

AD-A053 838

NAVAL POSTGRADUATE SCHOOL MONTEREY CALIF
EDUCATIONAL AND TRAINING OPPORTUNITIES AS INCENTIVES FOR MILITA--ETC(U)
FEB 78 J K ARIMA
NPS54-78-3

F/G 5/9

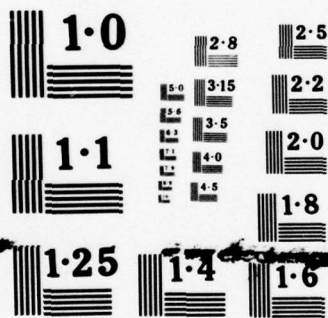
UNCLASSIFIED

NL

1 OF 1
ADA
053838



END
DATE
FILMED
6-78
DDC



NATIONAL BUREAU OF STANDARDS

2
Crest

NPS 54-78-3

NAVAL POSTGRADUATE SCHOOL

Monterey, California

AD A 053838



DDC
RECEIVED
MAY 12 1978
B

EDUCATIONAL AND TRAINING OPPORTUNITIES

AS INCENTIVES FOR MILITARY SERVICE

by

James K. Arima

February 1978

Approved for public release; distribution unlimited.

NAVAL POSTGRADUATE SCHOOL
Monterey, California

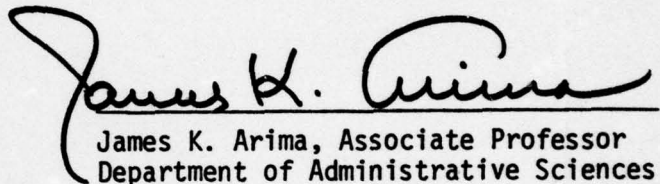
Rear Admiral Tyler Dedman
Superintendent

Jack R. Borsting
Provost

This work was supported by the Navy Personnel Research and Development Center, San Diego, California.

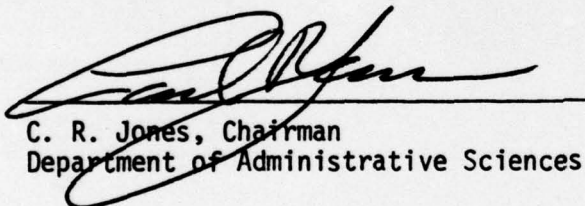
Reproduction of all or part of this report is authorized.

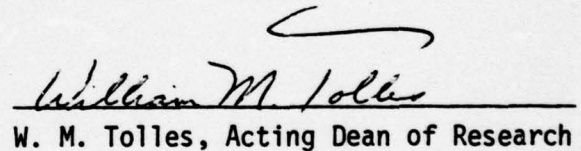
This report was prepared by:


James K. Arima, Associate Professor
Department of Administrative Sciences

Reviewed by:

Released by:


C. R. Jones, Chairman
Department of Administrative Sciences


W. M. Tolles, Acting Dean of Research

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

DD FORM 1 JAN 73 1473

EDITION OF 1 NOV 65 IS OBSOLETE
S/N 0102-014-6601 |

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

252 450

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

material featuring general themes. The importance of educational and training opportunities, the seasonality and limitations of advertising in recruiting, and the methodology used in the evaluation are discussed and recommendations are made.

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

FOREWORD

This study was conducted in the fall of 1976 as an input to a program at the Navy Personnel Research and Development Center (NPRDC) for evaluating the incentive value of the Navy Campus for Achievement (NCFA) in attracting volunteers for enlistment in the Navy (Githens & Wilcove, 1977).

In addition to its specific objective, the study has archival value for educators and advertisers, alike, in the analysis presented of the importance of educational and training opportunities for high school students who plan not to--or who cannot--continue their education in formal, full-time programs. For the advertiser, there are also implications about the seasonality and the limitations of advertising when the target population is essentially renewed annually. (These aspects are brought out in the Discussion section, primarily.) Finally, for the researcher in human behavior, the study provides an example of using objective, unobtrusive methods and archival information for making inferences in program evaluation in lieu of questionnaires, surveys, and other subjective methods.

The splendid cooperation and guidance provided by the Recruiting Advertising Department, Navy Recruiting Command, is gratefully acknowledged. Particular appreciation is expressed for the assistance of Dianne Edwards, Charles Hubbs, and SKC J. A. Gray.

ACCESSION for		
NTIS	White Section	☒
DOC	Bull Section	☐
UNANNOUNCED		☐
JUSTIFICATION		
BY		
DISTRIBUTION/AVAILABILITY CODES		
Dist.	and/or	SPECIAL
A		

SUMMARY

The purpose of this study effort was to determine the incentive potential of the Navy Campus for Achievement (NCFA) in recruiting in an objective a manner as possible.

To do this, a recruiting aids booklet, "Navy--A Campus for Achievement," and a Time magazine and TV Guide ad utilizing an NCFA theme exclusively, "Announcing the Navy's Worldwide Campus," were compared with comparable recruiting aids and ads using other themes. The measure of effectiveness for recruiting aids was the recruiter demand as documented by issues through the Navy Publications and Forms Center. The measures of effectiveness for magazine advertising were the number of inquiries and eligible leads received at the Navy Opportunities Information Center. The demand for the NCFA recruiting aid was about half that of the most popular, general-purpose enlisted programs booklet, equal to the next-most popular enlisted booklet, and 10 times that of an officer programs guide. The NCFA ad in Time magazine drew more responses than the average of all other ads that had been in Time magazine and was just as effective, if not more so, as the one comparison ad in TV Guide.

