AN EXPLORATORY STUDY OF ENLISTMENT INCENTIVES
AMONG JUNIOR COLLEGE STUDENTS

Abraham K. Korman
Barry E. Goodstadt
Albert S. Glickman
Alan P. Romanczuk

TECHNICAL MEMORANDUM No. 1
Navy Career Motivation Programs in an All-Volunteer Condition

Principal Investigator: Albert S. Glickman

JUNE 1973

This report was prepared under the Navy Manpower R&D
Program of the Office of Naval Research under Contract
N00014-72-C-0387.

Approved for public release; distribution unlimited.
Reproduction in whole or in part is permitted for any
purpose of the United States Government.
ACKNOWLEDGEMENTS

The authors of this report wish to acknowledge the support of the many persons who helped complete this phase of the Navy Career Motivation project. Special thanks go to Dr. Marshall J. Farr, Director of Personnel and Training Research Programs for the Office of Naval Research (Scientific Officer for the Career Motivation project) and Assistant Director, Dr. Joseph L. Young. Dr. Lester Frankfurt and Dr. Leonard Rosenbaum of Montgomery College, and Dr. Jeffrey Greenhaus of City University of New York helped us obtain junior college samples.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>i</td>
</tr>
<tr>
<td>OBJECTIVES</td>
<td>1</td>
</tr>
<tr>
<td>METHOD</td>
<td>3</td>
</tr>
<tr>
<td>ANALYSES AND RESULTS</td>
<td>5</td>
</tr>
<tr>
<td>DISCUSSION AND IMPLICATIONS</td>
<td>22</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>23</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>24</td>
</tr>
</tbody>
</table>
OBJECTIVES

In order to develop an administrative strategy to insure that the Navy has available a sufficient complement of competent and career-motivated personnel, we have suggested (Glickman, Goodstadt, Korman & Romanczuk, 1973), that a number of approaches might be both feasible and worthwhile. For example, one approach entails the operation of a series of small-scale administrative experiments which would yield understanding regarding the potential impact of incentives and organizational changes on Navy personnel. Following evaluation of such experimental programs and demonstrations of their effectiveness, changes might then be introduced on a Navy-wide basis to enhance recruiting and retention efforts. Of particular importance is that such organizational changes and incentives have appeal for those who are qualified to meet the Navy's technical requirements.

A general conceptual model of the career motivation process has been developed (Glickman, et al., 1973) as an aid in identifying those parameters of change that might have the greatest influence upon career motivation in the Navy. This model points out different types of organizational and incentive changes that appear most promising to introduce and evaluate in the form of limited-scale administrative experiments.

The research described in the present report is a step in the direction of developing and evaluating organizational and incentive changes for enhancing career motivation. Our focus in undertaking the work involved stems from the following considerations:

1. We seek to supplement interview data gathered during the first phase of the project (as documented in our initial report) by the use of a questionnaire procedure. Our content goal is to obtain additional information regarding possible incentives that might influence Naval career motivation and the shape and intrinsic characteristics of these incentives. It is felt that this additional information should come from different methodological procedures in order to complement dimensions that came out of our interview data. In cases where the incentive dimensions uncovered by interviews and by the questionnaires are similar, additional analysis enables us to specify more precisely the specific attributes comprising those dimensions.
In turn, such specifics are then useful for developing experiments with administrative innovations and new policies aiming to enhance career motivation.

2. A second aim of this research is to broaden our data base to insure adequate representation of specific and concrete administrative policies which might be employed in an incentive manipulation approach to influencing the enlistment process. We want to examine the adequacy of the range of incentives we have surveyed in our previous research and in our reviews of other research (cf. Gilbert Youth Survey Report, 1972) and to enable us to identify the major incentives available. Out of this pool of incentives, we wish to identify those incentives which seem to have considerable promise for influencing individuals to enlist in the Navy.

3. As a third consideration, we are also interested in exploring the generalizability and adequacy of our incentives for a specific population of interest, the junior college student, because, as indicated previously, (Glickman, et al., 1973), junior colleges tend to attract individuals who have: (a) the ability, motivation and self-discipline to successfully compete in achievement settings; as well as (b) a high degree of vocational and, often technical, work interest. Given the increasingly technical orientation of the Navy, there may be considerable untapped resources in junior colleges from which the Navy might recruit interested individuals.
METHOD

Questionnaire

The basic instrument used in this research was a 38-item question- naire which reflected a variety of incentives that might be employed by the Navy for recruiting in an all-volunteer setting. These incentives reflected the types of concerns and motivational variables found in our interviews (Glickman, et al., 1973), and in the existing research literature (Gilbert Report, 1971).

A preliminary revision of the 38-item questionnaire was pre-tested on civilian personnel to assure comprehensibility and relevance. Following pre-testing, a final form of the questionnaire was developed (see Appendix A). The responses to Navy recruiting incentives were made along a five-point scale ranging from thinking "less favorably of the Navy" to thinking "more favorably of the Navy and would seriously consider enlisting."

Sample

A total of 100 male community college students constituted the sample of this research. These students were contacted at two campuses of a suburban community college outside of Washington, D.C. and an inner-city community college in New York City. None of the respondents had ever been in the service and none had any current commitment to a military service. The demographic makeup of this sample (as determined by self-report items on the questionnaire) is shown in Table 1.

Administration

The questionnaire was administered to students in classes by their regular college instructors. All respondents were told the basic nature of the project and were assured of anonymity.
## TABLE 1
Junior College Sample Characteristics  
(N=100)

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>Father's Occupation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-19 yr.</td>
<td>45</td>
<td>Lower-middle class</td>
<td>10</td>
</tr>
<tr>
<td>20-21 yr.</td>
<td>36</td>
<td>Middle-middle class</td>
<td>36</td>
</tr>
<tr>
<td>22-over</td>
<td>19</td>
<td>Upper-middle class</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retired</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deceased</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nonrespondents</td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest Grade Completed</th>
<th>Consideration of Other Armed Service(s)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>12th</td>
<td>No</td>
<td>74</td>
</tr>
<tr>
<td>13th</td>
<td>Yes:</td>
<td></td>
</tr>
<tr>
<td>14th</td>
<td>Air Force</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Army</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Nonrespondents</td>
<td>4</td>
</tr>
</tbody>
</table>

### Interest in the Navy

- Am not interested in the Navy: 65
- Have not given much thought to joining: 24
- Am thinking about joining: 4
- Am thinking about joining and would like more information: 1
- Am definitely going to join the Navy: 0
- Nonrespondents: 6
A. The Descriptive Analysis

The method used to determine the incentive dimensions encompassed by the questionnaire was a principle-components factor analysis with an orthogonal varimax rotation to simple structure.

This analysis resulted in a total of six factors that could be given meaningful interpretation and which accounted for 68.8 percent of the common variance. The item loadings on each factor are shown in Tables 2 through 7. A cut-off point of .40 was used to indicate a "significant" loading. The interpretation of these findings and their relationship to our research goals is as follows:

Factor One: Opportunity for self-determination (Table 2). This factor, accounting for 48.0 percent of the common variance, was concerned with self-determination; that is, having control over one's own fate. Thus, incentive items 18, 26, 28, 29 and 31 (see Appendix A for questions) all seem to have the common thread of encouraging the potential enlistee to believe that he would not be completely under the control of the Navy and that he would be able to retain personal control over important aspects of his life. Since this motivational theme was also a common element in the interviews previously reported (Glickman, et. al., 1973), this outcome is consistent in showing that the desire for self-determination and fate control are important influences on career motivation. In addition, the present finding provides some explicit details regarding those incentives that may impinge on self-perceived powerlessness and fate control. These specific incentives will therefore be useful for application in later research.

