Wf?904 SUGGESTIONS FOR IMPROVING THE DEPARTMENT OF DEFENSE
SUGGESTION PROGRAM(U) NAVY PERSONNEL RESEARCH AND
DEVELOPMENT CENTER SAN DIEGO CA E C SHUMATE ET AL.

SHUMATE ET AL.

SUGGESTION PROR(A(U)
NAVY PERSONNEL RESEARCH AND
DEVELOPMENT CENTER SAN DIEGO CA E C SHUMATE ET AL.

04"UCL
SSIFED
MR
87 NPRDC-TR-87-20 MPR-DHAM-50040 F/O 5/9

UNCLASSIFIED

M0-0179 004
Suggestions for Improving the Department of Defense Suggestion Program

Approved for public release; distribution is unlimited
Suggestions for Improving the Department of
Defense Suggestion Program

E. Chandler Shumate, Ph.D.
Samuel B. Landau, Ph.D.

Reviewed and approved by
Richard C. Sorenson, Ph.D.

Released by
B. E. Bacon
Captain, U.S. Navy
Commanding Officer

and

J. S. McMichael, Ph.D.
Technical Director

Approved for public release;
distribution is unlimited.

Navy Personnel Research and Development Center
San Diego, California 92152-6800
Suggestions for Improving the Department of Defense Suggestion Program

Shumate, E. Chandler and Landau, Samuel B.

The present study provides a set of recommendations that can be used to improve the effectiveness of the DoD Suggestion Program. While it has been shown that the DoD Suggestion Program has had a positive impact on overall governmental cost savings and productivity, not all suggestion programs have been equally successful. The present effort systematically focused on selected areas of suggestion program management (top management commitment, resource allocation, measures of effectiveness, program eligibility, award/recognition, and program promotion) in an attempt to identify the elements required for suggestion program success. Various data collection procedures were used, including interviews with suggestion program administrators from the three military services, 5 other public sector organizations, and 10 private sector groups. Program recommendations included the development and implementation of DoD program objectives, systematic education and training of employees about the program, data-based decision making, award/recognition of evaluators, and evaluation of promotional strategies.
FOREWORD

This project was conducted in response to a request from the Office of the Assistant Secretary of Defense, Force Management and Personnel to undertake a systematic and scientific assessment of the effectiveness of the Department of Defense's suggestion programs. This effort was conducted under MIPR DWAM 50040. The primary objective of the project was to establish the basis for developing recommendations that could be used for legislative, regulatory, and administrative reforms.

An important aspect of this study was to identify current issues in suggestion program administration in both the public and private sectors. Similarities and differences between these sectors, as well as between the three armed services (Air Force, Army, and Navy), were identified and used as a basis for understanding the factors that contribute to an effective suggestion program.

Appreciation is expressed to Mr. Paul Rossbach, for his support of the present effort, and to the many individuals in both the public and private sectors who so generously shared their time and expertise.

B. E. BACON
Captain, U.S. Navy
Commanding Officer

J. S. McMICHAELE
Technical Director
SUMMARY

Problem

The Department of Defense (DoD) is actively seeking to improve the effectiveness of its productivity improvement programs. A program of special interest is the DoD Suggestion Program. While suggestion programs appear to be having an overall positive impact on cost savings and productivity, some programs have been found to be more effective than others. Questions have been raised as to why this is so. Obtaining answers to these questions will assist in the development of approaches and/or guidelines to improve individual agency programs as well as the overall DoD Suggestion Program.

Purpose

The primary objective of this effort was to develop a set of recommendations to be used as the basis for legislative, regulatory, and/or administrative reforms that would improve the effectiveness of the DoD Suggestion Program. Identifying distinctions between the suggestion programs of the three military services and between public and private sector organizations were secondary objectives.

Approach

A variety of data sources were used. They included a technical literature review, consultation with experts in the field, attendance at the annual meeting of the National Association of Suggestion Systems, site visits and interviews with suggestion program administrators (SPAs) at 8 public and 10 private sector organizations, documentation from these organizations, and attendance at a seminar on suggestion system operations.

Results and Discussion

The support of top management is critical to the success of any organizational program. Most of the organizations studied in this effort reported some top management support and commitment. Despite this reported support, most of the organizations still encountered difficulties in implementing their suggestion programs. These problems were attributed to a lack of support and interest by middle managers and first-line supervisors. Resource allocation in terms of the size of the suggestion program staff, time allotted to work on suggestion program activities (full- or part-time), and staff training were found to be related to perceptions of program effectiveness. Objective measures of program effectiveness, such as participation rates, adoption rates, backlog of suggestions, dollars saved, etc., were generally found to be used for end-of-the-year reporting purposes rather than as management tools to improve the effectiveness of the program throughout the year. This was particularly true for public sector organizations.

Suggester eligibility, suggestion content, award amounts, recognition of evaluators and supervisors, and payment schedules were found to vary across organizations. Further, in most organizations, there was no follow-up to determine whether the initial "estimated savings" matched the "actual savings" resulting from the implementation of a suggestion.

While the most effective way of increasing participation was reported to be face-to-face or one-on-one interaction between the administrator and the employee, it was not often practiced. Little or no evaluative comparisons were made between the various promotional attempts to increase awareness and participation.
Conclusions and Recommendations

1. Within DoD, headquarters management should establish overall program objectives and goals. Workshops with top-level SPAs addressing the issues raised in this report need to be held. Correspondingly, workshops should also be held between activity-, base-, and command-level SPAs.

2. Everyone in the organization needs to know how the suggestion program operates. Education and training in suggestion program objectives and goals, processing, and evaluation should be developed and presented to everyone in the organization.

3. In order to increase program effectiveness, there should be an increased emphasis on data-based decision making. Measures of effectiveness must be agreed upon and reporting systems standardized to facilitate timely and periodic review and assessment.

4. In order to increase program credibility, especially among top and middle managers, award payment schedules should include a trial period to assess whether estimated savings are realized. Serious consideration should be given to providing awards and/or recognition to evaluators.

