A CROSS-CULTURAL COMPARISON OF MANAGERIAL PRACTICES AND THEIR EFFECTS

APR 80 J A RIEDEL, L E YOUNG, J P SHEPHERD

UNCLASSIFIED NPRDC-TR-80-22
attitudes and to provide feedback and rewards), and (e) communication processes (upward
A CROSS-CULTURAL COMPARISON OF MANAGERIAL PRACTICES
AND THEIR RELATIONSHIP TO ORGANIZATIONAL
OUTCOME VARIABLES

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San Diego, California 92132
A CROSS-CULTURAL COMPARISON OF MANAGERIAL PRACTICES AND THEIR RELATIONSHIP TO ORGANIZATIONAL OUTCOME VARIABLES.

This study addressed the relationships between employee perceptions of organizational effectiveness and managerial, organizational, and satisfaction variables. Questionnaires designed to measure work center effectiveness, organizational climate, job characteristics, supervisory influence, managerial practices, job satisfaction, role stress, and work occurrences were administered to a sample of 1607 employees drawn from all hierarchical levels at four Public Works Centers (PWCs) in the U.S. (including Pearl Harbor); the PWC in Yokosuka, Japan; and the PWC at Subic Bay, PI. Results

Approved for public release; distribution unlimited.

Cross-cultural
Job satisfaction
Organizational effectiveness
Organizational climate
Managerial practices
Role conflict
Role ambiguity

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Indicated that (1) managers and supervisors were generally more positive as to work center performance, management efficiency, and organizational character than were workers, (2) perceptions of management effectiveness are affected more by specific job-related concerns than they are by non-job-related managerial practices, (3) well defined job responsibilities and feelings of esprit de corps contribute most to employee satisfaction, and (4) employees are motivated by work occurrences that reflect personal concerns (e.g., feelings of accomplishment) and demotivated by those that reflect task-related concerns (e.g., equipment problems).
FOREWORD

This research and development was conducted in support of Exploratory Development Task Area ZF55.521.034 (Civilian Personnel Research and Development), Work Unit 03.02 (Evaluation of Civilian Personnel Management). The objective of this work unit is to identify and evaluate the managerial practices used in Navy organizations staffed primarily with civilians. The purpose of this study, which was conducted at six of the Navy's Public Works Centers (PWCs), was to determine how Navy civilian employees' perceptions of various aspects of the work environment differ across cultural and ethnic groups and across hierarchical levels. A better understanding of these differences should enable Navy planners and policymakers to improve civilian personnel management.

This is the third report published concerning this study. The first (TR 79-9) described the interrelationships between cultural and work-related values and attitudes with respect to organizational functioning. The second (TR/80-8) addressed the relationships between employee perceptions of role stress and individual, organizational, and environmental variables. This report addresses the relationships between employee perceptions of organizational effectiveness and managerial, organizational, and satisfaction variables. The fourth (and final) report will provide an executive summary of the previous findings.

Although results of this report are primarily intended for use by the Navy Facilities Engineering Command, they may be applicable to other shore support activities under the Chief of Naval Material.

Appreciation is extended to the commanding officers of the PWCs and their staffs for their general support and cooperation. Special thanks are due to Mr. Bruce Kunkel for his assistance in analyzing the data for this study.

DONALD F. PARKER
Commanding Officer
The text on the page is not legible due to the quality of the image. It appears to be a page from a document, but the content cannot be accurately transcribed.
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTRODUCTION</strong></td>
<td>1</td>
</tr>
<tr>
<td>Problem</td>
<td>1</td>
</tr>
<tr>
<td>Purpose</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td><strong>APPROACH</strong></td>
<td>2</td>
</tr>
<tr>
<td>Organization Studied</td>
<td>2</td>
</tr>
<tr>
<td>Sample</td>
<td>2</td>
</tr>
<tr>
<td>Survey Questionnaire</td>
<td>4</td>
</tr>
<tr>
<td>Procedure</td>
<td>5</td>
</tr>
<tr>
<td>Analyses</td>
<td>5</td>
</tr>
<tr>
<td><strong>RESULTS</strong></td>
<td>6</td>
</tr>
<tr>
<td>Perceptions of Work Center Effectiveness</td>
<td>6</td>
</tr>
<tr>
<td>Perceptions of Management Effectiveness</td>
<td>6</td>
</tr>
<tr>
<td>Perceptions of Organizational Character</td>
<td>8</td>
</tr>
<tr>
<td>Relationship Between Organizational Effectiveness and Management Practices</td>
<td>8</td>
</tr>
<tr>
<td>Predictors of Organizational Effectiveness</td>
<td>14</td>
</tr>
<tr>
<td>Perceptions of Work Occurrences</td>
<td>16</td>
</tr>
<tr>
<td><strong>DISCUSSION AND CONCLUSIONS</strong></td>
<td>19</td>
</tr>
<tr>
<td>Criteria of Effectiveness</td>
<td>19</td>
</tr>
<tr>
<td>Predictors of Organizational Effectiveness</td>
<td>25</td>
</tr>
<tr>
<td>Perceptions of Work Occurrences</td>
<td>25</td>
</tr>
<tr>
<td><strong>RECOMMENDATIONS</strong></td>
<td>26</td>
</tr>
<tr>
<td><strong>REFERENCES</strong></td>
<td>28</td>
</tr>
<tr>
<td><strong>APPENDIX A—WORKER QUESTIONNAIRE (FORM A)</strong></td>
<td>A-0</td>
</tr>
<tr>
<td><strong>APPENDIX B—SUPERVISORY PERSONNEL QUESTIONNAIRE (FORM B)</strong></td>
<td>B-0</td>
</tr>
<tr>
<td><strong>APPENDIX C—PERCENTAGES OF PWC EMPLOYEES PROVIDING RESPONSES FALLING IN DERIVED CATEGORIES OF WORK OCCURRENCES</strong></td>
<td>C-0</td>
</tr>
<tr>
<td><strong>DISTRIBUTION LIST</strong></td>
<td></td>
</tr>
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</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Distribution of Study Participants by Hierarchical Level</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Sample Members' Mean Age and Years with the PWC System</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>Responses of PWC Employees to Items Measuring Work Center and Management Effectiveness</td>
<td>7</td>
</tr>
<tr>
<td>4.</td>
<td>Summary of Factor Analyses of Items Used to Measure Perceptions of Organizational Character</td>
<td>9</td>
</tr>
<tr>
<td>5.</td>
<td>F-Ratios for Six Organizational Character Factors</td>
<td>11</td>
</tr>
<tr>
<td>6.</td>
<td>Mean Factor Scores for Organizational Character Factors in Performed ANOVA</td>
<td>12</td>
</tr>
<tr>
<td>7.</td>
<td>Summary of Factor Analysis of Managerial Practices Items</td>
<td>13</td>
</tr>
<tr>
<td>8.</td>
<td>Center Ratings on Organization Effectiveness Variables</td>
<td>14</td>
</tr>
<tr>
<td>9.</td>
<td>Means and F-Ratios for Managerial Practices Factors by High and Low Rated PWCs</td>
<td>15</td>
</tr>
<tr>
<td>10.</td>
<td>Summary of Factor Analyses Performed on Satisfaction Items.</td>
<td>16</td>
</tr>
<tr>
<td>11.</td>
<td>Summary of Factor Analysis on Role Stress Items</td>
<td>17</td>
</tr>
<tr>
<td>12.</td>
<td>Simple and Multiple Correlations of Factors with Intrinsic Satisfaction and Work Center Performance by Level</td>
<td>18</td>
</tr>
<tr>
<td>13.</td>
<td>Categories Derived from Responses to Questions Concerning Work Occurrences.</td>
<td>20</td>
</tr>
<tr>
<td>14.</td>
<td>Examples of Responses Falling Under the Five Top-Ranked Response Categories</td>
<td>22</td>
</tr>
<tr>
<td>15.</td>
<td>Derived Categories Ranked in the First Five by Employees at Different Levels and Locations</td>
<td>24</td>
</tr>
</tbody>
</table>
INTRODUCTION

Problem

Because of the high cost of human resources, increasing pressure has been placed on Navy planners and policy makers to reduce manpower costs without undermining the Navy's goals and operational requirements. Thus, one of the major challenges facing the Navy today is to provide for more effective personnel management.

Recent research in the social and behavioral sciences has demonstrated that cultural values influence employees' attitudes toward work, including their acceptance of managerial and supervisory styles (Barrett & Bass, 1970, 1976). Since the Navy operates shore facilities around the world and employs people of many racial and ethnic groups, it is likely that the attitudes and perceptions of work force personnel differ considerably across facilities. Thus, Navy personnel managers should consider specific employee attitudes and perceptions in establishing managerial and supervisory practices.

Purpose

The purpose of this effort was to examine employees' perceptions of managerial effectiveness and organizational character and to relate them to perceptions of organizational effectiveness. It was anticipated that providing managers with information about employee's perceptions of these organizational variables and how they differ as a function of center location and level within the organization could help them become more responsive to employee concerns and thus more effective.

Background

Comparative studies on organizational effectiveness have concluded that management practices should vary as a function of cultural factors. For example, Whitehill (1964) suggests that management's success will depend, in part, upon understanding the nature and impact of the cultural environment, which exerts a significant influence on worker attitudes and behavior. Moreover, Barrett and Bass (1976) contend that culturally-based values and attitudes have a pervasive effect on the acceptance of managerial and supervisory styles and on the nature of motivation and attitudes concerning work. Other organizational theorists (Shetty & Carlisle, 1975) have suggested a contingency model of management that maintains that management practices must be responsive to organizational issues such as structure, technology, and environmental differences specific to each organizational setting, as well as to individual factors such as attitudinal and motivational variables.
Organization Studied

The Navy Public Works Centers (PWCs), which provide engineering, maintenance (including rehabilitation construction), utilities, transportation, and housing to U.S. Navy customers within their geographic area, were chosen as the organizations in which to conduct this study. There are five PWCs within the continental United States (CONUS)—Great Lakes, Norfolk, Pensacola, San Diego, and San Francisco (Oakland), and four others in the Pacific area—Guam, Pearl Harbor, HI; Subic Bay, PI; and Yokosuka, Japan. Their annual operating budget ranges from $60 million to $120 million; and the number of persons employed, from 675 to 3400.

The Naval Facilities Engineering Systems Command (NAVFAC) is responsible for the operation of the PWCs. Thus, most of the policies governing the operations of each center are formulated by NAVFAC and are standardized. NAVFAC uses information and control systems so that PWC work activities can be centrally monitored and directed.

PWCs are almost identical as to tasks performed, available technology, organizational structure, and managerial background. To the extent that they service one large organization (i.e., the U.S. Navy shore establishment), the nature of their work and the means to accomplish it are consistent across sites. Structurally, each consists of four major hierarchical levels: (1) top management, consisting of officers from the Navy's Civil Engineering Corps, (2) middle management, consisting of civilian department heads, (3) several civilian supervisory levels, and (4) the civilian labor force. Except for the Center at Yokosuka, which has a number of Japanese department directors, top and middle managers are U.S. citizens, mostly Caucasian and male. The supervisory levels and the labor force, however, are made up of individuals from the community where the PWC is located. Thus, the similarities among organizations lie in their tasks, technology, organizational structure, and managerial background. Most of the differences are in the surrounding physical and social environments, as well as in the ethnic and cultural composition of the labor force and supervisors.

Sample

Six of the nine PWCs were included in the study. Of these, three were located within CONUS—San Francisco, Great Lakes, and Norfolk; and three, in the Pacific area—Pearl Harbor, Yokosuka, and Subic Bay. The Commanding Officers of these PWCs encouraged all managers and supervisors to participate; these personnel, in turn, selected a sample of the work force representative of all PWC departments. Initially, several interviews were conducted with managers and first-line supervisors. Questionnaires were then administered to 1607 employees from all hierarchical levels of the organization. The distribution of the final sample, which was drawn from all hierarchical levels of the organization, is shown in Table 1. Sample members' mean age and years with the PWC system are shown in Table 2.

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1 The PWC at San Francisco was formed from several public works departments in June 1973.
Table 1

Distribution of Study Participants by Hierarchical Level

<table>
<thead>
<tr>
<th>Location</th>
<th>Workers</th>
<th>Supervisors</th>
<th>Department Heads</th>
<th>Military</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>159</td>
<td>42</td>
<td>11</td>
<td>8</td>
<td>220</td>
</tr>
<tr>
<td>Great Lakes</td>
<td>166</td>
<td>34</td>
<td>6</td>
<td>10</td>
<td>216</td>
</tr>
<tr>
<td>Norfolk</td>
<td>199</td>
<td>127</td>
<td>10</td>
<td>4</td>
<td>340</td>
</tr>
<tr>
<td>Pearl Harbor</td>
<td>123</td>
<td>98</td>
<td>6</td>
<td>4</td>
<td>231</td>
</tr>
<tr>
<td>Yokosuka</td>
<td>74</td>
<td>74</td>
<td>10</td>
<td>4</td>
<td>162</td>
</tr>
<tr>
<td>Subic Bay</td>
<td>259</td>
<td>163</td>
<td>12</td>
<td>4</td>
<td>438</td>
</tr>
<tr>
<td>Total</td>
<td>980</td>
<td>538</td>
<td>55</td>
<td>34</td>
<td>1607</td>
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Table 2

Sample Members' Mean Age and Years with the PWC System

<table>
<thead>
<tr>
<th>PWC</th>
<th>Workers</th>
<th>Supervisory and Managerial Personnel</th>
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<td></td>
<td>Mean Age in Years</td>
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</tr>
<tr>
<td></td>
<td>San Francisco</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Great Lakes</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Norfolk</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Pearl Harbor</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Yokosuka</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Subic Bay</td>
<td>39</td>
</tr>
<tr>
<td>Mean Years with the PWC System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Francisco</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Great Lakes</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Norfolk</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Pearl Harbor</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Yokosuka</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Subic Bay</td>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>
Survey Questionnaire

Two questionnaire forms were designed: one for the work force (Form A); and the other, for supervisory and managerial personnel (Form B) (See Appendices A and B). In many cases, questionnaire items were taken from scales previously used to measure the constructs of interest. Although the two forms were very similar, items that assessed attitudes toward supervision and control systems were included in Form A; and those that measured interdepartmental relations and various managerial practices, in Form B.

Questionnaire items of interest to this report are described below:

1. Demographics (D) (Items 1-12, A-3 and 1-13, B-3). Items were included to obtain demographic characteristics (e.g., age, ethnic identification, and tenure) of individual sample members.

2. Work Center Effectiveness (WCE) (Items 17-21, A-16 and B-14). Respondents were asked to rate their center as to (a) overall performance, (b) productivity, (c) adaptability, (d) responsiveness, and (e) customer satisfaction.

3. Organizational Climate (OC) (see footnote 2). Items exploring climate dimensions were adapted from those developed by Campbell and Beaty (1971). These items assessed employees' perceptions of such organizational dimensions as climate, competence, flexibility, openness, status, and morale.

4. Specific Job Characteristics (SJC) (see footnote 2). These items were directed at characteristics particularly relevant to the PWC concerns, such as material handling, transportation, and equipment problems.

5. General Job Characteristics (GJC) (see footnote 2). These items, which are similar to those included by Jenkins, Nadler, Lawler, and Cammann (1975) in their Nature of the Job Scale, assessed employees' perceptions of the characteristics of tasks performed as part of their jobs. Such characteristics included variety, skills, autonomy, cooperation, independence, task feedback, meaningfulness, and pace control.

6. Supervisory Influence (SI) (Items 32-51, A-23/24; 53-72, B-26). Respondents were presented with a list of 10 supervisory duties (e.g., scheduling work, hiring or firing employees, and settling disagreements). Workers were asked to indicate how much influence they felt their supervisors did have and should have in specific areas; and supervisors, how much influence they felt they themselves had and should have in these areas.

7. Managerial Practices (MP) (see pages A-18/19, B-16/18, B-21; B-25/26). Respondents were asked to indicate how they felt managerial practices had affected such areas as: (a) flexibility (management's ability to adjust to the demands of the environment), (b) coordination (subsystems working together to facilitate goal attainment), (c) supervisory practices, (d) control system responsiveness (the ability to monitor

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2Since the items assessing any one construct are sometimes scattered within the questionnaire form rather than clustered in a specific part, the questionnaires provided in Appendices A and B are keyed to facilitate identification. For example, items pertaining to demographic characteristics are marked "D," while those pertaining to role stress are marked "RS."
attitudes and to provide feedback and rewards), and (e) communication processes (upward and downward).

8. Job Satisfaction (JS) (Items 20–28, A-11/12; B-9/10. All respondents were asked to indicate how satisfied they were with various job aspects (e.g., pay, security, chances for getting ahead).

9. Role Stress (RS) (Items 29–43, A-12/13 and B-10/11. Fifteen items were selected from the role stress scale developed by Rizzo, House, and Lirtzman (1970). Seven of these items related to role conflict; and eight, to role ambiguity.

10. Work Occurrences; Productivity (Items 1–4, A-13/14, B-11/12. Respondents were asked to respond to four open-ended questions on work occurrences/productivity. The two items of interest in this study asked respondents to list specific work occurrences that made them feel positively or negatively about working.

Procedure

Questionnaires were administered during the summer of 1977 to groups of approximately 5 to 25 workers or supervisory personnel (supervisors and managers) at the six PWC sites included in the study. Workers and supervisory personnel met separately to complete the questionnaires since (1) the two groups received different forms and (2) researchers felt that members of both groups would respond more candidly if they were not in the presence of persons from different levels. At the centers in Japan and the Philippines, questionnaires had been translated into Japanese and the Tagalog dialect respectively. Also, at all sessions held at these centers, translators were present to explain the purpose of the study, to give instructions, and to answer questions.

Analyses

1. Principal components factor analyses, using varimax rotation, were performed on responses to items assessing organizational climate (OC), specific job characteristics (SJC), general job characteristics (GJC), supervisory influence (SI), managerial practices, (MP), job satisfaction (JS), and role stress (RS) to reduce variables to a reasonable number.

2. Responses to items/factors measuring work center effectiveness, management effectiveness, and organizational characteristics were compared to determine whether response patterns differed across PWC locations and/or hierarchical level.

3. Analyses were performed to determine how supervisors' perceptions of managerial practices related to workers' perceptions of organizational effectiveness (as measured by responses to items assessing worker satisfaction, esprit de corps, and work center performance.

4. Multiple regressions were performed to determine which factors were the best predictors of organizational effectiveness, using intrinsic satisfaction or work center performance as the criterion.