Factor Two: Opportunity for vocational and financial satisfactions (Table 3). This second factor accounted for 6.0 percent of the common variance and is also quite similar to some of the motivational themes described in previous work. As we have indicated earlier, it would seem that the increasing value that young men assign to self-actualization and meaningful control over their vocational and personal life has not been
TABLE 2
Factor One: Opportunity for Self-Determination

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.</td>
<td>Educational leave at full pay for 2 months a year.</td>
<td>.75</td>
</tr>
<tr>
<td>25.</td>
<td>Periodic visits by dependents while at sea, which would be paid for by the Navy.</td>
<td>.72</td>
</tr>
<tr>
<td>26.</td>
<td>A policy of guaranteed location assignments after your initial tour.</td>
<td>.72</td>
</tr>
<tr>
<td>31.</td>
<td>The right to leave the Navy at any time after 2 years, with no strings attached.</td>
<td>.67</td>
</tr>
<tr>
<td>29.</td>
<td>The right to live off the base after boot camp, if you prefer.</td>
<td>.67</td>
</tr>
<tr>
<td>28.</td>
<td>Assurance that you will be able to change your job after 1 year if you don't like it.</td>
<td>.66</td>
</tr>
<tr>
<td>33.</td>
<td>30 days paid vacation each year.</td>
<td>.60</td>
</tr>
<tr>
<td>11.</td>
<td>An opportunity to get out of the Navy after 6 months, if you are not satisfied, with no strings attached.</td>
<td>.58</td>
</tr>
<tr>
<td>32.</td>
<td>Free long distance phone calls to dependents when separated for more than 2 weeks (one free call every 2 weeks).</td>
<td>.57</td>
</tr>
<tr>
<td>22.</td>
<td>An opportunity to work in jobs that have clear civilian transferability.</td>
<td>.55</td>
</tr>
<tr>
<td>20.</td>
<td>Eliminate drilling and reduce physical training aspects of Navy boot camp.</td>
<td>.53</td>
</tr>
<tr>
<td>21.</td>
<td>An opportunity to accumulate unused leave time up to 180 days.</td>
<td>.53</td>
</tr>
<tr>
<td>30.</td>
<td>Redesigning military quarters on shore bases in order to provide for one and two-man rooms with bath.</td>
<td>.52</td>
</tr>
<tr>
<td>27.</td>
<td>A chance to enroll in an officer training program immediately after completing 2 years of college (or junior college).</td>
<td>.51</td>
</tr>
<tr>
<td>Item #</td>
<td>Loading</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>More pay for sea duty than for shore duty.</td>
<td>.49</td>
</tr>
<tr>
<td>34.</td>
<td>Guarantee of the Navy vocational school of your choice at enlistment.</td>
<td>.44</td>
</tr>
<tr>
<td>1.</td>
<td>A $1000 bonus at the time of enlistment</td>
<td>.41</td>
</tr>
<tr>
<td>14.</td>
<td>The opportunity to retire at half pay, with medical benefits after 15 years of service.</td>
<td>.41</td>
</tr>
</tbody>
</table>
### TABLE 3
Factor Two: Opportunity for Vocational and Financial Satisfaction

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>A $3000 bonus at the time of enlistment with no strings attached.</td>
<td>.80</td>
</tr>
<tr>
<td>3.</td>
<td>An enlistment of 2 years instead of 3 or 4 years.</td>
<td>.76</td>
</tr>
<tr>
<td>2.</td>
<td>The Navy would help you get started in a civilian job after finishing your active duty, by providing training in a civilian skill.</td>
<td>.73</td>
</tr>
<tr>
<td>5.</td>
<td>As an enlisted man, you would be paid by the government for up to four years of college, including living expenses, at the school of your choice, in return for four years of active duty.</td>
<td>.65</td>
</tr>
<tr>
<td>1.</td>
<td>A $1000 bonus at the time of enlistment.</td>
<td>.65</td>
</tr>
<tr>
<td>6.</td>
<td>People who have been to college for one or two years would enter at higher pay grades than persons who have not had any college.</td>
<td>.63</td>
</tr>
<tr>
<td>8.</td>
<td>An opportunity to work in the home port area of your choice for the first 2 years of your enlistment.</td>
<td>.59</td>
</tr>
<tr>
<td>7.</td>
<td>The Navy would pay up to two years of technical/vocational school training, including living expenses, at the school of your choice, in return for four years of active duty.</td>
<td>.55</td>
</tr>
<tr>
<td>12.</td>
<td>A 9 month leave of absence at full pay for educational and/or other personal growth activities every 6 years.</td>
<td>.43</td>
</tr>
<tr>
<td>17.</td>
<td>A $5000 bonus at the time of enlistment with no strings attached.</td>
<td>.43</td>
</tr>
<tr>
<td>21.</td>
<td>An opportunity to accumulate unused leave time up to 180 days.</td>
<td>.41</td>
</tr>
</tbody>
</table>
accompanied by a devaluation of vocational and financial satisfactions. These traditional concerns continue to be important as shown by our interviews and as documented here.

**Factor Three**: Opportunity for retirement benefits (Table 4). This factor accounted for 5.5 percent of the common variance, and is rather specific in nature. Two major item loadings reflect the extent to which individuals value currently existing Navy retirement benefits. A third significant loading (Item 34) is not consistent with this interpretation. However, it also loads significantly on Factor One and is consistent with the "Opportunity for Self-Determination" interpretation of that grouping.

It may be noted that the "opportunity for retirement benefits" is not a frequently cited factor in our interviews. Its occurrence here, therefore, constitutes an addition to the findings of that earlier study.

**Factor Four**: Opportunity for integration of military and civilian life (Table 5). In Factor Four, which accounts for 3.5 percent of the common variance, we seem to be dealing with a view of the Navy in the same career framework with civilian employers. The Navy, as an organization offering employment, is viewed here as part of a whole set of employers that exist in an individual's perceptual field, all of whom are interrelated in terms of degree of skill and occupational transferability. This factor emerges as consistent with our earlier interview research. In addition, it adds information as to specific incentives underlying this dimension which can be used when we address ourselves to the linkage of military and civilian careers and how such linkages impact on career motivation. (It may be noted that several retirement items that load on this factor also form the more specific Factor Three. This is not inconsistent with our general interpretation since retirement benefits can be seen both in terms of their specific enlistment incentive values, and in terms of their congruence with an individual's plan for a civilian career after leaving the Navy.)