This study showed NCFA to be a very effective recruiting incentive. It would be more effective if the advertising concentrated on the opportunities for the enlistee to gain a college degree while in the Navy and/or a marketable technical skill. The officer candidate and officer programs are adequately described elsewhere.

CONTENTS

	Page
EDUCATIONAL AND TRAINING OPPORTUNITIES	
AS INCENTIVES FOR MILITARY SERVICE	1
Purpose.....	1
Background.....	1
Approach.....	3
Recruiting aids.....	6
Media Advertising.....	12
RESULTS.....	15
Recruiting Aids.....	16
Media Advertising.....	19
DISCUSSION.....	23
CONCLUSIONS.....	26
REFERENCES.....	28

LIST OF TABLES

1. NCFA Recruiting Aid and Comparison Aids.....	8
2. Media Advertising for NCFA and Comparison Aids.....	13
3. Field Demand for Recruiting Aids in FY 1976.....	18
4. Response Per Insertion to NCFA and Comparison Magazine Ads.	20

EDUCATIONAL AND TRAINING OPPORTUNITIES

AS INCENTIVES FOR MILITARY SERVICE

Purpose

The purpose of this study effort was to determine the incentive potential of the Navy Campus for Achievement (NCFA) in recruiting in as objective a manner as possible.

Background

With the advent of the all-volunteer force (AVF) in July 1973, there were many uncertainties regarding the success, or lack thereof, the services might encounter in the acquisition of personnel to man the forces authorized by Congress. To ensure success in the initial stages, Congress was cooperative in setting entry pay scales that were competitive with the civilian market, providing a large number of positions for recruiting personnel, and authorizing considerable sums for advertising (Arima, 1976). In addition, funds were made available to study the attitudes and desires of service-age persons to provide a basis of incentives and programs to entice enlistments and the background necessary to develop a favorable image of military service. A consistently expressed desire in this population was for opportunities to advance oneself in the area of formal education or to learn a marketable trade or set of skills (Fisher and Rigg, 1974).

The services responded to this finding by calling attention in recruiting advertising and in the canvassing efforts of individual recruiters to the opportunities provided in the services for education and training. One important incentive in the area of formal education was the Vietnam era GI bill for service veterans. By enlisting and serving for a specific period

of time, individuals could earn and save money and then make use of the stipend provided by the GI Bill to help finance their formal education at a civilian institution. Another program in existence was the United States Armed Forces Institute (USAFI) at Madison, Wisconsin, that provided individual correspondence courses, group lesson materials, contract courses with civilian universities, and testing programs to credit individuals with educational equivalence at the level of the tests they could pass. Finally, there were the on-duty training programs of the services that were counterparts of similar training programs in the civilian sector, such as electronics maintenance training.

Within a short time, the emphasis given educational and training opportunities in personnel acquisition efforts grew tremendously. The first factor underlying this growth was the competition among the services for their share of the market of quality enlistees. The Air Force used its in-service training programs to great advantage in advertising and in creating a favorable image. The Army, with perhaps a less favorable image in this respect, developed and pushed hard a program called "Project Ahead" that apparently had considerable appeal. The Navy, which was in competition with the Air Force for personnel to fill comparable positions requiring technical skills, also found itself losing some of its share of this market to the Army's Project Ahead program. The answer to the challenge was the Navy Campus for Achievement.

The educational opportunities, for both off-duty and on-duty education and training within a particular service, took on greater importance due to other factors. One of these was the disbandment of USAFI by Congressional action in refusing to fund it in the FY1976 appropriations.

Second, the imminent end of the GI Bill in January 1977 loomed as a definite possibility as time went by without a definitive follow-on program passed by the Congress and receiving the approval of the President. Then, in the second year of the AVF, funds for advertising were cut back by nearly one-third and severe cuts were made in the strength of the recruiting force in the field. The result was that each service had to advertise as attractively as possible its own offerings in the area of education and training. Within the Navy, while realizing the incentive value of educational and training opportunities, there may have been some reticence in highlighting NCFA, specifically, as an advertising theme.

Thus, the crucial question became, What is the incentive value of NCFA for recruiting? The criticality of the question was mitigated, however, by several steps taken by the recruiting command and its advertising agency to integrate NCFA into advertising programs. Nevertheless, the question is still valid, and it is the subject of this research.

Approach

There did not appear to be any convenient or readily available way for assessing the absolute value of NCFA as an incentive. The only alternative was to attempt to determine its relative value. Two approaches suggested themselves. One was direct comparison of the advertising effectiveness of an NCFA theme versus other themes. Another was an incremental approach to measure the effectiveness of advertising without and incremented with NCFA information. Specific test paradigms were relatively simple to design. In the process, it became obvious that an attempt should be made to determine whether the essence of such designs had been implemented in the natural course of events. If they had, and evidence existed to document the results,

no contrived test would be necessary. The use of such naturally occurring "experiments" has proliferated since the publicity given to the approach under the name, "unobtrusive measures" (Webb, Campbell, Schwartz and Sechrest, 1966).