5. A systematic approach for evaluating the effectiveness of the various promotional strategies should be developed. Comparisons between the various approaches could thus be made and their relative importance to suggestion program success could be determined.
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Problem</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>Purpose</td>
<td>2</td>
</tr>
<tr>
<td>APPROACH</td>
<td>3</td>
</tr>
<tr>
<td>RESULTS AND DISCUSSION</td>
<td>4</td>
</tr>
<tr>
<td>Management Requirements</td>
<td>4</td>
</tr>
<tr>
<td>Defining the Purpose of the Suggestion Program</td>
<td>4</td>
</tr>
<tr>
<td>Locating the Suggestion Program Within the Organization</td>
<td>4</td>
</tr>
<tr>
<td>Establishing Objectives and Goals of the Suggestion Program</td>
<td>5</td>
</tr>
<tr>
<td>Resource Allocation</td>
<td>6</td>
</tr>
<tr>
<td>Measurement and Evaluation</td>
<td>7</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>7</td>
</tr>
<tr>
<td>Measures</td>
<td>7</td>
</tr>
<tr>
<td>Reporting Systems</td>
<td>8</td>
</tr>
<tr>
<td>Eligibility</td>
<td>10</td>
</tr>
<tr>
<td>Who May Suggest?</td>
<td>10</td>
</tr>
<tr>
<td>What May Be Suggested?</td>
<td>10</td>
</tr>
<tr>
<td>Awards</td>
<td>11</td>
</tr>
<tr>
<td>Award Amounts</td>
<td>11</td>
</tr>
<tr>
<td>Award Payment Schedules</td>
<td>12</td>
</tr>
<tr>
<td>Awards for Evaluators</td>
<td>12</td>
</tr>
<tr>
<td>Awards for Supervisors</td>
<td>12</td>
</tr>
<tr>
<td>Publicity and Promotion</td>
<td>13</td>
</tr>
<tr>
<td>Relationship Between Suggestion Programs and Other Employee Involvement Programs</td>
<td>13</td>
</tr>
<tr>
<td>Suggestion Program Problem Areas</td>
<td>14</td>
</tr>
<tr>
<td>Management Support</td>
<td>14</td>
</tr>
<tr>
<td>Evaluation Processing Time</td>
<td>15</td>
</tr>
<tr>
<td>Suggestion Programs of the Three Armed Services</td>
<td>15</td>
</tr>
<tr>
<td>Special Topics</td>
<td>17</td>
</tr>
<tr>
<td>Automation</td>
<td>17</td>
</tr>
<tr>
<td>Role Definition</td>
<td>18</td>
</tr>
<tr>
<td>CONCLUSIONS</td>
<td>19</td>
</tr>
<tr>
<td>RECOMMENDATIONS</td>
<td>20</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>23</td>
</tr>
<tr>
<td>DISTRIBUTION LIST</td>
<td>25</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Purposes of Suggestion Programs According to Program Administrators</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>Frequency of Reporting Requirements by Level of Management</td>
<td>9</td>
</tr>
<tr>
<td>3.</td>
<td>Award Eligibility for Employees in Public and Private Organizations</td>
<td>11</td>
</tr>
<tr>
<td>4.</td>
<td>Military Service Comparisons Based on Two Suggestion Program Indicators: &quot;Suggestions Received per 100 Employees&quot; and &quot;Benefit-to-Award Ratios&quot;</td>
<td>16</td>
</tr>
</tbody>
</table>
INTRODUCTION

Problem

In an attempt to reduce government spending while improving products and services, the Department of Defense (DoD) is seeking to determine the effectiveness of its programs, especially those aimed at improving organizational performance. Among those programs is the DoD Suggestion Program. In FY85, DoD reported that the total cost savings obtained through the suggestion program for both military and civilian employees was close to $260 million. The money paid out in awards for these savings was less than $8 million (Neal, 1986). These numbers amount to more than a 32:1 ratio of savings to awards and indicate that the DoD Suggestion Program has a positive impact upon cost savings and productivity.

However, not all DoD suggestion programs are equally successful. Discrepancies are often found between indicators of program effectiveness. For example, with respect to suggestions received per 100 employees, we find for FY85 the following rates for civilians among the services: Air Force (16.1), Army (13.4), and Navy (6.7) (National Association of Suggestion Systems' Annual Statistical Report/1985 (1986)). Other measures, such as adoption rates and benefits-to-award ratios, also show substantial variability across the services. Thus, in order to improve the effectiveness of the DoD Suggestion Program, information must be obtained that will systematically answer questions such as "Why are there large differences between programs?", "What factors account for these differences?", and "How can elements of one program be adapted by another to make it more successful?"

Background

A current management trend focuses on the value workers can play in contributing to the overall success of an organization. Employee involvement is a concept wherein employees are encouraged to participate in the management process by engaging in problem-solving activities and offering ideas to improve company operations. One of the oldest employee involvement programs is the suggestion program. The concept of a suggestion program operates on the assumption that employees are closest to their work and, therefore, in the best position to find new and better ways to improve it. Seelig (1985) provides a simple description of a suggestion program. "Employees write down an idea to help improve the company, its products or the work place and submit it to company management through a formal suggestion system. If the idea is adopted by the company, then the employee is rewarded with something--usually cash--proportionate in value to the savings resulting from the idea" (p. 42).

One can trace the history of suggestion programs in the private sector back to the mid-1800's. Stewart (1984) reports that the first "suggestion scheme" (in Great Britain), wherein workers were paid for ideas that improved production and saved on materials, was introduced by Chance Brothers of Smethwick in 1857. In the United States, the first suggestion system was established in 1886 by National Cash Register. Eastman Kodak boasts of having the oldest, continuously operating suggestion system, dating back to 1896 (Fritsch, 1985). Significant increases in the use of suggestion programs in private industry occurred during the two world wars. The federal suggestion program was established by Congress as part of the Federal Incentive Awards Act in 1954 to improve government operations and services. Prior to 1954, suggestion programs existed in government organizations, but they were independently operated by the different agencies. The Act provided the authority to pay employees (civilian and military in the case of DoD) for
ideas or suggestions that improve the effectiveness and efficiency of government operations. Two assumptions under which the system operates are that employees can be motivated to submit suggestions under the "right" set of conditions and that the value of the program exceeds its costs.

Regardless of significant reported savings and cost avoidance, as well as positive outcomes for employees, some programs fail. Although no exact count has been made of the number of current formal suggestion programs, the National Association of Suggestion Systems (NASS) has estimated that approximately 3,000 to 4,000 exist in the U.S. today (Fritsch, 1985; Gregg, 1983). While the number of suggestion programs has continued to increase during the 1980's (Gregg, 1983), Graf (1982) reported that up to 90 percent of those initiated prior to 1977 have been abandoned. Through a review of the literature, Graf (1982) has identified many of the reasons for failures. They include: (1) inappropriate specification and clarification of related policies and guidelines, (2) poor program promotion, (3) failure to provide top management with adequate information on suggestion program activities and results, (4) insignificant rewards, (5) inadequate program administration leading to a lack of employee confidence, (6) inadequate implementation of accepted suggestions, (7) insufficient personal contact, (8) lack of supervisory interest, and (9) lack of top management support.

Brengel (1986), calling upon years of experience in directing the activities of the federal Incentive Awards Program (under the U.S. Civil Service Commission and currently the Office of Personnel Management) and as Secretary-Treasurer of NASS, has identified several factors he considers to be critical to the development of an effective suggestion program. They include: (1) management commitment, (2) "directed publicity" (towards organizational goals), (3) innovation and change with respect to trying and testing new ideas, (4) use of current technology, (5) program integrity, (6) organization-wide support, and (7) establishment of relationships with other employee participation programs within the organization.

Considering such findings as well as information obtained from our own preliminary interviews, discussions, and reviews, we chose to focus on selected areas of suggestion program management that included: (1) top management support and commitment, (2) resource allocation, (3) identification, application, and significance of measures of effectiveness, (4) eligibility, (5) award/recognition procedures, and (6) promotional activities.

Purpose

The primary objective of this study was to establish the basis for developing recommendations for legislative, regulatory, and administrative reforms needed to improve the effectiveness of the DoD Suggestion Program. The basis for developing these recommendations was a systematic assessment of factors contributing to the effective operations of established suggestion programs.

Two secondary objectives focused on identifying and describing characteristics of suggestion programs that could account for differences between the three military services and between the public and private sector organizations.
APPROACH

Several sources of information were used for this study. A brief description of those sources follows:

1. A review of the suggestion program literature focusing primarily on material published within the last 5 years.


3. Attendance at the annual convention of NASS.

4. Attendance at a 2-1/2-day seminar sponsored by NASS, entitled "Basic Concepts & Operation of a Suggestion System." The seminar was taught by experienced suggestion program administrators (SPAs). A great deal of information and insight was gathered from the instructors and the participants, who had varying degrees of experience with the business of administering suggestion programs.

