimental Group After Removal of Institutional/ Military Names and Estimated Size of Control Group

Mailing List	% Removed <sup>a</sup>	Number Remaining in Exp. Group	Estimated Size of Control Group
Popular Hot Rodding	3.6	1,949	1,890
Cycle World	5.6	7,810	7,180
Motor Trend	4.9	13,362	13,588
Motorcyclist	2.0	3,601	3,374
Car Craft	3.5	5,386	4,699
Total		32,108	30,731

<sup>a</sup>The percentage actually removed from experimental group mailing lists was applied to the corresponding control group list to adjust the size of the group.

2. Although some names appeared on several mailing lists because of multiple subscriptions, duplicates were not eliminated because of the time and expense required. Instead, a sample of names drawn from the experimental and control mailing lists was checked for frequency of duplicates. Based on this procedure, it was estimated that the total number of names would be reduced by 6 percent if duplicates were removed. This percentage was used to estimate the total number of persons in the experimental and control groups as a whole.

### Field Test Procedures

Direct mail materials were distributed to about 32,000 subscribers in two waves--in February 1981 to subscribers to Popular Hot Rodding and Cycle World and in May 1981 to subscribers of the other three magazines. The direct-mail materials consisted of the "school" letter (see appendix) and two postage-paid reply cards, which were color-coded to identify the mailing list on which the name appeared. One card was intended for the person receiving the letter, and the other was to be passed on to a friend. Individuals interested in joining the Navy were requested to provide their name, address, telephone number, date of birth, and educational data and to mail the card to a west coast post office box.

The reply cards were screened to identify individuals who were 16- to 30-years old or who did not provide age information. These individuals were considered to be leads (i.e., interested in the Navy and appropriate for recruiters to follow up regarding enlistment)<sup>\*</sup> and their names and addresses were forwarded to the appropriate recruiting station. Each month, the recruiters provided the status of leads, indicating whether a contact had been attempted, a contact had been made, an appointment had been made, or an interview had been conducted. A copy of the lead status report is included in the appendix. If no action had been taken on a particular lead, recruiters gave the reason and the lead was included in the next status report.

Recruiting stations were contacted by telephone when status reports were not returned or when misunderstandings about procedures developed. Although the follow-up system provided information on the initial action taken on each lead, it did not indicate the extent of the contact before the lead lost interest, was found to be ineligible for military service, or finally enlisted.

### Evaluation

#### Impact Assessment

The following measures were used to evaluate the impact of the direct campaign.

1. The <u>rate of return</u> was determined by dividing the number of reply cards received by the total number of names for the experimental group as a whole. The <u>rate of</u> <u>eligible returns</u> was determined by dividing the number of eligible leads (i.e., leads who were 17-to-30 years old and, therefore, eligible to enlist during the field test period) by the number of names on a mailing list. The rate of eligible returns was calculated for each experimental list.

2. The <u>conversion rate</u> was determined by dividing the number of enlistments by the number of eligible leads. A single conversion rate was calculated for the experimental group as a whole.

3. The <u>enlistment rate</u> for each experimental and control mailing list was determined by dividing the number of enlistments by the number of names on a list. The <u>adjusted enlistment rate</u>, which was calculated for the experimental or control group as a whole, was determined by dividing the number of enlistments for the group by the estimated number of persons in the group (i.e., the number of names in the group reduced by the estimated percentage of duplicate names).

<sup>b</sup>Individuals who were 16 years old were considered to be valuable contacts for future enlistment and so were considered to be leads even though they could not be enlisted during the field test period. Individuals who were 31- to 34-years old, although eligible to enlist, were considered to be marginal for follow-up and enlistment and so were not included as leads. Enlistment records, consisting of name, age, gender, and recruiting station where enlisted, were extracted from the Personalized Recruiting for Immediate and Delayed Enlistment (PRIDE) file for NRDs San Francisco and Seattle for the period from March through October 1981. These records were compared with the mailing lists consisting of subscriber name, address, and zip code to determine whether or not a subscriber had enlisted. Since only the name and zip code were common to the enlistment records and mailing lists, the following criteria were used to identify matching entries:

1. The enlistment record and the mailing list entries had to have the same last name.

2. The recruiting stations for the two entries had to match; that is, the zip code of the mailing list entry had to be in the territory of the recruiting station of the enlistment record entry.