The primary benefit to accrue from using the so-called unobtrusive measures is that the act of gathering information does not bias the information obtained. Two approaches are available under the concept. One is to collect information about ongoing events in such a manner that the subjects being observed are not aware that they are the objects of examination. The other approach, used in this study, is to look for the remnants or traces of human behavior and infer the events that occurred therefrom. A common form of the latter approach is the use of archival information for data. The problems associated with this approach are the logical leap necessary from the information obtained to the question being asked, the data available may have considerable shortcomings from the standpoint of the analyses possible, and there may not be sufficient replications of the events being examined to provide a statistically based level of confidence in the findings. Nevertheless, the advantages frequently override the shortcomings when compared with obtrusive methods, such as a questionnaire or interview. With respect to the subject area of this study, the following set of questions and answers about NCFA taken from the results of a December 1975 survey carried out under the auspices of the Navy Recruiting Command at recruit training centers provides a sterling example:

* * * * *

60. Had you heard about the Navy Campus for Achievement before enlisting?

a. No. 1,390 (76.9%) b. Yes. 418 (23.1%)

61. Do you remember receiving or seeing material about the Navy Campus for Achievement before your enlistment?

a. No. 1,458 (81.0%) b. Yes. 342 (19.0%)

62. Did you know before enlisting that the Navy can assist you in getting a college degree while you are on active duty?

a. No. 591 (32.6%) b. Yes. 1,200 (67.4%)

63. Did you join the Navy primarily for education and training benefits you can get under the Navy Campus for Achievement?

a. No. 966 (54.6%) b. Yes. 802 (45.4%)

* * * * *

One way, among many, to interpret the foregoing sequence is that there was a 100 percent growth in the awareness of Navy Campus for Achievement between questions 60 and 63. But the insertion of question 62 in the series would, no doubt, be seen by many as the precursor of the startling change in question 63. Whatever the interpretation, NCFA would appear to have considerable appeal for this group.

Pursuing the possibility of evaluating the incentive value of NCFA from past events, two specific incidents were found that appeared worthy of further development. Fortunate, also, was the fact that the two incidents were appropriate to the two faces of Navy recruiting advertising. That is, Navy advertising takes two forms: one is essentially an in-house effort and the other is an outside, contract effort. The in-house effort is directed toward producing recruiting aids that are designed to be used by the recruiting force at the local level, as a rule. These include tapes, film clips, video tapes, hard copy, posters, booklets, bumper stickers and promotional items, such as pencils, brief cases, calendars and so forth. The contract effort

provides the advertising through agencies in public media, other than the electronic media. It also includes direct-mail advertising from purchased lists. The contractual effort covers the receipt, cataloging, and processing of leads from mail-ins in response to the media advertising and telephone inquiries through the National Navy Recruiting Information Center (NNRIC) at Macon, Georgia. The approach to developing the incidents will be described separately for each advertising area.

Recruiting Aids

One recruiting aid featuring NCFA exclusively was published and distributed in 1975. It was 20 pages plus cover and done on heavy, slick 8 x 10½ paper in four colors. The title was "The Navy--A Campus for Achievement." The basic format was a program per page that included Vocational Schools, PACE (Program for Afloat College Education), STAR (Selective Training and Reenlistment Program), SCORE (Selective Conversion and Reenlistment Program), NESEP (Navy Enlisted Scientific Education Program), NENEP (Navy Enlisted Nursing Education Program), NEDEP (Navy Enlisted Dietetic Education Program), NROTC (Naval Reserve Officers Training Corps), U.S. Naval Academy, BOOST (Broadened Opportunity for Officer Selection and Training Program), SOC (Servicemen's Opportunity College), PREP (Predischarge Education Program), Instructor Hire, Navy Tuition Assistance Program, Veteran's Administration Educational Assistance, and DANTES (Defense Activity for Non-Traditional Education). The major portion of each program was an attractive, page-wide photo. The other pages described the management aspects of NCFA and the relationships with participating institutions, what NCFA could do for the prospective recruit, and an alphabetic listing of enlisted Navy occupations. The booklet, as the reader might judge from the

contents and format, had something for everyone and nothing sufficiently in detail and scope for anyone interested in any of the programs described.

The initial distribution date, the production run, the total production cost, the cost per item, and the initial distribution of the booklet are shown in Table 1. These data appear to be accurate, but there are other circumstances that becloud the events. The data shown are for a booklet coded as 511-1297. The original authorization for 500,000 copies of the booklet was coded 511-0158, and copies of the booklet with that designation were approved 1 December 1974. It appears that, in the interest of expediting publication, a "split printing" procedure was adopted with Grey Advertising to print the first 100,000 copies and the Government Printing Office to do the remainder. A letter from Grey Advertising dated 19 December 1974 shows a planned delivery schedule as of 31 January 1975 that lists the numbers to be shipped by freight, truck and air. These numbers do not fit the printing authorization, and it is not known what portion of the schedule was actually shipped. Based on the best available evidence, it is assumed for this report that Grey Advertising printed 100,000 copies of 511-0158 and distributed them directly to the field in January 1975. While the booklet eventually coded as 511-1297 was authorized in December 1974, it was not printed until August 1975, which would seem to justify the split-printing adopted for the booklet. Records referring to the printing and initial distribution of 511-1297 show that 249,169 copies were initially distributed in September 1975. The number shown in Table 1 was provided by the Distribution Section of the Recruiting Aids Division, as were all of the other data in the table. The confusion and inconsistency in the information for this booklet are typical

TABLE 1

**NCFA RECRUITING AID
AND COMPARISON AIDS**

<u>Aid</u>	<u>Date of Issue</u>	<u>Production (Thousands)</u>	<u>Total Cost (\$ Thou- sands)</u>	<u>Unit Cost (¢)</u>	<u>Initial Distribution</u>
Navy--A Campus for Achievement	9/75	402	62.0	15.4	264,000
Want to Go Places Fast?	10/73	750	74.0	9.9	None
	12/74	500	45.0	9.0	51,622
A Whole New World	5/74	500	40.5	8.1	100,000
	7/75	1,000	100.0	10.0	None
	3/76	500	?	?	None
Officer Programs Counseling Guide	8/75	200	39.0	19.5	None

of the records in the system. Changes are being made, hopefully for the better.