5. Site visits and interviews with headquarters-level SPAs from 8 public and 10 private sector organizations. All of the site visits were with organizations belonging to NASS. Both private companies and public organizations with established programs were selected in order to identify the issues facing today's SPAs. The private organizations were selected to represent different "industry groups" as defined by NASS. Our sample included at least one organization from 10 of 18 different industry groups that represent both blue and white collar workers. A list of both public and private organizations visited follows.

   Bank of America
   Burroughs Corporation
   City of San Diego
   Convair
   Datagraphics
   Ford Motor Company
   General Motors
   General Services Administration
   Inland Steel
   Kaiser Permanente Medical Center
   Naval Air Rework Facility, North Island
   Naval Sea Systems Command
   Pacific Gas and Electric
   Sears, Roebuck and Company
   U.S. Air Force
   U.S. Army
   U.S. Navy
   U.S. Postal Service

   The study called for an "in-depth" analysis of the DoD Suggestion Program. To accommodate this requirement, SPAs were asked to participate in structured interviews that ranged in length from 2 to 6 hours, depending upon the interest and willingness of the particular administrator. The structured protocol used during the interview was designed to facilitate both the interview process as well as data analysis and interpretation.

6. Review of documentation, instructions, handbooks, guides, forms, and procedures gathered from the organizations visited.

7. Discussions with two top suggestion program officials: the Chief of the Office of Incentive Systems, Office of Civilian Personnel Management; and the Executive Secretary of NASS. A full day was spent with the Executive Secretary of NASS learning about suggestion systems, with special emphasis on history, important issues, problem areas, and future trends.
RESULTS AND DISCUSSION

Management Responsibilities

Defining the Purpose of the Suggestion Program

The most important factor behind the success of any type of organizational program is the support and direction provided by top management (General Accounting Office, 1978; Metz, 1984). If the purpose of a suggestion program is to improve the productivity/efficiency of the organization, management should make that purpose clear as it pertains to the suggestion program. We asked SPAs to identify the primary purpose of the suggestion program in their respective organizations. Most organizations reported multiple purposes. As seen in Table 1, the most frequent responses dealt with bottom line concerns, such as improving productivity and cost savings/cost avoidance. Of lesser concern, although important, were employee-related issues. Two-thirds of the organizations mentioned employee involvement (participation) or morale. Only one respondent (from a private organization) said the program's sole purpose was "to save money by reducing costs." Consequently, while priorities may differ somewhat among SPAs, they all had specific ideas about the purposes of their programs. This is obviously important for the way a program is designed and operated.

Table 1

Purposes of Suggestion Programs According to Program Administrators

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Number of Organizations (18 total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve productivity/efficiency</td>
<td>15 ( ^a )</td>
</tr>
<tr>
<td>Cost savings/cost avoidance</td>
<td>14</td>
</tr>
<tr>
<td>Employee involvement/participation</td>
<td>2</td>
</tr>
<tr>
<td>Improvement of morale</td>
<td>11</td>
</tr>
<tr>
<td>Individual recognition</td>
<td>1</td>
</tr>
</tbody>
</table>

\( ^a \) Organizations could indicate more than one purpose.

Locating the Suggestion Program Within the Organization

In the process of determining the purpose (or purposes) of an organization's suggestion program, an interesting inconsistency was noted. While the most frequently reported program purpose was directed towards productivity, the majority of SPAs reported to personnel-related departments. Personnel departments typically have responsibility for personnel administration, employee relations, compensation, employee benefits, etc., not
organizational productivity. Of the 18 organizations in the study, 1 suggestion program was located in a financial department, 3 were under the direction of either a value or industrial engineering department, and 10 were located in personnel departments. The remaining 4 administrators indicated that they reported to departments separate from personnel, but which performed personnel-like functions (such as "Risk Management," a department that administered employee benefits, and "Motivation and Public Affairs," an office within an administrative services department).

It could be argued that it makes no difference where the suggestion program is located in the organization. The fact that some very successful suggestion programs are located in personnel departments provides support for that argument. However, it could also be argued that if those programs were located in departments more directly related to productivity, they could enjoy even greater success. In our opinion, the reporting structure should be determined by the purpose of the program, and if the purpose is to enhance productivity, the suggestion program administrator should report to the department with that responsibility. According to a recent article published by NASS, the "ideal" structure is to have SPAs reporting directly to senior managers or the company president/CEO. The next best position would be to have SPAs report to "a Productivity Management, Methods Research, Industrial Engineering or Quality Assurance unit" (NASSPAK, 1986). Whether these units are appropriate or not is debatable; the important point to remember is that the suggestion program should support organizational requirements and the organizational structure that best facilitates that end is preferable.

Establishing Objectives and Goals of the Suggestion Program

Once management has decided what the purpose of the suggestion program is, it needs to specify objectives and set goals. The terms "purpose," "objective," and "goal" have unique definitions in this report that perhaps can be more clearly understood by way of example. A purpose of the suggestion program, as indicated earlier, can be to reduce costs. One objective related to this purpose can be to increase the adoption rate. A goal can be to increase the adoption rate by 10 percent. Basically, the differences in terminology reflect different levels of specificity, but the distinctions are very important in the design and administration of a suggestion program.

Who is responsible for setting objectives and goals? In part, responsibility depends upon purpose. If the suggestion program is intended to improve the quality of work life for company employees, then objectives and goals could reasonably be established by the human resource management department. If, on the other hand, the objectives and goals are productivity-oriented, as was the case with most of the organizations we visited, they should be established by line management, starting at the top. The objectives and goals should be directed towards the needs of the organization. Brengel (1986) uses the phrase "directed publicity" wherein management's current business goals become the goals of the suggestion system. As an example, First Interstate Bank (1983) reports on a program that is separate from its regular suggestion program; this other program periodically focuses attention on current problem areas as determined by management (e.g., cost reduction in a specific area of the bank). During the focused program, usually 4 to 5 weeks in duration, suggestions are accepted for the special program only if they relate to that concern. As an added incentive, the sharing rate is raised from 10 to 20 percent.

Most of the organizations we visited reported that they established annual improvement goals for their suggestion programs. Only three organizations stated they did not set any goals. Both public and private sector organizations set similar goals for reducing backlog and evaluator/total processing time, and increasing savings and adoption rates.
Public organizations were more interested in the total number of suggestions they received rather than the number of different people submitting those suggestions. Government organizations kept no records of the number of different suggesters. Private organizations, in general, kept information on both the total number of suggestions and the number of different suggesters. The significance of distinguishing between these measures, that is, the suggestion rate and the participation rate, is discussed later in the report.

Resource Allocation

Another important criterion of management support is resource allocation to develop and operate the suggestion program. Resources can be defined in terms of staffing and training.

Staffing. One aspect of resource allocation is the number of people assigned to a program and the amount of time they are tasked to spend working on that program. In the present sample of 18 organizations, there were only 9 full-time SPAs, of which only 3 (38%) were employed in the public sector (Air Force, Army, and the City of San Diego). In all of the 18, however, the actual number of support staff members, from administrative to clerical, consisted of either one or two additional full-time individuals regardless of the size of the organization or the number of suggestions submitted.