5. Responses provided to questions on positive and negative work occurrences were analyzed to identify those that most contributed to positive or negative attitudes toward work.
RESULTS

Perceptions of Work Center Effectiveness

Table 3, which presents the percentages of PWC employees who responded positively ("very good" or "good") to the items measuring work center effectiveness, shows that (1) the majority of respondents, at all centers and at all levels, rated their PWC positively, and (2) supervisory personnel were generally more positive than were workers. At all centers, significantly more supervisors than workers responded positively to items measuring work center performance, productivity, and adaptability; at the three continental U.S. centers only, significantly more supervisors responded positively to the items on customer satisfaction. At the three overseas centers, more workers than supervisors responded positively to the items on customer satisfaction, and at Yokosuka only, more workers responded positively to the items on responsiveness. These differences, however, were not significant.

Although responses of workers and supervisors differed across centers, employees at PWC Great Lakes were consistently more positive than were those at PWC San Francisco. A posteriori tests showed that responses of employees of the two centers differed significantly (p < .05) on all five effectiveness measures.

Perceptions of Management Effectiveness

Management effectiveness was evaluated using responses to five questionnaire items: one relating to organizational climate (OC), two to managerial practices (MP), and two to specific job characteristics (SJC). The percentages of PWC employees who responded negatively to these items are also presented in Table 3. The items themselves are described below.

1. Respondents were asked to indicate, on a 5-point scale ranging from "To a great extent" to "Not at all," how well they felt managers and workers agree on supervisory practices (OC item 9, A-11, B-9). As shown, except for workers at San Francisco and Great Lakes, less than a third of the respondents felt that the two groups do not agree on supervisory practices (i.e., they responded "To a small extent" or "Not at all").

2. Respondents were asked to indicate, on a 5-point scale ranging from "Almost always" to "Never," the degree to which those in authority make prompt decisions or recommendations when problems arise (MP item 12, A-19, B-17). As shown, except for the workers at San Francisco and Great Lakes, less than 17 percent felt that managers fail to make decisions/recommendations promptly (i.e., they responded "Rarely" or "Never").

3. Respondents were asked to indicate, on a 5-point scale ranging from "Strongly Agree" to "Strongly Disagree," how much they agreed that their managers and supervisors set up interrelated jobs and work activities so that work flows smoothly (MP item 8, A-19, B-17). As shown, responses to this item differed considerably across PWCs. For example, 59.6 percent of workers and supervisors combined at San Francisco appeared to have difficulties with coordinating workflow (i.e., they responded "Disagree" or "Strongly disagree"), compared to 7.7 percent of those at Yokosuka. Workers were generally more critical of workflow than were supervisors, except for those at Subic Bay and Pearl Harbor, where this pattern was reversed.

4. Respondents were asked to indicate, on a 5-point scale ranging from "A great deal" to "None," how much time they felt workers spend waiting for material (SJC item...
Table 3
Responses of PWC Employees to Items Measuring Work Center and Management Effectiveness

<table>
<thead>
<tr>
<th>Item</th>
<th>San Francisco</th>
<th>Great Lakes</th>
<th>Norfolk</th>
<th>Pearl Harbor</th>
<th>Yokosuka</th>
<th>Subic Bay</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Supervisors and Managers</td>
<td>Supervisors and Managers</td>
<td>Supervisors and Managers</td>
<td>Supervisors and Managers</td>
<td>Supervisors and Managers</td>
<td>Supervisors and Managers</td>
</tr>
<tr>
<td>Performance</td>
<td>62.4</td>
<td>83.9</td>
<td>83.4</td>
<td>98.0</td>
<td>74.6</td>
<td>94.0</td>
</tr>
<tr>
<td>Productivity</td>
<td>58.3</td>
<td>68.3</td>
<td>76.6</td>
<td>88.0</td>
<td>69.2</td>
<td>87.2</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>52.3</td>
<td>65.0</td>
<td>73.9</td>
<td>82.0</td>
<td>61.1</td>
<td>87.2</td>
</tr>
<tr>
<td>Adaptability</td>
<td>48.7</td>
<td>69.5</td>
<td>75.3</td>
<td>92.0</td>
<td>63.3</td>
<td>89.0</td>
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<tr>
<td>Customer satisfaction (Items 17-21, A-16, B-14)</td>
<td>53.3</td>
<td>57.6</td>
<td>77.1</td>
<td>82.0</td>
<td>64.7</td>
<td>85.1</td>
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Percentages Responding Positively to Items Measuring Work Center Effectiveness

<table>
<thead>
<tr>
<th>Item</th>
<th>San Francisco</th>
<th>Great Lakes</th>
<th>Norfolk</th>
<th>Pearl Harbor</th>
<th>Yokosuka</th>
<th>Subic Bay</th>
</tr>
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<tr>
<td></td>
<td>Supervisors and Managers</td>
<td>Supervisors and Managers</td>
<td>Supervisors and Managers</td>
<td>Supervisors and Managers</td>
<td>Supervisors and Managers</td>
<td>Supervisors and Managers</td>
</tr>
<tr>
<td>Management/workforce agreement on supervisory practice (OIC) (Item 9, A-11, B-9)</td>
<td>38.5</td>
<td>25.9</td>
<td>34.2</td>
<td>21.3</td>
<td>23.2</td>
<td>5.3</td>
</tr>
<tr>
<td>Management's promptness in making decisions (MIP) (Item 12, A-19, B-17)</td>
<td>29.2</td>
<td>6.8</td>
<td>29.0</td>
<td>4.9</td>
<td>16.4</td>
<td>6.4</td>
</tr>
<tr>
<td>Management's success in scheduling work (MIP) (Item 8, A-19, B-17)</td>
<td>41.0</td>
<td>18.6</td>
<td>33.3</td>
<td>16.7</td>
<td>23.7</td>
<td>11.5</td>
</tr>
<tr>
<td>Time workers spend waiting for material (SSC) (Item 26, A-7, 27, B-6)</td>
<td>38.6</td>
<td>39.6</td>
<td>25.9</td>
<td>23.3</td>
<td>40.2</td>
<td>42.7</td>
</tr>
<tr>
<td>Amount of material waste (SSC) (Item 25, A-7, 28, B-6)</td>
<td>45.2</td>
<td>46.9</td>
<td>35.3</td>
<td>17.4</td>
<td>36.2</td>
<td>31.2</td>
</tr>
</tbody>
</table>

Percentages Responding Negatively to Items Measuring Management Effectiveness
Except for those at Yokosuka, the percentages of workers and managers at all PWCs who responded negatively to this item (i.e., they responded "A great deal" or "Quite a bit") were similar.

5. Finally, respondents were asked to indicate, on a 5-point scale ranging from "A great deal" to "Not at all," how much material they see wasted at PWCs (SJC item 25, A-7; 28, B-8). Respondents from all centers, with the exception of Yokosuka, reported that a significant amount of material waste occurs (i.e., they responded "A great deal" or "Quite a bit").

Perceptions of Organizational Character

An indication of employees' perceptions of organizational character was inferred on an a priori basis, based on responses to items designed to measure organizational climate (OC), specific job characteristics (SJC), general job characteristics (GJC), and supervisory influence (SI). Table 4, which summarizes the results of the factor analyses performed on responses to these items, shows that five factors emerged for OC; four, for SJC; five (two for workers only), for GJC; and two, for SI. When analyses of variance (ANOVAs) were performed on these factors to determine whether responses patterns differed across PWC locations and/or levels, significant effects were obtained for six of them: problems (OC), openness (OC), esprit de corps (OC), material efficiency (SJC), reward contingencies (GJC), and supervisory influence in task matters (SI). The F values for these six factors are summarized in Table 5; and their mean factor scores, in Table 6. As shown, workers generally had more negative perceptions of organizational character than did supervisors or managers. They reported significantly more ethnic and theft problems, less openness in the organization, less accurate reward contingencies, and less supervisory influence in task matters than did supervisors and/or managers. Managers reported significantly less esprit de corps than did workers and supervisors.

With respect to location differences, employees at San Francisco and Subic Bay reported more ethnic and theft problems than did those at the other PWCs. Also, employees at the overseas centers reported significantly more esprit de corps and material efficiency than did their counterparts in the U.S., as well as a significantly stronger relationship between performance and rewards.

Relationship Between Organizational Effectiveness and Management Practices

In addition to assessing perceptions of organizational effectiveness and organizational character, it was of interest to determine how supervisors' perceptions of managerial practices (MP) related to measures of organizational effectiveness. As indicated previously, MP items were factor analyzed to reduce the variables to a reasonable number. The factors that emerged from the analysis performed on supervisors' responses to MP items, along with the items comprising them, are presented in Table 7.

In this analysis, the measures of organizational effectiveness were based on workers' responses to items designed to assess worker satisfaction (OS items 20-28, A-11/12; B-9/10), esprit de corps (OC items 10, 13, 15, A-4/5; B-4/5), and work center performance (WCE item 17, A-16, B-14). WCE items on productivity, adaptability, responsibility, and customer satisfaction were not included because they were highly corrected with the item on work center performance.

Means for each center were computed based on workers' responses to the items measuring esprit de corps, satisfaction, and performance. Next, centers with means that were significantly higher than the others were assigned to high-rated groups; and those
### Table 4
Summary of Factor Analyses of Items Used to Measure Perceptions of Organizational Character

<table>
<thead>
<tr>
<th>Factor/Items</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organizational Climate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problems between people of different ethnic backgrounds</td>
<td>.78</td>
<td>-.03</td>
<td>-.09</td>
<td>-.08</td>
<td>-.19</td>
</tr>
<tr>
<td>Ethnic problems hurt center performance</td>
<td>.76</td>
<td>-.06</td>
<td>-.07</td>
<td>-.11</td>
<td>-.19</td>
</tr>
<tr>
<td>Employee theft presents a problem</td>
<td>.50</td>
<td>.08</td>
<td>.07</td>
<td>-.08</td>
<td>.03</td>
</tr>
<tr>
<td>Perceptions of Military Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military management's ability to deal with personnel</td>
<td>-.04</td>
<td>.77</td>
<td>.11</td>
<td>.21</td>
<td>.09</td>
</tr>
<tr>
<td>Military management's financial management skills</td>
<td>.01</td>
<td>.71</td>
<td>.07</td>
<td>.28</td>
<td>.08</td>
</tr>
<tr>
<td>Opinion of civilians toward military</td>
<td>.03</td>
<td>.35</td>
<td>.11</td>
<td>.13</td>
<td>.20</td>
</tr>
<tr>
<td>Necessity of military management for successful operation</td>
<td>.11</td>
<td>.58</td>
<td>.11</td>
<td>.06</td>
<td>.07</td>
</tr>
<tr>
<td>Effect of military management on up-and-down communication</td>
<td>.14</td>
<td>.57</td>
<td>.17</td>
<td>.09</td>
<td>.22</td>
</tr>
<tr>
<td>Opinion of military toward civilians</td>
<td>-.08</td>
<td>.36</td>
<td>.07</td>
<td>.22</td>
<td>.12</td>
</tr>
<tr>
<td>Work Force/Management Agreement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreement on the way people are viewed</td>
<td>.00</td>
<td>.13</td>
<td>.77</td>
<td>.13</td>
<td>.18</td>
</tr>
<tr>
<td>Agreement on the way the world is viewed</td>
<td>.04</td>
<td>.06</td>
<td>.70</td>
<td>.05</td>
<td>.13</td>
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<tr>
<td>Agreement on individual value systems</td>
<td>-.01</td>
<td>.16</td>
<td>.70</td>
<td>.23</td>
<td>.18</td>
</tr>
<tr>
<td>Agreement on problems facing Public Works Centers</td>
<td>-.09</td>
<td>.18</td>
<td>.35</td>
<td>.28</td>
<td>.16</td>
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<tr>
<td>Agreement on supervisory practices</td>
<td>-.03</td>
<td>.20</td>
<td>.34</td>
<td>.35</td>
<td>.16</td>
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<tr>
<td>Openness</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Supervisors willing to hear your problems</td>
<td>-.22</td>
<td>.07</td>
<td>.16</td>
<td>.37</td>
<td>.06</td>
</tr>
<tr>
<td>Workers confident in management's judgment</td>
<td>.06</td>
<td>.23</td>
<td>.30</td>
<td>.35</td>
<td>.29</td>
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<tr>
<td>Cooperation exists between departments</td>
<td>.02</td>
<td>.23</td>
<td>.16</td>
<td>.30</td>
<td>.33</td>
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<tr>
<td>Cooperative atmosphere among workers</td>
<td>-.12</td>
<td>.06</td>
<td>.12</td>
<td>.37</td>
<td>.30</td>
</tr>
<tr>
<td>Rating of job security</td>
<td>-.05</td>
<td>.18</td>
<td>.03</td>
<td>.36</td>
<td>.00</td>
</tr>
<tr>
<td>Individual judgment trusted on work matters</td>
<td>.02</td>
<td>.09</td>
<td>.06</td>
<td>.35</td>
<td>.05</td>
</tr>
<tr>
<td>Effectiveness of center with unexpected problems</td>
<td>-.11</td>
<td>.01</td>
<td>.12</td>
<td>.35</td>
<td>.16</td>
</tr>
<tr>
<td>Esprit de Corps</td>
<td></td>
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<td></td>
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<tr>
<td>Extent of esprit de corps</td>
<td>.03</td>
<td>.21</td>
<td>.29</td>
<td>.28</td>
<td>.55</td>
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<tr>
<td>Efficiency of Public Works Centers</td>
<td>.09</td>
<td>.24</td>
<td>.18</td>
<td>.34</td>
<td>.35</td>
</tr>
<tr>
<td>People goof off if not watched</td>
<td>-.12</td>
<td>.13</td>
<td>.12</td>
<td>.02</td>
<td>.30</td>
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<tr>
<td>Specific Job Characteristics</td>
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<tr>
<td>Material Waste</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Damaged material contributes to waste</td>
<td>.72</td>
<td>-.09</td>
<td>.03</td>
<td>.09</td>
<td>N/A</td>
</tr>
<tr>
<td>Wrong material delivered contributes to waste</td>
<td>.97</td>
<td>-.20</td>
<td>-.01</td>
<td>.09</td>
<td>N/A</td>
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<tr>
<td>Theft contributes to waste</td>
<td>.35</td>
<td>-.23</td>
<td>.19</td>
<td>.16</td>
<td>N/A</td>
</tr>
<tr>
<td>Procedures for turning in material cause waste</td>
<td>.35</td>
<td>-.23</td>
<td>.18</td>
<td>.07</td>
<td>N/A</td>
</tr>
<tr>
<td>Stockpiling of material occurs</td>
<td>.66</td>
<td>.12</td>
<td>.31</td>
<td>.13</td>
<td>N/A</td>
</tr>
<tr>
<td>Material wasted at this Public Works Center</td>
<td>.25</td>
<td>.33</td>
<td>.38</td>
<td>.03</td>
<td>N/A</td>
</tr>
<tr>
<td>Manpower Waste</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workers get the supplies they need</td>
<td>-.10</td>
<td>.39</td>
<td>-.00</td>
<td>-.03</td>
<td>N/A</td>
</tr>
<tr>
<td>Workers are successful at getting material</td>
<td>-.14</td>
<td>.38</td>
<td>.05</td>
<td>.08</td>
<td>N/A</td>
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<tr>
<td>The Material Department gets the material to the job site</td>
<td>-.11</td>
<td>.37</td>
<td>-.03</td>
<td>-.07</td>
<td>N/A</td>
</tr>
<tr>
<td>Equipment is safe</td>
<td>.07</td>
<td>.38</td>
<td>-.11</td>
<td>-.16</td>
<td>N/A</td>
</tr>
<tr>
<td>Vehicles designed to do the job</td>
<td>.03</td>
<td>.27</td>
<td>-.03</td>
<td>-.27</td>
<td>N/A</td>
</tr>
<tr>
<td>Transportation is safe</td>
<td>.04</td>
<td>.36</td>
<td>-.13</td>
<td>-.44</td>
<td>N/A</td>
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<tr>
<td>Time spent in nonproductive activity</td>
<td>.11</td>
<td>.04</td>
<td>.60</td>
<td>.06</td>
<td>N/A</td>
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<tr>
<td>IV. Vehicles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of vehicle breakdown</td>
<td>.10</td>
<td>-.15</td>
<td>.13</td>
<td>-.63</td>
<td>N/A</td>
</tr>
<tr>
<td>How much better vehicles would increase production</td>
<td>.26</td>
<td>.01</td>
<td>-.06</td>
<td>.26</td>
<td>N/A</td>
</tr>
<tr>
<td>Safety of transportation</td>
<td>.04</td>
<td>.46</td>
<td>-.13</td>
<td>-.38</td>
<td>N/A</td>
</tr>
<tr>
<td>(Items 32-34, A-8; 35-37, B-7)</td>
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</tbody>
</table>
Table 4 (Continued)

<table>
<thead>
<tr>
<th>Factor/Items</th>
<th>Factor Loading</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>General Job Characteristics</td>
<td></td>
</tr>
<tr>
<td>I. Pay and Fringe Benefits</td>
<td></td>
</tr>
<tr>
<td>Pay is fair considering others in industry</td>
<td>.68</td>
</tr>
<tr>
<td>Pay is fair considering others in the organization</td>
<td>.23</td>
</tr>
<tr>
<td>(Items 6-7, A-10 and B-8)</td>
<td></td>
</tr>
<tr>
<td>II. Job Challenge</td>
<td></td>
</tr>
<tr>
<td>Job gives an opportunity for independence</td>
<td>.01</td>
</tr>
<tr>
<td>Job is significant and important</td>
<td>-.01</td>
</tr>
<tr>
<td>(Items 14-15, A-6; 18-19, B-5)</td>
<td></td>
</tr>
<tr>
<td>III. Reward Contingencies</td>
<td></td>
</tr>
<tr>
<td>Likelihood that one doing a bad job will be reprimanded</td>
<td>-.03</td>
</tr>
<tr>
<td>Likelihood that one doing a good job will be rewarded</td>
<td>.00</td>
</tr>
<tr>
<td>(Items 4-5, A-10 and B-8)</td>
<td></td>
</tr>
<tr>
<td>IV. Job Importance (Workers Only)</td>
<td></td>
</tr>
<tr>
<td>Job requires high level skills</td>
<td>N/A</td>
</tr>
<tr>
<td>Job gives a feeling of accomplishment</td>
<td>N/A</td>
</tr>
<tr>
<td>Job requires cooperation with others</td>
<td>N/A</td>
</tr>
<tr>
<td>Job requires you to handle surprising situations</td>
<td>N/A</td>
</tr>
<tr>
<td>Job is crucial for many others' work</td>
<td>N/A</td>
</tr>
<tr>
<td>(Items 1, 2, 6, 12, A-5/6)</td>
<td></td>
</tr>
<tr>
<td>V. Time Constraints (Workers Only)</td>
<td></td>
</tr>
<tr>
<td>Frequently asked to do excessive amounts of work</td>
<td>N/A</td>
</tr>
<tr>
<td>Job permits no free time</td>
<td>N/A</td>
</tr>
<tr>
<td>Frequently interrupted for reasons unrelated to work</td>
<td>N/A</td>
</tr>
<tr>
<td>(Items 2, 4, 5, A-5)</td>
<td></td>
</tr>
</tbody>
</table>