Given the existence and distribution of the Navy Campus for Achievement, the plan was to find other similar recruiting publications for comparison to determine the incentive value of NCFA. The "logical leap" in this case was that the demand for the document would indicate the extent to which the recruiter in the field had found NCFA useful in his recruiting efforts. The comparison with the demand for other publications would provide an indication of the relative degree of usefulness the program provided. Table 1 provides data on three booklets that will be used to make comparisons with the demand for the NCFA booklet.

The first of these is a booklet with the title, "Want to go places fast? Be someone special. Go Navy." In addition to the front cover, it has nine pages of text, including the inside front cover. It is very hard-sell copy with a new theme on each page imaginatively illustrated by an artist's montage of the contents of the page done in four colors. The pages and the covers (except the inside front cover) are blue, and the paper is a slick stock somewhat lighter than the paper for the NCFA booklet. The size is 8 x 11-in. The themes on each page are: Want to go places fast? Go Navy; Want to train for a better job? Go Navy; Want to travel? Go Navy; Want a good life? Go Navy; Want better pay and more benefits? Go Navy; Want to get into an advanced technical field? Go Navy; Want a six-month head start? Go Navy (the Cache program); The new Navy believes in equal opportunities for women; Want the best of two worlds? Go Naval Reserve; and Want to become an officer? Go Navy. (The last two are on the same page.) The booklet, although having only half as many pages, is otherwise comparable

to the NCFA booklet in printing quality, size, page format, and the emphasis on a broad spectrum of topics. It was originally issued in October 1973 with the code 73113 and again in December 1974 under the designation 74116. Both of the printings are in stock and issued as demanded through the Navy Publications Center.

The second of the comparison booklets is titled, "A Whole New World... A Whole New Navy!" It has a subtitle, "The Navy's New Career Training Programs." As in the case of the booklet, *Want to Go Places Fast?*, different editions of the booklet exist concurrently, as shown in Table 1. While they appear to be the same upon cursory examination, there is some substantial difference in the content. The differences reflect changes in Navy enlistment programs and emphasis. The third of the series is listed to make the accounting complete, but it will not be used in the comparative analysis. Accordingly, the description will be of the second edition coded 511-0827. (The first version was 73-19401.) In addition to the front and back cover, the booklet has a full 30 printed pages, including both inside covers. It is a smaller, folio size (5½ x 8½-in.) printed in 2-column format with a liberal number of 1-column, 4-color photographs of Navy life and several page-wide illustrations. It is written in a simple, straightforward, narrative style without the hard sell of the previously described booklet. It begins by saying, "This booklet was designed to help you evaluate the many career opportunities now available in today's new Navy." The contents include: Navy Life; Navy Women (the WAVES); Advanced Training in Nuclear Power, Technology, and Electronics; Guarantee Your Job Before Enlisting; Civilian Job Experience Can Give You a Head Start; Combining Navy Training with a Civilian Career; How You Can "CACHE" in on

the Navy's Delayed Entry Program; What About Pay and Benefits?; How to Find Out More. The section, Guarantee Your Job Before Enlisting, lists and describes the Navy ratings, just as in the two booklets described above. So this booklet, too, is an all-purpose recruiting aid, but it has no description of officer programs. Otherwise, it is comparable to the other booklets in quality and content.

The third edition of the booklet, 611-1926, will not be used in the analysis because it is one of the newer booklets that incorporates the NCFA within it. The section, What About Pay and Benefits?, devotes most of its space to the Navy Campus for Achievement and much smaller space to pay, allowances and incentives. It could be compared with the demand for previous editions to see whether inclusion of NCFA had an incremental effect, as explained above. But since it does not have sufficient demand history, this cannot be done. Obviously, there are other, difficult-to-control and/or account for factors in such a comparison.

The third of the comparison booklets is titled "Officer Programs Counseling Guide--The Navy." It is included here because of its strict limitation to officer programs. It will provide a base rate for the demand for officer material, against which the demand for the NCFA booklet can be compared for its publicity of officer opportunities. The Officer Programs Counseling Guide is a small, 4 x 6-in. booklet of 60 pages plus the covers. Only the outside covers (front and back) are in color, with some action-oriented officer scenes, along with the words, "A Proud Tradition--The Navy." The contents present all of the Navy officer programs in sharp, outline form. For each program, it gives the requirements with respect to age range at commissioning, education,

visual acuity, marital status and special and service requirements. It describes the initial training and rank that will be given. Each section closes with a word as to the period for submitting applications. This is all done in black-and-white.

There is also a new "Pocket Guide to Enlisted Programs," which is very comparable to the Officer Programs Counseling Guide that could have been used for comparative purposes. The issue record, however, was so apparently unreliable that it could not be used. For example, about twice the number that was printed was shown to have been issued in one month. The Pocket Guide to Enlisted Programs, first issued in August 1975, also has a small section on the NCFA.