In the private sector, 6 of the 10 people interviewed were full-time SPAs. The size of the support staff was generally larger than in the public sector and in one case there was an entire department with 6 full-time staff members devoted to maintaining and operating the suggestion program. In general, however, the field offices or local branches of the companies were staffed by people given the responsibility for maintaining and operating the suggestion program as a collateral duty.

The suggestion programs of the Air Force, Army, and Navy are all technically centralized at headquarters level. Their methods of operating vary, however. The Air Force has field representatives assigned to manage the suggestion program at the base or command level. The Army has personnel within personnel offices managing and maintaining the suggestion program as a collateral duty. The Navy, unlike the Air Force and Army, has separately administered suggestion programs for civilian and military personnel. The Navy civilian suggestion program is administered by an office that is also responsible for other employee programs, such as injury compensation, employee benefits, and drug testing. The Navy military suggestion program has a newly appointed full-time administrator. While the Army and Navy systems are formally centralized, their operations are, in fact, vested with the various base and systems commands that may or may not have full-time SPAs.

Staff Training. Another aspect of management commitment to resource allocation is the amount of training given to individuals responsible for maintaining and operating the suggestion program. The results obtained from the present study indicated that most organizations had little formalized training for evaluators or supervisors. In 13 organizations, the only "training" on how to evaluate suggestions came from a manual. In only 2 organizations was additional training provided by supervisors, and in only 1 company was additional training provided by a suggestion program staff member. In the remaining 2 organizations, no type of instruction or training in evaluation was provided at all. In general, evaluators are left to decide for themselves what it is they should be concerned with when evaluating suggestions. It should be noted that most companies have evaluation forms, but they vary in content, level of specificity, and clarity. In addition to these
problems, there were few, if any, rewards for completing the evaluations. Moreover, this work was usually done as a collateral duty. It is little wonder then that evaluation processing time emerged as one of the most important areas for improvement in the suggestion system process. This issue will be discussed more fully later in the report.

Administrators from 12 of the organizations reported that one of the best ways to improve their programs would be to provide supervisors and evaluators with training in the goals, operations, and management of their suggestion programs. In the companies we interviewed, only General Motors had developed systematic procedures to train their supervisors and potential evaluators in suggestion program requirements. Training of this type serves many ends. As discussed earlier, clarity of purpose for the program is specified. Not only will the employees better understand how their suggestion program works, they will also have a better understanding of how to carry out the objectives and goals of the program. In summary, management should provide training to supervisors and evaluators in how to process and evaluate suggestions. Further, training for employees in how the suggestion program operates, how to prepare and submit quality suggestions, and what the appropriate and inappropriate topic areas are would also help the program.

Measurement and Evaluation

Effectiveness

One of the objectives of this study was to provide recommendations to improve the "effectiveness" of the DoD Suggestion Program. The concept of effectiveness is discussed here because it is basically a measurement issue. What does effectiveness mean? In our opinion, the effectiveness of any managerial program should be defined in terms of the organizational context in which it is used and the extent to which the program's objectives and goals are established and satisfied within that context. For example, if the goal of a suggestion program is to reduce the cost of some product or service by some specified amount and that goal is met, one would conclude that the program was effective. The degree of effectiveness would be determined by how close the program came to reaching the goal.

Measures

To determine program effectiveness, an organization must have criteria to measure performance. All of the 18 organizations that were part of the present sample indicated that they used various measures to determine program success. (The numbers in parentheses following the names of the measures indicate the number of organizations that reported collecting information on that measure.) The most consistently used measures were Suggestions Received per 100 Employees (18), Awards Paid (18), Savings (17), Suggestions Adopted (17), and Backlog (16). Less frequently collected were measures of the Number of Employees Eligible to Make Suggestions (13), Participation Rates (12), Adoption Rates (11), Average Award (8), Increase in Savings (over various time periods) (8), Average Savings per Adoption (7), and Processing Time (7). While not used by all organizations, the last few measures could be computed rather easily from several of the measures presented above.

Participation Versus Suggestion Rates. A particularly interesting distinction between the public and private sector organizations concerned whether information was collected on the number of different employees submitting suggestions (Participation Rate) and the number of suggestions received per 100 employees (Suggestion Rate). While most private sector organizations reported their Participation Rates (six out of nine, with information
unavailable from one organization), only one out of eight public sector organizations did so. This finding indicates that, in general, public sector organizations are not aware of how many different suggesters they have (i.e., they are not aware if the number of suggestions submitted is due to many people submitting few suggestions or few suggesters submitting many suggestions). This measure is important and certainly has ramifications for promotional campaigns, budgeting considerations, publicity, feedback, and even award structures.

The other measures were generally similar for the public and private sector organizations in the sample.

Adoption Rate. It is interesting to note that when SPAs were asked about setting goals to improve suggestion program performance, the least mentioned measure was Adoption Rate. Only two organizations, both in the private sector, reported establishing goals for the number of suggestions adopted relative to the number of suggestions submitted. According to the National Association for Suggestion Systems' Annual Statistical Report/1985 (1986), the average Adoption Rate for 1985 was 22 percent. In general, adoption rates ranged between 20-25 percent. This means that, in most cases, only one out of four or five suggestions is approved for adoption. These statistics indicate that the "quality" of most suggestions, that is, their value to the organization, is low.

Few of the organizations we visited specified the areas that were eligible for suggestions. Most organizations that had any guidance at all on what kinds of suggestions could be submitted specified those areas that were not eligible for consideration. Therefore, one possible, and likely, reason for low adoption rates is that employees do not know enough about their organization's suggestion program to effectively participate.

Another problem associated with low adoption rates is the time spent by evaluators reviewing unacceptable suggestions. This situation must certainly lead to negative attitudes towards the suggestion program on the part of the evaluators. Who could look forward to reviewing suggestions if (1) the duty is collateral, (2) little, if any, compensation or recognition is provided, and (3) 80 percent of the suggestions are unacceptable? This situation undoubtedly has an adverse motivational effect upon the time it takes an evaluator to process suggestions, which was identified in the literature and during interviews as a major problem in suggestion program administration (Graf, 1982; Gregg, 1983).

A third problem that may be fostered by a low adoption rate is the adverse impact upon suggesters and/or potential suggesters. If an individual is going to submit a suggestion, the value of the award (of whatever kind) must be high enough to overcome the expectation that four out of five suggestions are going to be rejected. We do not know the extent to which potential suggesters do not submit suggestions because of a concern that they will not be accepted, nor do we imply that every suggestion should be accepted. We do suggest, however, that the criteria for ideas most likely to be useful to the organization and therefore, adopted should be specified by management. This may result in fewer suggestions, but they may be of greater value to the organization in reaching its goals. Attitudes of suggesters, evaluators, and managers may also improve as a result.

Reporting Systems

In many organizations, the sole purpose for collecting suggestion program statistics is to provide descriptive or summary data for publication in an organization's annual report.
or be sent to organizations like NASS or the Office of Personnel Management, both of which serve as statistical data clearinghouses. There is no other intended use for the data. This situation may indicate the limited significance or importance of the program to the organization. Such statistics, when used properly, can serve as a powerful management tool for improving suggestion programs. The data can direct attention to problem areas where significant improvements can be realized. If the statistics are to be used for program improvement, they need to be reported periodically to a level of management that has the authority and responsibility to act upon the information obtained.

