

# NAVAL POSTGRADUATE SCHOOL

Monterey, California



## THESIS

A PROFILE OF MANAGEMENT PROBLEMS IN THE NAVY

by

John Michael Croll

September 1977

Thesis Advisor:

Wm. Howard Church

Approved for public release; distribution unlimited

T 180041

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle)  A Profile of Management Problems in the Navy		5. TYPE OF REPORT & PERIOD COVERED Master's Thesis: September 1977
7. AUTHOR(s)  John Michael Croll		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS  Naval Postgraduate School Monterey, California 93940		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS  Naval Postgraduate School Monterey, California 93940		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)  Naval Postgraduate School Monterey, California 93940		12. REPORT DATE September 1977
		13. NUMBER OF PAGES 120
		15. SECURITY CLASS. (of this report)
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)  Approved for public release; distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)  Naval Personnel, Management, Navy, Personnel Management, Statistical Analysis, Factor Analysis, Problem Solving, Determination, Clustering, Statistics.		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  This study is conducted in conjunction with a project on Improved Personnel Utilization conducted by the Naval Personnel Research and Development Center, San Diego. Its purpose is to empirically identify Navy management problems which have a significant impact on morale and the effectiveness with which objectives are met. Of particular interest in this study is the identification of salient problem characteristics and situational		

variables. Management case studies collected by Professor Wm. Howard Church have been classified and analyzed. Quantitative analysis of the case evaluations includes a factor analysis of the antecedents and the manifestations of the management problem, and a stratification of problem attributes by situational variables.

Approved for public release; distribution unlimited

A PROFILE OF MANAGEMENT PROBLEMS IN THE NAVY

by

John Michael Croll  
Lieutenant, Supply Corps, United States Navy  
B.A., University of Dallas, 1970

Submitted in partial fulfillment of the  
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the  
NAVAL POSTGRADUATE SCHOOL  
September 1977

ABSTRACT

This study is conducted in conjunction with a project on Improved Personnel Utilization conducted by the Naval Personnel Research and Development Center, San Diego. Its purpose is to empirically identify Navy management problems which have a significant impact on morale and the effectiveness with which assigned objectives are met. Of particular interest in this study is the identification of salient problem characteristics and situational variables. Management case studies collected by Professor Wm. Howard Church have been classified and analyzed. Quantitative analysis of the case evaluations includes a factor analysis of the antecedents and the manifestations of the management problem, and a stratification of problem attributes by situational variables.

## TABLE OF CONTENTS

I.	INTRODUCTION.....	7
II.	METHODOLOGY.....	13
A.	COLLECTION OF MANAGEMENT CASES.....	13
1.	Description of Typical Case Writer.....	14
2.	Framework of Management Incidents.....	14
B.	EVALUATION AND CODIFICATION OF CASES.....	15
1.	The Coding Form.....	16
a.	Problem Attributes.....	16
b.	Antecedent Events.....	17
c.	Manifestations of the Situation.....	17
2.	Case Evaluations.....	18
a.	Case Evaluators.....	18
b.	Interpretation of Incidents.....	18
III.	ANALYSIS OF DATA.....	20
A.	FACTOR ANALYSIS.....	20
1.	Factor Analytic Technique.....	21
2.	Clusters Identified.....	26
B.	PROBLEM ATTRIBUTE ANALYSIS.....	32
IV.	SUMMARY OF FINDINGS.....	35
V.	CONCLUSION AND RECOMMENDATIONS.....	37
Appendix A:	TEN COMMANDMENTS OF GOOD ORGANIZATION.....	40
Appendix B:	THE SCIENTIFIC METHOD APPLIED TO PROBLEM SOLVING.....	42
Appendix C:	VARIABLE INPUT FORMAT.....	44
Appendix D:	MANAGERIAL PROBLEM ATTRIBUTES.....	47
Appendix E:	FREQUENCIES.....	57
Appendix F:	UNROTATED FACTOR MATRIX AND COMMUNALITY ESTIMATES.....	109
Appendix G:	VARIMAX ROTATED FACTOR MATRIX.....	114

LIST OF REFERENCES.....	118
INITIAL DISTRIBUTION LIST.....	120

## I. INTRODUCTION

Technological advances together with intensified interest in human behavior during the past thirty years have wrought significant innovations in the theory and practice of management. These new concepts have profoundly affected organizational structure in industry and government, and have had an impact on the nature of this partnership.

Concepts, techniques and strategies of management have existed since the beginning of man's efforts to form organized groups for attaining mutual objectives. The systematic examination of management thought, and the development of a discipline devoted to codifying principles and developing a theory has been, for the most part, a product of the twentieth century.

Management can be seen to be a distinct process or activity concerned with the achievement of objectives. It may be expressed in a number of different ways, viz., "...a process of designing and maintaining the internal environment for organized effort to accomplish group goals," [Koontz, 1972]. Saul W. Gellerman defines management as the task of organizing and motivating the efforts of other people [Gellerman, 1976]. Rensis Likert describes management as the systematic application of motivational forces on the human resources of an entity [Likert, 1967]. Throughout most definitions of management, however, one finds certain universal elements, viz.,

- Management is a distinct process dealing with group activity.
- An objective is involved.

- The objectives are achieved through establishing salient relationships between human and non-human resources.

- Management necessitates that the manager relinquish the tendency to perform things for himself, and accomplish objectives by delegation and through working with others in the group situation.

- Decision-making is pervasive in the management process.

Consideration of these elements indicates widespread agreement concerning the functions and nature of the management process. Adequate empirical observation and research have contributed to the development of a scientifically-based philosophy of management. One of the major disquieting forces in management theory today is the variety of approaches which are appearing from parochial areas. There are tendencies to formulate distinct approaches to management, thereby neglecting the inter-disciplinary nature of the management process. The various approaches to management theory include at least four schools. Harold Koontz describes the various schools of management under six different categories [Koontz, 1962] which have been condensed into three main groups. Responsibility for the addition of the systems school in the following discussion belongs to the author.

**Traditional School.** Founded by Henri Fayol, this approach highlights the management process of getting things done through people in organized groups. Management is viewed as a universal activity by this group, with the principles thereof holding true whether the group be a business, government, military, or other organization. Included in this school is the contribution of Frederick Taylor, often called the father of scientific management.

**Human Behavior School.** The human behavioral view of

management places heavy emphasis on the interpersonal relations that exist in the management situation, and is heavily oriented in the theories presented by the psychologists and sociologists. Perhaps more so than the traditional school, this approach is based on the thesis that managing is getting things done through people, with the primary focus resting in the motivating function of management.