Media Advertising

The situation with the media advertising efforts of the Navy is, as mentioned, similar to the recruiting aids situation with respect to NCFA advertising. There was one ad devoted exclusively to NCFA that appeared once in Time magazine and in TV Guide, and there are comparable ads for comparison. In this case, the comparison is more direct. The number of eligible leads developed and the total number of inquiries received can be compared as a result of the mail-in coupons that were a part of or accompanied the ads. The ads are shown in Table 2. While a considerable period of time is represented in the ads, the return rate per insertion is interesting historically and does provide a broader context for the evaluation of the one NCFA ad.

The NCFA ad in Time magazine was headed "Announcing the Navy's World-wide Campus." It was in four colors with two small illustrations--one, a sailor welding and the other, a classroom scene. There was also a page-wide

TABLE 2

**MEDIA ADVERTISING FOR NCFA
AND COMPARISON ADS**

<u>Ad</u>	<u>Magazine</u>	<u>Dates</u>
NCFA	Time	29 December 75
	TV Guide	22 December 75
A Navy Career	Time	7 April 75
I Want You for the Navy	Time	19 November 73
Gee I Wish I Were A Man	Time	22 October 73
Get A Little More	Time	15 May, 12 June, 17 July, 31 July, 24 August 72
	TV Guide	13 May, 10 June, 8 July, 22 July, 15 August 72.

illustration across the bottom showing a 963-class destroyer. This did not leave much of the page for copy, but what there was pertained strictly to obtaining a college-level education in the Navy or a professional/technical certificate. The first line stated, appropriately, "The Navy's been the place for young people to learn." The last paragraph urged, "Check out the Navy's new NCFA program." There was nothing about specific programs, enlisted or officer. There was no detail about the Navy occupational categories. There was no attempt to show or push Navy life, except for the captions with the ship, "The Spirit of Navy--Build Your Future on a Proud Tradition." The ad had a double, pop-up coupon--i.e., two mailable, separate coupons inserted into the magazine. A word should be said about the date of insertion, smack between Christmas and New Years during the holiday season. This is traditionally the light recruiting season, and the recruit training centers are not even open to accept new inputs. It is not a period for advertising. The factor that led to the ad's appearance at this time appears to have been connected with the fact that Grey Advertising had lost its contract with the Navy, and its term as the Navy's agency expired at the end of calendar year 1975.

The ad, A Navy Career, was inserted at a critical decision period for new, high-school graduates-to-be. Those students uncertain about their life after graduation or those considering the armed forces as a choice would be expected to jump at the opportunity to get some information in time to make their move. It appropriately asked the prospect to consider a Navy career in a full-page, four-color ad with a double pop-up coupon. Thus, it is the ad that is most directly comparable to the NCFA ad, except for the fact that it was published at a more opportune time.

The next two ads shown in Table 2 were a part of the poster campaign of Grey Advertising. The World War I drawings of Isabel Rogers by Howard Chandler Christie were resurrected and featured in the ads. The ads invited readers to drop by the Navy recruiting office to obtain a free color poster of the first "pin ups." The ads were four-color spreads with a single, pop-up coupon. Their time of issue corresponded with the second quarter of the first year of the AVF. The poster theme proved very popular, and even Playboy magazine had a cartoon that was a replica of the Gee I Wish I Were A Man poster showing why the model was not a man.

The "Get A Little More" ad is shown, primarily, for the comparison it affords with the NCFA ad in TV Guide. Its appearance in Time magazine is also documented to show the general incentive value of the ad in the context of all the other ads. That is, the comparison of the ad alone in TV Guide with the NCFA ad would leave considerable doubt about the validity of the comparison because of the difference in years between the ads. But, when its strength is compared with several other ads in Time magazine over a period of years, its comparison with NCFA ad in TV Guide becomes more meaningful. It is no longer an unknown entity. The ads in TV Guide were one-page, black-and-white ads. The Get A Little More ad in Time magazine was also a black-and-white, one-page ad.

RESULTS

The results of the examination of the archival record will be presented separately for the recruiting aids and the media advertising, as was done in the immediately preceding section. The impact of the findings will be elaborated in the discussion section to follow.

Recruiting Aids

Table 3 shows the demand history for the NCFA booklet and the comparison aids for FY 1976, with the exception of May and June 1976. The data were not readily available for those months since a changeover in the software for keeping track of the distribution, to be effective in July 1976, was being effected and no hard copy was provided for those months. As explained in the approach section above, the demand for two concurrent versions of Want to Go Places and Whole New World were summed for the tabulations shown in Table 3. All of the data in Table 3 are based on individual orders that are filled at the Navy Publications Depot, Philadelphia, as reported to and aggregated at the Navy Recruiting Command Headquarters.

The information on the comparison aids has a consistency to it over the entire 10 months (7 months for the Officer Programs booklet). The problem is the booklet of primary concern, NCFA. As previously noted, there was at least a 100,000-copy distribution to the field by Grey Advertising in January 1975. There are no records that could provide any information as to how many of that distribution were still in recruiter hands when the September distribution (264,000) of the GPO version was made through the Navy Publications Depot. The issues in December and January through the depot would seem to imply that many places had run low on the booklet. There is another explanation for the demand at that time. It could be that the December ad in Time magazine could have been the basis for recruiters suddenly ordering a supply of the booklets. Obviously, the December issues must have preceded the appearance of the ad on 29 December (Table 2), but an information sheet goes to recruiters in the field announcing new recruiting

aids and previewing the media campaign. Thus, they would have had advance notice of the ad. The sudden drop-off of demand in March and April would seem to confirm this hypothesis. The fiscal year total (including May and June) was a total issue of 105,523 copies of the booklet, and there was an issue of 6516 copies in July of 1976. These trends indicate that there was a 5- to 6,000-copy demand in those three months (May, June and July). If the 100,000 January 1975 distribution and the 264,000 forced distribution in September had been consumed, then the subsequent issue history would imply that the supply of the booklet was essentially exhausted shortly after the end of the fiscal year. Inquiry to the program manager for NCFA advertising confirms this fact. Thus, for comparison purposes, it will be assumed that the demand was for 358,300 copies in the 8-month period of the booklet's existence (as an issue item) in FY 1976 at an issue rate of 44,788 copies per month.