The interviews contained several questions associated with reporting requirements and included (1) the frequency with which such reports were required and (2) the levels of management requiring them. Table 2 shows reporting requirements of public and private sector organizations in terms of frequency of reports and the levels of management receiving them. One of the more interesting results depicted is the difference between public and private sector organizations in frequency of required reports, especially at lower levels of management. Only 1 of the 7 (14.3%) public sector organizations required a monthly report to supervisors, while 5 of the 9 (55.5%) private sector companies had such a requirement. Only 2 of the 7 (28.6%) public organizations had monthly report requirements for local management, while 4 out of the 10 (40%) private sector companies did. No public organizations had monthly requirements at the corporate level, while 3 of 10 private sector companies did. Similarly, the requirements for quarterly reports were disproportionately higher for private sector organizations than for the public sector.

Table 2

Frequency of Reporting Requirements by Level of Management

<table>
<thead>
<tr>
<th></th>
<th>Supervisors Public</th>
<th>Supervisors Private</th>
<th>Local Management Public</th>
<th>Local Management Private</th>
<th>Corporate Level Public</th>
<th>Corporate Level Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None required</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Monthly</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Quarterly</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Semi-annually</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Annually</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>No data</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

a Organizations may have more than one reporting requirement.
It was also surprising that several organizations did not require any reports at all, not even at the corporate/headquarters level. Summary reports were generally prepared in all organizations, but they were not always required by the organizations. While the present figures are too small to make generalizations about public or private sector organizations, they do point out differences that may indicate the relative importance of such programs to the organization. The less frequently a report is required, the less likely the interest in improving that suggestion program.

One problem surfaced several times that related to the standardization of reporting. For example, one organization indicated that its screening procedures were more stringent than another organization down the street, thereby resulting in a lower participation rate. More examples could be cited, but the important point is that if measures from different organizations are going to be compared and/or combined, they need to be based upon the same criteria.

Finally, there is some evidence that the simple act of reporting data may produce a positive effect on an organizational program. Schlar (1985) reports that, in general, when management starts to require more frequent (monthly, quarterly) reporting for a given program, performance tends to improve. Although Schlar offered no explanation for the effect, it is generally true that employees pay attention to what their superiors are asking for, and, therefore, requests for frequent reports may be interpreted as an indicator of what the boss thinks is important.

Eligibility

Who May Suggest?

Table 3 shows a breakdown of the types of employees eligible to participate in the suggestion programs of the public and private sector organizations in the sample. The results of the study indicate that, for most of the organizations we visited (15 of 18), a primary purpose of the suggestion program was to improve productivity. All but one of the public sector organizations in our sample allow full-time employees to participate in the program. Private sector organizations, however, required that employees meet a variety of eligibility criteria, the most common being to include only the hourly, non-exempt employees. Part of the reason that some organizations exclude management is based on tradition. When suggestion programs were first introduced in this country, they were considered to be "employee benefit" programs; their value with respect to improved productivity and other positive outcomes was not an issue. Managers knew how to manage; they didn't need any help from their subordinates. Another argument is that managers are paid to develop ideas that can save the organization money and motivate their personnel. Therefore, if they were compensated for making suggestions or submitting ideas to the suggestion program, they would be getting paid twice for the same thing. Some organizations still hold this view, but the trend is in the direction of expanding eligibility requirements to include more management personnel (NASS, 1986).

What May Be Suggested?

The domain into which suggestions could legitimately fall was identified as nearly any area as long as present job duties were not included. This was predominantly the case for both the public and private sector organizations. Two private sector organizations reported that while their formal organizational policy stipulated that suggestions should
Table 3
Award Eligibility for Employees in Public and Private Organizations

<table>
<thead>
<tr>
<th>Employee Categories</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time employees</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Hourly</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>All but top management</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

not address duties or responsibilities contained in an employee's job description, it was not strictly enforced, especially at lower levels. The argument typically given to exclude one's own job from the area of concern, and it is a reasonable one, is that organizations do not want to pay people twice for doing their work. However, if we want to obtain suggestions on how to improve productivity and reduce organizational costs, no one is in a better position to suggest improvements than the person who performs a particular job day in and day out. Further, how often do the job descriptions of most nonmanagerial employees include finding ways to reduce costs and improve efficiency?

Perhaps the issue of "What may be suggested?" points up another reason why so many suggestions are not adopted--people make suggestions in areas they know little about. As with the issue of "Who may suggest?", there seems to be a trend toward more loosely defining what is within one's job scope.

Awards

Suggestion programs operate on the simple premise, "If I use your idea, I'll pay you." That is where the simplicity stops. Most organizations use cash awards. Other types of awards include merchandise, savings bonds, tickets to various events, paid vacations, etc. With respect to cash awards, organizations use different bases for determining minimum and maximum awards as well as the total award amount. In the following paragraphs we will describe some of the important issues associated with awards.

Award Amounts

Since most government agencies operate under the Office of Personnel Management (OPM) guidelines, amounts for tangible and intangible benefits resulting from adopted suggestions are determined in accordance with those guidelines. Tables have been developed to determine specific amounts to be awarded based on the value of the savings; awards range from $25 to $35,000. Briefly (for tangible awards only), the amount of the award is generally determined by (1) the estimated net benefit of the first year's savings and (2) a varying schedule of shared savings. The savings must exceed $250; thereafter, the individual receives 10 percent of the savings up to an award amount of $1,000. Beyond $1,000, sharing percentages get smaller until the maximum amount is reached.

As might be expected, private sector organizations vary in the amounts they award ($20 to $100,000) as well as the percentage of savings awarded (sharing rate) to the
suggester. The most common sharing rate we found in private companies was 20 percent of the first year's net savings.

**Award Payment Schedules**

One of the most interesting aspects of the awards component of suggestion programs was the award payment schedule--when the suggester receives payment. Seven out of 10 private sector companies reported making final payments after a suggestion was implemented or a trial period was held to determine the "actual" savings to the organization. The public organizations were just as likely to make payments after approval of a suggestion or after implementation. No public organization we visited had a system by which to verify that estimated savings were actually realized over a specified period of time. Awards were based on estimated savings generally over a 1-year period.

While these findings identify little consistency in the method of award payment, they do point to areas that can have an effect on the perceived credibility of a suggestion program. A program that demonstrates that estimated cost savings can be realized before a total payment is made is more likely to be perceived as more credible and, therefore, more acceptable to management. On the other hand, such a system can result in a longer delay between the time an employee submits a suggestion and subsequent recognition. Theoretically, the lengthy delay period leads to fewer suggestions. An important area of future investigation would be to identify which payment schedule is most likely to result in (1) a more credible program in the view of management and (2) employees submitting more suggestions.

**Awards for Evaluators**

Most organizations in our sample reported that they provided little, if any, rewards for evaluators. While the possibility of collusion or conflicts of interest might be made if evaluators were compensated for their evaluation duties, the issue still remains as to how to motivate them to review suggestions in a more timely fashion. Most job descriptions do not include evaluation responsibilities; they are added to already existing tasks. Consequently, in order for evaluators to reduce the evaluation processing time, which has been identified as an important area of concern in the present study as well as others we reviewed (General Accounting Office report, 1978; Merit Systems Protection Board report, 1986), incentives need to be provided either by establishing greater accountability for conducting evaluations, such as in job descriptions or in performance appraisals, or by providing awards or recognition for engaging in evaluation activities.