**Factor Five**: Release option (Table 6). This factor, which accounted for 2.9 percent of the common variance, has as its major motivational thrust the individual's desire to be able to reject and/or change aversive factors
### TABLE 4

**Factor Three: Opportunity for Retirement Benefits**

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>38.</td>
<td>The opportunity to retire from the Navy at 3/4 pay after 30 years.</td>
<td>.81</td>
</tr>
<tr>
<td>36.</td>
<td>The opportunity to retire from the Navy at half pay with medical benefits after 20 years.</td>
<td>.72</td>
</tr>
<tr>
<td>34.</td>
<td>Guarantee of the Navy vocational school of your choice at enlistment.</td>
<td>.58</td>
</tr>
<tr>
<td>Item #</td>
<td>Factor Four: Opportunity for Integration of Military &amp; Civilian Life</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>The opportunity to retire at half pay, with medical benefits after 15 years of service.</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Retirement at 3/4 pay, with medical benefits, after 20 years.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>The Navy would pay up to two years of technical/vocational school training, including living expenses, at the school of your choice, in return for four years of active duty.</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>A policy of making pay and allowances on all jobs in the Navy comparable to civilian pay and benefits for smaller jobs.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>An opportunity to work in the home port area of your choice for the first 2 years of your enlistment.</td>
<td></td>
</tr>
<tr>
<td>36.</td>
<td>The opportunity to retire from the Navy at half pay with medical benefits after 20 years.</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>A 9 month leave of absence at full pay for educational and/or other personal growth activities every 6 years.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>A special allowance for high-cost of living areas such as New York City, Washington, etc.</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 6

Factor Five: Release Option

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.</td>
<td>The ability to leave the Navy at any time by paying a fee of $500 with no strings attached.</td>
<td>.82</td>
</tr>
<tr>
<td>30.</td>
<td>Redesigning military quarters on shore bases in order to provide for one and two-man rooms with bath.</td>
<td>.51</td>
</tr>
<tr>
<td>20.</td>
<td>Eliminate drilling and reduce physical training aspects of Navy boot camp.</td>
<td>.40</td>
</tr>
</tbody>
</table>
i.e., some of the tangible conditions of military life. Positive affect is associated with reduction of these aversive conditions. This may be accomplished by changes made by the Navy, or by the individual leaving the Navy. The thrust of this factor fits in quite well with the findings revealed by interviews.

Factor Six: Reduction of perceived inequities (Table 7). The last factor, "Reduction of perceived inequities" accounted for 2.8 percent of the common variance, and reflects the degree to which the Navy, as an employing institution, is perceived as providing the same job opportunities, i.e., money, interaction with opposite sex ("assign women to duty aboard ship"), and vacation time, as do civilian employers. The major theme of this factor is that the more the Navy reduces these perceived inequities, (i.e., inequities as defined by what is commonly available in civilian life)—the better.

The Identification of the Most Promising Incentives

In the process of developing incentives to enhance enlistment, we were guided by a number of considerations. First, there was the need to insure a sufficiently wide range of incentive content from which we could draw a variety of different kinds of incentives outside of the conventional domain of monetary bonuses and educational benefits. A second consideration was the possibility that particular incentives might have different degrees of appeal for different segments of the Navy eligible population. To the extent that this were the case, it would contribute to the design of our research and development program. In order to assess this possibility, we undertook an exploratory analysis of limited sample size to give us some preliminary information as to whether certain incentives did have differential appeal for individuals from different socio-economic backgrounds. Using the father's occupation as a measure of socio-economic background and eliminating cases where the father was unemployed or deceased, or where his occupation was undeterminable, the socio-economic status of 73 respondents could be classified. A three category classification was used, based on whether the father was employed in a professional or high technical occupation, in a skilled-trade occupation, or in a job involving relatively low-level, somewhat menial tasks. Those whose fathers were classified in the first group were considered to be of Upper Middle (UM) socio-economic
<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.</td>
<td>Assign women to duty aboard ship.</td>
<td>.75</td>
</tr>
<tr>
<td>24.</td>
<td>A policy of bonuses for exceptionally good performance.</td>
<td>.65</td>
</tr>
<tr>
<td>23.</td>
<td>More pay for sea duty than for shore duty.</td>
<td>.56</td>
</tr>
<tr>
<td>22.</td>
<td>An opportunity to work in jobs that have clear civilian transferability.</td>
<td>.48</td>
</tr>
<tr>
<td>17.</td>
<td>A $5000 bonus at the time of enlistment with no strings attached.</td>
<td>.46</td>
</tr>
<tr>
<td>32.</td>
<td>Free long distance phone calls to dependents when separated for more than 2 weeks (one free call every 2 weeks).</td>
<td>.45</td>
</tr>
<tr>
<td>11.</td>
<td>An opportunity to get out of the Navy after 6 months, if you are not satisfied, with no strings attached.</td>
<td>.45</td>
</tr>
<tr>
<td>10.</td>
<td>A requirement that uniforms be worn only one day per week (and on special occasions) while on shore duty.</td>
<td>.45</td>
</tr>
<tr>
<td>15.</td>
<td>A policy of making pay and allowances on all jobs in the Navy comparable to civilian pay and benefits for smaller jobs.</td>
<td>.45</td>
</tr>
<tr>
<td>6.</td>
<td>People who have been to college for one or two years would enter at higher pay grades than persons who have not had any college.</td>
<td>.43</td>
</tr>
<tr>
<td>13.</td>
<td>A 20% pay increase across the board (starting salary before the increase is $288 per month plus clothing, room, board, educational and medical benefits).</td>
<td>.41</td>
</tr>
<tr>
<td>33.</td>
<td>30 days paid vacation each year.</td>
<td>.41</td>
</tr>
<tr>
<td>21.</td>
<td>An opportunity to accumulate unused leave time up to 180 days.</td>
<td>.41</td>
</tr>
</tbody>
</table>
status (N=27), those from the second group were considered to be of Middle (M) socio-economic status (N=36), while those from the last group were assigned to the Lower (L) socio-economic level (N=10).

Relevant data from this analysis are shown in Tables 8, 9, and 10. In Table 8 are listed the mean ratings of each incentive, by socio-economic grouping, while Table 9 presents those items ranked highest by members of each socio-economic subgroup (i.e., UM, M, & L) and pairs of sub-groups (UM & M). Also presented in Table 9 are the factors on which each of these items loaded (e.g., Item 5, which had a mean rating of 3.25 for the L group, loaded .65 on Factor II-Opportunity for Vocational and Financial Satisfaction). Table 10 gives corresponding data for the whole sample (those classified regarding socio-economic status, as well as those individuals who could not be so classified.

An examination of these tables suggests the following:

1. There is some indication from column means shown in Table 8 that among junior college students the most favorable overall feelings toward the Navy exist for those with either UM or M backgrounds, while those from L backgrounds seem to be least attracted (means 3.07 and 3.11 vs. 2.90). This conclusion is, of course, based on very small samples and only cautious generalization is warranted. Yet, subject to further confirmation, there is here the suggestion that the incentives evaluated in this study are least effective for attracting persons from lower socio-economic backgrounds.

2. The locus of problems associated with attracting L-category persons may be pinpointed in Table 9. With decreasing socio-economic status, the significance of tangible incentives becomes stronger; while the items reflecting aspiration for "self-control" and "equity" become stronger with increasing socio-economic status. That is, Factors II and IV are more important among those of lower SES, while Factors I and VII are more important to those of higher SES.