3. The information on the enlistment record and the mailing list entries had to match; for example, agreement between the first name and/or first initial and no difference in gender such as "Mrs." on one and "M" on the other.

It was assumed that any errors associated with the application of these criteria would be the same for both the experimental and control groups. For example, because these criteria excluded persons who enlisted at any recruiting station other than the one assigned to the mailing list zip code, the number of enlistments and hence the conversion and enlistment rates obtained were likely to be underestimated for both the experimental and control groups.

### Qualitative Analyses

The age and educational characteristics of the leads and enlistees in the experimental and control groups and the two NRDs were compared to determine if the direct-mail materials had attracted the same type of person, in terms of these demographic characteristics, as had enlisted during the field test period.<sup>5</sup> In addition, the pass-on rate, defined as the percentage of leads not on the experimental group mailing lists, was calculated for the leads received. Although the direct-mail materials included special pass-on cards, the pass-on rate was not calculated directly from these cards because of the possibility that an incorrect card had been returned.

Eligible leads were interviewed by telephone to determine their reactions to the direct-mail letter and to contacts with a recruiter. These semistructured and open-ended interviews were conducted in August 1981 using the interview guide presented in the appendix. Telephone contact was attempted with every eligible lead whose name had been forwarded to a recruiting station; 55 interviews were completed.

The monthly status reports were examined to determine the extent to which recruiters had attempted contact with the leads provided them.

<sup>5</sup>Gender information was not requested on the reply cards and could not be accurately estimated from the names of the leads. Hence, gender was not included in the comparison of demographics.

## RESULTS

## Effectiveness of the Direct-mail Campaign

The return rate of the direct-mail campaign was 1.14 percent. Of the 367 cards received, 177 met the age criterion (i.e., 16- to 30-years old) to be considered a lead and were forwarded to the recruiting stations  $f^{**}$  follow-up. The overall rate of eligible returns was .55 percent. Table 2 presents the frequency and rate of eligible returns for each mailing list.

## Table 2

Mailing List	Number of Eligible Returns	Return Rate (%)
Popular Hot Rodding	19	0.97
Cycle World	62	0.79
Motor Trend	45	0.34
Motorcyclist	24	0.67
Car Craft	27	0.50
	<u> </u>	
Total	177	0.55

### Frequency and Rate of Eligible Returns by Mailing List

Two of the leads enlisted. The conversion rate was 1.29 percent, based on the 155 leads who were 17- to 30-years old and, therefore, eligible to enlist. Given the criteria used to match enlistment record and mailing list entries, this figure probably underestimated the true conversion rate for the experimental group. The rate obtained was lower than, but not significantly different from, the COMNAVCRUITCOM conversion rate of 2.65 percent for national leads in Navy Recruiting Area Eight in FY81. The following characteristics of national leads should be considered when comparing the two conversion rates:

1. National leads include responses to both print and direct-mail advertising.

2. National leads are screened for both education and age and include individuals up to 34 years of age.

3. The national lead conversion rate is calculated from information generated from follow-up surveys with recruiting stations.

Because of these differences, it was not possible to determine the extent to which the Area Eight conversion rate was an overestimate relative to the rate for the experimental group.