Mathematical School. This school includes those theorists who emphasize the use of mathematical models in managerial decision-making. According to the mathematical school, the essence of management is decision-making, a process which can be expressed in terms of mathematical symbols and relationships. Mathematics then logically has a place in management, through the requirement for objectivity and abstract reasoning.

Systems Approach. This most recent school opines that traditional management philosophy is pervaded with vertical flow of authority and responsibility relationships and emphasizes parts and segments of the organization. According to the systems school, the traditional approach does not place sufficient import on the interrelationships and integration of activities involved in the total management system. The systems concept presents a theoretical framework for viewing the internal and external environmental factors as integrated into the whole. Explicit in this concept is the interdependency of decisions between all parts of components of the management problem.

Each of these schools has its place in any management situation, with varying emphasis, depending on the environment. Professor Church advocates a definition which recognizes that the most effective decision process involves recognition of environmental factors, the prevailing

"management climate," the essence of successful management experience, political, economic and social forces, and the utility of quantitative analysis and decision models when appropriate.

Possibly one of the greatest management challenges encountered today is in the development of major weapon systems. In this complex environment, the project manager is facing an interlaced sequential managerial activity encompassing broad spectrums of authority and responsibility. Change has become a normal way of life, and the increase in the rate of change has complicated the manager's decision problems. Experience alone has proven inadequate for coping with these rapid changes; managers have been forced to develop better methods for making and executing decisions. The development of electronic computers and the introduction of quantitative analysis into management processes has manifestly changed the way we think about the management task. Managers in industry and government are beginning to recognize the tremendous potential of the computer and the quantitative tools of the Operations Researcher as aids in the decision process.

There is some evidence to indicate that a cleavage has developed between those who belong to the Mathematical school and the other schools of management, primarily the Traditional School. The terms qualitative and quantitative managements have been used to indicate these two schools. It is the author's contention that a view of management which does not combine the contributions of these two schools in the management process is erroneous. One does not have the simple alternative of being either a qualitative or a quantitative manager. To formulate a philosophy of management on this basis can easily lead to the unfortunate impression that the question is one of utilizing either quantitative analysis or qualitative

analysis in the management function. Such is not the case. The difference which should be emphasized is neither one of methodology nor point of view, but rather the particular aspects of the managerial problems and the degree of analysis essential to the management task.

The manager's job can be viewed as a two-step process: (1) deciding what should be done, and (2) assuring that actions are taken to effect the decision. For convenience, these steps can be designated the decision process and the execution process respectively. It is quite clear that the manager must assume responsibility for both these processes. To perform only one would accomplish something less than the total management job required. The portion of the total management job comprising each of these processes varies with the job.

Management problems do not come with their salient issues neatly defined and categorized. The very essence of the managerial decision process is that of determining the various aspects of the problem and finding what interrelations exist between them. It is the intent of this study to empirically determine Navy management problems which have a significant impact on effectiveness. Case studies written by Navy managers and collected over the past 20 years have been classified and analyzed for the purpose of identifying problem characteristics and situational variables. Quantitative analysis of the case evaluations includes aggregate analysis (factor analysis) of precipitating events and observable outcomes as well as stratification of events and outcomes by situational variables. No attempt has been made to determine a correlation among the variables for the purpose of identifying a criterion as a predictor. The factor analytic procedure employed in this study attempts to identify groups of variables that relate to each other and to determine the

relative frequency with which these clusters occur. Looking at individual management cases on a micro basis requires little or no quantitative analysis; looking at the same cases in the aggregate permits us to make use of quantitative techniques that can present ultimate findings and solutions with much greater force and conviction.

## II. METHODOLOGY

This study utilized as its data base management case studies written by Naval officers during the past twenty years. The case studies were collected by Professor William Howard Church of the Naval Postgraduate School from students enrolled in Personnel Management and in Organization and Management courses. Students were requested to match their own experiences up to the Ten Commandments of Good Organization, prepared by the American Management Association [Appendix A], and other related guidelines to organizational effectiveness and harmonious interpersonal relations. The case writers generally employed the "Scientific Method Applied to Problem Solving" prepared by Prof. Church [Appendix B] in determining the relevant facts and in defining the problem or problems in the case studies. The cases selected for this study dealt with circumstances in which there were one or more violations of the basic principles of good management. By virtue of the fact that Prof. Church's class members were solicited to present management-oriented case studies drawn from their own varied professional experiences, the data thus gathered are valid indices of significant management problems encountered by the Navy's middle managers over the last two decades.

### A. COLLECTION OF MANAGEMENT CASES

Because of the screening process employed in selecting management students for the Naval Postgraduate School (NPS) and because of the manner in which the incidents were

described, the cases represent a significant longitudinal contribution to the collection of illustrative and enduring management studies.

## 1. Description of Typical Case Writer

A typical class in the various management curricula will include officers ranking from Lieutenant Junior Grade to Commander, of both the Unrestricted Line and Staff Corps. The selection process employed for officer students relies heavily upon the service member's performance evaluations to indicate superior ability and motivation. These officers represent a cross section of superior middle-managers and, thus, a highly selective universe of inquiry. Their awareness of management problems and their ability to analyze and describe them can be considered significantly superior to that of a typically effective Naval officer.

## 2. Framework of Management Incidents

As part of the various courses in personnel management conducted by Prof. Church, the management students have presented case studies describing real incidents from their own professional experiences. Many of the cases depict problems in their actual setting, while others are disguised. However, the disguises are not considered to have altered the relevant facts. These are open-ended cases, unconstrained by the semantics of an inquiry document or by the personality or appearance of an interviewer. Many of these may be a fictionalized account of an actual experience in an officer's career, illuminated by the management criteria mentioned above.

It is recognized that the studies may not reveal

actual organizational problems in each case. However, the cases do indicate what each writer perceived as the problem. The perceived problem might well be considered as important or significant as the actual underlying organizational malfunction, especially when we recognize that human interaction can be viewed as a function of how individuals perceive a situation [Bass, 1960].

## B. EVALUATION AND CODIFICATION OF CASES

As part of a project to improve personnel management, a team of researchers from the Naval Personnel Research and Development Center (NPRDC), San Diego, became interested in the management cases described above as a data source for empirically determining Navy management problems. It was through the brain-storming efforts of Dr. Linda Doherty and Dr. Robert Holzbach in consultation with Prof. Church that the litany of variables were derived for the coding form used in evaluating the cases. In order to provide a broad base from which to classify the problems described in the case studies, a total of 86 variables in three categories were defined. The large number of variables permitted the case evaluator to codify the problem characteristics according to the particular perspective assumed by the case writer. For one case writer, a management problem might best be described according to the perceived precipitating events. For another case writer, a similar management problem may best be defined according to its observable outcomes. In either case, what one witness might consider to be an antecedent event to the problem might well be viewed as a manifestation of the problem by another. The three categories of variables are thus complementary approaches to the identification of significant characteristics of the management incidents described in the

cases.