Supervisory Influence

I. Supervisory Influence in Task Matters

<table>
<thead>
<tr>
<th>Supervisors say in</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling problems you face</td>
<td>.83</td>
</tr>
<tr>
<td>How you do your work</td>
<td>.77</td>
</tr>
<tr>
<td>Scheduling your work</td>
<td>.72</td>
</tr>
<tr>
<td>What you do in an emergency</td>
<td>.66</td>
</tr>
<tr>
<td>Settling disagreements</td>
<td>.39</td>
</tr>
<tr>
<td>(Items 32-36, 40, 41, A-23, B-24)</td>
<td></td>
</tr>
</tbody>
</table>

II. Supervisory Influence in Personnel Matters

<table>
<thead>
<tr>
<th>Supervisors say in</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting people</td>
<td>.22</td>
</tr>
<tr>
<td>Firing people</td>
<td>.15</td>
</tr>
<tr>
<td>Hiring people</td>
<td>.26</td>
</tr>
<tr>
<td>Pay raises</td>
<td>.10</td>
</tr>
<tr>
<td>(Items 35-38, A-23, B-24)</td>
<td></td>
</tr>
<tr>
<td>Factor</td>
<td>Center Location (C) (df = 5,1589)</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Problems (OC)</td>
<td>33.59**</td>
</tr>
<tr>
<td>Openness (OC)</td>
<td>7.63*</td>
</tr>
<tr>
<td>Esprit de Corps (OC)</td>
<td>20.79**</td>
</tr>
<tr>
<td>Material Efficiency (SJC)</td>
<td>33.59**</td>
</tr>
<tr>
<td>Reward Contingencies (GJC)</td>
<td>12.60**</td>
</tr>
<tr>
<td>Supervisory Influence in Task Matters (SI)</td>
<td>2.04</td>
</tr>
</tbody>
</table>

*p < .01  
**p < .001
Table 6
Mean Factor Scores for Organizational Character Factors in Performed ANOVA

<table>
<thead>
<tr>
<th>Item</th>
<th>Problems (OC)</th>
<th>Openness (OC)</th>
<th>Esprit de Corps (OC)</th>
<th>Material Efficiency (SJC)</th>
<th>Reward Contingencies (GJC)</th>
<th>Supervisory Influence (Tasks) (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By Hierarchical Level&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workers</td>
<td>-.07</td>
<td>.21</td>
<td>-.02</td>
<td>-.05</td>
<td>.08</td>
<td>.32</td>
</tr>
<tr>
<td>Supervisors</td>
<td>.08</td>
<td>-.27</td>
<td>-.01</td>
<td>-.03</td>
<td>-.16</td>
<td>-.46</td>
</tr>
<tr>
<td>Managers (Civilian and Military)</td>
<td>.24</td>
<td>-.64</td>
<td>.26</td>
<td>-.32</td>
<td>-.17</td>
<td>.78</td>
</tr>
<tr>
<td>By Center Location</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Francisco</td>
<td>-.03</td>
<td>.03</td>
<td>.49</td>
<td>.01</td>
<td>.38</td>
<td>.26</td>
</tr>
<tr>
<td>Great Lakes</td>
<td>.34</td>
<td>.10</td>
<td>.09</td>
<td>.10</td>
<td>.02</td>
<td>-.06</td>
</tr>
<tr>
<td>Norfolk</td>
<td>.13</td>
<td>-.36</td>
<td>.09</td>
<td>.10</td>
<td>.10</td>
<td>-.14</td>
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<tr>
<td>Pearl Harbor</td>
<td>.15</td>
<td>-.09</td>
<td>.00</td>
<td>-.02</td>
<td>.13</td>
<td>-.01</td>
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<tr>
<td>Yokosuka</td>
<td>.63</td>
<td>.10</td>
<td>-.48</td>
<td>-.15</td>
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<td>-.05</td>
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<tr>
<td>Subic Bay</td>
<td>-.57</td>
<td>.22</td>
<td>-.25</td>
<td>-.17</td>
<td>-.27</td>
<td>.02</td>
</tr>
</tbody>
</table>

Note. The lower the score, the more the attribute exists.

<sup>a</sup>Values not differing significantly across levels as indicated by Duncan's Multiple Range Tests are underlined.
<table>
<thead>
<tr>
<th>I. Flow of Communication</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suggestions made to top management receive fair evaluation</td>
<td>.69 -.27 .05 .04 .08 .01</td>
</tr>
<tr>
<td>Management is interested in ideas from below</td>
<td>.69 -.15 -.03 .06 .12 -.06</td>
</tr>
<tr>
<td>Communication flows up and down</td>
<td>.66 -.19 .06 .12 .15 -.07</td>
</tr>
<tr>
<td>Management sets up work to flow smoothly</td>
<td>.56 -.12 -.04 .25 .21 -.14</td>
</tr>
<tr>
<td>Supervisors are rewarded for helping subordinates with skills</td>
<td>.32 .02 .09 .11 .12 -.02</td>
</tr>
<tr>
<td>Those in authority make prompt decisions to problems</td>
<td>.32 -.11 -.01 .09 .22 -.12</td>
</tr>
<tr>
<td>Good ideas don't go up because management is not approachable</td>
<td>-.32 .46 .04 .00 -.02 .06</td>
</tr>
<tr>
<td>You are encouraged to participate in decisions that affect you</td>
<td>.38 -.25 -.02 -.09 .13 .03</td>
</tr>
<tr>
<td>(Items 1, 3-7, B-16; 8, 11-12, 16-17, B-17; 20, B-18)</td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>II. Derogation of Workers</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information is withheld from workers</td>
<td>-.23 .60 -.12 -.09 -.16 .16</td>
</tr>
<tr>
<td>Workers are blamed when things go wrong</td>
<td>-.17 .30 -.02 -.10 -.07 .03</td>
</tr>
<tr>
<td>Threats and punishments are used to get people to work</td>
<td>-.05 .46 .12 .09 -.01 .10</td>
</tr>
<tr>
<td>Small matters referred to higher-ups</td>
<td>-.09 .21 .10 -.10 .13 .07</td>
</tr>
<tr>
<td>(Items 3, 4, B-16; 75, B-25, B-26)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. Reporting System</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Necessary information is provided for reporting systems to operate</td>
<td>.14 -.00 .74 .06 .04 -.13</td>
</tr>
<tr>
<td>Reporting systems accurately reflect what is taking place on the job</td>
<td>.27 -.07 .63 .01 .10 .03</td>
</tr>
<tr>
<td>The effect of PMS upon the amount of work</td>
<td>-.03 .15 .57 .01 -.06 -.13</td>
</tr>
<tr>
<td>Pressure is applied to avoid the use of overhead</td>
<td>-.11 .03 .59 .07 .09 .20</td>
</tr>
<tr>
<td>(Items 28-31, B-21)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV. Performance Standards</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards of performance are established in writing</td>
<td>.13 -.06 -.02 .69 .03 .02</td>
</tr>
<tr>
<td>Performance appraisals are based on written standards</td>
<td>.09 -.03 .08 .67 .03 -.06</td>
</tr>
<tr>
<td>Performance standards are established for your job</td>
<td>.13 .11 .02 .32 .30 -.06</td>
</tr>
<tr>
<td>(Items 18-19, B-17; 73, B-25)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>V. Proper Channels Followed</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chain of command is followed in decision-making</td>
<td>.37 -.19 .04 .02 .63 .01</td>
</tr>
<tr>
<td>Going through the proper channels is required</td>
<td>.22 -.02 .05 .14 .36 .07</td>
</tr>
<tr>
<td>(Items 87, 88, B-26)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VI. Supervision Bypassed</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers are given orders by those other than their immediate supervisor</td>
<td>-.08 .27 -.06 -.10 -.07 .71</td>
</tr>
<tr>
<td>Management bypasses levels below them in assigning work</td>
<td>-.36 .33 -.00 -.06 -.21 .42</td>
</tr>
<tr>
<td>(Items 9-10, B-17)</td>
<td></td>
</tr>
</tbody>
</table>
with means that were significantly lower, to low-rated groups. Results are provided in Table 8, which shows that the three overseas PWCs received high ratings on esprit de corps and satisfaction; and the three PWCs in CONUS, low ratings. PWC San Francisco received low ratings on all three variables.

Table 8
Center Ratings on Organization Effectiveness Variables

<table>
<thead>
<tr>
<th>Group</th>
<th>Esprit de Corps</th>
<th>Satisfaction</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Rated</td>
<td>Pearl Harbor</td>
<td>Pearl Harbor</td>
<td>Great Lakes</td>
</tr>
<tr>
<td></td>
<td>Yokosuka</td>
<td>Yokosuka</td>
<td>Norfolk</td>
</tr>
<tr>
<td></td>
<td>Subic Bay</td>
<td>Subic Bay</td>
<td></td>
</tr>
<tr>
<td>Low Rated</td>
<td>San Francisco</td>
<td>San Francisco</td>
<td>San Francisco</td>
</tr>
<tr>
<td></td>
<td>Great Lakes</td>
<td>Great Lakes</td>
<td>Subic Bay</td>
</tr>
<tr>
<td></td>
<td>Norfolk</td>
<td>Norfolk</td>
<td></td>
</tr>
<tr>
<td>Moderately Rated</td>
<td>--</td>
<td>--</td>
<td>Pearl Harbor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yokosuka</td>
</tr>
</tbody>
</table>

To determine how the various managerial practices reported by supervisors related to the workers' perceptions of organizational effectiveness, an ANOVA was performed on each of the high- or low-rated groups, using the factor scores from the MP factors (Table 7) as dependent measures. Results are presented in Table 9, which shows that supervisors at PWCs rated high on esprit de corps and satisfaction (Pearl Harbor, Yokosuka, and Subic Bay) were more likely to report that workers were being derogated, reporting systems and performance standards were accurate, and supervision was often bypassed than were those at PWCs rated low on these variables (San Francisco, Great Lakes, and Norfolk). Also, supervisors at centers rated high on performance (Great Lakes and Norfolk) were less inclined than those at low-rated centers (San Francisco and Subic Bay) to believe that workers were being derogated and that reporting systems were accurate.

These findings are of interest for two reasons. First, employees at centers in CONUS were generally less satisfied and reported less esprit de corps than did those at the overseas centers. Second, the managerial practices that were related to performance were differentially related to satisfaction and esprit de corps. This suggests that changes in managerial practice (e.g., improving the accuracy of reporting systems) could increase worker satisfaction, while having no effect on work center performance.

Predictors of Organizational Effectiveness

Multiple regression analyses were performed to identify those factors that are most predictive of organizational effectiveness. As indicated previously, respondents were asked to rate their work center's performance (Item 17, A-16, B-14) and to indicate how satisfied they were with various aspects of the job (Items 20-28, A-11/12, B-9/10). The factor analysis performed on responses to the satisfaction items resulted in two factors— intrinsic and extrinsic satisfaction (Table 10). In the multiple regression analyses,
### Table 9

Means and F-Ratios for Managerial Practices
Factors by High and Low Rated PWCs

<table>
<thead>
<tr>
<th>MP Factors</th>
<th>Mean Responses of Supervisors at:</th>
<th>F Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Centers Rated High on</td>
<td>(1,624)</td>
</tr>
<tr>
<td></td>
<td>Esprit de Corps and Satisfaction (N = 374)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Centers Rated Low on</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Esprit de Corps and Satisfaction (N = 352)</td>
<td></td>
</tr>
<tr>
<td>Flow of Communication</td>
<td>-.19</td>
<td>-.14</td>
</tr>
<tr>
<td>Derogation of Workers</td>
<td>.26</td>
<td>.49</td>
</tr>
<tr>
<td>Reporting System</td>
<td>-.04</td>
<td>.13</td>
</tr>
<tr>
<td>Performance Standards</td>
<td>-.06</td>
<td>.22</td>
</tr>
<tr>
<td>Proper Channels Followed</td>
<td>-.26</td>
<td>-.16</td>
</tr>
<tr>
<td>Supervision Bypassed</td>
<td>.04</td>
<td>.18</td>
</tr>
</tbody>
</table>

|                                 | Centers Rated High on             |          |
|                                 | Performance (N = 191)              |          |
|                                 | Centers Rated Low on              |          |
|                                 | Performance (N = 240)              |          |
| Flow of Communication           | -.17                              | -.11     | .60      |
| Derogation of Workers           | .46                               | .20      | 13.35**  |
| Reporting System                | .14                               | -.10     | 9.72     |
| Performance Standards           | .14                               | .06      | 1.03     |
| Proper Channels Followed        | -.20                              | -.28     | 1.86     |
| Supervision Bypassed            | .13                               | .24      | 2.40     |

**Notes.**

1. The lower the score, the greater the attribute exists.
2. PWCs with moderate ratings were excluded from the analysis.

* p < .01
** p < .001
Table 10
Summary of Factor Analyses Performed on Satisfaction Items

<table>
<thead>
<tr>
<th>Factor/Itema</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor I</td>
</tr>
<tr>
<td>I. Intrinsic Satisfaction</td>
<td></td>
</tr>
<tr>
<td>With chances to accomplish something</td>
<td>-.74</td>
</tr>
<tr>
<td>With the opportunity to develop skills</td>
<td>-.63</td>
</tr>
<tr>
<td>With recognition received</td>
<td>-.62</td>
</tr>
<tr>
<td>With seeing results of your work</td>
<td>-.53</td>
</tr>
<tr>
<td>With chances for getting ahead</td>
<td>-.49</td>
</tr>
<tr>
<td>With respect received from co-workers</td>
<td>-.42</td>
</tr>
<tr>
<td>II. Extrinsic Satisfaction</td>
<td></td>
</tr>
<tr>
<td>With pay</td>
<td>.07</td>
</tr>
<tr>
<td>With chances for getting ahead</td>
<td>.49</td>
</tr>
<tr>
<td>With job security</td>
<td>.24</td>
</tr>
</tbody>
</table>


intrinsic satisfaction factor scores or the work center performance score were used as the criterion of organizational effectiveness; and the scores for factors measuring organizational climate (OC), specific job characteristics (SJC), general job characteristics (GJC), supervisory influence (SI), and rate stress (RS), as the independent variables. The items comprising the OC, SJC, GJC, and SI factors are presented in Table 4; and those comprising the RS factors, in Table 11.

Results are provided in Table 12, which shows that the sets of factors predicting intrinsic satisfaction were very similar for workers and supervisors. For both groups, the two best predictors were esprit de corps (OC) and role ambiguity (RS). Both sets of factors produced a multiple correlation of .61, accounting for 37 percent of the variance.

When work center performance was used as the criterion of organizational effectiveness, however, a different pattern of predictors emerged. For both workers and supervisors, openness (OC) was the best predictor of performance. Other factors included in both sets were perceptions of problems, manpower waste, and supervisory influence in task matters. Interestingly, however, perceptions of role ambiguity and role conflict were predictive of perceived work center performance for workers but not for supervisors; and esprit de corps, for supervisors but not for workers. The multiple correlations for the sets of predictors for supervisors and for workers were .54 and .57 respectively, accounting for 29 and 32 percent of the variance. In general, the predictors of center performance seem to be task-related, and the predictors of satisfaction, personal-related.

Perceptions of Work Occurrences

A total of 1211 employees provided 3413 responses to the open-ended item concerning positive work occurrences; and a total of 1068 employees, 1989 responses to the item
Table 11
Summary of Factor Analysis on Role Stress Items

<table>
<thead>
<tr>
<th>Factor/Itema</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>I. Role Ambiguity</td>
<td></td>
</tr>
<tr>
<td>Do you know exactly what is expected of you?</td>
<td>.68</td>
</tr>
<tr>
<td>Do you know what your responsibilities are?</td>
<td>.62</td>
</tr>
<tr>
<td>Do you know that you have divided your time properly?</td>
<td>.58</td>
</tr>
<tr>
<td>Are explanations clear about what has to be done?</td>
<td>.57</td>
</tr>
<tr>
<td>Do you know if your work will be acceptable to your boss?</td>
<td>.54</td>
</tr>
<tr>
<td>Do you feel certain about how much authority you have?</td>
<td>.52</td>
</tr>
<tr>
<td>Do you feel certain about how you will be evaluated for a raise or promotion?</td>
<td>.47</td>
</tr>
<tr>
<td>Are you given enough time to do what is expected of you on your job?</td>
<td>.35</td>
</tr>
<tr>
<td>II. Role Conflict</td>
<td></td>
</tr>
<tr>
<td>Do you receive assignments without the manpower to complete them?</td>
<td>-.00</td>
</tr>
<tr>
<td>Do people ask you to do things on your job which get in the way of your work?</td>
<td>-.03</td>
</tr>
<tr>
<td>Do you have to break the rules to get everything done on your job?</td>
<td>-.10</td>
</tr>
<tr>
<td>Do you do things that are likely to be accepted by one person and not accepted by others?</td>
<td>-.02</td>
</tr>
<tr>
<td>Does it seem like you have too much work for one person to do?</td>
<td>.11</td>
</tr>
<tr>
<td>Is it difficult to satisfy everybody at the same time?</td>
<td>-.00</td>
</tr>
</tbody>
</table>

aItems 29-43, A-12/13 and B-10/11.
Table 12
Simple and Multiple Correlations of Factors with
Intrinsic Satisfaction and Work Center Performance by Level