It was stated earlier that typical archival information, while providing an unobtrusive measure of human activity, does not lend itself to detailed or sophisticated analyses. Obviously this is the case with the information in Table 3. Any inferences to be drawn from the data will be subjective and clinical. To this author, the NCFA booklet appears to compare favorably in demand with a booklet that has apparently been a recruiter's standby since 1973 (Want to Go Places Fast). The demand is only half as great as that for the very fine booklet, Whole New World, which has been in existence for a half-year longer than the NCFA booklet and is devoted entirely to the potential enlisted acquisition. Considering the fact that a large portion of the booklet is devoted to officer programs, the demand for the NCFA booklet compares very favorably with the Whole New

TABLE 3

FIELD DEMAND FOR RECRUITING AIDS

IN FY 1976

<u>Month*</u>	<u>Recruiting Aid</u>			
	NCFA	Want to Go Places	Whole New World	Officer Programs
July	-	31,000	19,500	-
August	-	47,100	117,300	0
September	(264,000)**	18,600	243,900	0
October	0	15,800	117,900	9,095
November	0	56,000	75,600	5,740
December	56,700	26,000	77,500	6,603
January	37,485	137,600	80,300	6,208
February	115	35,800	34,400	1,570
March	0	115,900	179,500	3,024
April	0	44,600	62,000	976
Total	94,300 (358,300)**	528,400	1,015,100	33,216
Per Month***	44,788**	52,840	101,510	4,745

* May, June data not available.

** Initial distribution to field; initial distribution included

*** Based on 8, 10, 10 and 7 months, respectively.

World booklet. And, as stated, the newest edition of the latter now includes a section on the NCFA. The demand for the NCFA booklet, when compared with one dealing solely with officer programs, the Officer Programs Counseling Guide, shows a demand that is an order of magnitude greater.

Another way of looking at the demand for these booklets is to compare their monthly demand with the number of enlistees or enlisted contracts signed per month. A rough figure is 10,000 contracts a month. This would mean, then, that recruiters give away four to five times as many NCFA booklets as the prospects they sign. Surely the recruiter must value the NCFA booklet as a "sales" aid to use it this much.

Media Advertising

In the area of media advertising, the measures that will be used to evaluate the incentive value of NCFA will be the eligible leads, total inquiries, and the percent of inquiries that are eligible leads in response to the advertising. These measures are shown for the NCFA ad and the comparison ads in Table 4. When the ad, Get a Little More, appeared in 1972, the method of assessing the eligible leads had not been formalized and institutionalized as it has since 1973. Accordingly, the data are not presented with respect to eligible leads and percent eligible leads for that ad. The data in Table 4 were current as of 31 August 1976, at which time inquiries were still being received, albeit in small numbers, for both the NCFA and the A Navy Career ads. In August, 26 inquiries (9 eligible leads) were received from the NCFA ad and 3 inquiries (2 eligible leads), from the A Navy Career ad.

Taking the numbers in Table 4 at face value, for the time being, it would appear that the NCFA ad pulled in more inquiries and compared favorably

TABLE 4

RESPONSE PER INSERTION TO NCFA
AND COMPARISON MAGAZINE ADS

<u>Ad</u>	<u>Magazine</u>	<u>Eligible Leads</u>	<u>Total Inquiries</u>	<u>% Eligible Leads</u>
NCFA	Time	1,311	3,048	43.0
	TV Guide	359	558	64.3
A Navy Career	Time	739	2,495	29.6
I Want You	Time	1,312	2,604	50.4
Gee I Wish	Time	1,500	2,774	54.0
Get A Little More *	Time	--	2,466	--
	TV Guide	--	495	--

* Based on an average of 5 insertions (all others are single insertions).

Eligible leads were not calculated on the same basis as the other ads
and are not shown.

in the area of eligible inquiries. If we use the total inquiries data of the other four ads that appeared in Time magazine and compute the 95 percent confidence interval for their average, the upper limit is 2,807. On this basis it can be rather confidently concluded that the NCFA ad was significantly better. In computing the average of five insertions for the Get A Little More ad, however, the total of 222 inquiries for the first insertion was used in the calculation. This is certainly an outlier value that cannot be explained at this time. If that value is excluded, and the average for the other four insertions is calculated, the mean value for Get A Little More is 3,207.5. When this value is used in computing the 95 percent confidence interval for the mean of the four values, the upper limit is 3,094, which includes the value of 3,048 for NCFA. The upper limit of the 90 percent confidence interval is 2,998. Thus, the obtained value for NCFA could be expected to occur between 5 and 10 percent of the time by chance. Since there is no empirical basis for selecting either of the results, one significant at the 5 percent level and the other nearly so, it will be assumed that the NCFA ad did draw in a significantly larger number of inquiries than the other ads, as a group.