## 1. The Coding Form

A set of four data collection sheets was employed for recording the data for each case. The data collection sheets were formatted according to the standard 80 column computer card and were numbered accordingly. Columns on the sheets are set aside for the identification number of the case and for coding of the respective variables. Appendix C identifies the format of each data collection sheet. Along with the coding forms, each case evaluator was given a list which identified and described the variables used in this study. This list is presented in Appendix D entitled "Managerial Problem Attributes."

### a. Problem Attributes

A total of 24 variables were employed as descriptors of the managerial problem situation and general problem characteristics. In the general description of the situation in which the problem occurred, the distinction was made as to the organizational setting in which the problem occurred, the function of the manager with the problem, the level of the manager with the problem, and the time of occurrence. These variables are defined in Section I of Appendix D.

Under general problem characteristics, the problem was further typed according to the degree to which people, physical resources, and the system (required procedures, manning, etc.) may have been important ingredients. Another subset within this category describes the related managerial functions being performed by the

manager. The functions are defined as: decision making, organizing, staffing, planning, controlling, communicating, and directing. Another variable is defined as the realm of the problem, making the distinction between civilian or military or a combination of the two. Another subset within the category of problem attributes describes the parties involved in the problem: the manager himself, his superior(s), his subordinate(s), another work group within the command, or external commands or externally generated policies. The last variables within this category define the onset of the problem, the impact it has on mission effectiveness, and the ease of management resolution. Each of the variables that are included under general problem characteristics are defined in Section II of Appendix D.

#### b. Antecedent Events

Variables 25 through 57 are defined as the antecedent events or the precipitating conditions relative to the problem in the case. These are described in Section III of Appendix D. Variables 25 through 34 represent the general management principles identified in the "Ten Commandments of Good Organization." The antecedent events are not causal events to the problem. Rather, they are a collection of common and not-so-common problem situations which might be present in the view of the case writer. Antecedent events are distinguished from problem manifestations only to the extent that different witnesses to problem situations might classify one aspect as precipatory while another might consider the same aspect to be an outcome resulting from the problem.

#### c. Manifestations of the Situation

Variables 58 through 86 are defined as the manifestations of the problem or the observable outcomes resulting from the problem. These are described in Section IV of Appendix D. As has been mentioned above, these problem dimensions may closely resemble, or even duplicate, those listed under antecedent events. This is not by accident, but is designed to serve as a broad instrument for codifying the case studies.

## 2. Case Evaluations

A group of twelve people were utilized in the case evaluation process. The case evaluators were gathered from the enrollment at NPS and from the staff of NPRDC, San Diego. A total of 454 cases were codified by the group; 200 were codified by the author and an approximate equal share of the remaining number were coded by the other eleven case evaluators. Uniformity of the methodology employed in the case evaluations was assured through the coordination provided by the researchers from NPRDC, San Diego.

### a. Case Evaluators

Of the twelve people who codified the management cases, three were students at NPS within one of the management programs. Two of these, including the author, were officers in the Navy, while the third was an upper-level, career civil servant employed by the Navy. The remaining nine people involved in this effort were Naval officers assigned as staff members of NPRDC, San Diego.

### b. Interpretation of Incidents

Because no absolute, objective system for codification of these cases was deemed feasible, an attempt was made to insure that a likeness of mind existed among the evaluators so that the subjective evaluations were derived according to a standardized methodology. A cross-validation test was attempted in order to determine inter-evaluator correlations, however, this could not be completed among all the evaluators. In order to minimize the possible effects of differing interpretations, the evaluators were given training in the desired procedures. A test sample of three cases was given to each of the evaluators as part of an indoctrination process. The differences in coded variables selected by the evaluators were noted and discussed during a post analysis conducted by Prof. Church, Dr. Doherty, Dr. Holzbach, and the student evaluators. It was thus determined that only those antecedents and manifestations that were specifically mentioned or directly implied by the writer would be noted and recorded on the data collection sheets.

### III. ANALYSIS OF DATA

The frequency and percentage of each variable recorded from the evaluation of 454 cases is presented in Appendix E. An initial effort to discriminate those situational variables which might indicate significant areas for further analysis of problem attributes attempted to employ an arbitrary frequency criterion. However, on closer analysis, it was recognized that the elimination of problem antecedent or manifestation variables on the basis of relative frequency of occurrence among the total cases might ignore significant correlations among variables with low frequencies. Consequently, a factoring technique was employed to reduce the number of variables for further analysis.

#### A. FACTOR ANALYSIS

By employing 62 variables to describe the kind of problems that exist in the Navy, the data thus gathered presents a picture whose variations confuse the eye and whose dimensions defy comprehension. If only for parsimonious reasons, it would be appropriate to employ a factoring technique so that the data might be reduced to a more manageable size. Factor analysis, however, further serves to determine the patterns of interrelationships between the variables. As demonstrated by Rudolph Rummel, the columns of data which list the frequency that each problem attribute occurred for each case represent a vector, with the collective column vectors forming a vector space

[Rummell, 1970]. Vectors that are statistically interdependent will cluster together in the vector space. Each of these clusters will define a distinct pattern of regularity in the data. Factor analysis determines the minimum number of independent coordinate axes (dimensions) necessary to reproduce the variations in vectors in the space. Each coordinate axis is called a dimension, which collectively delineates the order, the uniformity, the patterns in the data. Thus, factors can be considered a typology, providing a meaningful classification or categorization of phenomena according to their interrelationships. It is an underlying hypothesis in this analysis that some structure exists to be discovered within the multiplicity of variables presented [Cattell, 1975].

#### 1. Factor Analytic Technique

The factoring method employed in this study is a technique described by Norman Nie and others and is entitled "Principal factoring with iteration (PA2)" [Nie, 1975]. PA2 is a factoring method concerned with dimensions of common parts of the variables. The method employs R-factor analysis in determining the correlation matrix and automatically replaces the main diagonal elements of the correlation matrix with communality estimates given by the squared multiple correlations between the variable and the rest of the variables in the matrix. PA2 also employs an iterative procedure to improve estimates of communality. In this context, communality is defined as the proportion of a variable sharing something in common with other variables in the set. The VARIMAX orthogonal rotation technique was employed to derive the terminal solution.