<table>
<thead>
<tr>
<th>Factor</th>
<th>Simple β&lt;sup&gt;a&lt;/sup&gt;</th>
<th>r</th>
<th>Multiple R</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intrinsic Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workers (N = 980)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Esprit de corps (OC)</td>
<td>.27</td>
<td>.40</td>
<td>.40</td>
</tr>
<tr>
<td>Role ambiguity (RS)</td>
<td>.10</td>
<td>.37</td>
<td>.50</td>
</tr>
<tr>
<td>Reward contingencies (GJC)</td>
<td>.11</td>
<td>.38</td>
<td>.53</td>
</tr>
<tr>
<td>Job challenge (GJC)</td>
<td>.17</td>
<td>.30</td>
<td>.56</td>
</tr>
<tr>
<td>Perceptions of military management (OC)</td>
<td>.20</td>
<td>.25</td>
<td>.58</td>
</tr>
<tr>
<td>Work force/management agreement (OC)</td>
<td>.17</td>
<td>.26</td>
<td>.60</td>
</tr>
<tr>
<td>Openness (OC)</td>
<td>.13</td>
<td>.31</td>
<td>.61</td>
</tr>
<tr>
<td>(r&lt;sup&gt;2&lt;/sup&gt; = .37)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors (N = 596)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role ambiguity (RS)</td>
<td>.25</td>
<td>.50</td>
<td>.50</td>
</tr>
<tr>
<td>Esprit de corps (OC)</td>
<td>.20</td>
<td>.34</td>
<td>.55</td>
</tr>
<tr>
<td>Perceptions of military management (OC)</td>
<td>.17</td>
<td>.31</td>
<td>.58</td>
</tr>
<tr>
<td>Job challenge (GJC)</td>
<td>.08</td>
<td>.35</td>
<td>.59</td>
</tr>
<tr>
<td>Work force/management agreement (OC)</td>
<td>.12</td>
<td>.21</td>
<td>.60</td>
</tr>
<tr>
<td>Openness (OC)</td>
<td>.11</td>
<td>.34</td>
<td>.61</td>
</tr>
<tr>
<td>(r&lt;sup&gt;2&lt;/sup&gt; = .37)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Work Center Performance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workers (N = 980)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness (OC)</td>
<td>.21</td>
<td>.41</td>
<td>.41</td>
</tr>
<tr>
<td>Role ambiguity (RS)</td>
<td>.22</td>
<td>.38</td>
<td>.48</td>
</tr>
<tr>
<td>Role conflict (RS)</td>
<td>-.08</td>
<td>-.26</td>
<td>.52</td>
</tr>
<tr>
<td>Manpower waste (SJC)</td>
<td>-.09</td>
<td>-.25</td>
<td>.53</td>
</tr>
<tr>
<td>Supervisory influence in task matters (SI)</td>
<td>.13</td>
<td>.26</td>
<td>.55</td>
</tr>
<tr>
<td>Problems (OC)</td>
<td>-.11</td>
<td>-.17</td>
<td>.56</td>
</tr>
<tr>
<td>(r&lt;sup&gt;2&lt;/sup&gt; = .32)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors (N = 596)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness (OC)</td>
<td>.36</td>
<td>.43</td>
<td>.43</td>
</tr>
<tr>
<td>Manpower waste (SJC)</td>
<td>-.10</td>
<td>-.24</td>
<td>.48</td>
</tr>
<tr>
<td>Problems (OC)</td>
<td>-.13</td>
<td>-.21</td>
<td>.51</td>
</tr>
<tr>
<td>Supervisory influence in task matters (SI)</td>
<td>.13</td>
<td>.28</td>
<td>.52</td>
</tr>
<tr>
<td>Esprit de corps (OC)</td>
<td>.14</td>
<td>.27</td>
<td>.54</td>
</tr>
<tr>
<td>(r&lt;sup&gt;2&lt;/sup&gt; = .29)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>All simple correlations are significant at p < .01.
concerning negative work occurrences. Responses to the two questions were classified separately, following the procedure outlined by Barthol and De Mille (1969). In this procedure, all responses are randomly divided among three classifiers, who independently sort them into as many categories as they think appropriate. The classifiers then (1) pool their separate category schemes to produce a joint scheme and (2) sort the cards into that category scheme. Responses that do not fit are classified as "Miscellaneous." The categorized responses were then analyzed using the GURU computer program (Riedel & Dodson, 1976, 1977), which calculates the overall percentages of responses and of respondents that occur in each category. These data, which are presented in Appendix C, were used as an index of the importance of the categories.

The derived categories for the two items, listed in order of response frequency, are presented in Table 13; and examples of responses falling under the five top-ranked categories for each item, in Table 14. As shown in Table 13, over a third of the respondents reported that feelings of accomplishment contributed to positive feelings toward their work. This category, along with three other of the five top-ranked categories—respect/recognition, work group climate, and cooperation of co-workers—reflect the importance of personal, rather than task-related, concerns.

Job planning and estimating was the category most frequently cited as contributing to negative attitudes toward work. This category, along with two others in the five top-ranked negative response categories—material problems and equipment problems—deal with task-related concerns, while the other two—irresponsibility and co-worker attitudes—reflect interpersonal relations.

Finally, Table 15 lists those response categories that were ranked among the first five positive and the first five negative work occurrences by employees at different levels and locations. As shown, employees generally agreed that a feeling of accomplishment was the most important contributor to positive work attitudes; and job planning and estimating, to negative attitudes. Their opinions varied widely across centers and levels, however, as to other contributors to such attitudes.

DISCUSSION AND CONCLUSIONS

Criteria of Effectiveness

The finding that managers and supervisors generally hold more positive perceptions of work center effectiveness, management effectiveness, and organizational character than do workers may be because employees at higher levels have a greater sense of identification with the organization and feel more responsible for its success than do those at the work force level. As a result, they would be less likely to be critical of organizational functioning. Workers may be more likely to criticize, since they can attribute poor operation to their superiors (e.g., workflow is hampered by poor planning and scheduling). Also, managers and supervisors may have a wider view of organizational functioning than workers. Workers perceive the organization primarily through on-the-job experiences, while managers and supervisors get an overall view of the organization.

Employees at San Francisco, the center receiving the lowest ratings on work center and management effectiveness, reported the most problems with scheduling work and the greatest amount of material waste; while those at Great Lakes, the center receiving the highest ratings, reported the least time spent waiting on material. Employees at both of these centers reported disagreement between workers and managers on supervisory practices and felt decisions were not made promptly. These results suggest that specific job-related concerns affect perceptions of effectiveness more than non-task-related managerial practices.
Table 13
Categories Derived from Responses to Questions Concerning Work Occurrences

<table>
<thead>
<tr>
<th>Response Category</th>
<th>Response Frequency</th>
<th>Percent of Respondents (N = 1211)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Occurrences (Item 1, A-13, B-11)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Feelings of accomplishment</td>
<td>438</td>
<td>36.2</td>
</tr>
<tr>
<td>2. Respect/recognition</td>
<td>218</td>
<td>18.0</td>
</tr>
<tr>
<td>3. Work group climate</td>
<td>205</td>
<td>16.9</td>
</tr>
<tr>
<td>4. Tools/equipment/supplies</td>
<td>198</td>
<td>16.4</td>
</tr>
<tr>
<td>5. Cooperation of co-workers</td>
<td>189</td>
<td>15.6</td>
</tr>
<tr>
<td>6. Pay and fringe benefits</td>
<td>168</td>
<td>13.9</td>
</tr>
<tr>
<td>7. Well-planned time and manpower</td>
<td>160</td>
<td>13.2</td>
</tr>
<tr>
<td>8. Physical work environment</td>
<td>143</td>
<td>11.8</td>
</tr>
<tr>
<td>9. Problem solving/job challenge</td>
<td>141</td>
<td>11.6</td>
</tr>
<tr>
<td>10. Social aspects of the job</td>
<td>138</td>
<td>11.4</td>
</tr>
<tr>
<td>11. Respect and understanding between supervisors and subordinates</td>
<td>123</td>
<td>10.3</td>
</tr>
<tr>
<td>12. Liking the job</td>
<td>109</td>
<td>9.0</td>
</tr>
<tr>
<td>13. Independence</td>
<td>103</td>
<td>8.5</td>
</tr>
<tr>
<td>14. Customer relations</td>
<td>98</td>
<td>8.1</td>
</tr>
<tr>
<td>15. Good supervisor-subordinate relations</td>
<td>87</td>
<td>7.2</td>
</tr>
<tr>
<td>16. Use of skills/enjoy work content</td>
<td>80</td>
<td>6.6</td>
</tr>
<tr>
<td>17. Perceptions of competence between supervisors and subordinates</td>
<td>71</td>
<td>5.9</td>
</tr>
<tr>
<td>18. Job security</td>
<td>64</td>
<td>5.3</td>
</tr>
<tr>
<td>19. Training/skill development</td>
<td>60</td>
<td>5.0</td>
</tr>
<tr>
<td>20. Opportunity for involvement in decision-making</td>
<td>57</td>
<td>4.7</td>
</tr>
<tr>
<td>21. Safety on the job</td>
<td>55</td>
<td>4.5</td>
</tr>
<tr>
<td>22. Clearly defined task specifications</td>
<td>47</td>
<td>3.9</td>
</tr>
<tr>
<td>23. Negative comments</td>
<td>44</td>
<td>3.6</td>
</tr>
<tr>
<td>24. Miscellaneous</td>
<td>42</td>
<td>3.5</td>
</tr>
<tr>
<td>25. Interdepartmental relations</td>
<td>42</td>
<td>3.5</td>
</tr>
<tr>
<td>26. Personal responsibility</td>
<td>38</td>
<td>3.1</td>
</tr>
<tr>
<td>27. Personal factors</td>
<td>36</td>
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<tr>
<td>28. Chance for advancement</td>
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</tr>
<tr>
<td>29. Respect and trust of co-workers</td>
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<td>2.4</td>
</tr>
<tr>
<td>30. Job hours</td>
<td>27</td>
<td>2.2</td>
</tr>
<tr>
<td>31. Training others</td>
<td>27</td>
<td>2.2</td>
</tr>
<tr>
<td>32. Loyalty to and identification with the organization</td>
<td>25</td>
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</tr>
<tr>
<td>33. Open communication between supervisors and subordinates</td>
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</tr>
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<td>34. Competence of co-workers</td>
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<td>36. Trust and confidence of supervisors</td>
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<tr>
<td>37. Health</td>
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</tr>
<tr>
<td>38. EEO</td>
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</tr>
<tr>
<td>39. Having something to do</td>
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<td>Total</td>
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</tr>
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20
Table 13 (Continued)

<table>
<thead>
<tr>
<th>Response Category</th>
<th>Response Frequency</th>
<th>Percent of Respondents (N = 1211)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Occurrences (Item 2, A-14, B-12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Job planning and estimating</td>
<td>236</td>
<td>22.1</td>
</tr>
<tr>
<td>2. Material problems</td>
<td>153</td>
<td>14.3</td>
</tr>
<tr>
<td>3. Irresponsibility</td>
<td>151</td>
<td>14.1</td>
</tr>
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<td>4. Equipment problems</td>
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</tr>
<tr>
<td>5. Co-worker attitudes</td>
<td>109</td>
<td>10.2</td>
</tr>
<tr>
<td>6. Favoritism</td>
<td>108</td>
<td>10.1</td>
</tr>
<tr>
<td>7. Lack of communication</td>
<td>104</td>
<td>9.7</td>
</tr>
<tr>
<td>8. Quality of work life</td>
<td>93</td>
<td>8.7</td>
</tr>
<tr>
<td>9. Abusive, inconsiderate supervisors</td>
<td>86</td>
<td>8.1</td>
</tr>
<tr>
<td>10. Incompetent employees</td>
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</tr>
<tr>
<td>11. Transportation</td>
<td>56</td>
<td>5.2</td>
</tr>
<tr>
<td>12. Physical working conditions</td>
<td>55</td>
<td>5.1</td>
</tr>
<tr>
<td>13. Supervisors not doing their jobs</td>
<td>56</td>
<td>5.1</td>
</tr>
<tr>
<td>14. Supervisors' complaints about employees</td>
<td>49</td>
<td>4.6</td>
</tr>
<tr>
<td>15. Racism</td>
<td>42</td>
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</tr>
<tr>
<td>16. Lack of cooperation</td>
<td>41</td>
<td>3.8</td>
</tr>
<tr>
<td>17. Red tape</td>
<td>40</td>
<td>3.7</td>
</tr>
<tr>
<td>18. Organizational problems</td>
<td>39</td>
<td>3.6</td>
</tr>
<tr>
<td>19. Civilian/military interface</td>
<td>39</td>
<td>3.6</td>
</tr>
<tr>
<td>20. Supervisors' lack of understanding for employees</td>
<td>37</td>
<td>3.5</td>
</tr>
<tr>
<td>21. Customers</td>
<td>36</td>
<td>3.4</td>
</tr>
<tr>
<td>22. General complaints against supervisors</td>
<td>33</td>
<td>3.1</td>
</tr>
<tr>
<td>23. Miscellaneous</td>
<td>30</td>
<td>2.8</td>
</tr>
<tr>
<td>24. Training</td>
<td>29</td>
<td>2.7</td>
</tr>
<tr>
<td>25. Time-job pressure</td>
<td>29</td>
<td>2.7</td>
</tr>
<tr>
<td>26. Lack of recognition</td>
<td>27</td>
<td>2.3</td>
</tr>
<tr>
<td>27. Safety</td>
<td>25</td>
<td>2.3</td>
</tr>
<tr>
<td>28. No problem</td>
<td>22</td>
<td>2.1</td>
</tr>
<tr>
<td>29. Unfair evaluations</td>
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<td>2.0</td>
</tr>
<tr>
<td>30. Chain of command</td>
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<td>1.9</td>
</tr>
<tr>
<td>31. Too much time spent for job</td>
<td>18</td>
<td>1.7</td>
</tr>
<tr>
<td>32. Salary</td>
<td>17</td>
<td>1.6</td>
</tr>
<tr>
<td>33. Rules and regulations</td>
<td>16</td>
<td>1.5</td>
</tr>
<tr>
<td>34. Inspections</td>
<td>15</td>
<td>1.4</td>
</tr>
<tr>
<td>35. Job changes</td>
<td>13</td>
<td>1.2</td>
</tr>
<tr>
<td>36. Interdepartmental problems</td>
<td>10</td>
<td>0.9</td>
</tr>
<tr>
<td>37. Sexism</td>
<td>8</td>
<td>0.7</td>
</tr>
<tr>
<td>38. Personal problems</td>
<td>8</td>
<td>0.7</td>
</tr>
<tr>
<td>39. Theft</td>
<td>6</td>
<td>0.6</td>
</tr>
<tr>
<td>40. Unions</td>
<td>5</td>
<td>0.5</td>
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<tr>
<td>41. Hostility toward researcher</td>
<td>2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Total: 1989
Table 14

Examples of Responses Falling Under the Five Top-Ranked Response Categories

<table>
<thead>
<tr>
<th>Response Category</th>
<th>Examples of Responses</th>
</tr>
</thead>
</table>
| 1. Feelings of Accomplishment | Getting something impossible done on time.  
 Doing a job well.  
 Seeing good results.  
 Knowing my job.  
 Putting accepted beneficial ideas into action.  
 Producing.  
 Knowing I did a good job. |
| 2. Respect/Recognition     | Worker respect.  
 Good word from my boss.  
 Management notices good work I'm doing.  
 Supervisors acknowledge my completed work and are pleased.  
 Being thanked for doing work in a shorter time.  
 Employee rewarded deservedly.  
 Asked to do a "special" job. |
| 3. Work Group Climate      | Getting along with fellow employees.  
 People help one another.  
 High morale in work.  
 Working in a friendly atmosphere.  
 Good communication among workers.  
 Sincere workers' attitudes.  
 Friendly attitude of co-workers. |
| 4. Tools/Equipment/Supplies| Having all necessary tools and equipment.  
 Fast procurement of materials.  
 All materials are ready.  
 Efficient tools and equipment.  
 Complete parts and tools to use.  
 Complete equipment and no equipment breakdown.  
 Ready materials and transportation. |
| 5. Cooperation of Co-workers | Working with people in my trade area.  
 Helping others with advice, tools, work.  
 Group achievement of success.  
 Cooperative co-workers.  
 Work together as a good working team.  
 Working together.  
 Receiving good support from fellow workers. |
<table>
<thead>
<tr>
<th>Response Category</th>
<th>Examples of Responses</th>
</tr>
</thead>
</table>
| **1. Job Planning and Estimating** | Poor planning and wrong materials.  
 Poorly written job orders and plans.  
 Having to wait for supplies to finish a job.  
 P&Es lack knowledge of trades and material.  
 Lack manpower to accomplish the job on time.  
 Last minute changes on job assignments.  
 Being unable to complete first job before starting next. |
 Waiting for material.  
 Lack of material in storeroom.  
 Wrong materials ordered for P&Es.  
 Spend too much time hunting down material that should be stocked.  
 Material not arriving on time.  
 Bad or unsafe material. |
| **3. Irresponsibility**        | Indifference others seem to take on the job.  
 The "don't give a damn" attitude of some fellow workers.  
 Co-worker asking me to perform a job that was assigned to him.  
 Employees who constantly write personal letters and make phone calls on the government's time.  
 When there are two working and two watching.  
 People coming to work late.  
 PWC workers blatantly goofing off. |
| **4. Equipment Problems**      | No spares for commonly used parts and materials in shop.  
 Ratio between equipment and personnel is 1:6.  
 Bad equipment, sometimes completely inoperable.  
 Misuse of equipment.  
 Old equipment frequently breaking down.  
 Waste time waiting during equipment breakdowns.  
 Lack the right equipment and tools to do the job. |
| **5. Co-worker Attitudes**     | Having to do work with someone who does not take pride in his work.  
 Feeling of some that the world owes them a living.  
 Negative attitudes of co-workers.  
 To see someone cast blame unjustly on another.  
 Fellow workers very critical of each other.  
 Unconcerned and unfriendly attitudes of some co-workers.  
 People who are all for themselves. |
### Table 15

**Derived Categories Ranked in the First Five by Employees at Different Levels and Locations**

<table>
<thead>
<tr>
<th>Category</th>
<th>San Francisco</th>
<th>Great Lakes</th>
<th>Norfolk</th>
<th>Pearl Harbor</th>
<th>Yokosuka</th>
<th>Subic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Work Occurrences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feelings of accomplishment</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Work group climate</td>
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<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Tools/equipment/supplies</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Respect/recognition</td>
<td>-</td>
<td>4</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Problem solving/job challenge</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cooperation of co-workers</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pay and fringe benefits</td>
<td>3</td>
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<td>3</td>
<td>-</td>
<td>2</td>
<td>5</td>
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<tr>
<td>Social aspect of the job</td>
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<tr>
<td>Physical work environment</td>
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<tr>
<td>Customer relations</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Well-planned time/manpower</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Respect and understanding between supervisors and subordinates</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Use of skills/enjoy work content</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Liking of job</td>
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<tr>
<td>Opportunity for involvement in decision making</td>
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<tr>
<td>Perceptions of competence between supervisors and subordinates</td>
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<tr>
<td>Negative Work Occurrences</td>
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<tr>
<td>Job planning and estimating</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
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<td>Irresponsibility</td>
<td>-</td>
<td>2</td>
<td>2</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>Co-workers attitudes</td>
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<td>3</td>
<td>-</td>
<td>5</td>
<td>3</td>
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<td>4</td>
<td>-</td>
<td>1</td>
</tr>
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<td>Equipment</td>
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<td>Lack of communication</td>
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<tr>
<td>Supervisor's complaints about employees</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Abusive, inconsiderate supervisors</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lack of cooperation</td>
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<td>3</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Quality of work life</td>
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<tr>
<td>Incompetent employees</td>
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<tr>
<td>Supervisors not doing their jobs</td>
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<td>Favoritism</td>
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<td>-</td>
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<td>Organizational problems</td>
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<td>Time-job pressure</td>
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<tr>
<td>Racism</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Red tape</td>
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<td>Civilian/military interface</td>
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<td>Incompetent supervision</td>
<td>5</td>
<td>-</td>
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<td>-</td>
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</tr>
</tbody>
</table>

Note. W = Workers, S = Supervisors, M = Managers.
On indices of organizational character, employees at San Francisco reported the largest number of ethnic problems; and those at Great Lakes, the least. This is not surprising since the San Francisco center is characterized by an ethnically heterogeneous work force, while its management personnel are primarily Caucasian. At Great Lakes, the work force and management personnel are relatively homogeneous.