The NCFA ad then, drew close to 20 percent more total inquiries than the average of the other four ads. The average of the other three ads for which data are available results in a percent of eligible leads of 45.1, which is only 2 percent better than the NCFA figure of 43.0 percent.

Since, in spite of the time differential, Get A Little More compares favorably with the other ads in Time magazine, there would seem to be justification to place it into direct comparison with the NCFA ad in TV Guide. That is, time does not seem to make any great difference in these figures.

While the average for Get A Little More was smaller than the NCFA ad, there was considerable variability in response to the five insertions. As a result, the 95 percent confidence interval for total inquiries of the Get A Little More ad in TV Guide has an upper limit of 763. The total inquiries for the NCFA ad in TV Guide falls well within this range, and we cannot conclude that there is a reliable difference between the obtained value for the NCFA ad and the average value for the Get A Little More ad. Rather, we would have to conclude that there was no difference.

It could be argued that there are many other factors involved that make the values in Table 4 appear to be more similar than they really are. Two of these factors might be the attitude of the civil population towards the service, and the total circulation of the magazine. One way to counter these factors is to compare the NCFA ad with its closest neighbor in time in the same magazine. This would be a comparison of the NCFA ad with A Navy Career. In this case, total inquiries are 20 percent greater for NCFA, the number of eligible leads is 77 percent better, and the percent of eligible leads is 45 percent greater. The differences are all the more significant when consideration is given to the relative favorableness of the time when the ads appeared (Table 2). As stated previously, the NCFA ad was the product of an outgoing agency collecting its last commission, which apparently accounted for its appearance in December between the two major holidays. On the other hand, the A Navy Career ad appeared just two months prior to high school graduation, when its attraction should have been greatest. Thus, in this direct comparison, the NCFA ad comes out even more superior than against the average of all the comparison ads.

DISCUSSION

Based on the acceptance of the NCFA booklet by recruiters and the response to magazine ads with a unique NCFA theme, it has to be acknowledged that the concept of NCFA has very great incentive value for the recruiting effort of the Navy. It would appear that the greatest appeal is that portion of NCFA that pertains to the attainment of a college education or the acquisition of a technical skill. This is all that was required for the NCFA Time magazine and TV Guide ads. The NCFA booklet, on the other hand, has too wide a range of programs described in it. It is as if the Navy were trying to convince the reader that the notion of a Navy campus was a valid concept by reciting every program in the Navy that could conceivably be considered an educational, as well as a mission-oriented, activity. The reader should be informed what the Navy can do for him in attaining a college degree, the ways he can build up college credits while serving, and the educational institutions that will accept the enlistee as a student and grant a degree when the educational requirements have been met, even without residence credits. Similarly in the technical skills area, the description of all the Navy's occupational skills does not pass the information on in an optimum manner as to how and what skills can be acquired in the Navy. The skill or occupational fields should be mentioned as the primary target of description, not the Navy ratings. Booklets such as the Pocket Guide to Enlisted Programs and A Whole New World do that much better. But NCFA cannot be adequately described in those books either. Thus, if the NCFA booklet is properly oriented toward the potential enlistee (and not the officer) and describes the educational benefits that can be attained, it would have just as much demand as any recruiting aid

in the inventory. In fact, such a booklet is necessary for the Navy to maintain its share of the market of the better qualified individuals. The Navy must not only compete with the Army's Project Ahead program, but now the Air Force has been granted authority by the 94th Congress to give the Associate in Arts degree, which is accredited by the important regional bodies. The Air Force is, accordingly, pushing their program called Community College of the Air Force.

While it was maintained all along that the NCFA ad appearing in Time magazine in December was in a disadvantageous position with respect to the timing of the ad, it might be worthwhile to reconsider the assertion. Not enough is actually known of the decision processes of a high school senior to document whether it was, in fact, a bad time to attract his or her attention. It may be that a large number, perhaps the majority, of high school seniors begin to worry about and plan their post-graduation life in earnest fairly early in the senior year. For those considering college as an alternative, they would be forced to do so because of deadlines in the submission of applications and the taking of required tests. Most early acceptance programs, for example, invite the confirmation of the high school applicant well prior to graduation. Thus, the appearance of the ad in December actually could have been timely. It was also in a vacation period when the student has time to read. Considered in this light, it was perhaps overly strong to insist on the disadvantageous insertion of the NCFA ad with respect to time of the year. On the other hand, the appearance of a Navy ad some two months prior to graduation could be expected to invite the attention of the undoubtedly many seniors who, at that late date, have no firm plans for their post-graduation life. One way to examine

hypotheses such as this might be by cross checking leads with the column in the ASVAB printout that tells the testee's intentions after graduation.

With respect to the media data in Table 4, it was stated earlier that the apparent regularity of the responses could have been an artifact of differences in the attitude of the civilian population with respect to a career or enlistment in the armed forces. That is, one ad might not have had much appeal, but the attitude was favorable at that particular time, while another ad might have had considerable intrinsic appeal, but there was less interest in a military enlistment as a viable choice alternative at its particular time. The result would be a similar, quantitative response to the ads in terms of the number of inquiries. A more parsimonious explanation would be that attitudes do not change much over a long period of time (three years in Table 4) and that, regardless of the ad, time of year, or year of insertion, there is a constant fraction of the circulation that will be interested enough to send in the coupon and/or call the toll-free 800 number. Considerable evidence for this assertion could be amassed from the periodic attitudinal surveys taken by Grey Advertising using a national population sample of 17 to 21 year old youths over the same period covered by the ads in Table 4. The attitude toward favorably considering an enlistment in the armed forces is more or less a constant during that period (Grey Advertising, 1973). The response pattern seen for these ads would certainly converge with the survey results to confirm the constant fraction hypothesis enunciated. Thus, any significant difference from the average of a number of ads in the ability to draw inquiries must stand as a real difference due to the appeal of the ad, which is the documented case with NCFA.