As suggested by Rudolph Rummel, a number of criteria were considered in determining the number of factors to be

utilized from this analysis [Rummell, 1970]. The first is eigenvalue-one. Eigenvalue represents the amount of total variance accounted for by the factor. By retaining components with eigenvalues greater than unity, this criterion insures that only components accounting for at least the amount of variance of a single variable will be treated as significant. The second criterion examined in determining the number of factors is meaningfulness. Meaningfulness is a subjective probability criterion for deciding the acceptability of a factor [Rummell, 1970]. Weight is given to the interpretability of the factor, its proportional factor variance, and the configuration of its loadings. The second criterion was discarded because it did not result in any significant change in the terminal solution without wholesale amendments in the number and structure of the factors.

To avoid extraneous and uninterpretable results from the factor analysis, the data were screened to omit those variables with a frequency of less than 5% of the total cases. Ten variables were thus deleted from the analysis. The unrotated factor matrix and the communality estimates for each of the 52 variables included in the analysis are presented in Appendix F.

By employing the eigenvalue-one criterion, seventeen factors are retained by the program for rotation to terminal solution. The cumulative variance explained by these factors is 59.4% of the total variance. The rotated factor matrix is presented in Appendix G. The results of the factor analysis are presented in Table 1.

TABLE 1

HIGHEST LOADINGS OF PROBLEM ATTRIBUTES ON  
ORTHOGONALLY ROTATED FACTORS

VARIABLES	LABEL	FACTOR
		I
V70	Poor Interpersonal Relations	.66
V47	Personality Problems	.56
V30	Public Criticism	.34
V84	Insufficient Cooperation	.34
V38	Lack of Full Cooperation	.30
V41	Lack of Confidence/Trust	.30
		II
V60	Degraded Perf.-Timeliness	.60
V58	Degraded Perf.-Quantity	.46
V61	Degraded Perf.-Efficiency	.44
V53	Inadequate Work Design	.43
V59	Degraded Perf.-Quality	.40
		III
V66	Insufficient Initiative	.74
V65	Insufficient Motivation	.68
V36	Lack of Initiative	.43
V43	Supervision-Not Enough	.31
		IV
V37	Inadequate Coordination	.69
V83	Insufficient Coordination	.64
V38	Lack of Full Cooperation	.43
V84	Insufficient Cooperation	.35

TABLE 1 (cont.)

VARIABLES	LABEL	FACTOR
		V
V25	Resp/Auth Not Clear	.53
V27	Not Aware Change in Resp.	.51
V26	Authority Not Appropriate	.49
V28	Orders from Multiple Sources	.40
V31	Auth/Resp Conflicts Not Resolved	.36
V33	Individual Both Critic/Assistant	.33
		VI
V42	Supervision-Too Close	.75
V35	Fail to Delegate Authority	.39
V82	Interfere with Work Group	.36
V41	Lack of Confidence/Trust	.35
		VII
V44	Supervision-Not Task Oriented	.57
V40	Inapprop. Work/Group Goals	.47
V45	Accountability Lacking	.31
		VIII
V51	Inadequate Job-Skill Match	.55
V50	Insufficient Job Skills	.50
V77	Undesirable Pers. Assignments	.35
V62	Degraded Perf.-Inspections	.31
		IX
V57	Inadequate Planning	.49
V78	Inadequate Admin Procedures	.48
V54	Inadequate Work Policies	.40
V45	Accountability Lacking	.35
V25	Resp/Auth Not Clear	.31

TABLE 1 (cont.)

VARIABLES	LABEL	FACTOR
		X
V69	Low Morale	.68
V68	Dissatisfaction	.49
		XI
V55	Personal Problems	.65
		XII
V34	Independent Inspection Not Avail.	.49
		XIII
V46	Compliance with External	.53
		XIV
V64	Degraded Perf.-Equip. Failure	.52
V65	Insufficient Motivation	.43
V58	Degraded Perf.-Quantity	.35
		XV
V29	Chain of Command Violated	.69
V82	Interference with Work Group	.51
V28	Orders from Multiple Sources	.50
V30	Public Criticism	.36
		XVI
V80	Superior Not Responsive	.60
V81	Lack Respect for Superior	.53
		XVII
V73	Unusual Absenteeism	.52
V71	Discipline Problems	.38

Factor cutoff at eigenvalues > 1.00. Loadings > |.30| shown in table. Varimax rotation was employed.

## 2. Clusters Identified

The factor analytic technique has clustered the 52 problem attribute variables into seventeen factors. Certainly, some of the factors are more significant than others, not only in the statistical sense of loadings and percentage of variance explained, but in a rational sense of discrete meaningfulness. Recognizing the factors as classifications of managerial problem attributes, the following descriptive names have been assigned to the factors.

Factor I	Conflict/Cooperation
Factor II	Performance
Factor III	Motivation/Initiative
Factor IV	Coordination/Cooperation
Factor V	Responsibility/Authority
Factor VI	Supervisory
Factor VII	Task/Goal
Factor VIII	Job Skills
Factor IX	Planning
Factor X	Morale
Factor XI	Personal
Factor XII	Assistance
Factor XIII	Organization
Factor XIV	Performance/Motivation
Factor XV	Command/Communication
Factor XVI	Responsiveness/Respect
Factor XVII	Discipline

By recognizing the multiple loadings of some variables on certain of these factors, it becomes apparent that a number of these factors are closely related to each other. For example, Factors I and IV not only share component variables V38 and V84, but they have similar meaning as well, and might logically be grouped as one. A similar example is

presented with Factors VI and XIV. The factor Performance is closely related to Performance/Motivation. Indeed, by separating Factor XIV because of its distinctive loading of the variable Insufficient Motivation, one is left with a dimension which by itself adds little to our understanding of the phenomena.

If we choose to discard those factors which were not statistically loaded with more than two variables, and if we proceed in the vein described above to combine those factors which were sensibly identical, the number of significant factors is reduced to seven.

Conflict/Cooperation/Communication

Performance

Motivation/Initiative

Responsibility/Authority

Supervisory

Planning and Coordination

Job Skills

Conflict/Cooperation/Communication. This factor addresses problems in communication that are classified by their flow: vertical and horizontal. Vertical communication flows downward along the formal lines of authority and upward in response to the accountability imposed by a control system. Horizontal communication channels are the means by which managers on the same level of an organization provide cooperative support without using authority channels at all [Massie, 1971]. This study identified problems in both vertical and horizontal communications. The formal chain of command was violated in 24 percent of the cases; personnel were subject to definite but conflicting orders from more than one source in 20 percent of the cases. Managers were considered to be interfering too much with the performance of the work group in 23 percent of the cases. This dimension also included problems of poor interpersonal

relations 24 percent of the time and a lack of confidence or trust between individuals 28 percent of the time. These might well be considered measures of man's inhumanity to man.