**Awards for Supervisors**

The same arguments identified for evaluators could be used for supervisors. However, even fewer organizations provide any type of award or recognition for supervisors. Only one private sector company we visited (General Motors) offers any type of compensation to supervisors. They award an amount equivalent to five percent (recently increased from 1%) of the awards received by the employees who worked for them. The idea is to achieve a cooperative relationship between the supervisor and the subordinate with regard to supporting the company's suggestion program, the sole purpose of which at General Motors is cost savings. While the feasibility of this kind of arrangement may require further evaluation in other organizational settings, GM's suggestion program goals have been achieved over the last several years, and it would appear that the incentive awards offered to supervisors have helped to achieve them. It is important to note that the estimated savings figures at General Motors were substantiated only after a trial
period of 12 months; at that time final award payments were made. This approach appears, at face value, to lend more credibility to the effectiveness of the program, particularly with top management.

Publicity and Promotion

SPAs were asked about the various forms of publicity used to promote their suggestion programs. The response given by every organization in the sample, except one, indicated the use of in-house publications, primarily to publicize award winners or contributors to the program. Posters, easy to order and to display, were frequently used to promote a particular message. Contests were not frequently held. Only two public sector organizations and two private companies reported the use of contests as a means of promoting the suggestion program. Personal contact between suggestion program staff and employees was mentioned in only about half of the cases. While the face-to-face interaction with employees was reported to be the most important way to increase awareness and to stimulate interest in the suggestion program, limited staff and, in some cases, limited time associated with the suggestion program precluded much personal contact. Ten organizations (four public and six private) reported the use of "give-aways" (cups, pens, caps, decals, etc.), but these were generally distributed for submission of eligible suggestions.

Other types of promotional activities included a 24-hour "hot-line," radio and television announcements, home mailings to employees, suggestion boxes (usually in conjunction with posters), and information on paycheck stubs. A variety of promotional approaches were identified, and many of the organizations used more than one approach. However, when asked how effective these techniques or methods were, four SPAs reported that they perceived their publicity attempts to be effective, two said the number of suggestions submitted always increased after a specific publicity campaign, and one said there was an increase in dollars saved. Eleven individuals indicated that they did not know how effective their efforts were. Only one organization (Burroughs) provided data (a run chart) showing the effects of various promotional attempts on the number of suggestions submitted.

Since practically no attention was given among the organizations we visited to measuring the effectiveness of promotional activities, it is impossible to specify which methods are effective and to what degree. Posters are used almost universally. What is their purpose and do they satisfy that purpose? Does the distribution of coffee mugs sporting the company logo increase participation rates? Do posters elicit more suggestions than coffee mugs? Evaluations should be conducted that answer such questions and that assess the relative costs of one approach over another. The information obtained from such evaluations and cost analyses can help a SPA decide where to allocate limited resources. Finally, and possibly most important to the success of the suggestion program, the information obtained through such evaluations and cost comparisons of the various publicity and promotional schemes may also improve the credibility and acceptability of the program to top management.

Relationship Between Suggestion Programs and Other Employee Involvement Programs

One of the dominant trends in management in the eighties focuses on the value the worker can play in contributing to the overall success of an organization. Managers have begun to recognize the fact that it is not sufficient to have a dedicated, highly skilled work force that simply carries out the dictates of management. An assumption of employee involvement (EI) programs is that every employee, to varying degrees, has the
potential to help an organization improve. Because of their intimate knowledge of the work they do, employees should become more involved in the management process. They can make significant contributions to the success of their organizations by finding better, more cost-effective ways to get the work done and improve the delivery of quality products and services.

Excluding suggestion programs, the most commonly mentioned EI program was that of quality circles (13 of 18; 72%). Other programs frequently mentioned were cost reduction and incentive (performance) awards. Some EI programs such as Value Engineering, Zero Defects, Management Teams, and Total Quality Management were not familiar to most of the people we interviewed. The most significant difference between suggestion programs and other EI programs is that suggestion programs require employees to make suggestions outside of their job responsibilities (although we have previously stated that this practice is not always the case), whereas other EI programs encourage employees to look at ways to improve their own jobs or those of their work group. Although there appeared to be some confusion with respect to the definition of job responsibility, in the final analysis the decision of job scope or responsibility should be determined by management based upon the stated purpose of the suggestion program.

With respect to the relationship of the suggestion program to other EI programs, particularly quality circles (QCs), several individuals stated that the programs were in competition and, in some cases, were vying for the same funds. This type of competition (perceived or real) suggests the need for greater program integration within the organization. The objectives and goals of the various programs need to be determined to avoid duplication of effort. Where possible, consideration ought to be given to integrating programs with similar objectives. For example, in some of the organizations we visited, both public and private, ideas developed through QCs resulted in monetary group awards distributed through the suggestion program. (Note: NASS is currently sponsoring a study to investigate the relationship between suggestion programs and other EI programs, specifically QCs and productivity/cost reduction teams.)

**Suggestion Program Problem Areas**

**Management Support**

The individuals interviewed in the present study were asked to identify problems they had with their suggestion programs. Only half of the people interviewed (with equal proportions from the public and private sectors) identified lack of top management support as a problem. Although they did not always get the extent of support they would like, there was at least some type of top management acknowledgement for the suggestion program. The overwhelming concern was for lack of middle management and first-line supervisor support for the suggestion program. Fifteen SPAs reported this as a problem (6 public, 9 private).

Although the present study did not explore this problem further, several possible explanations are feasible. First, the general impression from most of the organizations was that the suggestion program was not seen as one of the more important ones, inferring that while top management was perceived as supportive, this message was not being adequately conveyed to middle management and first-level supervisors. Second, middle managers and supervisors may see the suggestion program as an additional burden placed upon them and their staff (having to provide suggestion evaluation support), with little or no incentive to provide timely or quality support. If top management does not send a clear signal to its managers with respect to the importance of the suggestion program, it will probably be neglected. Third, it was reported that middle managers were
not fully familiar with the suggestion program. This finding suggests the need for training and internal marketing efforts to "spread the word" about the suggestion program if it is to have a significant impact on the effectiveness of the organization. Finally, some middle managers and supervisors may find the suggestion program a threat to their abilities as managers (Graf, 1982). They believe that it is their job to find better ways to improve operations, not the job of those they supervise. Consequently, it is difficult to get supervisors with these attitudes to support a suggestion program. In order to change such attitudes, individuals need to understand and be convinced by top management that receiving implementable ideas through the suggestion program does not reflect negatively on their managerial abilities, rather it may be a positive indicator of supervisory skills, that is, they are able to motivate subordinates to contribute suggestions.

**Evaluation Processing Time**

Another often-mentioned problem area concerned the length of the evaluation processing time and the related problem of suggestion backlog. One of the most serious consequences of this situation is its impact upon suggesters and potential suggesters. Timely feedback has been demonstrated to be a strong motivator. When delays occur, they not only hurt the organization economically by delaying the implementation of good ideas, but also in terms of decreasing the likelihood of receiving future, economically beneficial suggestions. Improving the way suggestions are processed so that they are more timely and less burdensome to evaluators, supervisors, and SPAs can go a long way towards improving the effectiveness and credibility of the suggestion program.