Taken together, these findings suggest three interrelated but distinguishable administrative implications. First, the fact that differences exist between the socio-economic levels such that upper middle class persons are more attracted to the Navy than persons lower in socio-economic status.
### TABLE 8

Mean Ratings and Standard Deviations for Incentives for Total Sample and the Sub-samples Based on Father’s Occupation

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Sample N=100</th>
<th>Upper-Middle Background N=27</th>
<th>Middle-(Skilled) Worker Background N=36</th>
<th>Low-Socio-Economic Background N=10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1.</td>
<td>2.67</td>
<td>0.93</td>
<td>2.48</td>
<td>0.70</td>
</tr>
<tr>
<td>2.</td>
<td>3.09</td>
<td>1.00</td>
<td>3.15</td>
<td>0.99</td>
</tr>
<tr>
<td>3.</td>
<td>3.02</td>
<td>1.08</td>
<td>3.04</td>
<td>0.90</td>
</tr>
<tr>
<td>4.</td>
<td>3.15</td>
<td>1.13</td>
<td>3.00</td>
<td>1.10</td>
</tr>
<tr>
<td>5.</td>
<td>3.25</td>
<td>1.01</td>
<td>3.19</td>
<td>1.06</td>
</tr>
<tr>
<td>6.</td>
<td>3.07</td>
<td>1.08</td>
<td>3.19</td>
<td>0.83</td>
</tr>
<tr>
<td>7.</td>
<td>2.69</td>
<td>0.92</td>
<td>2.67</td>
<td>0.73</td>
</tr>
<tr>
<td>8.</td>
<td>2.89</td>
<td>1.06</td>
<td>3.04</td>
<td>1.02</td>
</tr>
<tr>
<td>9.</td>
<td>2.89</td>
<td>0.78</td>
<td>2.93</td>
<td>0.78</td>
</tr>
<tr>
<td>10.</td>
<td>2.81</td>
<td>0.95</td>
<td>2.93</td>
<td>0.78</td>
</tr>
<tr>
<td>11.</td>
<td>3.58</td>
<td>1.08</td>
<td>3.63</td>
<td>1.15</td>
</tr>
<tr>
<td>12.</td>
<td>3.03</td>
<td>0.95</td>
<td>2.93</td>
<td>0.87</td>
</tr>
<tr>
<td>13.</td>
<td>3.14</td>
<td>0.91</td>
<td>3.12</td>
<td>0.95</td>
</tr>
<tr>
<td>14.</td>
<td>2.95</td>
<td>1.09</td>
<td>2.89</td>
<td>1.15</td>
</tr>
<tr>
<td>15.</td>
<td>3.04</td>
<td>0.99</td>
<td>3.08</td>
<td>1.02</td>
</tr>
<tr>
<td>16.</td>
<td>3.05</td>
<td>0.98</td>
<td>3.00</td>
<td>1.04</td>
</tr>
<tr>
<td>17.</td>
<td>3.42</td>
<td>1.14</td>
<td>3.30</td>
<td>1.07</td>
</tr>
<tr>
<td>18.</td>
<td>3.09</td>
<td>0.93</td>
<td>3.33</td>
<td>1.07</td>
</tr>
<tr>
<td>19.</td>
<td>3.19</td>
<td>1.13</td>
<td>3.41</td>
<td>1.01</td>
</tr>
<tr>
<td>20.</td>
<td>2.75</td>
<td>1.17</td>
<td>2.85</td>
<td>1.20</td>
</tr>
<tr>
<td>21.</td>
<td>3.19</td>
<td>0.90</td>
<td>3.07</td>
<td>0.92</td>
</tr>
<tr>
<td>22.</td>
<td>3.30</td>
<td>0.95</td>
<td>3.26</td>
<td>0.98</td>
</tr>
<tr>
<td>23.</td>
<td>3.09</td>
<td>0.99</td>
<td>2.96</td>
<td>1.02</td>
</tr>
<tr>
<td>24.</td>
<td>3.15</td>
<td>1.03</td>
<td>3.26</td>
<td>1.06</td>
</tr>
<tr>
<td>25.</td>
<td>3.08</td>
<td>1.08</td>
<td>3.11</td>
<td>1.19</td>
</tr>
<tr>
<td>26.</td>
<td>3.16</td>
<td>0.97</td>
<td>3.11</td>
<td>1.05</td>
</tr>
<tr>
<td>27.</td>
<td>3.25</td>
<td>1.03</td>
<td>3.26</td>
<td>1.10</td>
</tr>
<tr>
<td>28.</td>
<td>3.21</td>
<td>1.01</td>
<td>3.22</td>
<td>1.12</td>
</tr>
<tr>
<td>29.</td>
<td>3.27</td>
<td>0.97</td>
<td>3.26</td>
<td>1.10</td>
</tr>
<tr>
<td>30.</td>
<td>3.10</td>
<td>0.88</td>
<td>3.00</td>
<td>0.94</td>
</tr>
<tr>
<td>31.</td>
<td>3.40</td>
<td>0.99</td>
<td>3.44</td>
<td>0.97</td>
</tr>
<tr>
<td>32.</td>
<td>3.11</td>
<td>0.90</td>
<td>3.00</td>
<td>0.92</td>
</tr>
<tr>
<td>33.</td>
<td>3.33</td>
<td>0.90</td>
<td>3.37</td>
<td>0.97</td>
</tr>
<tr>
<td>34.</td>
<td>3.09</td>
<td>0.92</td>
<td>3.19</td>
<td>0.92</td>
</tr>
<tr>
<td>35.</td>
<td>2.65</td>
<td>1.29</td>
<td>2.81</td>
<td>1.27</td>
</tr>
<tr>
<td>36.</td>
<td>2.81</td>
<td>0.92</td>
<td>2.73</td>
<td>0.60</td>
</tr>
<tr>
<td>37.</td>
<td>2.90</td>
<td>0.90</td>
<td>2.81</td>
<td>0.85</td>
</tr>
<tr>
<td>38.</td>
<td>2.70</td>
<td>0.95</td>
<td>2.69</td>
<td>0.88</td>
</tr>
</tbody>
</table>

**Overall Mean**

<table>
<thead>
<tr>
<th>Total Sample N=100</th>
<th>Upper-Middle Background N=27</th>
<th>Middle-(Skilled) Worker Background N=36</th>
<th>Low-Socio-Economic Background N=10</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.07</td>
<td>3.11</td>
<td>2.90</td>
<td>16</td>
</tr>
<tr>
<td>Most Important Incentives</td>
<td>Mean</td>
<td>Factors and Factor Loadings</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------------</td>
<td>------</td>
<td>----------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Upper Middle (N=27)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Assign women to duty aboard ship.</td>
<td>3.19</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>24. A policy of bonuses for exceptionally good performance.</td>
<td>3.14</td>
<td>.65</td>
<td></td>
</tr>
<tr>
<td>18. Educational leave at full pay for 2 months a year.</td>
<td>3.09</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td><strong>Upper Middle (N=27) &amp; Middle (N=36)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. A $5000 bonus at the time of enlistment with no strings attached.</td>
<td>3.42</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>31. The right to leave the Navy at any time after 2 years, with no strings attached.</td>
<td>3.40</td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>22. An opportunity to work in jobs that have clear civilian transferability.</td>
<td>3.30</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>29. The right to live off the base after boot camp, if you prefer.</td>
<td>3.27</td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>28. Assurance that you will be able to change your job after 1 year if you don't like it.</td>
<td>3.21</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td><strong>Middle (N=36)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. An opportunity to accumulate unused leave time up to 180 days.</td>
<td>3.19</td>
<td>.53</td>
<td></td>
</tr>
<tr>
<td>4. A $3000 bonus at the time of enlistment with no strings attached.</td>
<td>3.15</td>
<td>.80</td>
<td></td>
</tr>
</tbody>
</table>
| 6. People who have been to college for one or two years would enter at higher pay grades than persons who have not had any college. | 3.07 | .63 .43
TABLE 9 (Cont'd.)