A comparison of the adjusted enlistment rates (i.e., the enlistment rates based on the number of persons in each group) for the experimental and control groups indicated that the rates were not significantly different. As shown in Table 3, the adjusted enlistment

## Table 3

	Experimen	ntal Group	Control	Group
Mailing List	Number	Rate (%)	Number	Rate(%)
Popular Hot Rodding	4	0.21	7	0.37
Cycle World	15	0.19	15	0.21
Motor Trend	21	0.16	21	0.15
Motorcyclist	7	0.19	12	0.36
Car Craft	13	0.24	15	0.32
Total	 59	0.20 <sup>a</sup>	64	0.22 <sup>a</sup>

## Number of Enlistments and Enlistment Rates by Mailing List

<sup>a</sup>The total rates are based on the number of persons estimated to be in the experimental and control groups if duplicate names were removed.

rate for the experimental group was .20 percent, compared to .22 percent for the control group. The enlistment rates (i.e., the enlistment rates based on the number of names) for the individual lists are also shown in Table 3.<sup>6</sup> The enlistment rate for the experimental group was lower than that for the control group for four of the five magazines.

### Qualitative Analyses

Table 4 presents the age and education of the leads generated in the field test and of the enlistees in the experimental and control groups and in the two NRDs during the period of the field test. Twenty-four percent of the leads were in the 19- to 23-year-old group. This figure was at the low end of the percentage range of subscribers the magazines estimated to be in the target age group and lower than the percentage of 19to 23-year-old enlistees in the experimental and control groups and in the two NRDs. The percentage of leads who had completed at least 12 years of education was similar to that for enlistees in the experimental and control groups and in the two NRDs; however, a substantially higher percentage of the leads had completed some college.

In terms of pass-on rate, 44 percent of the leads did not appear on any of the mailing lists. Because the names and addresses of these leads differed from those of the subscribers, they were considered to be true pass-ons. Another 16 percent of the leads had the same last name and address, but a different first name, as an entry on the mailing lists. In these cases, the identification as a pass-on was questionable since the person who returned the card may have been the actual magazine reader, while the person who was listed paid for the subscription.

<sup>6</sup>The procedure used to estimate duplicates was appropriate to apply to the experimental and control groups as a whole but not to the individual mailing lists.

ŝ

11

## Table 4

			Enlistment	
Characteristic	Direct-mail Leads (%) (N = 177)	Exp. Group (%) (N = 59)	Cont. Group (%) (N = 64)	NRD (%) (N = 5909
Age				<u> </u>
16	12.4	~-		
17	14.7	18.6	14.1	17.8
18	11.9	27.1	29.7	24.7
19-23	24.2	40.7	51.6	40.6
24 and older	24.9	13.6	4.7	16.8
Not available	11.9			0.1
Education (Highest g	rade)			
9 and below	4.0	0.0	1.6	3.3
10	16.9	10.2	14.1	9.8
11	16.9	28.8	18.8	26.2
12	37.3	54.2	59.4	50.2
13 and above	20.3	1.7	4.7	6.4
Not available	4.5	5.1	1.6	4.1

## Age and Education of Leads Generated in the Field Test and Enlistments in the Experimental and Control Groups and in the Two NRDs

Of the leads who participated in the telephone interviews, 22 percent were in the 19to 23-year-old age group and 68 percent had a high school diploma. Because the interviewees were not selected randomly, the survey findings may not be representative of the group as a whole. Given this qualification, the following summarizes the interview responses:

1. About two-thirds of the interviewees recalled receiving a direct-mail letter from the Navy, but most did not remember its contents.

2. About one-third of the interviewees indicated that they had visited a recruiter. All of them had positive impressions of the recruiter, whom they perceived as informative, truthful, and professional.

3. Over half of the interviewees (and over three-fourths of those who saw a recruiter) indicated that they would consider future service in the Navy. The primary reason for considering enlistment was educational advancement and skill development. The primary objection to Navy service was a better alternative such as a good job or career, or plans to attend college.