Performance. The problem of performance, as defined by this dimension, is measured in various qualitative and quantitative factors: timeliness, efficiency, mission accomplishment, etc. The frequencies for these variables range from a low of 17 percent (quantity) to a high of 40 percent (quality). In discussing performance as the object of measurement in a control system, Ross Webber argues that the control system should build congruity between three elements: continuing objectives, specific goals, and performance indicators [Webber, 1975]. The specific causes of the problems in performance identified in the case studies cannot be empirically determined. However, it might reasonably be assumed that the nature of the problems addressed in the other six dimensions noted here might lend some insight into possible causes for poor performance.

Motivation/Initiative. The problem of insufficient employee motivation in performing task-related activities occurred in 24 percent of the cases. A lack of initiative in accomplishing the overall task or objective was identified 16 percent of the time. In a popular discussion on employee motivation, Herzberg states that the factors involved in producing job satisfaction or motivation are intrinsic to the job itself [Herzberg, 1968]. The motivator factors are achievement, recognition for achievement, and the work itself. Once the organization has addressed the issue of providing meaningful work, it remains for the manager to insure proper recognition of the employees' achievements - a truly human and personal endeavor.

Responsibility/Authority. As the fourth dimension

in managerial problem attributes, this factor defines a problem whose frequency, 40 percent of the cases, was second only to that of inadequate communications (V39). Specifically, the problem constitutes a failure to assign definite and clear-cut responsibilities to each executive. This constitutes more than just a definition of the job function. According to Peter Drucker, it requires a definition of the "specific contribution which a specific manager is expected to make;" a definition of "relationships - upward, downward, and sideways;" and a definition of the "information needed for the job" and of the manager's place in the information network [Drucker, 1974]. Other variables within this cluster occurred with less frequency, but add significantly to the problem dimension: responsibility was not coupled with corresponding authority (20%), personnel were not made aware of a change in the scope or responsibilities of a position (20%), disputes between executives concerning authority or responsibilities were not promptly resolved (26%). Just as "authority is the basis for responsibility and is the binding force in organization," [Koontz, 1972], the lack of a clear definition of an executive's responsibilities or the failure to delegate commensurate authority pose a serious threat for the continuation of order in an organization.

Supervisory. This dimension involved the failure of a superior to delegate authority to his subordinates, a problem which occurred in 25 percent of the cases. It also included the problem of a superior interfering too much with the performance of a work group, which occurred in 23 percent of the cases. By "supervisory" this factor embraces more than the dispensation of work assignments, rewards, and punishments. Rather, it describes leadership which involves influence of people beyond the routine uses of organizational power. This factor describes a lack of proper leadership whereby supervisors attempt to manage

conflict by simply flexing organizational muscle [Katz, 1964], rather than focusing on the level of motivation of the individual and providing the necessary organizational structure and climate.

Planning and Coordination. This factor includes the following problem attributes (relative frequencies noted in parentheses): Insufficient coordination between two or more individuals to accomplish specific tasks (39%). Inadequate planning, in which job related activities were not analyzed sufficiently to the extent that adverse effects are observed (35%). Administrative procedures were inadequate, too burdensome, or unclear (30%). Inadequate work policies and procedures existed in that they were inefficient or not appropriate to job demands or they were not clearly specified or understood by work group members (28%). Inappropriate work or group goals were maintained by individuals or the work group (27%). This problem factor has increased importance as a result of the changing environment in which the organization operates, especially changes in technology, governmental policy, social norms and economic activity.

Job Skills. This factor includes the problem on insufficient job skills possessed by the individual to perform his assigned work adequately in 16 percent of the incidents studied. Additionally, the problem of inadequate job-skill match existed in 9 percent of the cases. The problem of a manager being required to reassign, transfer, or accept an individual into or out of his work group, irregardless of his personal disagreement, occurred in 9 percent of the cases.

The fact that such problems exist in the Navy is supported by nearly 500 testimonials written by top Navy managers over the past twenty years. The significance of

these problems might be evaluated on the basis of the empirical evidence presented in this study. But the factors alone are meaningful indicators of the organizational environment in the Navy when considering such subjects as the nature of personnel training and development programs that should be employed or in evaluating the merits and achievements of a particular program designed to improve the productivity of our forces.

## B. PROBLEM ATTRIBUTE ANALYSIS

The thirteen problem factors derived from the analytic technique described above collectively define a broad spectrum of management problems including interpersonal relations, communications, organizational climate and management processes. Three factors have arbitrarily been selected from these for further analysis and discussion which represent the impact that both the leadership and the system have on the individual:

Factor I - Conflict/Cooperation

Factor III - Motivation/Initiative

Factor V - Responsibility/Authority

In order to identify the magnitude of the problems comprised in these factors, a joint frequency table of selected situational variables with representative variables from each of the three factors has been computed and is presented in Table 2.

TABLE 2

JOINT FREQUENCY DISTRIBUTION OF SELECTED VARIABLES  
(count/row percentage)

Variables	V70	V30	V65	V25	V28
V1(1)	33/28	31/26	35/30	48/41	27/23
V5(2)	103/29	68/19	97/27	140/39	68/19
V8	65/26	34/14	72/29	105/42	51/20
V14	68/35	42/22	61/32	85/44	56/29

Reading across the rows, for those cases in which the problem occurred aboard a ship (V1(1)), the problem involved Poor Interpersonal Relations (V70) 28 percent of the time. Similarly, it involved Public Criticism (V30) of subordinates 26 percent of the time, Insufficient Motivation (V65) 30 percent of the time, Responsibility/Authority Not Clear (V25) 41 percent of the time, and Orders Received from more than one source (V28) 23 percent of the time. It appears significant, indeed, that the hierarchical environment and regimentation of shipboard organization should be plagued with the dimension of responsibility or authority being unclear in two out of three cases when faced with a personnel problem.

Moving from the organizational setting to the type of managerial problem involved, the second row of Table 2 indicates that whenever people were considered an extremely important ingredient in the managerial problem (V5(2)), the problem included the dimensions of Poor Interpersonal Relations (29%), Public Criticism of subordinates (19%), Insufficient Motivation (27%), Responsibility/Authority not clear (39%) and Orders received from more than one source (19%). These percentage figures indicate an order of magnitude to the problems which cannot be ignored.

The table presents similarly significant frequencies of these problem attributes in those circumstances where the managerial function being performed is Decision making (V8) or Directing (V14). In those circumstances where the problem involves decision making, in which a course of action is consciously chosen from available alternatives for the purpose of achieving a desired result, forty-two percent of those problems correlated with a lack of clear responsibility or authority. Cases which related a problem in the directing function, the process by which actual ideas are transmitted to others for the purpose of effecting a desired result, identified the dimensions of Poor Interpersonal Relations and Public Criticism of subordinates 35 percent and 22 percent of the time, respectively.