Employees overseas generally evaluated their centers more positively on indices of organizational character than did those in the U.S. They reported more esprit de corps, felt there was a stronger relationship between performance and rewards, and thought materials were more readily available than did those in the U.S. These results may be partially explained by the fact that employees overseas had generally worked within their organizations longer than had their U.S. counterparts (see Table 2). Longer service may contribute to greater feelings of commitment to and identification with the organizations, which in turn may lead to more positive perceptions of organizational character and greater satisfaction. Cause-effect relationships between these variables, however, cannot be determined. Alternatively, employees overseas may have different expectations concerning their work that may influence their reported job satisfaction.

Predictors of Organizational Effectiveness

The regression performed using intrinsic satisfaction as the criterion of organizational effectiveness showed that sets of predictors were similar for workers and supervisors. Although workers' and supervisors' job responsibilities differ markedly, role ambiguity and esprit de corps were the two best predictors of satisfaction at both levels. This suggests that well-defined job responsibilities and feelings of esprit de corps among co-workers contribute most to satisfaction for employees at all hierarchical levels.

In contrast, the regression performed to predict work center performance yielded somewhat different sets of predictors for workers and supervisory personnel. While openness of the organization was the best predictor at both levels, perceptions of role ambiguity and role conflict were related to center performance for workers only. It is not surprising that workers who feel unsure about how to do their job and receive conflicting assignments think this affects their on-the-job performance, whereas supervisors do not feel that pressures affecting them affect the performance of their work center. Pressures experienced by supervisors may be due to problems not directly related to work center performance.

Perceptions of Work Occurrences

The categories obtained from responses to the questions on work occurrences indicate that work motivators reflect personal concerns (e.g., feelings of accomplishment, work group climate, and respect/recognition); and demotivators, task-related concerns (e.g., planning and estimating, material and equipment problems). This finding is consistent with those of organizational theorists such as Herzberg, Mausner, & Synderman (1959), who found that factors that cause people to be motivated are not necessarily the same as those that cause them to be dissatisfied.

With respect to center and level comparisons, several interesting patterns emerged. First, feelings of accomplishment was rated as the most important positive category by workers at all U.S. centers, and tools/equipment/supplies was rated as most important by workers at Yokosuka and Subic Bay. Feelings of accomplishment was also rated first by all supervisors and managers at all U.S. centers and Yokosuka, and was considered as second or third in importance by those at Subic Bay. This finding is consistent with those found by Riedel, Sheposh, and Young (1979), in an earlier report in this series. Riedel et
al. found that, although the values held by managerial personnel at U.S. centers were similar to those held by managerial personnel at Yokosuka and Subic Bay, this was not the case for workers. A similar finding was obtained from the ANOVA performed on the organizational character factor scores (Table 6). Results showed that material concerns were far more important for workers at Yokosuka and Subic Bay than they were for any other groups. This convergence of structured and semistructured data provides interpretive strength for the results concerning employee perceptions of organizational issues.

Job planning and estimating was ranked as the most negative work occurrence by supervisors and managers at all centers except for those at Norfolk, who ranked irresponsibility as the most negative. This finding makes sense, since the majority of supervisors and managers work for the Maintenance Department and are responsible for coordinating successful job accomplishment in accordance with plans and estimates drawn up by planners and estimators.

It is also noteworthy that abusive, inconsiderate supervision was listed as an important demotivator for workers and supervisors at Subic Bay and for workers at Yokosuka, but it was not included in the top five demotivators for employees in the U.S. Also, supervisors in Subic Bay listed complaints about employees as an important demotivator. This conflict between workers and supervisors is consistent with the ethnic problems reported in Subic Bay, and suggests that these problems may influence perceived incompatibility between workers and supervisors.

As might be expected, managers, unlike workers and supervisors, did not report job-related problems (material and equipment) as demotivating factors; rather, they cited more general issues such as communication, employee relations, and organizational problems.

**RECOMMENDATIONS**

For improving managerial effectiveness:

1. Timely, accurate information should be provided about job accomplishment.

2. Supervisory training should be provided in job-related communication and in interpersonal relations. Supervisors should be able to provide clear directions and explain policies to workers. Also, since they are responsible for reporting results to management, they should be able to report efficiently. Interpersonal training is important, especially in overseas centers. Workers at both Subic Bay and Yokosuka reported abusive, inconsiderate supervision as an important demotivating factor.

3. Accurate reward contingencies should be established to ensure that good performance is rewarded and that poor performance is reprimanded. Since workers are generally motivated to gain their supervisor's approval, this should improve their perceptions of management's fairness, improve their performance, and reduce role ambiguity.

4. Since effective work planning and estimating was the most important factor demotivating employees, the following steps should be taken to improve management's role in this area:

   a. Provide training for planners and estimators to ensure that they have the knowledge and skills required to do their jobs well.
b. Provide planners and estimators with descriptions of proposed jobs that will enable them to prepare accurate job plans and estimates.

c. Review standards for planning (e.g., the ratio of planning to productive hours) to determine if they are appropriate. Planners and estimators who feel pressured to meet unreasonable standards may produce a poorly written job plan or, where standards can be exceeded, use either unnecessary time to meet the standard or excess hours to meet the standards on another job. Planning schedules should be flexible, since the scope of, for example, a rehabilitation construction job may not be initially apparent.

For improving organizational character:

1. Managers and supervisors should be encouraged to be receptive to workers' concerns. Workers need an avenue for expressing their complaints and suggestions, and they need to feel that their comments are taken seriously. Supervisors should be open to workers' questions, as well as to their time and labor-saving ideas.

2. Workers' racial and ethnic concerns should be discussed during supervisory training. These concerns, if ignored, may impair center effectiveness.
REFERENCES


APPENDIX A

WORKER QUESTIONNAIRE (FORM A)

D  Demographics
OC  Organizational Climate
SJC  Specific Job Characteristics
POS  Perceptions of Supervisors
SI  Supervisory Influence
RS  Role Stress
GJC  General Job Characteristics
GJC(W)  General Job Characteristics (Workers Only)
MP  Managerial Practices
JS  Job Satisfaction
CV  Cultural Values
JV  Job Values
WCE  Work Center Effectiveness
NAVY PUBLIC WORKS CENTER ATTITUDE INVENTORY

FORM A

The purpose of this survey is to obtain information on the attitudes and opinions of Public Works Center employees regarding their work. It is anticipated that the results derived from your responses will be used to improve the quality of working life and productivity in the Navy Public Works Centers.

For this survey to be of value it is necessary that you be as frank and thoughtful as possible in responding to the items in this questionnaire.

Thank you for your cooperation.

PRIVACY ACT STATEMENT

Information concerning your opinions is requested under authority of 57 USC 301 as reflected in OPNAV Notice 5450 of 17 April 1975. This information will be used by NAVPERSRANDCEN to recommend methods of enhancing PWC effectiveness. The information provided will be combined with that provided by other individuals. Individual responses will not be made available to anyone. You are not required to provide this information; your participation is voluntary.

Developed by:

The Navy Personnel Research and Development Center
San Diego, California 92152
Please WRITE your answer in the space provided.

D 1. What is your job title (that which is listed on your position description)?

D 2. What work center are you assigned to? What is the code number?

D 3. How long have you worked in the PWC system?

D 4. How long have you worked at this Center?

D 5. Age

D 6. Are you an American citizen? If no, specify

D 7. How many dependents do you have? (Others who depend on your income for financial support)

D 8. Have you ever served in the U.S. Armed Forces? If yes, which branch? How long did you serve?

CIRCLE the letter next to your answer.

D 9. Sex
   A. Male
   B. Female

D 10. The following is a list of ethnic backgrounds for people who work at PWCs. Please CIRCLE the one that comes closest to describing your ethnic background.
   A. Anglo-Saxon
   B. Black or Afro-American
   C. Mexican
   D. Native American Indian
   E. Filipino
   F. Samoan
   G. Chinese
   H. Japanese
   I. Hawaiian
   J. Mediterranean
   K. Slavic
   L. Other

D 11. What is your education level? (CIRCLE the highest grade completed)
   A. Some elementary school (grades 1 to 7)
   B. Completed elementary school (8 grades)
   C. Some high school (9 to 11 years)
   D. Graduated from high school or General Educational Development (GED)
   E. Some college or technical training beyond high school (1 to 3 years)
   F. Graduated from college or university (B.A., B.S., or other bachelor’s degree)
   G. Some graduate school

D 12. How many more years do you plan to work before leaving or retiring from U.S. Government employment? (CIRCLE your answer)
   A. Less than five years
   B. 6-10
   C. 11-15
   D. 16-20
   E. 21 years or more
The following group of items are general questions about working at this PWC. Please CIRCLE the letter in front of the best answer to each item.

**OC 1.** To what extent do rules and regulations interfere with how well you do your job?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

**OC 7.** To what extent do workers have confidence in management's judgment?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

**OC 2.** To what extent does your job require full use of your skills and abilities?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

**OC 8.** In this Center about the only source of information on important matters is the grapevine (rumor).
A. Strongly agree
B. Agree
C. Not sure
D. Disagree
E. Strongly disagree

**OC 3.** To what extent is your individual judgment trusted on work matters?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

**OC 9.** To what extent is your immediate supervisor willing to listen to your problems?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

**OC 4.** To what extent does cooperation exist between departments at this Center?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

**OC 10.** Do people who work here "goof off" if they are not watched?
A. Almost no one "goofs off"
B. A few "goof off"
C. About half "goof off"
D. A lot "goof off"
E. Almost everyone "goofs off"

**OC 5.** To what extent does a cooperative atmosphere exist among people you work with?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

**OC 11.** To what extent do you have to "toe the line" at this Center?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

**OC 6.** How effective is your work center in overcoming unexpected problems?
A. Exceptionally resourceful
B. More resourceful than most
C. Usually overcomes difficulties
D. Somewhat set back by obstacles
E. Frequently stumped by obstacles

**OC 12.** How do you rate your job security in working for this PWC?
A. Very secure
B. Somewhat secure
C. Don't know
D. Somewhat insecure
E. Very insecure
13. To what extent is there an esprit de corps (workgroup pride) among the employees at this PWC?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

14. Which of the following is most important in getting promoted?

A. Seniority
B. Competence or ability
C. Personal relationships
D. The department you're in
E. Work output

15. How would you describe this PWC?

A. Very efficient
B. Efficient
C. Moderately efficient
D. Not very efficient
E. Totally inefficient

16. This PWC is:

A. Very up-to-date
B. Up-to-date
C. Moderately up-to-date
D. Old fashioned
E. Very old fashioned
GJC 9. The job requires a lot of cooperative work with other people.
   A. Very descriptive of your job
   B. Descriptive of your job
   C. Somewhat descriptive
   D. A little descriptive of your job
   E. Not at all descriptive of your job

GJC 10. The job can be done adequately by a person working alone — without talking or checking with other people.
   A. Very descriptive of your job
   B. Descriptive of your job
   C. Somewhat descriptive
   D. A little descriptive of your job
   E. Not at all descriptive of your job

GJC 11. The supervisors on this job hardly ever give me any “feedback” about how well I am doing in my work.
   A. Very descriptive of your job
   B. Descriptive of your job
   C. Somewhat descriptive
   D. A little descriptive of your job
   E. Not at all descriptive of your job

GJC 12. This job is one where a lot of other people can be affected by how well the work gets done.
   A. Very descriptive of your job
   B. Descriptive of your job
   C. Somewhat descriptive
   D. A little descriptive of your job
   E. Not at all descriptive of your job

GJC 13. The job denies me any chance to use my personal initiative or judgment in carrying out the work.
   A. Very descriptive of your job
   B. Descriptive of your job
   C. Somewhat descriptive
   D. A little descriptive of your job
   E. Not at all descriptive of your job

GJC 14. The job gives me considerable opportunity for independence and freedom in how I do the work.
   A. Very descriptive of your job
   B. Descriptive of your job
   C. Somewhat descriptive
   D. A little descriptive of your job
   E. Not at all descriptive of your job

GJC 15. The job itself is significant and important in the broader scheme of things.
   A. Very descriptive of your job
   B. Descriptive of your job
   C. Somewhat descriptive
   D. A little descriptive of your job
   E. Not at all descriptive of your job

16. To what extent are you satisfied with this job?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

17. To what extent do you feel a very high degree of personal responsibility for the work you do on this job?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

18. To what extent do you personally care how well the job gets done.
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

19. To what extent do differences in language hinder getting the job done?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

20. To what extent are you hindered from doing a good job by poor equipment or lack of equipment?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
SJC 21. How safe is the equipment which is supplied to you?
A. Very safe
B. Quite safe
C. Moderately safe
D. Unsafe
E. Very unsafe
F. Not sure

SJC 22. In general you get the material and supplies you need to do the job.
A. Strongly agree
B. Agree
C. Not sure
D. Disagree
E. Strongly disagree

SJC 23. To what extent do people in the Material Department get the proper material to the job site?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all
F. Not sure

SJC 24. How much time do you spend on the job waiting for material to arrive?
A. A great deal
B. Quite a bit
C. Some
D. Little
E. None
F. Not sure

SJC 25. How much material do you see being wasted at PWC?
A. A great deal
B. Quite a bit
C. Some
D. Little
E. None
F. Not sure

SJC 26. To what extent does difficulty in turning materials back in contribute to material waste in this PWC?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all
F. Not sure

SJC 27. To what extent does damaged material delivered contribute to material waste in this PWC?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all
F. Not sure

SJC 28. To what extent does having the wrong material delivered contribute to material waste in this PWC?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all
F. Not sure

SJC 29. To what extent does theft contribute to material waste in this PWC?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all
F. Not sure

SJC 30. To what extent does stockpiling of material (goldpiling) occur in this PWC?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all
F. Not sure

SJC 31. How successful are you in getting material you need in a squeeze or emergency?
A. Very successful
B. Quite successful
C. Somewhat successful
D. Not very successful
E. Not at all successful
F. Not sure

SJC 32. Rate the transportation you use on its safety.
A. Very safe
B. Reasonably safe
C. Not sure
D. Slightly unsafe
E. Very unsafe
SJC 33. How frequently do you experience vehicle breakdown?
   A. Very frequently
   B. Frequently
   C. Occasionally
   D. Seldom
   E. Almost never
   F. Not sure

SJC 34. How much would better vehicles increase PWC productivity?
   A. A great deal
   B. Quite a bit
   C. Some
   D. Little
   E. There would be no increase
   F. Not sure

SJC 35. The vehicles provided are designed and/or equipped to do the job.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

SJC 36. In general, when PWC employees use PWC vehicles they are treated with care.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

SJC 37. How frequently are there times when there isn't enough work to do?
   A. Very frequently
   B. Frequently
   C. Occasionally
   D. Seldom
   E. Almost never
   F. Not sure

SJC 38. How frequently are there more workers than needed to accomplish the work scheduled?
   A. Very frequently
   B. Frequently
   C. Occasionally
   D. Seldom
   E. Almost never
   F. Not sure

SJC 39. How frequently do you find that there is more work scheduled than can be accomplished as scheduled?
   A. Very frequently
   B. Frequently
   C. Occasionally
   D. Seldom
   E. Almost never
   F. Not sure

SJC 40. Our work center's workload is fairly constant from day to day.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

SJC 41. In general, how much time do you see being spent in nonproductive activity in the PWC?
   A. A great deal
   B. Quite a bit
   C. Some
   D. Little
   E. Very little
   F. Not sure

SJC 42. In general, which area do you see as causing the most problems for work getting done in your work center?
   A. Material
   B. Equipment
   C. Transportation
   D. Do not know

SJC 43. How much more do you think most people in your work center could produce if they wanted to?
   A. A great deal more
   B. Quite a bit more
   C. Moderately more
   D. A little more
   E. People are producing as much as possible

SJC 44. If you think that there is time wasted at this PWC, list the major reasons you think cause this waste.

A-8
The following questions are about your supervisor. Please CIRCLE the letter in front of the best answer to each question.

1. To what extent does your supervisor encourage you to participate in important decisions?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

2. To what extent does your supervisor stand up for you or support you?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

3. To what extent does your supervisor see to it that you know what has to be done?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

4. To what extent does your supervisor help you solve work-related problems?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

5. To what extent does your supervisor demand that you do high quality work?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

6. To what extent does your supervisor do a good job of judging your performance?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

7. To what extent is your supervisor competent?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

8. To what extent is your supervisor biased on the basis of race?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

9. To what extent does your supervisor show favoritism?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

10. How well does your supervisor know the technical parts of his or her job?
    A. Knows them very well
    B. Knows them quite well
    C. Knows them somewhat
    D. Doesn't know much
    E. Knows nothing

11. How well does your supervisor know the administrative parts of his or her job?
    A. Knows them very well
    B. Knows them quite well
    C. Knows them somewhat
    D. Doesn't know much
    E. Knows nothing

12. To what extent does your supervisor help you develop your skills?
    A. To a very great extent
    B. To a great extent
    C. To some extent
    D. To a small extent
    E. Not at all
13. To what extent does your supervisor praise good work?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

14. To what extent does your supervisor keep poor performers from getting rewarded?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

The following group of questions deal with the personal feelings you have about your day-to-day work. Please CIRCLE the letter in front of the best answer to each item.

1. How important is your job to you compared with other interests in your life?
   A. My job is much more important than my other interests.
   B. My job is somewhat more important than my other interests.
   C. My job is somewhat less important than my other interests.
   D. My job is much less important than my other interests.

2. If I had the chance, I would take a different job within this organization.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

3. I would like to look for a new job in the next year.
   A. Definitely
   B. I might
   C. Not sure
   D. I doubt it
   E. Definitely not

4. How likely is it that a person who does a good job will be rewarded?
   A. Extremely likely
   B. Likely
   C. Somewhat likely
   D. Unlikely
   E. Extremely unlikely

5. How likely is it that a person who does a poor job will be reprimanded?
   A. Extremely likely
   B. Likely
   C. Somewhat likely
   D. Unlikely
   E. Extremely unlikely

6. My pay is fair considering what other people in this organization are paid.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

7. My pay is fair considering what people in similar jobs in private industry are making.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

8. The fringe benefits for working at a PWC are better than one would get in private industry.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree
To what extent do management and the local workforce agree on the following issues:

<table>
<thead>
<tr>
<th>#</th>
<th>Issue</th>
<th>To a very great extent (A)</th>
<th>To a great extent (B)</th>
<th>To some extent (C)</th>
<th>To a small extent (D)</th>
<th>Not at all (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Supervisory practices</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>10</td>
<td>Problems facing this PWC</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>11</td>
<td>Individual value systems</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>12</td>
<td>The way the world is viewed</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>13</td>
<td>The way people are viewed</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

From the following list, please WRITE in the spaces provided the three MOST IMPORTANT and three LEAST IMPORTANT items in terms of their importance to you on your job.