<table>
<thead>
<tr>
<th>Most Important Incentives</th>
<th>Mean</th>
<th>I</th>
<th>II</th>
<th>IV</th>
<th>VII</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Middle (N=36) &amp; Lower (N=10)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. A policy of guaranteed location assignments after your initial tour.</td>
<td>3.16</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lower (N=10)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. As an enlisted man, you would be paid by the government for up to four years of college, including living expenses, at the school of your choice, in return for four years of active duty.</td>
<td>3.25</td>
<td>.65</td>
<td>.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Periodic visits by dependents while at sea, which would be paid for by the Navy.</td>
<td>3.08</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Retirement at 3/4 pay, with medical benefits, after 20 years.</td>
<td>3.05</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 10

Most Important Incentives and Factor Loadings for the Entire Sample of Junior College Students

<table>
<thead>
<tr>
<th>Most Important Incentives</th>
<th>Factors and Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>11. An opportunity to get out of the Navy after 6 months, if you are not satisfied, with no strings attached.</td>
<td>3.58</td>
</tr>
<tr>
<td>33. Thirty (30) days paid vacation each year.</td>
<td>3.33</td>
</tr>
<tr>
<td>27. A chance to enroll in an officer training program immediately after completing 2 years of college (or junior college).</td>
<td>3.26</td>
</tr>
</tbody>
</table>
suggests that something might need to be done to increase the attractiveness of the Navy for those from lower socio-economic backgrounds.

Secondly, the fact that there are variations in the manner by which persons of different socio-economic groupings respond to incentives reinforces the view that varied incentives and appeals should be developed and directed at different target populations of potential enlistees. One means of doing this may be to have these appeals generated and reviewed with the help of individuals from different backgrounds, i.e., those who have knowledge of, or who can adopt the different "frames of reference" most easily.

Third, these results also suggest that a group not often thought of as being interested in a Navy career (i.e., those from upper middle class backgrounds) might be a rich source of potential enlistees. Thus, our data show that certain appeals may be most useful for attracting young men from upper middle class backgrounds and that appeals to such persons could be given more emphasis by the Navy. There has been a tendency by recruiters and Navy officials in the past to consider this group (and college students in general) as unreachable. Hence, such populations have been relatively neglected as an enlisted recruiting pool.

3. The differences in the attractiveness of incentives for the different subgroups of potential enlistees should not be allowed to obscure the incentives which appear to be common to all subgroups (Table 10). Thus, while some difference in attractiveness of certain incentives may occur as a function of socio-economic status, junior college students in general seem to be attracted both by the opportunity to (a) exercise control of their vocational and career life as much as possible, and (b) by traditional incentives, such as money, advancement opportunities and working conditions.

4. Finally, these results suggest that the utilization of population characteristics may be useful for defining differential appeals and differential approaches in future research and administrative applications. It appears necessary to further examine these findings using larger, more systematically defined samples in order to evaluate the utility of segmenting potential populations of recruits according to socio-economic variables.
In addition, there is also a need to test more fully the utility of segmenting the "market" according to such variables as urban-suburban, rural location, career interests, and related dimensions.
DISCUSSION AND IMPLICATIONS

Suggestions for the Navy recruiting effort in the all-volunteer environment will become increasingly explicit as we obtain additional information. Thus, while the data presented here are only exploratory and reflect our hypothesis and model-generating interests at this time, several indications have emerged regarding the enlistment motives of junior college students. First, they wish to retain considerable control over their vocational and their personal lives. Second, they are interested in "traditional" vocational work incentives such as money, the opportunity for advancement, good vacations and working conditions. From these data, we would hypothesize that the current generation of junior college students differs from previous generations of college students and high school graduates in that they expect "more" from the Navy. They want both traditional incentives and increased opportunity for self-control. However, it also needs to be noted that the relative weight of these factors may be different for those of different socio-economic backgrounds in that the more "tangible" traditional incentives seem to be more important at lower socio-economic levels. There is considerable evidence in the research literature that these types of work values are quite typical of those from lower socio-economic backgrounds (cf. Davis, 1946; Goodale, 1973). Thus, while our samples in this study were of a size most appropriate for exploratory analysis, the substantive conclusions drawn are strengthened by this previous work.

The implications from these findings are several. First, it will be necessary to evaluate the effectiveness of incentives reflecting both "new" and "traditional" appeals. Second, incentives need to be selected on the basis of their appropriateness and attractiveness for specific populations in order to maximize their potential for influencing enlistment decisions. Our previous discussions have suggested that one possible procedure might be to have representatives of different socio-economic groups contribute to the development of incentives responsive to the varying motivational characteristics of different target populations.
REFERENCES


AMERICAN INSTITUTES FOR RESEARCH  
NAVY ATTITUDE QUESTIONNAIRE  

The American Institutes for Research, a private, nonprofit organization, is conducting a study of young mens' attitudes toward the Navy. We would appreciate your cooperation in filling out this questionnaire. Your answers will remain confidential and your name is not required. Please answer the questions on the first page before turning to page two where additional instructions will be given.

1. At this time, I:  
   (circle appropriate answer)  
   a. Am not interested in the Navy.  
   b. Have not given much thought to joining the Navy.  
   c. Am thinking about joining the Navy.  
   d. Am thinking about joining the Navy and would like more information about Navy programs.  
   e. Am definitely going to join the Navy.

2. Age: _____years_____months

3. Highest school grade completed: ________

4. Father's occupation __________________________________________

5. Have you ever been in a military service? _____(yes/no)  
   If so, which one? ________________

6. Have you considered any armed service other than the Navy? _____(yes/no)  
   If so, which one? ________________
Instructions

As the military draft comes to an end, the Navy is expecting to make some changes. Basically, the idea is to see how some of these possible changes might affect the plans of young men with respect to enlisting in the Navy. Below you will find descriptions of a number of changes which the Navy may consider adopting in order to attract more people like yourself. Before each description, you will find five choices, a, b, c, d, e. Circle the letter you feel most accurately describes how that particular change might affect you. Use the following key making your ratings:

a. If this change were introduced, I would think less favorably of the Navy.

b. If this change were introduced, I would think neither more or less favorably of the Navy.

c. If this change were introduced, I would think more favorably of the Navy.

d. If this change were introduced, I would think more favorably of the Navy and would try to get more information about Navy programs.

e. If this change were introduced, I would think more favorably and would seriously consider enlisting in the Navy.