#### IV. SUMMARY OF FINDINGS

The format and content of the coding sheets employed in this empirical study have been demonstrated to be a useful and meaningful instrument for the analysis and codification of case studies in management. By employing 62 variables, divided among antecedent events and manifestation of the management problem, this analytic technique provides a sufficiently broad and flexible process for empirically determining characteristics of the management incident being described which are significantly and meaningfully associated with other similar case studies.

Factorization brings forth a new order of variables and concepts. On the relations among these factors it is richly rewarding to begin forming hypotheses - hypotheses which can be of wider reference and import than those built intuitively on surface variables. The factor analytic technique described in this study has produced seventeen factors which account for nearly 60 percent of the variance in the management problem attribute variables. Certainly, other factoring schemes may be properly employed to test the sensitivity of this study or other similar studies to the methodology of the analysis. In this instance, the principal component factor analysis was employed because of the universal nature of its applicability. Other techniques are also available, but they often require that broad assumptions be made concerning the type of data selection scheme and the nature of the sample under consideration.

By generating seventeen factors to describe the management problems, there remains the question of whether

this study approach is not too general in its conclusions for the sake of being exact in its method. A brief discussion of this point in the previous section indicates that the number of factors may be appropriately reduced from seventeen to seven significant attributes. This permits the results of this study to be compared with others that may relate to the same subject.

Finally, the analysis has demonstrated that there are particular areas within the Navy which affect the proper functioning of the organization. These problem areas are: conflict, cooperation, and communication; performance; motivation and initiative; responsibility and authority; supervisory; planning and coordination; and job skills. These management problems are significant not only because of their relative magnitude, but also because of the fact that they represent the views of top Navy middle managers over the past two decades.

## V. CONCLUSION AND RECOMMENDATIONS

A man who works does not ask for a job only, or for tools and the possibility of seeing the results of his work. He asks for rational conditions of work. That is he wants to understand the nature of his work and the reason why it is so. He wants to understand the reason and the objective which direct him, without upsetting the necessary organizational structure. He wants to use all his talent and skill.

Men with management responsibility are supposed to respond to this human need for understanding, for having reasonable work conditions, and for being in a position to express their own work in a sense of responsibility. The man who manages does not have to look to himself only as an author or surveyor of a technical process, but he must feel himself to be a truly responsible leader of men.

It is apparent that officers in the Navy, as well as any other military service, will enter environments which will be lacking in a sufficient number of qualified personnel who have highly developed supervisory skills and real sensitivity to the humanistic problems already identified. The question remains, how are these officers to implement sound management concepts that will provide job satisfaction, enhance productivity and promote employee motivation, when they are faced with an often hostile environment which ignores these same principles. They are doomed to frustration and often failure unless this environment is changed.

A concept known as "developmental management" is receiving increasing emphasis in current literature. Under this concept, one of the primary organizational objectives is the full development of all organizational members, providing an opportunity for these members to fully utilize whatever abilities they have and to develop their potential abilities to the highest possible degree [Lawrence, 1969]. In addition, individuals are given an opportunity for personal growth and enrichment which benefits everyone.

Each organizational member, by utilizing individual abilities to the utmost, feels a greater sense of self-esteem and satisfaction from operating at full capacity. When all organizational members are operating to the limits of their abilities and potentials, the organization also benefits by obtaining the maximum use of its manpower. An organization making less than full use of the manpower at its disposal is wasting this resource which could prove to be a serious detriment to its success.

"We know that we have to go beyond personnel management. We will have to learn to lead people rather than to contain them. Our traditional approaches fall into three categories. In part they are philanthropic: the desire to look after the needs, the housing, the health care, the welfare of people who cannot look after themselves. In part they are procedural: to handle in orderly fashion the recurrent chores connected with the employment of people. In large measure they aim at preventing and curing trouble - they see in people potential threats. The traditional approaches are needed. They are, however, not enough. Beyond them we will have to learn to look on people as resource and opportunity rather than as problem, cost, and threat. We will have to learn to lead rather than to manage, and to direct rather than to control" [Drucker, 1967].

Viewed over a twenty year period, it is evident from the cases that the U. S. Navy has made little progress in the systematic improvement of work environments, human interpersonal relationships, improved communications and reduction of unnecessary frictions, conflict and stress produced by members of the organization because of ignorance

and because top management does not require better managerial approaches as an essential ingredient in the officer promotion process.

## APPENDIX A

### TEN COMMANDMENTS OF GOOD ORGANIZATION\*

There are two kinds of efficiency: one kind is only apparent and is produced in organizations through the exercise of mere discipline. This is but a simulation of the second, or true, efficiency which springs, as Woodrow Wilson said, from "the spontaneous cooperation of a free people." If you are a manager, no matter how great or small your responsibility, it is your job in the final analysis, to create and develop this voluntary cooperation among the people whom you supervise. For, no matter how powerful a combination of money, machines and materials a company may have, this is a dead and sterile thing without a team of willing, thinking and articulate people to guide it.

1. Definite and clear-cut responsibilities should be assigned to each executive.
2. Responsibility should always be coupled with corresponding authority.
3. No change should be made in the scope or responsibilities of a position without a definite understanding to that effect on the part of all persons concerned.
4. No executive or employee, occupying a single position in the organization, should be subject to definite orders from more than one source.
5. Orders should never be given to subordinates over the head of a responsible executive. Rather than do this the officer in question should be supplanted.

6. Criticisms of subordinates should, whenever possible, be made privately, and in no case should a subordinate be criticized in the presence of executives or employees of equal or lower rank.
7. No dispute or difference between executives or employees as to authority or responsibilities should be considered too trivial for prompt and careful adjudication.
8. Promotions, wage changes, and disciplinary action should always be approved by the executive immediately superior to the one directly responsible.
9. No executive or employee should ever be required, or expected to be at the same time an assistant to, and critic of a superior.
10. Any executive whose work is subject to regular inspection should whenever practicable be given the assistance and facilities necessary to enable him to maintain an independent check of the quality of his work.

\* As prepared by the American Management Association.