There is one other direction that has seen an investment of NCFA advertising in the media. This area is labelled "influentials" advertising. It means advertising directed at those who could influence young individuals to enlist. The NCFA program has been aimed at the school counselor. The ads have had such themes as "What Comes After High School," "Shop for Opportunity," and "Send for Student Aid." The ads have included an on-page coupon offering to send the person an NCFA informative package and a guide for comparing Navy occupations with the Dictionary of Occupational Titles. The one-page, black-and-white ads have appeared in such journals as Personnel and Guidance Journal, Industrial Education, Today's Education, Scholastic Teacher, and Black Enterprise. These are recent ads that have been managed by the new agency, Ted Bates. The response has been extremely slow--in the neighborhood of a dozen per insertion. The cost per inquiry has been comparable to the other programs because the ads are much less expensive. The program is being curtailed. Since the coupons were for the specific purpose of obtaining the reference documents, it may be that most counselors already have the documents. Since the documents are RAD (recruiting aids) items, it could be expected that enterprising recruiters have already put them into the hands of the counselors with whom they deal.

CONCLUSIONS

The recruiter demand for a booklet devoted entirely to NCFA and the civilian response to magazine advertising using NCFA as the primary theme showed that NCFA is a very potent factor in recruiting. As shown in the 1975 RTC survey of recruits, the response to the magazine ads in Time and TV Guide, and the demand pattern for various recruiting aids, the NCFA program should emphasize college educational opportunities in the Navy and the

opportunities for attaining technical skills. Furthermore, the NCFA program should be directed to enlisted prospects. The fact that the Navy is the only service where a person can attain a bachelor's degree without meeting residence requirements at a civilian institution should be emphasized to compete with the Air Force's AA degree program in its Community College of the Air Force, and the Army's Project Ahead effort.

REFERENCES

- Arima, James K. A systems analysis of Navy recruiting (Special Report 76-9). San Diego, Calif.: Navy Personnel Research and Development Center, April 1976.
- Fisher, A. H., Jr., & Rigg, L. S. The endorsement of enlistment incentives. Alexandria, Va.: Human Resources Research Organization, January 1974. (NTIS No. AD-775 916).
- Githens, W. H., & Wilcove, G. L. Relationships between Navy off-duty educational programs and recruiting, performance, and retention (NPRDC TR 78-8). San Diego, Calif.: Navy Personnel Research and Development Center, December 1977.
- Grey Advertising. Market target/recruiting incentive study, stage III of a III stage project (26300BR601). New York: Grey Marketing and Research Department, Grey Advertising, May 1973.
- Webb, E. J., Campbell, D. T., Schwartz, R. D., & Sechrest, L. Unobtrusive measures: nonreactive research in the social sciences. Chicago: Rand McNally, 1966.

DISTRIBUTION LIST

	Copies
Defense Documentation Center Cameron Station Alexandria, Virginia 22314	2
Library, Code 0142 Naval Postgraduate School Monterey, Calif. 93940	2
Office of Research Administration Code 012A Naval Postgraduate School Monterey, CA 93940	1
Library, Codes 54 and 55 Naval Postgraduate School Monterey, CA 93940	1
Professor J. Arima Code 54Aa Naval Postgraduate School Monterey, CA 93940	10
Office of Naval Research Code 450 Code 452 800 N. Quincy Street Arlington, VA 22217	1 1
Dr. Richard S. Elster (Pers-Or) Bureau of Naval Personnel Department of the Navy Washington, D.C. 20370	1
Technical Director (Code 01) Navy Personnel R&D Center San Diego, CA 92152	1
Dr. Richard Sorenson (Code 03) Navy Personnel R&D Center San Diego, CA 92152	1
Dr. Martin F. Wiskoff (Code 310) Navy Personnel R&D Center San Diego, CA 92152	1
Director, Research/Analysis Div Code 22 Navy Recruiting Command 4015 Wilson Blvd. Arlington, VA 22203	1

Copies

Director, Management Systems Div.
Code 43
Recruiting Advertising Department
Navy Recruiting Command
4015 Wilson Blvd.
Arlington, VA 22203

1

Dr. W. A. Maloy
Code 00A
Chief of Naval Education and Training
NAS Pensacola, FL 32508

1

Dr. L. O'Clisham
(NOP-991C4)
Director, Naval Education
and Training
800 N. Quincy Street
Arlington, VA 22217

1

Dr. Alfred F. Smode
(N-Oot)
Training Analysis and
Evaluation Group
Chief of Naval Education
and Training
Orlando, FL 32813

1

Technical Director
Army Research Inst. for the
Behavioral & Social Sciences
5001 Eisenhower Avenue
Alexandria, VA 22333

1

Technical Director
AFHRL
Brooks AFB
Texas 78235

1

1 Psychology Research Unit
Department of Defense (Army Office)
Campbell Park Offices
CANBERRA ACT 2600
Australia

1

Dr. M. K. Malehorn
(NOP-991b)
Director, Naval Education
and Training
800 N. Quincy Street
Arlington, VA 22217

1