**Suggestion Programs of the Three Armed Services**

A secondary objective of this study was to attempt to identify and describe characteristics that could possibly account for program performance differences between the three military services. If we look at two measures, Suggestions Received per 100 Employees and Benefit-to-Award Ratios, we find some large and consistent differences. Table 4 provides data on these two measures for 5 consecutive years beginning in 1981. What is notable from the data is that the rank order across services is the same on each measure with only one exception (Benefit-to-Award Ratio in 1985), and, with the exception of 1984, the Suggestions Received per 100 Employees shows very little year-to-year variability. To determine cause and effect is beyond the scope of this study. We did find several program characteristics that varied across the services, however, that could possibly account for the differences. The characteristics included:

1. Full-time suggestion program administrator (Air Force, Army);
2. Suggestion program administered separately (different office and administrator) from performance awards program (Air Force, Army);
3. Total force program, that is, civilian and military suggestion programs administered from the same office and by the same person (Air Force, Army);
4. Automated suggestion tracking and retrieval system (Air Force);
5. Suggestion and performance program documentation separate (e.g., instructions, regulations) (Air Force, Army);
6. Location of the suggestion program office within the organization (Air Force, recently moved from Personnel to Management Engineering; Army, in the process of moving from Personnel to the Comptroller; Navy, Personnel);
7. Statistical reporting requirements (Air Force, monthly, quarterly and annually; Army, annually; Navy, annually);

8. Experienced suggestion program administrator (Air Force, 12 years; Army, less than a year; Navy, less than a year).

Table 4

Military Service Comparisons Based on Two Suggestion Program Indicators: "Suggestions Received per 100 Employees" and "Benefit-to-Award Ratios"

<table>
<thead>
<tr>
<th></th>
<th>Number of Suggestions Received per 100 Employees</th>
<th>Benefit-to-Award Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Force</td>
<td>15.9</td>
<td>83:1</td>
</tr>
<tr>
<td>Army</td>
<td>10.6</td>
<td>44:1</td>
</tr>
<tr>
<td>Navy</td>
<td>6.4</td>
<td>44:1</td>
</tr>
<tr>
<td>1982</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Force</td>
<td>15.9</td>
<td>53:1</td>
</tr>
<tr>
<td>Army</td>
<td>10.3</td>
<td>26:1</td>
</tr>
<tr>
<td>Navy</td>
<td>6.1</td>
<td>17:1</td>
</tr>
<tr>
<td>1983</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Force</td>
<td>16.7</td>
<td>38:1</td>
</tr>
<tr>
<td>Army</td>
<td>11.1</td>
<td>29:1</td>
</tr>
<tr>
<td>Navy</td>
<td>6.9</td>
<td>21:1</td>
</tr>
<tr>
<td>1984</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Force</td>
<td>23.7</td>
<td>37:1</td>
</tr>
<tr>
<td>Army</td>
<td>17.6</td>
<td>31:1</td>
</tr>
<tr>
<td>Navy</td>
<td>12.2</td>
<td>20:1</td>
</tr>
<tr>
<td>1985</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Force</td>
<td>16.1</td>
<td>44:1</td>
</tr>
<tr>
<td>Army</td>
<td>13.4</td>
<td>26:1</td>
</tr>
<tr>
<td>Navy</td>
<td>6.7</td>
<td>33:1</td>
</tr>
</tbody>
</table>


As mentioned before, a cause-and-effect relationship between the measures shown in Table 4 and the listed program characteristics cannot be determined. One of the characteristics could possibly account for most, if not all, of the variability in the measures, or perhaps none of the characteristics have any effect upon the program measures. It is likely, however, that each characteristic has some impact upon the measures, but to varying degrees. The value of identifying program differences is not to show that one program is "better" than another (we cannot tell from the present data), but rather to provide some directions or ideas about where improvement activities might begin.
The magnitude of the measures presented in Table 4, as well as others mentioned throughout the report, can serve as base lines against which an organization can measure future improvement. Even though the Air Force suggestion program appears to be very good relative to the other services and to many private sector programs as well, the Air Force suggestion program administrator was quick to point out that the program could be better ("A thirty percent participation rate is possible.").

Special Topics

In the course of talking with SPAs, either during the interviews or in other contexts (NASS conferences, seminars), we became aware of issues that were not specifically addressed in the structured interviews. Because of the frequency with which they were mentioned, they will be described in the following paragraphs.

Automation

According to NASS, of the 256 reporting organizations for 1985, 149 (58%) have computerized systems and 56 (22%) are considering the idea (NASS, 1986). Among the three military services, only the Air Force has an automated suggestion system. The Army suggestion program administrator indicated that an automated system "was coming" but was not sure when that would be. Several of the private companies we visited had automated programs. An automated suggestion program has many arguments in its favor, both in program administration and program management. A computerized program can be useful in addressing many of the issues we have described.

Although a computer cannot run a suggestion program, it can help—but it can only help significantly if it is properly designed and used. A well-designed computerized suggestion program has many advantages, a few of which will be mentioned here.

1. An automated system allows a suggestion program administrator to keep track of a suggestion throughout the entire system, from submission to adoption or rejection. The capability to track suggestions provides the kind of information control required to successfully administer any management program.

2. The status of a suggestion can be determined quickly no matter where it is in the system. The capability to locate a suggestion can be very important for getting quick, accurate answers to questions from suggesters, managers, and SPAs.

3. Tickler files can be established that provide suggesters with frequent updates on the status of their suggestions. Research indicates that accurate and timely feedback can serve as a motivator; it is possible that such feedback could improve participation rates or other aspects of the program.

4. Programmed periodic feedback to evaluators should shorten suggestion evaluation time.

5. Data for program measures (e.g., participation rates) can be stored, analyzed and reported. This readily available information can be helpful for evaluating program activities (e.g., promotional campaigns) and for preparing reports.

6. Performance compared to program goals can be more easily tracked and analyzed.

7. Cost-benefit analysis can be greatly facilitated.
One of the most common complaints of the SPAs we interviewed was that they did not have sufficient staff. A suggestion program, if administered properly, is labor-intensive. While automation cannot solve the staffing problem, it can help. It can help, however, only if program requirements are determined up front, and sufficient training is provided to the people operating the system. Computers are getting cheaper every year and information about computerizing a suggestion program is readily available (e.g., Foland, 1985), as are commercial suggestion program software packages.

Role Definition

The General Case. Role definition addresses the issue of responsibility. An important requirement for the success of any management program, including suggestion programs, is the clear specification of roles for the people who will be involved. In general, the major responsibilities associated with a suggestion program include (1) establishing policy, (2) assigning authority, (3) establishing objectives and goals, (4) providing guidance and procedures, and (5) operating the program. If the focus of the suggestion program is productivity improvement, as is the case for most of the organizations we visited (refer to Table 1), then it is the responsibility of management to ensure that duties are clearly defined.

The first three roles listed above are basically management functions, whereas providing guidance and procedures and operating the program generally fall under the domain of the SPA. How many managers know that the first three roles described above belong to them? Conversely, how many SPAs know that the first three roles do not belong to them? The activity of defining roles cannot be overemphasized. For example, what is the role of an SPA? The SPA for the Electric Boat Division of General Dynamics Corporation stated that his job was to "go out and get suggestions" (Blay, 1986). How would the activities of SPAs differ if they perceived their jobs in that way rather than as administrators of the suggestion program?

It is likely that the role of the SPA will vary from organization to organization. Whatever the role, however, the important point is that there be agreement among the administrators, evaluators, managers, and supervisors regarding their responsibilities.

DoD. Within DoD, the primary concern is to define the appropriate roles at each level in the structure. What kinds of activities should be expected from the DoD SPA, or the administrators at agency headquarters and on down the structure to individuals operating at small military installations? Are there levels in the bureaucratic structure where the suggestion program is monitored rather than managed? If so, where is the transition point? At what level does managing the program start? This kind of role differentiation should be established throughout the structure so that each player knows what s/he is expected to do.