## APPENDIX B

### THE SCIENTIFIC METHOD APPLIED TO PROBLEM SOLVING

by WM. Howard Church

- STEP I      WHAT ARE THE FACTS?  
Where is the evidence?  
Have I examined all sides of the issue?  
Am I dealing with facts or assumptions?  
Do I have the right answers to what? why? where?  
when? who? how?  
Is this a problem subject to qualitative and/or  
quantitative measurement?
- STEP II     REDEFINE THE PROBLEM.  
What is the immediate or critical incident?  
What is the real deep-seated, underlying cause?  
Can we treat the problem at the source?
- STEP III    WHAT MANAGEMENT PRINCIPLES, LAWS OR CRITERIA APPLY  
TO THIS CASE?  
Which criteria have been violated?  
What list of criteria and management policy could  
prevent the recurrence of this problem? What  
other criteria could one recommend that would  
anticipate and help prevent other management  
problems in this organization or in this case  
study?
- STEP IV    WHAT ARE THE POSSIBLE COURSES OF ACTION?  
Higher authority may need several alternatives.  
Which ones have maximized results while having the  
least number of undesirable effects or  
consequences?

STEP V WHAT HUMAN FACTORS ARE INVOLVED THAT CAN HAVE FAR REACHING CONSEQUENCIES ON MORALE AND EFFICIENCY?  
Have we analyzed the "zone of acceptance" of every group or individual concerned in terms of proposed recommendations?

STEP VI WHAT WILL BE THE ULTIMATE CONSEQUENCIES OF THE DECISION OR COURSE OF ACTION RECOMMENDED?

Let's have a trial run.

Let's be willing to change and start over if a plan is tried and does not work.

STEP VII TAKE ACTION BUT IF WE WANT RESULTS, WE MUST BUILD SUPPORT AND ACCEPTANCE.

THERE MUST BE BASIC UNDERSTANDING OF THE DESIRABILITY OR NEED FOR SUCH ACTION.

Then... Let's follow through to see that the desired results are obtained.

"The Scientific Approach to Management Problems" from Alford and Beatty, Principles of Industrial Management, page 34.

"It is important that all management problems be approached in this scientific manner if consistency in decision is to prevail. The decisions reached in this way are made on the basis of facts which are gathered, and not on hearsay and opinion. The head rules the decision and not the heart. When we allow our personal likes and dislikes to enter into the picture, inconsistencies are bound to creep in. It is inconsistencies of this type which lie at the bottom of most work grievances."

## APPENDIX C

### VARIABLE INPUT FORMAT

VARIABLE	FORMAT	RECORD	COLUMNS
ID	F 3. 0	1	1- 3
V1	F 2. 0	1	4- 5
V2	F 2. 0	1	6- 7
V3	F 1. 0	1	9- 9
V4	F 2. 0	1	10- 11
V5	F 1. 0	1	13- 13
V6	F 1. 0	1	15- 15
V7	F 1. 0	1	17- 17
V8	F 1. 0	1	19- 19
V9	F 1. 0	1	21- 21
V10	F 1. 0	1	23- 23
V11	F 1. 0	1	25- 25
V12	F 1. 0	1	27- 27
V13	F 1. 0	1	29- 29
V14	F 1. 0	1	31- 31
V15	F 1. 0	1	34- 34
V16	F 1. 0	1	36- 36
V17	F 1. 0	1	38- 38
V18	F 1. 0	1	40- 40
V19	F 1. 0	1	42- 42
V20	F 1. 0	1	44- 44
V21	F 1. 0	1	46- 46
V22	F 1. 0	1	49- 49
V23	F 1. 0	1	53- 53
V24	F 1. 0	1	57- 57
V25	F 1. 0	2	5- 5

VAR IABLE	FORMAT	RECORD	COLUMNS
V26	F 1. 0	2	7- 7
V27	F 1. 0	2	10- 10
V28	F 1. 0	2	12- 12
V29	F 1. 0	2	14- 14
V30	F 1. 0	2	16- 16
V31	F 1. 0	2	18- 18
V32	F 1. 0	2	21- 21
V33	F 1. 0	2	24- 24
V34	F 1. 0	2	27- 27
V35	F 1. 0	2	29- 29
V36	F 1. 0	2	31- 31
V37	F 1. 0	2	33- 33
V38	F 1. 0	2	35- 35
V39	F 1. 0	2	37- 37
V40	F 1. 0	2	39- 39
V41	F 1. 0	2	41- 41
V42	F 1. 0	2	43- 43
V43	F 1. 0	2	45- 45
V44	F 1. 0	2	47- 47
V45	F 1. 0	2	49- 49
V46	F 1. 0	2	52- 52
V47	F 1. 0	2	54- 54
V48	F 1. 0	2	56- 56
V49	F 1. 0	2	58- 58
V50	F 1. 0	2	60- 60
V51	F 1. 0	2	62- 62
V52	F 1. 0	3	5- 5
V53	F 1. 0	3	7- 7
V54	F 1. 0	3	9- 9
V55	F 1. 0	3	11- 11
V56	F 1. 0	3	13- 13
V57	F 1. 0	3	15- 15
V58	F 1. 0	4	5- 5
V59	F 1. 0	4	7- 7
V60	F 1. 0	4	9- 9
V61	F 1. 0	4	11- 11
V62	F 1. 0	4	13- 13
V63	F 1. 0	4	15- 15
V64	F 1. 0	4	18- 18
V65	F 1. 0	4	20- 20
V66	F 1. 0	4	22- 22
V67	F 1. 0	4	24- 24

VARIABLE	FORMAT	RECORD	COLUMNS
V68	F 1. 0	4	26- 26
V69	F 1. 0	4	28- 28
V70	F 1. 00	4	30- 30
V71	F 1. 0	4	33- 33
V72	F 1. 00	4	35- 35
V73	F 1. 0	4	37- 37
V74	F 1. 00	4	39- 39
V75	F 1. 0	4	41- 41
V76	F 1. 00	4	43- 43
V77	F 1. 0	4	45- 45
V78	F 1. 0	4	47- 47
V79	F 1. 00	4	49- 49
V80	F 1. 0	4	51- 51
V81	F 1. 00	4	53- 53
V82	F 1. 0	4	55- 55
V83	F 1. 00	4	57- 57
V84	F 1. 0	4	59- 59
V85	F 1. 0	4	61- 61
V86	F 1. 0	4	63- 63

## APPENDIX D

### MANAGERIAL PROBLEM ATTRIBUTES

#### I. SITUATION

V1 Setting (organizational setting in which the problem occurred)

##### Operational

1. Ship
2. Submarine
3. Squadron
4. Operational staff  
(e.g. TYCOM)

##### Support

5. Administration (e.g. BUPERS)
6. Finance (e.g. NFC)
7. Supply (e.g. NSC)
8. Maintenance (e.g. FMAG)
9. R and D (e.g. China Lake)
10. Training (e.g. NTC)
11. Construction
12. Other

V2 Function of manager with problem

- |               |                              |
|---------------|------------------------------|
| 1. Command    | 6. Maintenance               |
| 2. Operations | 7. Technical (R and D, O.R.) |
| 3. Supply     | 8. Engineering               |
| 4. Finance    | 9. Project Manager           |
| 5. Personnel  | 10. Other                    |
|               | 11. Weapons                  |

V3 Level of manager with problem

1. Command or top management
2. Department or reporting to top management
3. Division or middle management
4. Work center or first level management

V4 Time of occurrence: 19\_\_

#### II. PROBLEM CHARACTERISTICS

A. Type of Managerial Problem

V5 People

- 0 = Not an important ingredient  
1 = Moderately important ingredient  
2 = Extremely important ingredient

V6 Physical resources (\$, equipment, etc.)