**Most Important**

14. ____________________________________________________________
15. ____________________________________________________________
16. ____________________________________________________________

**Least Important**

17. ____________________________________________________________
18. ____________________________________________________________
19. ____________________________________________________________

20. How satisfied are you with the Intrinsic respect you receive from the people you work with?
    A. Very satisfied
    B. Satisfied
    C. Neither satisfied nor dissatisfied
    D. Dissatisfied
    E. Very dissatisfied

21. How satisfied are you with the Intrinsic chances you have to accomplish something worthwhile?
    A. Very satisfied
    B. Satisfied
    C. Neither satisfied nor dissatisfied
    D. Dissatisfied
    E. Very dissatisfied

22. How satisfied are you with the amount of pay you get?
    A. Very satisfied
    B. Satisfied
    C. Neither satisfied nor dissatisfied
    D. Dissatisfied
    E. Very dissatisfied

23. How satisfied are you with your Intrinsic chances for getting ahead in this PWC?
    A. Very satisfied
    B. Satisfied
    C. Neither satisfied nor dissatisfied
    D. Dissatisfied
    E. Very dissatisfied

24. How satisfied are you with the amount of job security you have?
    A. Very satisfied
    B. Satisfied
    C. Neither satisfied nor dissatisfied
    D. Dissatisfied
    E. Very dissatisfied
JS 25. How satisfied are you with the opportunity to develop your skills and abilities?

A. Very satisfied
B. Satisfied
C. Neither satisfied nor dissatisfied
D. Dissatisfied
E. Very dissatisfied

JS 26. How satisfied are you with recognition for doing the job?

A. Very satisfied
B. Satisfied
C. Neither satisfied nor dissatisfied
D. Dissatisfied
E. Very dissatisfied

JS 27. How satisfied are you with seeing the results from your work?

A. Very satisfied
B. Satisfied
C. Neither satisfied nor dissatisfied
D. Dissatisfied
E. Very dissatisfied

JS 28. How satisfied are you with having a job you don’t take home?

A. Very satisfied
B. Satisfied
C. Neither satisfied nor dissatisfied
D. Dissatisfied
E. Very dissatisfied
F. I do take work home

RS 29. To what extent do you work under conflicting policies and guidelines?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 30. To what extent do you receive assignments without the manpower to complete them?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 31. To what extent do you do things that are likely to be accepted by one person and not accepted by others?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 32. To what extent do you know if your work will be acceptable to your boss?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 33. To what extent is it difficult to satisfy everybody at the same time?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 34. To what extent do you have to break rules to get everything done on your job?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 35. To what extent do people ask you to do things on your job which get in the way of your work?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 36. To what extent do you feel certain about how much authority you have?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all
<table>
<thead>
<tr>
<th>RS 37. To what extent do you know what your responsibilities are?</th>
<th>RS 41. To what extent are explanations clear about what has to be done?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. To a very great extent</td>
<td>A. To a very great extent</td>
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<tr>
<td>B. To a great extent</td>
<td>B. To a great extent</td>
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<tr>
<td>C. To some extent</td>
<td>C. To some extent</td>
</tr>
<tr>
<td>D. To a small extent</td>
<td>D. To a small extent</td>
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<tr>
<td>E. Not at all</td>
<td>E. Not at all</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RS 38. To what extent do you feel certain about how you will be evaluated for a raise or promotion?</th>
<th>RS 42. To what extent are you given enough time to do what is expected of you on your job?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. To a very great extent</td>
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<tr>
<td>B. To a great extent</td>
<td>B. To a great extent</td>
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<tr>
<td>C. To some extent</td>
<td>C. To some extent</td>
</tr>
<tr>
<td>D. To a small extent</td>
<td>D. To a small extent</td>
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<tr>
<td>E. Not at all</td>
<td>E. Not at all</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RS 39. To what extent do you know exactly what is expected of you?</th>
<th>RS 43. To what extent does it seem like you have too much work for one person to do?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. To a very great extent</td>
<td>A. To a very great extent</td>
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<tr>
<td>B. To a great extent</td>
<td>B. To a great extent</td>
</tr>
<tr>
<td>C. To some extent</td>
<td>C. To some extent</td>
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<tr>
<td>D. To a small extent</td>
<td>D. To a small extent</td>
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<tr>
<td>E. Not at all</td>
<td>E. Not at all</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RS 40. To what extent do you know that you have divided your time properly?</th>
<th>RS 44. To what extent are the performance standards on your job too high?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. To a very great extent</td>
<td>A. To a very great extent</td>
</tr>
<tr>
<td>B. To a great extent</td>
<td>B. To a great extent</td>
</tr>
<tr>
<td>C. To some extent</td>
<td>C. To some extent</td>
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<tr>
<td>D. To a small extent</td>
<td>D. To a small extent</td>
</tr>
<tr>
<td>E. Not at all</td>
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</tbody>
</table>

Each of the next four questions is followed by five answer spaces. Please WRITE your answers in the spaces provided for each question.

1. What are some of the specific things which occur at work that make you feel good about working?

A. __________________________________________

B. __________________________________________

C. __________________________________________

D. __________________________________________

E. __________________________________________
2. What specific kinds of things occur at work that turn you off, frustrate you or make you angry?
   A. __________________________
   B. __________________________
   C. __________________________
   D. __________________________
   E. __________________________

3. If you had your way and could do anything, what things would you do to make your work life better?
   A. __________________________
   B. __________________________
   C. __________________________
   D. __________________________
   E. __________________________

4. If you had your way and could do anything, what things would you do to improve the productivity of this PWC?
   A. __________________________
   B. __________________________
   C. __________________________
   D. __________________________
   E. __________________________
Please CIRCLE the letter in front of the best answer for each item.

1. Overall, what effect do unions have on the PWC operation?
   A. Very positive
   B. Positive
   C. No effect
   D. Negative
   E. Very negative
   F. No opinion

2. To what extent does employee theft present a problem at your PWC?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

3. To what extent do you think there are problems between people of different ethnic backgrounds in your work center?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

4. To what extent do problems between people of different ethnic backgrounds hurt your work center's performance?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

5. In what way do you think "command interest" jobs affect productivity at this PWC?
   A. Greatly increase productivity
   B. Slightly increase productivity
   C. Do not affect productivity
   D. Slightly decrease productivity
   E. Greatly decrease productivity
   F. Do not know

6. To what extent is the "command interest" category abused?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Do not know

7. To what extent does work on "command interest" jobs interfere with everyday work accomplishments?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Do not know

8. What effect does military turnover have on the effectiveness of this PWC?
   A. Very positive
   B. Positive
   C. No effect either way
   D. Negative
   E. Very negative
   F. Do not know

9. What effect does military management have on vertical communications both up and down?
   A. Communications are improved greatly
   B. Communications are improved to some extent
   C. There is no effect on communications
   D. Communications are hampered slightly
   E. Communications are hampered greatly
   F. Do not know

10. In general, the opinion of military toward civilians is:
    A. Very high
    B. High
    C. Neutral
    D. Low
    E. Very low
OC 11. In general, the opinion of civilians toward the military is:
A. Very high
B. High
C. Neutral
D. Low
E. Very low

OC 12. Overall, rate military management in terms of their ability to deal with personnel matters.
A. Very good
B. Good
C. Fair
D. Poor
E. Very poor
F. No opinion

OC 13. Overall, rate the military management in terms of their financial management skills.
A. Very good
B. Good
C. Fair
D. Poor
E. Very poor
F. No opinion

OC 14. To what extent do you see military management as being necessary for the successful operation of this PWC?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

OC 15. In general, most people who work for this PWC like to work overtime.
A. Almost always
B. Often
C. Sometimes
D. Rarely
E. Never

OC 16. In general, overtime is distributed fairly among employees.
A. Almost always
B. Often
C. Sometimes
D. Rarely
E. Never

WCE 17. In general, rate your work center in terms of how well it does its job.
A. Very good
B. Good
C. Fair
D. Poor
E. Very poor

Rate your work center in terms of how well it does in the following areas: (CIRCLE one letter on each line for your answer.)

18. Productivity—amount and quality of work accomplished for money and time spent.
   A  B  C  D  E

19. Responsiveness—ability of PWC to start and complete work quickly.
   A  B  C  D  E

20. Adaptability—ability to meet changing conditions and demands.
   A  B  C  D  E

21. Customer Satisfaction—extent to which customers are satisfied with PWC performance.
   A  B  C  D  E

A-16
The following group of items deal with your feelings about life in general. Please CIRCLE the letter in front of the best answer for each item.

1. Obedience and respect for authority.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

2. Working hard to improve the prestige and status of one's group.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

3. Getting recognition for one's achievements.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

4. Prestige. To become well-known to obtain recognition, awards or high social status.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

5. Wealth. To earn a great deal of money.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

7. Self-realization. To get the most from one's personal development.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

8. Duty. To dedicate oneself totally to ideals and principles.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

9. Pleasure. To enjoy life, to be happy and content, to have the good things in life.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important
From the following list, please write in the space provided the four MOST IMPORTANT and four LEAST IMPORTANT things for a person to be.

Most Important

10. A. Ambitious
    B. Open-minded
    C. Capable
    D. Forgiving
    E. Helpful
    F. Cheerful
    G. Clean
    H. Courageous
    I. Honest
    J. Independent
    K. Self-disciplined
    L. Intelligent
    M. Loving
    N. Obedient
    O. Responsible
    P. Polite

Least Important

14. F. Cheerful
    G. Clean
    12. H. Courageous
    13. I. Honest
    14. J. Independent
    15. K. Self-disciplined
    16. L. Intelligent
    17. M. Loving
    18. N. Obedient
    19. O. Responsible
    20. P. Polite

Please CIRCLE the letter in front of the best answer to each question.

1. Are you encouraged to participate in decisions that affect you?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

2. Some people are given special privileges.
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

3. When things go wrong it is the workers who are usually blamed.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

4. Information is withheld from workers, even though it is readily available and could help.
   A. Almost always
   B. Often
   C. Sometimes
   D. Rarely
   E. Never

5. Good ideas don’t get communicated upward because top management is not very approachable.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

6. How frequently are suggestions made to top management?
   A. Very frequently
   B. Frequently
   C. Occasionally
   D. Seldom
   E. Almost never

7. Suggestions made to top management receive fair evaluation.
   A. Almost always
   B. Often
   C. Sometimes
   D. Rarely
   E. Never
8. Management and supervisors set up interrelated jobs and work activities so that the work flows smoothly.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

9. Workers are given direct orders by someone other than immediate supervisors.
   A. Almost always
   B. Often
   C. Sometimes
   D. Rarely
   E. Never

10. Management bypasses levels below them in assigning work.
    A. Almost always
    B. Often
    C. Sometimes
    D. Rarely
    E. Never

11. Top management is interested in ideas and suggestions from people at different levels in the organization.
    A. Almost always
    B. Often
    C. Sometimes
    D. Rarely
    E. Never

12. When problems are encountered, those in authority make prompt decisions or recommendations.
    A. Almost always
    B. Often
    C. Sometimes
    D. Rarely
    E. Never

13. In general, how would you rate the customer’s understanding of how the PWC operates?
    A. Very good
    B. Good
    C. Fair
    D. Poor
    E. Very poor
    F. Do not know

14. How often do job changes requested by customers cause unnecessary hardship on the efficiency of PWC?
    A. Almost always
    B. Often
    C. Sometimes
    D. Rarely
    E. Never
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent could job changes initiated by the customer be avoided if:</td>
<td>(CIRCLE one letter on each line for your answer.)</td>
<td></td>
</tr>
<tr>
<td>15. Customers provided a better description of the work.</td>
<td>A  B  C  D  E  F</td>
<td></td>
</tr>
<tr>
<td>16. Customers didn’t change their minds so often.</td>
<td>A  B  C  D  E  F</td>
<td></td>
</tr>
<tr>
<td>17. Management would teach customers about the PWC operation.</td>
<td>A  B  C  D  E  F</td>
<td></td>
</tr>
<tr>
<td>18. There was better communication between customers and planning.</td>
<td>A  B  C  D  E  F</td>
<td></td>
</tr>
<tr>
<td>19. To what extent is the quality of work performed by contractors</td>
<td>A. To a very great extent</td>
<td></td>
</tr>
<tr>
<td>better than that of PWC?</td>
<td>B. To a great extent</td>
<td></td>
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<td></td>
<td>C. To some extent</td>
<td></td>
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<td></td>
<td>D. To a small extent</td>
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<td></td>
<td>E. Not at all</td>
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<td></td>
<td>F. No opinion</td>
<td></td>
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<tr>
<td>20. PWC ends up having to redo much of a contractor’s job.</td>
<td>A. Almost always</td>
<td></td>
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<td></td>
<td>B. Often</td>
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<td></td>
<td>C. Sometimes</td>
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<td></td>
<td>D. Rarely</td>
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<td></td>
<td>E. Never</td>
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<tr>
<td></td>
<td>F. Do not know</td>
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<tr>
<td>21. To what extent are contractors evaluated on the same standards of</td>
<td>A. To a very great extent</td>
<td></td>
</tr>
<tr>
<td>performance as PWCs?</td>
<td>B. To a great extent</td>
<td></td>
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<td></td>
<td>C. To some extent</td>
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<td></td>
<td>D. To a small extent</td>
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<td></td>
<td>E. Not at all</td>
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<tr>
<td></td>
<td>F. Do not know</td>
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</tbody>
</table>
To what extent are the following codes (departments) helpful to you in getting your work done? (CIRCLE the letter on each line for your answer.)

1. 110-Activity Civil Engineer Office  
   | Great deal (A) | Good deal (B) | Somewhat involved (C) | Not at all in my work (D) | Not involved in my work (E) |
   | A | B | C | D | E |

2. 130-Management Office  
   | Great deal (A) | Good deal (B) | Somewhat involved (C) | Not at all in my work (D) | Not involved in my work (E) |
   | A | B | C | D | E |

3. 140-Civilian Personnel Office  
   | Great deal (A) | Good deal (B) | Somewhat involved (C) | Not at all in my work (D) | Not involved in my work (E) |
   | A | B | C | D | E |

4. 150-Comptroller Office  
   | Great deal (A) | Good deal (B) | Somewhat involved (C) | Not at all in my work (D) | Not involved in my work (E) |
   | A | B | C | D | E |

5. 160-Housing Office  
   | Great deal (A) | Good deal (B) | Somewhat involved (C) | Not at all in my work (D) | Not involved in my work (E) |
   | A | B | C | D | E |

6. 200-Engineering Department  
   | Great deal (A) | Good deal (B) | Somewhat involved (C) | Not at all in my work (D) | Not involved in my work (E) |
   | A | B | C | D | E |

7. 300-Maintenance Control Department  
   | Great deal (A) | Good deal (B) | Somewhat involved (C) | Not at all in my work (D) | Not involved in my work (E) |
   | A | B | C | D | E |

8. 500-Maintenance Department  
   | Great deal (A) | Good deal (B) | Somewhat involved (C) | Not at all in my work (D) | Not involved in my work (E) |
   | A | B | C | D | E |

9. 600-Utilities Department  
   | Great deal (A) | Good deal (B) | Somewhat involved (C) | Not at all in my work (D) | Not involved in my work (E) |
   | A | B | C | D | E |

10. 700-Transportation Department  
    | Great deal (A) | Good deal (B) | Somewhat involved (C) | Not at all in my work (D) | Not involved in my work (E) |
    | A | B | C | D | E |

11. 800-Material Department  
    | Great deal (A) | Good deal (B) | Somewhat involved (C) | Not at all in my work (D) | Not involved in my work (E) |
    | A | B | C | D | E |

12. If you have difficulty working with another work center, name it and list the reasons.

13. How familiar are you with PMS?  
    A. Very familiar  
    B. Familiar  
    C. Somewhat familiar  
    D. Not very familiar  
    E. Never heard of it

14. The actual time charge to a job reflects the actual hours worked on the job.  
    A. Almost always  
    B. Often  
    C. Sometimes  
    D. Rarely  
    E. Almost never

15. How often do P&Es plan and estimate jobs within their own trade?  
    A. Very frequently  
    B. Frequently  
    C. Not sure  
    D. Seldom  
    E. Almost never

16. To what extent do P&Es know about the latest developments in their field?  
    A. To a very great extent  
    B. To a great extent  
    C. To some extent  
    D. To a small extent  
    E. Not at all  
    F. Do not know

A-21
17. In general, P&Es are trained to do the work required of them.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

18. Is the ratio of P&E hours to production hours set by NAVFAC realistic?
   A. Yes
   B. No
   C. Not sure

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the ratio of P&amp;E hours to production hours set by NAVFAC realistic?</td>
<td>A. Yes</td>
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<td>B. No</td>
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<td></td>
<td>C. Not sure</td>
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</tbody>
</table>

19. A customer changing his mind
   A

20. Poor planning and estimating
   A

21. Poor job description from ACE
   A

22. A fact of life due to the nature of rehabilitative construction work
   A

23. Poor quality of work
   A

24. Where do you think the job plan should be developed?
   A. In Planning and Estimating
   B. In the Maintenance Department
   C. Not sure

25. How often should a P&E go to the job site and see what needs to be done?
   A. Very frequently
   B. Frequently
   C. Not sure
   D. Seldom
   E. Almost never

26. How often do P&Es visit the job site?
   A. Very frequently
   B. Frequently
   C. Not sure
   D. Seldom
   E. Almost never

27. To what extent are the job plans helpful in getting the work done?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Do not know

28. The P&Es do all they can to visit job sites but are too overworked and can't get to as many as they should.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

To a very great extent

To a great extent

To some extent

Not at all

Don't know

(CIRCLE one letter on each line for your answer.)
29. To what extent are the job schedules that are set up, meet the work required?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Not sure

30. Should the schedulers be located in the shops or centrally located?
   A. In the shops
   B. Centrally located
   C. No opinion

31. When people from the different departments work together to complete a job, the work activities are well planned.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

How much does your supervisor have to say in making decisions about:

32. How you do your work
33. Scheduling your work activities
34. How to handle problems you face in your work
35. Hiring of people
36. Pay raises
37. Firing people
38. Promoting people
39. When people take time off
40. What you should do when something unexpected happens
41. Settling disagreements

(CIRCLE one letter on each line for your answer.)