Although recruiters frequently delayed their follow-up, they attempted to contact (e.g., locate a telephone number, mail out recruiting material, set up an interview) 90 percent of the leads sent to the recruiting stations. An examination of the lead status reports (supplemented with the telephone interview information) indicated that one-fourth of the leads turned out to be either invalid or ineligible to enlist (excluding the leads known to be 16 years of age who had been forwarded for follow-up). Invalid leads included pranks and individuals who had changed residences and could not be contacted. Ineligible leads included individuals who could not enlist because of physical disability, mental aptitude, education, or police record.

## DISCUSSION

A number of factors should be considered in interpreting the lack of impact of the direct-mail campaign on enlistments. First, the size of the campaign and the number of subscribers in the target population may have been insufficient to provide a fair test of the strategy. The selection of recruiting stations was limited to a subset of those in NRDs San Francisco and Seattle because of other ongoing recruiting research and the yoking of the direct-mail strategy with a second strategy in the initial experimental design. There may not have been enough magazine subscribers in the territories surrounding the NRD stations to produce stable estimates of enlistment and conversion rates for evaluating the effectiveness of the campaign. Furthermore, although the magazines were selected for their high proportion of 19- to 23-year-old subscribers, the desired targeting of the campaign was reduced to the extent that the letter was received by individuals outside this age group. In future efforts of this type, the availability of specialized mailing lists that contain large numbers of target group members needs to be explored.

Second, it is possible that no matter what the direct-mail market approach, it would have had only a small impact on enlistments. For example, if the field test had been as effective as COMNAVCRUITCOM's direct-mail campaigns and had resulted in a conversion rate of 2.65 percent, the current effort would have resulted in 4 (rather than 2) of the 155 eligible leads enlisting. Direct mail campaigns may only have a significant effect on conversion rates when they are combined with other strategies such as peer networking as originally planned.

The qualitative analyses indicated that the direct-mail letter may not have appealed to members of the target population. The leads generated by the campaign underrepresented the 19- to 23-year-old age range in comparison to the percentage of subscribers estimated by the magazines to be in the target group and in comparison to the age distribution of enlistees in the two NRDs during the field test period. Furthermore, the content of the letter was not "memorable" enough to be recalled by most of the leads interviewed in the follow-up telephone survey. Although the letter was evaluated positively by members of the target population during copytesting, the results indicated that it may be difficult to tailor a recruiting message to appeal to a specific age group.

The lack of impact of the direct-mail campaign should be considered in light of the recruiting environment in which the field test took place. During the field test, both of the participating NRDs were usually attaining or exceeding their monthly recruiting goals. In such an environment, recruiters may have given direct-mail leads a lower priority for follow-up than leads from other sources that they considered more promising to produce enlistments.

Although there were problems associated with the field test design, several of the measures calculated may be applicable to other direct-mail evaluations. These measures are the enlistment rate and the conversion rate, both generated by matching names on the mailing lists with enlistment records. These measures need to be compared with the conversion measure used by COMNAVCRUITCOM that involves follow-up surveys to recruiting stations to determine the percentage of leads converted into enlistments. Such a comparison would provide information on the validity of both measurement techniques and might enhance the accuracy of the methods used to evaluate direct-mail efforts.

#### CONCLUSIONS

The direct-mail campaign did not have a significant impact upon enlistment rates and was not effective in appealing to the target population of 19- to 23-year-olds.

# APPENDIX

# MATERIALS USED IN FIELD TEST AND EVALUATION

Direct-mail Letter																					
Sample Lead Status Report	•		•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	A-2
Telephone Survey Interview Guide.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	٠	•	•	•	A-3



DEPARTMENT OF THE NAVY NAVY RECRUITING COMMAND 4015 WILSON BOULEVARD ARLINGTON, VIRGINIA 22203

IN REPLY REFER TO CNRC/223/jf 1100 30 April 1981

Dear Friend,

Would you be willing to invest a few years to get control over your life?

Training and experience are the answers. But where do you get them? Most companies don't hire people without experience. Even recent graduates of technical schools don't have experience.