a b c d e 1. A $1000 bonus at the time of enlistment.

a b c d e 2. The Navy would help you get started in a civilian job after finishing your active duty, by providing training in a civilian skill.

a b c d e 3. An enlistment of 2 years instead of 3 or 4 years.

a b c d e 4. A $3000 bonus at the time of enlistment with no strings attached.

a b c d e 5. As an enlisted man, you would be paid by the government for up to four years of college, including living expenses, at the school of your choice, in return for four years of active duty.

a b c d e 6. People who have been to college for one or two years would enter at higher pay grades than persons who have not had any college.

a b c d e 7. The Navy would pay up to two years of technical/vocational school training, including living expenses, at the school of your choice, in return for four years of active duty.

a b c d e 8. An opportunity to work in the home port area of your choice for the first 2 years of your enlistment.
a. If this change were introduced, I would think less favorably of the Navy.

b. If this change were introduced, I would think neither more or less favorably of the Navy.

c. If this change were introduced, I would think more favorably of the Navy.

d. If this change were introduced, I would think more favorably of the Navy and would try to get more information about Navy programs.

e. If this change were introduced, I would think more favorably and would seriously consider enlisting in the Navy.

9. A special allowance for high-cost of living areas such as New York City, Washington, etc.

10. A requirement that uniforms be worn only one day per week (and on special occasions) while on shore duty.

11. An opportunity to get out of the Navy after 6 months, if you are not satisfied, with no strings attached.

12. A 9 month leave of absence at full pay for educational and/or other personal growth activities every 6 years.

13. A 20% pay increase across the board (starting salary before the increase is $288 per month plus clothing, room, board, educational and medical benefits).

14. The opportunity to retire at half pay, with medical benefits after 15 years of service.

15. A policy of making pay and allowances on all jobs in the Navy comparable to civilian pay and benefits for similar jobs.

16. Retirement at 3/4 pay, with medical benefits, after 20 years.

17. A $5000 bonus at the time of enlistment with no strings attached.

18. Educational leave at full pay for 2 months a year.

19. Assign women to duty aboard ship.

20. Eliminate drilling and reduce physical training aspects of Navy boot camp.
a. If this change were introduced, I would think less favorably of the Navy.
b. If this change were introduced, I would think neither more or less favorably of the Navy.
c. If this change were introduced, I would think more favorably of the Navy.
d. If this change were introduced, I would think more favorably of the Navy and would try to get more information about Navy programs.
e. If this change were introduced, I would think more favorably and would seriously consider enlisting in the Navy.

21. An opportunity to accumulate unused leave time up to 180 days.
22. An opportunity to work in jobs that have clear civilian transferability.
23. More pay for sea duty than for shore duty.
25. Periodic visits by dependents while at sea, which would be paid for by the Navy.
26. A policy of guaranteed location assignments after your initial tour.
27. A chance to enroll in an officer training program immediately after completing 2 years of college (or junior college).
28. Assurance that you will be able to change your job after 1 year if you don't like it.
29. The right to live off the base after boot camp, if you prefer.
30. Redesigning military quarters on shore bases in order to provide for one and two-man rooms with bath.
31. The right to leave the Navy at any time after 2 years, with no strings attached.
32. Free long distance phone calls to dependents when separated for more than 2 weeks (one free call every 2 weeks).
33. 30 days paid vacation each year.
34. Guarantee of the Navy vocational school of your choice at enlistment.
35. The ability to leave the Navy at any time by paying a fee of $500, with no strings attached.
a. If this change were introduced, I would think less favorably of the Navy.
b. If this change were introduced, I would think neither more or less favorably of the Navy.
c. If this change were introduced, I would think more favorably of the Navy.
d. If this change were introduced, I would think more favorably of the Navy and would try to get more information about Navy programs.
e. If this change were introduced, I would think more favorably and would seriously consider enlisting in the Navy.

36. The opportunity to retire from the Navy at half pay with medical benefits after 20 years.

37. Guaranteed two year duty overseas in the country of your choice.

38. The opportunity to retire from the Navy at 3/4 pay after 30 years.
DISTRIBUTION LIST

NAVY

4 Dr. Marshall J. Farr
  Director, Personnel and Training
  Research Programs (Code 458)
  Office of Naval Research
  Arlington, Virginia 22217

1 Chief of Naval Technical Training
  Naval Air Station Memphis (75)
  Millington, Tennessee 38054
  ATTN: Dr. G. D. Mayo

1 Chief of Naval Training
  Naval Air Station
  Pensacola, Florida 32508
  ATTN: CAPT. Allen E. McMichael

1 Director
  ONR Branch Office
  495 Summer Street
  Boston, Massachusetts 02210

1 Chief
  Bureau of Medicine and Surgery
  Research Division (Code 713)
  Washington, D. C. 20390

1 Office of Naval Research
  Area Office
  207 West 24th Street
  New York, New York 10011

1 Commandant of the Marine Corps
  (Code A01M)
  Washington, D. C. 20380

1 Director
  Naval Research Laboratory
  Code 2627
  Washington, D. C. 20390

1 Commander
  Submarine Development Group Two
  Fleet Post Office
  New York, New York 09501

1 Commander
  Submarine Development Group Two
  Fleet Post Office
  New York, New York 09501

12 Defense Documentation Center
  Cameron Station, Building 5
  5010 Duke Street
  Alexandria, Virginia 22314

1 Head, Personnel Measurement Staff
  Capital Area Personnel Service
  Office
  Ballston Tower #2, Room 1204
  801 N. Randolph St.
  Arlington, Virginia 22203

1 Chairman
  Behavioral Science Department
  Naval Command and Management
  Division
  U.S. Naval Academy
  Luce Hall
  Annapolis, Maryland 21402
COL. George Caridakis  
Director, Office of Manpower Utilization  
Headquarters  
Marine Corps (A01H) MCB  
Quantico, Virginia 22134

Special Assistant for Research and Studies  
OASN (M&RA)  
The Pentagon, Room 4E794  
Washington, D.C. 20350

Mr. George N. Graine  
Naval Ship Systems Command (SHIPS 03H)  
Department of the Navy  
Washington, D.C. 20360

Chief  
Bureau of Medicine and Surgery  
Code 513  
Washington, D.C. 20390

Program Coordinator  
Bureau of Medicine and Surgery (Code 71G)  
Department of the Navy  
Washington, D.C. 20390

Research Director, Code 06  
Research and Evaluation Department  
U.S. Naval Examining Center  
Building 2711 - Green Bay Area  
Great Lakes, Illinois 60088  
ATTN: C.S. Winiewicz

Superintendent  
Naval Postgraduate School  
Monterey, California 93940  
ATTN: Library (Code 2124)

Technical Director  
Naval Personnel Research and Development Laboratory  
Washington Navy Yard  
Building 200  
Washington, D.C. 20390

Technical Director  
Personnel Research Division  
Bureau of Naval Personnel  
Washington, D.C. 20370

Technical Library (Pers-11B)  
Bureau of Naval Personnel  
Department of the Navy  
Washington, D.C. 20360

Technical Library  
Naval Ship Systems Command National Center  
Building 3, Room 3  
S-08  
Washington, D.C. 20360