A great deal (A)
Quite a lot (B)
Something (C)
Little (D)
Nothing (E)
A great extent (A)  Quite a lot (B)  Some (C)  Little (D)  Nothing (E)

<table>
<thead>
<tr>
<th>Question</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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</thead>
<tbody>
<tr>
<td>42. How you do your work</td>
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<tr>
<td>43. Scheduling your work activities</td>
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<td>44. How to handle problems you face in your work</td>
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<td>45. Hiring people</td>
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<td>46. Pay raises</td>
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<td>47. Firing people</td>
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<td>48. Promoting people</td>
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<td>49. When people take time off</td>
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<td>50. What you should do when something unexpected happens</td>
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<tr>
<td>51. Settling disagreements</td>
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<td>52. How often does your immediate supervisor check to see how you are doing your job?</td>
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<td>53. How much does your supervisor know about your on-the-job performance?</td>
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<tr>
<td>54. To what extent are performance standards established for your job?</td>
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<td>55. To what extent do performance ratings measure how well you do your job?</td>
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<td>56. In this PWC, to what extent are threats and punishments used as a way to get people to do better work?</td>
<td></td>
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<tr>
<td>57. To what extent do workers participate in making important decisions related to their work?</td>
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</tbody>
</table>

POS 52.

**Supervisory Competence**

A. Very often
B. Often
C. Occasionally
D. Seldom
E. Almost never

POS 53.

**Supervisory Competence**

A. Knows a lot
B. Knows quite a bit
C. Knows something
D. Knows little
E. Knows very little

POS 54.

**Supervisory Competence**

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

A-24
How much influence do the following groups or persons actually have on what happens in this Center?

(CIRCLE one letter on each line for your answer.)

<table>
<thead>
<tr>
<th></th>
<th>A very great deal of influence (A)</th>
<th>Quite a lot of influence (B)</th>
<th>Some influence (C)</th>
<th>Little influence (D)</th>
<th>Very little influence (E)</th>
<th>Not sure (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>58. Navy managers</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>59. Civilian managers</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>60. Supervisors</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>61. The workers</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
</tbody>
</table>

THANK YOU FOR YOUR COOPERATION
APPENDIX B

SUPERVISORY PERSONNEL QUESTIONNAIRE (FORM B)

D     Demographics
OC    Organizational Climate
SJC   Specific Job Characteristics
POS   Perceptions of Supervisors
SI    Supervisory Influence
RS    Role Stress
GJC   General Job Characteristics
GJC(W) General Job Characteristics (Workers Only)
MP    Managerial Practices
JS    Job Satisfaction
CV    Cultural Values
JV    Job Values
WCE   Work Center Effectiveness
NAVY PUBLIC WORKS CENTER ATTITUDE INVENTORY

FORM B

The purpose of this survey is to obtain information on the attitudes and opinions of Public Works Center employees regarding their work. It is anticipated that the results derived from your responses will be used to improve the quality of working life and productivity in the Navy Public Works Centers.

For this survey to be of value it is necessary that you be as frank and thoughtful as possible in responding to the items in this questionnaire.

Thank you for your cooperation.

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PRIVACY ACT STATEMENT

Information concerning your opinions is requested under authority of 57 USC 301 as reflected in OPNAV Notice 5450 of 17 April 1975. This information will be used by NAVPERSRANDCEN to recommend methods of enhancing PWC effectiveness. The information provided will be combined with that provided by other individuals. Individual responses will not be made available to anyone. You are not required to provide this information; your participation is voluntary.

Developed by:

The Navy Personnel Research and Development Center
San Diego, California 92152
Please WRITE your answer in the space provided.

1. Are you military or civilian? 

2. What is your job title (that which is listed on your position description)?

3. What work center are you assigned to? What is the code number?

4. How long have you worked in the PWC system?

5. How long have you worked at this Center?

6. Age _____

7. Are you an American citizen? If no, specify __________

8. How many dependents do you have? (Others who depend on your income for financial support)?

9. Have you ever served in the U.S. Armed Forces? If yes, which branch? How long did you serve?

CIRCLE the letter next to your answer.

10. Sex
   A. Male
   B. Female

11. The following is a list of ethnic backgrounds for people who work at PWCs. Please CIRCLE the one that comes closest to describing your ethnic background.
   A. Anglo-Saxon
   B. Black or Afro-American
   C. Mexican
   D. Native American Indian
   E. Filipino
   F. Samoan
   G. Chinese
   H. Japanese
   I. Hawaiian
   J. Mediterranean
   K. Slavic

12. What is your education level? (CIRCLE the highest grade completed)
   A. Some elementary school (grades 1 to 7)
   B. Completed elementary school (8 grades)
   C. Some high school (9 to 11 years)
   D. Graduated from high school or General Educational Development (GED)
   E. Some college or technical training beyond high school (1 to 3 years)
   F. Graduated from college or university (B.A., B.S., or other bachelor's degree)
   G. Some graduate school
   H. Graduate or professional degree (please indicate)

13. How many more years do you plan to work before leaving or retiring from U.S. government employment? (CIRCLE your answer)
   A. Less than five years
   B. 6-10
   C. 11-15
   D. 16-20
   E. 21 years or more
The following group of items are general questions about working at this PWC. Please CIRCLE the letter in front of the best answer to each item.

OC 1. To what extent do rules and regulations interfere with how well you do your job?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

OC 2. To what extent does your job require full use of your skills and abilities?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

OC 3. To what extent is your individual judgment trusted on work matters?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

OC 4. To what extent does cooperation exist between departments at this Center?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

OC 5. To what extent does a cooperative atmosphere exists among people you work with?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

OC 6. How effective is your work center in overcoming unexpected problems?
   A. Exceptionally resourceful
   B. More resourceful than most
   C. Usually overcomes difficulties
   D. Somewhat set back by obstacles
   E. Frequently stumped by obstacles

OC 7. To what extent do workers have confidence in management’s judgment?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

OC 8. In this Center about the only source of information on important matters is the grapevine (rumor).
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

OC 9. To what extent is your immediate supervisor willing to listen to your problems?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

OC 10. Do people who work here "goof off" if they are not watched?
   A. Almost no one "goofs off"
   B. A few "goofs off"
   C. About half "goof off"
   D. A lot "goofs off"
   E. Almost everyone "goofs off"

OC 11. To what extent do you have to "toe the line" at this Center?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

OC 12. How do you rate your job security in working for this PWC?
   A. Very secure
   B. Somewhat secure
   C. Don’t know
   D. Somewhat insecure
   E. Very insecure
13. To what extent is there an esprit de corps (workgroup pride) among the employees at this PWC?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

14. Which of the following is most important in getting promoted?

A. Seniority
B. Competence or ability
C. Personal relationships
D. The department you’re in
E. Work output

15. How would you describe this PWC?

A. Very efficient
B. Efficient
C. Moderately efficient
D. Not very efficient
E. Totally inefficient

16. This PWC is:

A. Very up-to-date
B. Up-to-date
C. Moderately up-to-date
D. Old fashioned
E. Very old fashioned

17. The job denies me any chance to use my personal initiative or judgment in carrying out the work.

A. Very descriptive of your job
B. Descriptive of your job
C. Somewhat descriptive
D. A little descriptive of your job
E. Not at all descriptive of your job

18. The job gives me considerable opportunity for independence and freedom in how I do the work.

A. Very descriptive of your job
B. Descriptive of your job
C. Somewhat descriptive
D. A little descriptive of your job
E. Not at all descriptive of your job

19. The job itself is significant and important in the broader scheme of things.

A. Very descriptive of your job
B. Descriptive of your job
C. Somewhat descriptive
D. A little descriptive of your job
E. Not at all descriptive of your job

20. To what extent are you satisfied with this job?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

21. To what extent do you feel a very high degree of personal responsibility for the work you do on this job?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

22. To what extent do you personally care how well the job gets done?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

23. To what extent do differences in language hinder getting the job done?

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

24. How safe is the equipment which is supplied to PWC employees?

A. Very safe
B. Quite safe
C. Moderately safe
D. Unsafe
E. Very unsafe
F. Not sure
SJC 25. In general workers get the material and supplies they need to do the job.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

SJC 26. To what extent do people in the Material Department get the proper material to the job site?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Not sure

SJC 27. How much time do you think workers spend on the job waiting for material to arrive?
   A. A great deal
   B. Quite a bit
   C. Some
   D. Little
   E. None
   F. Not sure

SJC 28. How much material do you think is being wasted at PWC?
   A. A great deal
   B. Quite a bit
   C. Some
   D. Little
   E. None
   F. Not sure

SJC 29. To what extent do the procedures for turning materials back in contribute to material waste in this PWC?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Not sure

SJC 30. To what extent does damaged material delivered contribute to material waste in this PWC?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Not sure

SJC 31. To what extent does having the wrong material delivered contribute to material waste in this PWC?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Not sure

SJC 32. To what extent does theft contribute to material waste in this PWC?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Not sure

SJC 33. To what extent does stockpiling of material (goldpiling) occur in this PWC?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Not sure

SJC 34. How successful are workers in getting the material they need in a squeeze or emergency?
   A. Very successful
   B. Quite successful
   C. Somewhat successful
   D. Not very successful
   E. Not at all successful
   F. Not sure
SJC 35. Rate the transportation that this PWC uses on its safety.
   A. Very safe
   B. Reasonably safe
   C. Not sure
   D. Slightly unsafe
   E. Very unsafe

SJC 36. How frequently do workers experience vehicle breakdown?
   A. Very frequently
   B. Frequently
   C. Occasionally
   D. Seldom
   E. Almost never
   F. Not sure

SJC 37. How much would better vehicles increase PWC productivity?
   A. A great deal
   B. Quite a bit
   C. Some
   D. Little
   E. There would be no increase
   F. Not sure

SJC 38. The vehicles provided are designed and/or equipped to do the job.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

SJC 39. In general, when PWC employees use PWC vehicles they are treated with care.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

SJC 40. How frequently are there times when there isn’t enough work to keep the workforce busy?
   A. Very frequently
   B. Frequently
   C. Occasionally
   D. Seldom
   E. Almost never
   F. Not sure

SJC 41. How frequently are there more workers than needed to accomplish the work scheduled?
   A. Very frequently
   B. Frequently
   C. Occasionally
   D. Seldom
   E. Almost never
   F. Not sure

SJC 42. How frequently do you find that there is more work scheduled than can be accomplished as scheduled?
   A. Very frequently
   B. Frequently
   C. Occasionally
   D. Seldom
   E. Almost never
   F. Not sure

SJC 43. Our work center’s workload is fairly constant from day to day.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

SJC 44. In general, how much time do you see being spent in nonproductive activity in the PWC?
   A. A great deal
   B. Quite a bit
   C. Some
   D. Little
   E. Very little
   F. Not sure

SJC 45. In general, which area do you see as causing the most problems for work getting done in your work center?
   A. Material
   B. Equipment
   C. Transportation
   D. Do not know

SJC 46. How much more do you think most people in your work center could produce if they wanted to?
   A. A great deal more
   B. Quite a bit more
   C. Moderately more
   D. A little more
   E. People are producing as much as possible
47. If you think that there is time wasted at this PWC, list the major reasons you think cause this waste.


The following group of questions deal with the personal feelings you have about your day-to-day work. Please CIRCLE the letter in front of the best answer to each item.

1. How important is your job to you compared with other interests in your life?
   A. My job is much more important than my other interests.
   B. My job is somewhat more important than my other interests.
   C. My job is somewhat less important than my other interests.
   D. My job is much less important than my other interests.

2. If I had the chance, I would take a different job within this organization.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

3. I would like to look for a new job in the next year.
   A. Definitely
   B. I might
   C. Not sure
   D. I doubt it
   E. Definitely not

4. How likely is it that a person who does a good job will be rewarded?
   A. Extremely likely
   B. Likely
   C. Somewhat likely
   D. Unlikely
   E. Extremely unlikely

5. How likely is it that a person who does a poor job will be reprimanded?
   A. Extremely likely
   B. Likely
   C. Somewhat likely
   D. Unlikely
   E. Extremely unlikely

6. My pay is fair considering what other people in this organization are paid.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

7. My pay is fair considering what people in similar jobs in private industry are making.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

8. The fringe benefits for working at a PWC are better than one would get in private industry.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree
To what extent do management and the local workforce agree on the following issues:

To a very great extent (A)  To a great extent (B)  To some extent (C)  To a small extent (D)  Not at all (E)

9. Supervisory practices  A  B  C  D  E
10. Problems facing this PWC  A  B  C  D  E
11. Individual value systems  A  B  C  D  E
12. The way the world is viewed  A  B  C  D  E

From the following list, please WRITE in the spaces provided the three MOST IMPORTANT and three LEAST IMPORTANT items in terms of their importance to you on your job.

Most Important

14. A. Respect from coworkers
15. B. Feeling of accomplishment
16. C. Pay
17. D. Chances for getting ahead
18. E. Job security
19. F. Opportunity to develop your skills
20. G. Recognition
21. H. Seeing the results of your work
22. I. Having a job you don’t take home

Least Important

23. How satisfied are you with your chances for getting ahead in this PWC?
A. Very satisfied
B. Satisfied
C. Neither satisfied nor dissatisfied
D. Dissatisfied
E. Very dissatisfied

24. How satisfied are you with the amount of job security you have?
A. Very satisfied
B. Satisfied
C. Neither satisfied nor dissatisfied
D. Dissatisfied
E. Very dissatisfied

25. How satisfied are you with the opportunity to develop your skills and abilities?
A. Very satisfied
B. Satisfied
C. Neither satisfied nor dissatisfied
D. Dissatisfied
E. Very dissatisfied
JS 26. How satisfied are you with recognition for doing the job?  
   A. Very satisfied  
   B. Satisfied  
   C. Neither satisfied nor dissatisfied  
   D. Dissatisfied  
   E. Very dissatisfied  

JS 27. How satisfied are you with seeing the results from your work?  
   A. Very satisfied  
   B. Satisfied  
   C. Neither satisfied nor dissatisfied  
   D. Dissatisfied  
   E. Very dissatisfied  

JS 28. How satisfied are you with having a job you don't take home?  
   A. Very satisfied  
   B. Satisfied  
   C. Neither satisfied nor dissatisfied  
   D. Dissatisfied  
   E. Very dissatisfied  
   F. I do take work home  

RS 29. To what extent do you work under conflicting policies and guidelines?  
   A. To a very great extent  
   B. To a great extent  
   C. To some extent  
   D. To a small extent  
   E. Not at all  

RS 30. To what extent do you receive assignments without the manpower to complete them?  
   A. To a very great extent  
   B. To a great extent  
   C. To some extent  
   D. To a small extent  
   E. Not at all  

RS 31. To what extent do you do things that are likely to be accepted by one person and not accepted by others?  
   A. To a very great extent  
   B. To a great extent  
   C. To some extent  
   D. To a small extent  
   E. Not at all  

RS 32. To what extent do you know if your work will be acceptable to your boss?  
   A. To a very great extent  
   B. To a great extent  
   C. To some extent  
   D. To a small extent  
   E. Not at all  

RS 33. To what extent is it difficult to satisfy everybody at the same time?  
   A. To a very great extent  
   B. To a great extent  
   C. To some extent  
   D. To a small extent  
   E. Not at all  

RS 34. To what extent do you have to break rules to get everything done on your job?  
   A. To a very great extent  
   B. To a great extent  
   C. To some extent  
   D. To a small extent  
   E. Not at all  

RS 35. To what extent do people ask you to do things on your job which get in the way of your work?  
   A. To a very great extent  
   B. To a great extent  
   C. To some extent  
   D. To a small extent  
   E. Not at all  

RS 36. To what extent do you feel certain about how much authority you have?  
   A. To a very great extent  
   B. To a great extent  
   C. To some extent  
   D. To a small extent  
   E. Not at all  

RS 37. To what extent do you know what your responsibilities are?  
   A. To a very great extent  
   B. To a great extent  
   C. To some extent  
   D. To a small extent  
   E. Not at all
RS 38. To what extent do you feel certain about how you will be evaluated for a raise or promotion?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 39. To what extent do you know exactly what is expected of you?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 40. To what extent do you know that you have divided your time properly?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 41. To what extent are explanations clear about what has to be done?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 42. To what extent are you given enough time to do what is expected of you on your job?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 43. To what extent does it seem like you have too much work for one person to do?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

RS 44. To what extent are the performance standards on your job too high?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

Each of the next four questions is followed by five answer spaces. Please WRITE your answers in the spaces provided for each question.

1. What are some of the specific things which occur at work that make you feel good about working?
A. _______________________________________
B. _______________________________________
C. _______________________________________
D. _______________________________________
E. _______________________________________
2. What specific kinds of things occur at work that turn you off, frustrate you or make you angry?
   A. 
   B. 
   C. 
   D. 
   E. 

3. If you had your way and could do anything, what things would you do to make your work life better?
   A. 
   B. 
   C. 
   D. 
   E. 

4. If you had your way and could do anything, what things would you do to improve the productivity of this PWC?
   A. 
   B. 
   C. 
   D. 
   E. 

B-12
Please CIRCLE the letter in front of the best answer for each item.

**OC 1.** Overall, what effect do unions have on the PWC operation?

A. Very positive  
B. Positive  
C. No effect  
D. Negative  
E. Very negative  
F. No opinion

**OC 2.** To what extent does employee theft present a problem at your PWC?

A. To a very great extent  
B. To a great extent  
C. To some extent  
D. To a small extent  
E. Not at all

**OC 3.** To what extent do you think there are problems between people of different ethnic backgrounds in your work center?