There is a "school" that offers both training and experience. It's the U. S. Navy. One of the biggest users of the most modern equipment and machinery in the world.

Navy training is among the best. You may work on equipment from the big companies. Companies looking for experienced people. You couldn't pay for this type of learning.

But the Navy is one "school" that pays you. Wages a lot higher than other schools. Benefits like food and housing, health care and insurance, plus 30 days vacation earned every year.

And the Navy takes care of its own. It's a place where your workmates will probably be your best friends. And your supervisors will be there to show you the ropes and help you move ahead when you're ready.

To learn more, send me back the prepaid postcard. There's no obligation.

And the next time you lose out on a job, ask the guy who got it. He just may be former Navy.

Sincerely,

N. THEOF Lieutenant, U. S. Navy Head, Field Liaison Branch

STALION NAME					
FUR EACH OF THE RETAIN LEADS LISTED BEL (1) WRITE IN THE REASON IF NO ACTI (2) PLACE A CHECK MARK IN THE MOST PLEASE MAIL THIS FORM BACK THE SAME DAY	BELOM, EITHER: CTION HAS BEEN TAKEN YET, OR OST APPROPRIATE COLUMN. DAY YOU RECEIVE IT.	*Stil a fc	*Still pending from a former report	g from ort	
	INACTION STATUS (WRITE IN REASON)	ACTION STA	NTUS (CHE	ACTION STATUS (CHECK ONE COLUMN)	
RETAIN LEAD OUTSTANDING		ATTEMPTED CONTACT	MADE CONTACT	MADE APPOINTMENT	HAD INTERVIEN

"IT ASE FOLD THIS FORM ONCE WITH WESTAT'S ADDRESS SHOWING, STAPLE, AND PUT IN MAILBOX. THANK YOU. .

a substitution of

STATES STATES

## WESTAT DIRECT-MAIL EVALUATION TOPIC GUIDE CONTRACT N00123-79-C-1511

Hello, my name is \_\_\_\_\_\_. I'm with Westat, an independent survey research firm in Rockville, Maryland. Westat is doing research for the U.S. Navy on their advertising campaigns. We're conducting interviews with men and women like yourself on the West Coast and would like to include your ideas.

We selected your name randomly from subscriber mailing lists of popular magazines. The information you provide us will remain confidential and will <u>not</u> be given to anyone in the military. Your participation is totally voluntary.

Do you have any questions?

- 1. Find out whether respondent received a letter in the mail from the Navy in past few months telling about a job opportunity. Probe:
  - Whether they read it
  - What they remember about it
  - 2. Determine whether information in letter affected their feelings about the Navy. Probe:
    - Degree to which it got them interested in finding out more about Navy, and why (or why not)
    - Degree to which it made them wish to see a Navy recruiter, and why (or why not)
  - 3. Find out if they did anything to get more information about Navy. If saw Navy recruiter, find out what led up to their contact.
  - 4. (IF SAW RECRUITER) Discuss what happened when they saw recruiter. Probe:
    - Type of person recruiter was
    - Things recruiter said and did which made them feel more positive about Navy
    - Things said and done which made them feel more negative about Navy
    - Things recruiter could have said and done (realistic) which would have made them feel more like joining the Navy
  - 5. Probe them to find out whether they will consider service in the Navy for the future. Reasons.
  - 6. Obtain information on:
    - Age
    - Marital status
    - Education completed
    - Prior military service
    - Sex (DO NOT ASK)

A-4

## DISTRIBUTION

Chief of Naval Operations (OP-115), (OP-135) Chief of Naval Education and Training (02), (N-5) Commander, Navy Recruiting Command (Code 223) Commander, Navy Recruiting Area Eight Commanding Officer, Navy Recruiting District, San Francisco Commanding Officer, Navy Recruiting District, Seattle Defense Technical Information Center (DDA) (12)