Military Participation. The rate of military participation is low relative to that of civilian participation in the suggestion program. One of the reasons given for the lower rate is that military personnel perceive offering suggestions as part of their jobs (or their superiors do) and, therefore, do not generally participate in the program. The important consideration appears to be whether people are aware that encouragement is being given to make suggestions that will improve their organizations.
CONCLUSIONS

One conclusion we have come to in the course of conducting this study is that suggestion programs are extremely complex. This high degree of complexity made it necessary to be selective in identifying what we perceive to be some of the more important issues associated with the effective administration of suggestion programs.

1. While top management support is critical to the success of a suggestion program, the importance of middle managers and first-line supervisors must also be recognized. Most administrators we interviewed reported some level of support by top management; however, this support was generally not maintained by middle managers and first-line supervisors. Since this latter group is closer to the operations of a program and represents the ones who must supply the required resources (e.g., labor hours, evaluators), they may exert a more direct effect on the success of a suggestion program than does top management.

2. A demonstrable sign of top management support for a suggestion system is the commitment to providing adequate resources, viz., adequate staffing to handle the workload in a timely and professional manner. Most of the organizations in the present study reported they were understaffed. This was particularly evident in the public sector organizations. While it is not clear that a large staff is needed to manage a local suggestion program, the responsibility for obtaining, evaluating, and providing timely awards for suggestions requires a staff that has the time to meet these responsibilities.

Staff size is only one aspect that needs to be considered. Organizations need to determine if their suggestion programs can be managed effectively as a collateral duty or whether a full-time administrator is needed. Further, little training was provided on how the individual suggestion programs should operate.

3. In many organizations, particularly within the public sector, the primary purpose of data collection was to provide descriptive or summary information, rather than to help with daily management. Requirements for collecting information on various indices of program effectiveness, such as participation rates, suggestion rates, adoption rates, etc., were infrequent in many cases and not reviewed by levels within the organization that could improve the program. All of the organizations in the study reported the collection of some information relative to assessing program effectiveness. In many cases, however, it was difficult to assess program effectiveness because little use was made of this information. Also, there was some inconsistency in how information was collected and reported.

4. Suggester eligibility and allowable suggestion content varied by organization. Typically, in the private sector, eligibility was limited to hourly employees. In public organizations, eligibility basically covered all full-time employees. By limiting the number and types of people who can submit suggestions, many potentially valuable contributors and contributions are lost. Generally, ideas within one's work specialty are not eligible for most suggestion programs. However, what better way to capture useful suggestions than within one's own area of specialization?

5. Another consideration is that of award and recognition procedures. While it was expected that amounts would vary by organization, it was not anticipated that so few awards and recognition would be given to others involved in the suggestion program.
process, in particular the evaluators and supervisors. Even more surprising, however, were the results associated with award payment schedules. Many organizations distributed suggestion awards based solely on expected savings and often did not follow-up to determine whether the suggestions were implemented. Even in situations where awards were based on implemented suggestions, that is, the ideas were actually used, there was little follow-up to determine whether the expected savings matched the actual savings over a prescribed time period.

6. Any successful program needs proper promotion throughout the organization. Although considerable resources were spent on various methods to increase participation in the suggestion program, very little action was taken to evaluate the effectiveness of such activities. While face-to-face contact was reported to be very effective, it was not frequently employed. Also, comparisons between various promotional approaches were generally not made. Comparative evaluations would go a long way in helping to determine which were the most successful in reaching which group of employees for which period of time.

RECOMMENDATIONS

1. Top management needs to know that the suggestion program belongs to them. They must establish objectives and goals for the program. They must also understand the important role middle managers and first-line supervisors play in supporting the program. Recognition systems must be established for managers at all levels in support of the suggestion program. Within DoD, these concerns could be handled in the following ways:

   a. Convene a workshop with top DoD SPAs in order to address current program issues, such as those discussed in this report. The agenda for the workshop should include developing clearly stated objectives, goals, measurement systems, and reporting requirements. Regular meetings between these officials could help establish a consistent DoD suggestion program and could greatly assist in the identification and implementation of initiatives to improve the program. These workshops could also assist in the exchange and sharing of ideas between the various DoD organizations.

   b. Convene regularly scheduled workshops at the base-, command-, or activity-level with respective SPAs. In addition to reporting on the information generated by the workshops described in (a) above, these meetings could serve to develop techniques and procedures that would improve the management of each organization in the system.

2. Everyone in the organization needs to know how the suggestion program operates. For a suggestion program to have a positive organizational impact, appropriate training must be provided to suggestion program staff, management (from top management to first-line supervisors), evaluators, and employees. Training should include information on the purpose of the program, on how to submit suggestions, on the process of evaluation, and on the award determination process.

3. To establish program effectiveness and credibility, there must be an increased emphasis on data-based decision making and program planning/evaluation. This step includes identifying appropriate measures and designing reporting systems that allow accurate information to get to the right people in a timely manner. In addition, program measures and reporting systems need to be standardized to facilitate statistical and program analysis. The establishment of these measures and their timely review and assessment can help to determine the effectiveness of a suggestion program.
4. Program credibility has been found to be an important issue, both from the perspective of top and middle management in determining whether savings actually result from suggestions, and from that of evaluators in deciding how much time to spend evaluating suggestions for which they are not compensated.

   a. An effective way to demonstrate program credibility is to show that the program is actually saving money or reducing costs (improving productivity). A way to do this would be to establish payment schedules in which savings must be demonstrated prior to final payment. Partial payments could be made after a suggestion was implemented, and a final payment made after a trial period in which actual savings were verified.

   b. Awards and/or recognition need to be considered, at the very least, for suggestion program evaluators. They are given a major responsibility for the technical aspects of the submitted ideas, and are often "rewarded" with the responsibility for evaluating more suggestions. To maintain their interests and high quality evaluations, they should receive some type of reward.

5. A systematic approach to identifying and comparing various promotional programs needs to be developed. The relative importance of these programs in terms of increasing participation, increasing adoption rates, or whatever else is deemed significant (e.g., the combination of several indicators) should be determined in order to implement those strategies that are most effective. These comparisons could also help determine how frequently promotions need to be run in order to most effectively stimulate employee awareness and participation.
REFERENCES


DISTRIBUTION LIST

Assistant Secretary of Defense (Force Management and Personnel)
Military Assistant for Training and Personnel Technology (OUSD) (R&AT)
Deputy Assistant Secretary of the Navy (Manpower)
Assistant for MPT Research and Development and Studies (OP-01B7)
Director, Civilian Personnel Policy (OP-14)
Director, Human Resources Management (OP-15)
Assistant for Manpower, Personnel, and Training (OP-987H)
Director of Navy Laboratories (SPAWAR-05)
Director, Naval Civilian Personnel Command
Director, Naval Military Personnel Command, Library (Code NMPC-013D)
Director, Human Resources Management Department (NMPC-6)
Technical Director, U.S. ARI, Behavioral and Social Sciences (PERI-ZT), Alexandria, VA
Commander, Air Force Human Resources Laboratory, Brooks Air Force Base, TX,
   Manpower and Personnel Division (AFHRL/MO)
Defense Technical Information Center (DTIC) (2)
END

4 - 87

DTIC