Mr. A. F. McKinnell  
Bureau of Naval Personnel (Pers-B2212)  
Washington, D.C. 20370

Pens-B221  
Bureau of Naval Personnel  
Washington, D.C. 20370

Office of Naval Research Area Office  
1076 Mission Street  
San Francisco, California 94103

Commander  
Operational Test and Evaluation Force  
U.S. Naval Base  
Norfolk, Virginia 23511

Commander Naval Air Reserve  
Naval Air Station  
Glenview, Illinois 60026

Commanding Officer  
Naval Medical Neuropsychiatric Reserve Unit  
San Diego, California 92152
AR

1 Behavioral Sciences Division
Office of Chief of Research and Development
Department of the Army
Washington, D.C. 20310

1 U.S. Army Behavior and Systems Research Laboratory
Rosslyn Commonwealth Building
Room 239
1300 Wilson Boulevard
Arlington, Virginia 22209

1 Director of Research
U.S. Army Armor Human Research Unit
ATTN: Library
Building 2422 Morade Street
Fort Knox, Kentucky 40121

1 COMMANDANT
U.S. Army Adjutant General School
Fort Benjamin Harrison, Indiana 46249
ATTN: ATSAG-EA

1 Armed Forces Staff College
Norfolk, Virginia 23511
ATTN: Library

1 Commanding Officer
ATTN: LTC Montgomery
USACDC - PASA
Ft. Benjamin Harrison, Indiana 46249

1 Director
Behavioral Sciences Laboratory
U.S. Army Research Institute of Environmental Medicine
Natick, Massachusetts 01760

1 Commandant
United States Army Infantry School
ATTN: ATSN-H
Fort Benning, Georgia 31905

1 U.S. Army Research Institute
Room 239
Commonwealth Building
1300 Wilson Boulevard
Arlington, Virginia 22209
ATTN: Dr. R. Dusek

1 Mr. Edmund Fuchs
BESRL
Commonwealth Building, Room 239
1320 Wilson Boulevard
Arlington, Virginia 22209

A

1 Dr. Robert A. Bottenberg
AFHRL/PHS Lackland AFB
Texas 78236

1 AFHRL/MD
701 Prince Street
Room 200
Alexandria, Virginia 22314

1 AFOSR (NL)
1400 Wilson Boulevard
Arlington, Virginia 22209

1 COMMANDANT
USAF School of Aerospace Medicine
ATTN: Aeromedical Library (SCL-4)
Brooks AFB, Texas 78235

1 AFHRL (TR/Dr. G. A. Eckstrand)
Wright-Patterson Air Force Base
Ohio 45433

1 AFHRL (TRT/Dr. Ross L. Morgan)
Wright-Patterson Air Force Base
Ohio 45433
Personnel Research Division
AFHRL
Lackland Air Force Base
San Antonio, Texas 78236

Headquarters, U.S. Air Force
Chief, Personnel Research and Analysis Division (AF/DPXY)
Washington, D. C. 20330

Research and Analysis Division
AF/DPXYR Room 4C200
Washington, D. C. 20030

CAPT Jack Thorpe USAF
Dept. of Psychology
Bowling Green State University
Bowling Green, Ohio 43403

Mr. Joseph J. Cowan, Chief
Psychological Research Branch (P-1)
U.S. Coast Guard Headquarters
400 Seventh Street, S.W.
Washington, D. C. 20590

Dr. Ralph R. Canter
Director for Manpower Research
Office of Secretary of Defense
The Pentagon, Room 3D986
Washington, D. C. 20301

Dr. Charles Ullman
Chief of Counseling, Training Programs
OSD (M&RA)
The Pentagon, Room 2C252
Washington, D. C. 20301

Dr. Alvin E. Goins, Chief
Personality and Cognition Research Section
Behavioral Sciences Research Branch
National Institute of Mental Health
5600 Fishers Lane
Rockville, Maryland 20852

Dr. Lorraine D. Eyde
Bureau of Intergovernmental Personnel Programs
Room 2519
U.S. Civil Service Commission
1900 E. Street, N.W.
Washington, D. C. 20415

Office of Computer Information
Center for Computer Sciences and Technology
National Bureau of Standards
Washington, D. C. 20234

Dr. Andrew R. Molnar
Computer Innovation in Education Section
Office of Computing Activities
National Science Foundation
Washington, D. C. 20550
1 Dr. Scarvia Anderson
   Executive Director for Special Development
   Educational Testing Service
   Princeton, New Jersey  08540

1 Professor John Annett
   The Open University
   Walontea, BLETCHLEY
   Bucks, England

1 Dr. Richard C. Atkinson
   Department of Psychology
   Stanford University
   Stanford, California  94305

1 Dr. Bernard M. Bass
   University of Rochester
   Management Research Center
   Rochester, New York  14627

1 Dr. David G. Bowers
   Institute for Social Research
   University of Michigan
   Ann Arbor, Michigan  48106

1 Dr. Kenneth E. Clark
   University of Rochester
   College of Arts and Sciences
   River Campus Station
   Rochester, New York  14627

1 Dr. Rene V. Dawis
   Department of Psychology
   324 Elliott Hall
   University of Minnesota
   Minneapolis, Minnesota  55455

1 Dr. Robert Dubin
   Graduate School of Administration
   University of California
   Irvine, California  92664

1 Dr. Marvin D. Dunnette
   University of Minnesota
   Department of Psychology
   Elliott Hall
   Minneapolis, Minnesota  55455

1 ERIC
   Processing and Reference Facility
   4833 Rugby Avenue
   Bethesda, Maryland  20014

1 Dr. Victor Fields
   Department of Psychology
   Montgomery College
   Rockville, Maryland  20850

1 Mr. Paul P. Foley
   Naval Personnel Research and Development Laboratory
   Washington Navy Yard
   Washington, D. C.  20390

1 Dr. Bert Green
   Department of Psychology
   Johns Hopkins University
   Baltimore, Maryland  21218

1 Dr. Richard S. Hatch
   Decision Systems Associates, Inc.
   11428 Rockville Pike
   Rockville, Maryland  20852

1 Dr. M. D. Havron
   Human Sciences Research, Inc.
   Westgate Industrial Park
   7710 Old Springhouse Road
   McLean, Virginia  22101

1 Human Resources Research Organization
   Division #3
   Post Office Box 5787
   Presidio of Monterey, California  93940

1 Human Resources Research Organization
   Division #4, Infantry
   Post Office Box 2086
   Fort Benning, Georgia  31905

1 Human Resources Research Organization
   Division #5, Air Defense
   Post Office Box 6057
   Fort Bliss, Texas  79916
1 Library
HumRRO Division Number 6
P.O. Box 428
Fort Rucker, Alabama 36360

1 Dr. Lawrence B. Johnson
Lawrence Johnson and Associates, Inc.
2001 "S" Street, N.W.
Suite 502
Washington, D. C. 20009

1 Dr. Norman J. Johnson
Associate Professor of Social Policy
School of Urban and Public Affairs
Carnegie-Mellon University
Pittsburgh, Pennsylvania 15213

1 Dr. Roger A. Kaufman
Graduate School of Human Behavior
U.S. International University
8655 E. Pomerada Road
San Diego, California 92124