A. To a very great extent  
B. To a great extent  
C. To some extent  
D. To a small extent  
E. Not at all

**OC 4.** To what extent do problems between people of different ethnic backgrounds hurt your work center's performance?

A. To a very great extent  
B. To a great extent  
C. To some extent  
D. To a small extent  
E. Not at all

**OC 6.** To what extent is the “command interest” category abused?

A. To a very great extent  
B. To a great extent  
C. To some extent  
D. To a small extent  
E. Not at all  
F. Do not know

**OC 7.** To what extent does work on “command interest” jobs interfere with everyday work accomplishments?

A. To a very great extent  
B. To a great extent  
C. To some extent  
D. To a small extent  
E. Not at all  
F. Do not know

**OC 8.** What effect does military turnover have on the effectiveness of this PWC?

A. Very positive  
B. Positive  
C. No effect either way  
D. Negative  
E. Very negative  
F. Do not know

**OC 9.** What effect does military management have on vertical communications both up and down?

A. Communications are improved greatly  
B. Communications are improved to some extent  
C. There is no effect on communications  
D. Communications are hampered slightly  
E. Communications are hampered greatly  
F. Do not know

**OC 10.** In general, the opinion of military toward civilians is:

A. Very high  
B. High  
C. Neutral  
D. Low  
E. Very low
11. In general, the opinion of civilians toward the military is:
   A. Very high
   B. High
   C. Neutral
   D. Low
   E. Very low

12. Overall, rate military management in terms of their ability to deal with personnel matters.
   A. Very good
   B. Good
   C. Fair
   D. Poor
   E. Very poor
   F. No opinion

13. Overall, rate the military management in terms of their financial management skills.
   A. Very good
   B. Good
   C. Fair
   D. Poor
   E. Very poor
   F. No opinion

14. To what extent do you see military management as being necessary for the successful operation of this PWC?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

15. In general, most people who work for this PWC like to work overtime.
   A. Almost always
   B. Often
   C. Sometimes
   D. Rarely
   E. Never

16. In general, overtime is distributed fairly among employees.
   A. Almost always
   B. Often
   C. Sometimes
   D. Rarely
   E. Never

17. In general, rate your work center in terms of how well it does its job.
   A. Very good
   B. Good
   C. Fair
   D. Poor
   E. Very poor

Rate your work center in terms of how well it does in the following areas:

18. Productivity - amount and quality of work accomplished for money and time spent.
   A B C D E

19. Responsiveness - ability of PWC to start and complete work quickly.
   A B C D E

20. Adaptability - ability to meet changing conditions and demands.
   A B C D E

   A B C D E
The following group of items deal with your feelings about life in general. Please CIRCLE the letter in front of the best answer for each item.

1. Obedience and respect for authority.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

2. Working hard to improve the prestige and status of one's group.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

3. Getting recognition for one's achievements.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

4. Prestige. To become well-known to obtain recognition, awards or high social status.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

5. Wealth. To earn a great deal of money.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

7. Self-realization. To get the most from one's personal development.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

8. Duty. To dedicate oneself totally to ideals and principles.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important

9. Pleasure. To enjoy life, to be happy and content, to have the good things in life.
   A. Very important
   B. Important
   C. Somewhat important
   D. Slightly important
   E. Not at all important
From the following list, please WRITE in the space provided the four MOST IMPORTANT and four LEAST IMPORTANT things for a person to be.

### Most Important

10. A. Ambitious  
11. B. Open-minded  
12. C. Capable  
13. D. Forgiving  
14. E. Helpful  
15. F. Cheerful  
16. G. Clean  
17. H. Courageous  
18. I. Honest  
19. J. Independent  
20. K. Self-disciplined  
21. L. Intelligent  
22. M. Loving  
23. N. Obedient  
24. O. Responsible  
25. P. Polite

### Least Important

14. F. Cheerful  
15. G. Clean  
16. H. Courageous  
17. I. Honest  
18. J. Independent  
19. K. Self-disciplined  
20. L. Intelligent  
21. M. Loving  
22. N. Obedient  
23. O. Responsible  
24. P. Polite

**Please CIRCLE the letter in front of the best answer to each question.**

#### MP 1. Are you encouraged to participate in decisions that affect you?

A. To a very great extent  
B. To a great extent  
C. To some extent  
D. To a small extent  
E. Not at all

#### MP 2. Some people are given special privileges.

A. To a very great extent  
B. To a great extent  
C. To some extent  
D. To a small extent  
E. Not at all

#### MP 3. When things go wrong it is the workers who are usually blamed.

A. Strongly agree  
B. Agree  
C. Not sure  
D. Disagree  
E. Strongly agree

#### MP 4. Information is withheld from workers even though it is readily available and could help.

A. Almost always  
B. Often  
C. Sometimes  
D. Rarely  
E. Never

#### MP 5. Good ideas don’t get communicated upward because top management is not very approachable.

A. Strongly agree  
B. Agree  
C. Not sure  
D. Disagree  
E. Strongly disagree

#### MP 6. How frequently are suggestions made to top management?

A. Very frequently  
B. Frequently  
C. Occasionally  
D. Seldom  
E. Almost never

#### MP 7. Suggestions made to top management receive fair evaluation.

A. Almost always  
B. Often  
C. Sometimes  
D. Rarely  
E. Never
MP 8. Management and supervisors set up interrelated jobs and work activities so that the work flows smoothly.
A. Strongly agree
B. Agree
C. Not sure
D. Disagree
E. Strongly disagree

MP 9. Workers are given direct orders by someone other than immediate supervisors.
A. Almost always
B. Often
C. Sometimes
D. Rarely
E. Never

MP 10. Management bypasses levels below them in assigning work.
A. Almost always
B. Often
C. Sometimes
D. Rarely
E. Never

MP 11. Top management is interested in ideas and suggestions from people at different levels in the organization.
A. Almost always
B. Often
C. Sometimes
D. Rarely
E. Never

MP 12. When problems are encountered those in authority make prompt decisions or recommendations.
A. Almost always
B. Often
C. Sometimes
D. Rarely
E. Never

MP 13. In general, how would you rate the customer's understanding of how the PWC operates?
A. Very good
B. Good
C. Fair
D. Poor
E. Very poor
F. Do not know

MP 14. How often do job changes requested by customers cause unnecessary hardship on the efficiency of PWC?
A. Almost always
B. Often
C. Sometimes
D. Rarely
E. Never

MP 15. To what extent does management demand detailed information from people at lower levels?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

MP 16. Communications flow both up and down.
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

MP 17. Written documents (such as budgets, schedules, project specifications, procedures, or program plans) are used as an important part of the job.
A. Strongly agree
B. Agree
C. Not sure
D. Disagree
E. Strongly disagree

MP 18. Performance appraisals are based on written performances standards or criteria.
A. Yes
B. No

MP 19. Standards of performance and control systems have been established in writing.
A. Yes
B. No
20. Supervisors are rewarded for helping their subordinates develop their skills and abilities.
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all
F. Not sure

<table>
<thead>
<tr>
<th>To what extent could job changes initiated by the customer be avoided if:</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. Customers provided a better description of the work.</td>
</tr>
<tr>
<td>23. Customers didn’t change their minds so often.</td>
</tr>
<tr>
<td>24. Management would teach customers about the PWC operation.</td>
</tr>
<tr>
<td>25. There was better communication between customers and planning.</td>
</tr>
<tr>
<td>26. To what extent is the quality of work performed by contractors better than that of PWC?</td>
</tr>
<tr>
<td>27. PWC ends up having to redo much of a contractor’s job.</td>
</tr>
<tr>
<td>28. To what extent are contractors evaluated on the same standards of performance as PWCs?</td>
</tr>
<tr>
<td>29. To what extent has NAVFAC been helpful in the implementation of new systems and procedures?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>23.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>24.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>25.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>26.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>27.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>28.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>29.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>
30. To what extent are PWC personnel involved in the development of systems and procedures implemented by NAVFAC?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Do not know

31. Contracting out jobs is more cost-effective than performing them in-house.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree
   F. Do not know

Please answer the following three questions if you attend meetings that pertain to your work.

1. How productive are the meetings in terms of resolving problems?
   A. Very productive
   B. Somewhat productive
   C. Somewhat unproductive
   D. A total waste of time

2. Of the regular meetings you attend, list those that have value.

3. List those meetings that are not worth attending.

4. Are you able to obtain from other work centers the information you need in order to carry out your duties?
   A. Very often
   B. Often
   C. Sometimes
   D. Infrequently
   E. Never

5. In general, how would you characterize the relationship between the divisions within your code (department)?
   A. Excellent
   B. Very good
   C. Average
   D. Below average
   E. Very poor
6. To what extent do ACEs or SCEs (staff civils) provide useful information to the P&Es concerning new work?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

7. A description of the job to be done is generally provided to the P&Es by:
   A. ACEs or SCEs
   B. Customers
   C. Both

8. To what extent is productivity in your work group affected by other departments failure to communicate?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all

---

To what extent are the following codes (departments) helpful to you in getting your work done?

<table>
<thead>
<tr>
<th>Code</th>
<th>Great Deal</th>
<th>Good Deal</th>
<th>Somewhat</th>
<th>Not at All</th>
<th>Not Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td></td>
</tr>
</tbody>
</table>

9. 110 - Activity Civil Engineer Office
10. 130 - Management Office
11. 140 - Civilian Personnel Office
12. 150 - Comptroller Office
13. 160 - Housing Office
14. 200 - Engineering Department
15. 300 - Maintenance Control Department
16. 500 - Maintenance Department
17. 600 - Utilities Department
18. 700 - Transportation Department
19. 800 - Material Department
20. If you have difficulty working with another work center, name it and list the reasons.

---

B-20
21. How much information have you received on PMS procedures?
   - A. A great deal
   - B. Quite a bit
   - C. Some
   - D. A little
   - E. None

22. How familiar are you with PMS?
   - A. Very familiar
   - B. Familiar
   - C. Somewhat familiar
   - D. Not very familiar
   - E. Never heard of it

23. Do you think workers understand PMS?
   - A. To a very great extent
   - B. To a great extent
   - C. To some extent
   - D. To a small extent
   - E. Not at all
   - F. Do not know

24. If PMS has been implemented at this PWC, to what extent has it improved the:
   - Planning of work
   - Scheduling of work
   - Coordinating various PWC functions
   - Overall efficiency of work accomplishment

25. In general, PMS has:
   - A. Created more work than it has saved
   - B. Saved work
   - C. Had no effect on the amount of work
   - D. Don't know

26. In general, the necessary information is provided so the reporting systems can operate effectively.
   - A. To a very great extent
   - B. To a great extent
   - C. To some extent
   - D. To a small extent
   - E. Not at all
   - F. Don't know

27. In general, the necessary information is provided so the reporting systems can operate effectively.
   - A. To a very great extent
   - B. To a great extent
   - C. To some extent
   - D. To a small extent
   - E. Not at all
   - F. Don't know

28. In general, PMS has:
   - Reporting System
     - A. Created more work than it has saved
     - B. Saved work
     - C. Had no effect on the amount of work
     - D. Don't know

29. To what extent do you think the reporting systems at this PWC accurately reflect what is actually taking place on the job?
   - A. To a very great extent
   - B. To a great extent
   - C. To some extent
   - D. To a small extent
   - E. Not at all
   - F. Don't know
32. How often do you see employees at this PWC do things on the job that seem contrary to common sense, just to fulfill the requirements of a reporting system?
   A. Very frequently
   B. Frequently
   C. Occasionally
   D. Seldom
   E. Almost never

33. The actual time charged to a job reflects the actual hours worked on the job.
   A. Almost always
   B. Often
   C. Sometimes
   D. Rarely
   E. Almost never

34. List the reports by name or number that you deal with on your job. Indicate how useful they are by checking the appropriate category.

<table>
<thead>
<tr>
<th>Useful the way it is</th>
<th>Should be modified</th>
<th>Should be eliminated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

35. How often do P&Es plan and estimate jobs within their own trade?
   A. Very frequently
   B. Frequently
   C. Not sure
   D. Seldom
   E. Almost never

36. To what extent do P&Es know about the latest developments in their field?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Don’t know

37. In general, P&Es are trained to do the work required of them.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

38. Is the ratio of P&E hours to productive hours set by NAVFAC realistic?
   A. Yes
   B. No
   C. Not sure
To a very great extent (A)  To a great extent (B)  To some extent (C)  To a small extent (D)  Not at all (E)  Don't know (F)

Quite often there are changes in the job. To what extent is this a result of:

39. A customer changing his mind  A  B  C  D  E  F

40. Poor planning and estimating  A  B  C  D  E  F

41. Poor job description from ACE  A  B  C  D  E  F

42. A fact of life due to the nature of rehabilitative construction work  A  B  C  D  E  F

43. Poor quality of work  A  B  C  D  E  F

44. Where do you think the job plan should be developed?
   A. In Planning and Estimating
   B. In the Maintenance Department
   C. Not sure

45. How often should a P&E go to the job site and see what needs to be done?
   A. Very frequently
   B. Frequently
   C. Not sure
   D. Seldom
   E. Almost never

46. How often do P&Es visit the job site?
   A. Very frequently
   B. Frequently
   C. Not sure
   D. Seldom
   E. Almost never

47. The P&Es do all they can to visit job sites but are too overworked and can’t get to as many as they should.
   A. Strongly agree
   B. Agree
   C. Not sure
   D. Disagree
   E. Strongly disagree

48. How good is the communication between P&Es and the engineers?
   A. Excellent
   B. Very good
   C. Fair
   D. Poor
   E. Very poor
   F. Do not know

49. To what extent are the job plans helpful in getting the work done?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Do not know

50. To what extent are the job schedules that are set up meet the work required?
   A. To a very great extent
   B. To a great extent
   C. To some extent
   D. To a small extent
   E. Not at all
   F. Not sure

51. Should the schedulers be located in the shops or centrally located?
   A. In the shops
   B. Centrally located
   C. No opinion
52. When people from the different departments work together to complete a job, the work activities are well planned.
   A. Strongly agree  
   B. Agree  
   C. Not sure  
   D. Disagree  
   E. Strongly disagree

<table>
<thead>
<tr>
<th>Question</th>
<th>A great deal</th>
<th>Quite a lot</th>
<th>Something</th>
<th>Little</th>
<th>Nothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
<td>(E)</td>
</tr>
<tr>
<td>53. How you do your work</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>54. Scheduling your work activities</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>55. How to handle problems you face in your work</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>56. Hiring of people</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>57. Pay raises</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>58. Firing people</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>59. Promoting people</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>60. When people take time off</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>61. What you should do when something unexpected happens</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>62. Settling disagreements</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

53. How much do you as a supervisor have to say in making decisions about:

54. How much say should you as a supervisor have in making decisions about:
73. To what extent are performance standards established for your subordinate's job?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

74. To what extent do performance ratings measure how well your subordinates do their job?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

75. In this PWC, to what extent are threats and punishments used as a way to get people to do better work?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

76. To what extent do workers participate in making important decisions related to their work?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all

77. In this Center, people who make decisions have complete and accurate information.
A. Always
B. Many times
C. Usually
D. Sometimes
E. Rarely

78. How much influence do the following groups or persons actually have on what happens in this Center?
(CIRCLE one letter on each line for your answer.)

<table>
<thead>
<tr>
<th>Group</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy managers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian managers</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>The workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

79. To what extent are written communications emphasized?
A. To a very great extent
B. To a great extent
C. To some extent
D. To a small extent
E. Not at all
HP 84. To what extent is the formal chain of command followed in decision making processes?

A. Almost always  
B. Often  
C. Sometimes  
D. Seldom  
E. Almost never

HP 86. To what extent is going through proper channels required?

A. To a very great extent  
B. To a great extent  
C. To some extent  
D. To a small extent  
E. Not at all

HP 87. To what extent do even small matters have to be referred to someone higher up for a final decision?

A. Strongly agree  
B. Agree  
C. Not sure  
D. Disagree  
E. Strongly disagree

THANK YOU FOR YOUR COOPERATION
APPENDIX C

PERCENTAGES OF PWC EMPLOYEES PROVIDING RESPONSES FALLING IN DERIVED CATEGORIES OF WORK OCCURRENCES
Table C-1

Percentages of Workers (W), Supervisors (S), and Managers (M) Providing Responses Falling in Derived Categories of Positive Work Occurrences

<table>
<thead>
<tr>
<th>Category Index and Title</th>
<th>San Francisco W</th>
<th>San Francisco S</th>
<th>San Francisco M</th>
<th>Great Lakes W</th>
<th>Great Lakes S</th>
<th>Great Lakes M</th>
<th>Norfolk W</th>
<th>Norfolk S</th>
<th>Norfolk M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Miscellaneous</td>
<td>5.0</td>
<td>0.0</td>
<td>3.6</td>
<td>3.1</td>
<td>8.7</td>
<td>0.0</td>
<td>3.3</td>
<td>2.9</td>
<td>9.1</td>
</tr>
<tr>
<td>2 Problem-solving/Job Challenge</td>
<td>14.2</td>
<td>16.9</td>
<td>27.8</td>
<td>28.3</td>
<td>30.7</td>
<td>27.2</td>
<td>9.1</td>
<td>13.5</td>
<td>17.5</td>
</tr>
<tr>
<td>3 Social Aspects of Job</td>
<td>10.8</td>
<td>5.1</td>
<td>16.7</td>
<td>16.6</td>
<td>17.4</td>
<td>14.3</td>
<td>15.0</td>
<td>17.3</td>
<td>9.1</td>
</tr>
<tr>
<td>4 Work Group Climate</td>
<td>25.0</td>
<td>26.3</td>
<td>27.8</td>
<td>24.2</td>
<td>29.8</td>
<td>21.9</td>
<td>22.9</td>
<td>18.4</td>
<td>18.2</td>
</tr>
<tr>
<td>5 Cooperation of Co-workers</td>
<td>14.2</td>
<td>13.5</td>
<td>27.8</td>
<td>10.9</td>
<td>8.7</td>
<td>21.9</td>
<td>11.8</td>
<td>19.6</td>
<td>0.0</td>
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<tr>
<td>6 Respect/Recognition</td>
<td>10.0</td>
<td>16.2</td>
<td>22.2</td>
<td>11.7</td>
<td>17.4</td>
<td>21.4</td>
<td>9.8</td>
<td>28.2</td>
<td>27.3</td>
</tr>
<tr>
<td>7 Liking the Job</td>
<td>10.8</td>
<td>13.5</td>
<td>0.0</td>
<td>9.4</td>
<td>4.3</td>
<td>0.0</td>
<td>12.4</td>
<td>5.8</td>
<td>0.0</td>
</tr>
<tr>
<td>8 Good Supervisor/Subordinate Relations</td>
<td>3.3</td>
<td>3.4</td>
<td>5.6</td>
<td>3.9</td>
<td>0.0</td>
<td>0.0</td>
<td>6.5</td>
<td>6.8</td>
<td>18.2</td>
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<tr>
<td>9 Having Something to Do</td>
<td>0.8</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>2.0</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>10 Open Communication Between Supervisors and Subordinates</td>
<td>2.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>7.1</td>
<td>1.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>11 Use of Skill/Enjoy Work Content</td>
<td>8.3</td>
<td>5.4</td>
<td>5.6</td>
<td>8.6</td>
<td>4.3</td>
<td>28.6</td>
<td>7.2</td>
<td>3.9</td>
<td>9.1</td>
</tr>
<tr>
<td>12 Fair Supervisors</td>
<td>0.0</td>
<td>5.4</td>
<td>0.0</td>
<td>0.0</td>
<td>4.3</td>
<td>0.0</td>
<td>0.7</td>
<td>3.9</td>
<td>0.0</td>
</tr>
<tr>
<td>13 Respect and Trust of Co-workers</td>
<td>3.0</td>
<td>2.7</td>
<td>3.6</td>
<td>0.8</td>
<td>0.0</td>
<td>7.1</td>
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Table C-2
Percentages of Workers (W), Supervisors (S), and Managers (M) Providing Responses Falling in Derived Categories of Negative Work Occurrences
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