1 Dr. E. J. McCormick
Department of Psychological Sciences
Purdue University
Lafayette, Indiana 47907

1 Dr. Robert R. Mackie
Human Factors Research, Inc.
Santa Barbara Research Park
6780 Cortona Drive
Goleta, California 93017

1 Dr. Stanley M. Nealy
Department of Psychology
Colorado State University
Fort Collins, Colorado 80521

1 Mr. Luigi Petrullo
2431 North Edgewood Street
Arlington, Virginia 22207

1 Dr. Robert D. Pritchard
Assistant Professor of Psychology
Purdue University
Lafayette, Indiana 47907

1 Psychological Abstracts
American Psychological Association
1200 Seventeenth Street, N.W.
Washington, D. C. 20036

1 Dr. Diane M. Ransey-Klee
R-K Research & System Design
3947 Ridgemont Drive
Malibu, California 90265

1 Dr. Joseph W. Rigney
Behavioral Technology Laboratories
University of Southern California
3717 South Grand
Los Angeles, California 90007

1 Dr. Leonard L. Rosenbaum, Chairman
Department of Psychology
Montgomery College
Rockville, Maryland 20850

1 Dr. George E. Rowland
Rowland and Company, Inc.
Post Office Box 61
Haddonfield, New Jersey 08033

1 Dr. Benjamin Schneider
Department of Psychology
University of Maryland
College Park, Maryland 20742

1 Dr. Arthur I. Siegel
Applied Psychological Services
Science Center
404 East Lancaster Avenue
Wayne, Pennsylvania 19087

1 Dr. Henry Solomon
George Washington University
Department of Economics
Washington, D. C. 20006

1 Dr. David Weiss
University of Minnesota
Department of Psychology
Elliott Hall
Minneapolis, Minnesota 55455
Mr. Edmond Marks  
109 Grange Building  
Pennsylvania State University  
University Park, Pennsylvania  
16802

Dr. Anita S. West  
Denver Research Institute  
University of Denver  
Denver, Colorado 80210

Century Research Corporation  
4113 Lee Highway  
Arlington, Virginia 22207

Dr. Robert J. Lundegard (Chairman)  
Director  
Mathematical and Information Sciences Division  
Code 430

LCDR Robert D. Matulka  
Research Program Officer  
Code 430C

Dr. Thomas C. Varley  
Program Director Operations Research  
Code 434

Mr. Marvin Denicoff  
Program Director Information Systems  
Code 437

Dr. Glenn L. Bryan (Program Manager) Director  
Psychological Sciences Division  
Code 450

LCOL Austin W. Kibler, Director  
Human Resources Research Office  
ARPA  
1400 Wilson Boulevard  
Arlington, Virginia 22209

Dr. Kenneth E. Young  
Vice President  
American College Testing Program  
Suite 340  
One Dupont Circle, N.W.  
Washington, D. C. 20036

PLANNING COMMITTEE FOR THE OFFICE OF NAVAL RESEARCH PROGRAM IN MANPOWER R&D

Dr. H. Wallace Sinaiko  
Research Study Director  
Code 450

Dr. John A. Nagay  
Director Organizational Effectiveness Research Programs  
Code 452

Dr. Bert T. King  
Associate Director  
Code 452

Dr. Martin A. Tolcott  
Director Engineering Psychology Programs  
Code 455

Mr. Robert J. Miller  
Director Naval Analysis Programs  
Code 462

Mr. J. Randolph Simpson  
Supervisory Operations Research Analyst  
Code 462
<table>
<thead>
<tr>
<th>No.</th>
<th>Contractor Name</th>
<th>Address</th>
</tr>
</thead>
</table>
| 1   | Mr. Philip G. Bernard            | B-K Dynamics, Inc.  
2351 Shady Grove Road  
Rockville, Maryland 20850                                               |
| 1   | Dr. Barry M. Feinberg            | Bureau of Social Science Research, Inc.  
1200 Seventeenth Street, N.W.  
Washington, D.C. 20036                                                    |
| 1   | Prof. Robert M. Oliver           | University of California Operations Research Center  
Berkeley, California 94720                                                 |
| 1   | Mr. John P. Thomas               | Hudson Institute  
Quaker Ridge Road  
Croton-on-Hudson, New York 10520                                           |
| 1   | Mr. James N. Kelly               | Management Analysis Center, Inc.  
745 Concord Avenue  
Cambridge, Massachusetts 02138                                              |
| 1   | Dr. Lawrence Friedman            | MATHEMATICA, Inc.  
P.O. Box 2392  
Princeton, New Jersey 08540                                                 |
| 1   | Dr. Jack R. Borsting             | Department of Operations Research  
Naval Postgraduate School  
Monterey, California 93940                                                  |
| 1   | Prof. G. S. Watson               | Princeton University  
Department of Statistics  
Princeton, New Jersey 08540                                                 |
| 1   | Mr. Michael W. Brown             | Operations Research, Inc.  
1400 Spring Street  
Silver Spring, Maryland 20910                                               |
| 1   | Mr. H. Dean Brown                | Stanford Research Institute  
333 Ravenswood Avenue  
Menlo Park, California 94025                                                |
| 1   | Dr. Robert Glaser                | Learning Research and Development Center  
University of Pittsburgh  
Pittsburgh, Pennsylvania 15213                                              |
| 1   | Dr. Duncan N. Hansen             | Center for Computer-Assisted Instruction  
Florida State University  
Tallahassee, Florida 32306                                                   |
| 1   | Dr. Frederick M. Lord            | Educational Testing Service  
Princeton, New Jersey 08540                                                 |
| 1   | Mr. R. Bard Battelle             | Stanford Research Institute  
Naval Warfare Research Center  
Menlo Park, California 94025                                                 |
| 1   | Dr. Gloria L. Grace              | System Development Corporation  
2500 Colorado Avenue  
Santa Monica, California 90406                                              |
| 1   | Dr. Leonard Carmichael           | The Smithsonian Institution  
Washington, D.C. 20560                                                       |
| 1   | Prof. Gerald L. Thompson         | Carnegie-Mellon University  
Graduate School of Industrial Administration  
Pittsburgh, Pennsylvania 15213                                              |
| 1   | CAPT John F. Riley, USN           | Commanding Officer, U.S. Naval Amphibious School  
Coronado, California 92155                                                   |
| 1   | Mr. William E. Lassiter          | Data Solutions Corporation  
5272 River Road, Suite 100  
Bethesda, Md. 20016                                                           |
A questionnaire designed to assess reaction to possible enlistment incentives was administered to 100 junior college students. A factor-analysis of the measure indicated the importance both of traditional tangible incentives and of the "newer" incentives of control over one's work life. The data also indicated that: a) low socio-economic individuals were less attracted to the Navy overall than those from middle-or-higher levels, and b) the traditional incentives were more important for the low socio-economic respondents while the newer incentives were more important for the higher level individuals.
Dr. Norman M. Abrahams
Naval Personnel & Training
Research Laboratory
San Diego, California 92152

Dr. Herbert R. Northrup
Wharton School of Finance
& Commerce
University of Pennsylvania
Philadelphia, Pa. 19104

Prof. Ezra S. Krendel
Department of Operations
Research
University of Pennsylvania
Philadelphia, Pa. 19104