- 0 = Not an important ingredient
- 1 = Moderately important ingredient
- 2 = Extremely important ingredient

V7 System (required procedures, manning, etc.)

- 0 = Not an important ingredient
- 1 = Moderately important ingredient
- 2 = Extremely important ingredient

B. Related Managerial Functions (V8 to V14)

V8 Decision making (the process by which a course of action is consciously chosen from available alternatives for the purpose of achieving a desired result)

V9 Organizing (the process by which the structure and allocation of jobs is determined)

V10 Staffing (the process by which managers select, train, promote, and retire subordinates)

V11 Planning (the process by which a manager anticipates the future and discovers alternative courses of action open to him)

V12 Controlling (the process that measures current performance and guides it toward some predetermined end)

V13 Communicating (the process by which ideas are transmitted to others for the purpose of effecting a desired result)

V14 Directing (the process by which actual performance of subordinates is guided toward common goals)

V15 Realm of managerial problem

- 1. Civilian
- 2. Military
- 3. Mixed civilian and military

C. Parties Involved: Individuals or Groups Significantly Involved in Problem Antecedents/Manifestations (V16 to V21)

V16 The manager himself

V17 The manager's superior(s)

V18 An individual subordinate

V19 The manager's work group

V20 Other work group within the command

V21 External commands or externally generated policies

- V22 Onset of managerial problem
1. Acute (short build-up, crisis)
  2. Chronic (recurring or cumulative)
- V23 Impact on mission effectiveness of manager's work group
1. Low
  2. Moderate
  3. High
  4. Very high
- V24 Ease of management resolution
1. Straightforward (easily resolved)
  2. Moderately difficult
  3. Very difficult
  4. Impossible (no solution)

### III. ANTECEDENT EVENTS/CONDITIONS

- V25 Responsibility/Authority not clear
- "Definite and clear-cut responsibilities should be assigned to each executive."
- V26 Authority not appropriate for responsibility
- "Responsibility should always be coupled with corresponding authority."
- V27 Not aware of change in scope or responsibility of a position
- "No change should be made in the scope or responsibilities of a position without a definite understanding to that effect on the part of all persons concerned."
- V28 Orders received from more than one source
- "No executive or employee, occupying a single position in the organization, should be subject to definite orders from more than one source."
- V29 Chain of command violated (top-down)
- "Orders should never be given to subordinates over the head of a responsible executive. Rather than do this the officer in question should be supplanted."
- V30 Public criticism
- "Criticism of subordinates should, whenever possible, be made privately, and in no case should a subordinate be criticized in the presence of executives or employees of equal or lower rank."
- V31 Authority/Responsibility conflict not resolved promptly

"No dispute or difference between executives or employees as to authority or responsibilities should be considered too trivial for prompt and careful adjudication."

V32 Personnel action by responsible superior not approved by his immediate superior

"Promotions, wage changes, and disciplinary action should always be approved by the executive immediately superior to the one directly responsible."

V33 Individual required to be both critic and assistant to his superior

"No executive or employee should ever be required, or expected to be at the same time an assistant to, and a critic to a superior."

V34 Assistance and facilities not available for independent check on inspectable work

"Any executive whose work is subject to regular inspection should whenever practical be given the assistance and facilities necessary to enable him to maintain an independent check on the quality of his work."

V35 Failure to delegate authority/responsibility

Superior does not delegate authority/responsibility to his subordinates, but rather seems to do "everything" himself.

V36 Lack of initiative

Individual performs only those tasks directly assigned. He does not seek additional work, responsibilities, or better ways of performing present assignments. He does not "aggressively" accomplish assigned tasks.

V37 Inadequate coordination

The necessary coordination between two or more individuals or groups is not attained so that mutually interdependent tasks may be successfully accomplished.

V38 Lack of full cooperation/teamwork

The amount of cooperation, or sense of teamwork, either within the work group or between work groups, is not sufficient for the attainment of common or individual objectives in a reasonable manner.

V39 Inadequate communications

The amount or direction of information flow is below desired levels to meet the work related needs of

individuals or groups.

V40 Inappropriate work or group goals

An individual or work group does not possess appropriate mission or task oriented goals and objectives. Either no definitive goals may be present, or the goals that are emphasized may not be relevant.

V41 Lack of confidence/trust

Individuals do not possess a reasonable level of confidence and trust in each other. This condition may be unidirectional or bidirectional.

V42 Inappropriate Supervision: Too close

A superior's interactions with his work group is perceived to be too constraining by work group members. For example, the superior may be perceived to check on work progress too frequently, to specify too many details on how to accomplish assigned tasks, or be constantly "meddling" in the work group.

V43 Inappropriate Supervision: Not enough

Supervisor does not adequately attend to his work group. Poor performance goes unnoticed; deficiencies are not corrected; basic supervision just not present.

V44 Inappropriate Supervision: Not task oriented

Supervisor does not adequately emphasize mission or goal oriented behaviors. Rather, supervisor emphasizes non-task related behaviors and goals in his work group (e.g. time off vs. task accomplishment).

V45 Accountability lacking

Individuals or groups are not made to be directly accountable for their work performance. Instead, individuals feel that performance (good or bad) goes unnoticed and unrecorded either by superiors or by the "system".

V46 Compliance with external policies, rules, regulations, etc.

Compliance with policies, rules, regulations, etc., must be accomplished without regard to their desirability or impact on the individual or work group. Such undesirable situations may not be totally anticipated by the individuals involved.

V47 Personality problems

Individuals cannot function together effectively due to personality conflicts between two or more people. The focus of the personality differences may be centered with one individual or with a number of

individuals. The extent of the personality conflicts may range from simple differences or personality characteristics to complex, "abnormal" behaviors.

V48 Automation (computer, etc.)

Differences arise because of, or associated with, the introduction of some form of automation into the work setting. One example of this is computerization of inventory records, and re-order procedures.

V49 Lack of job security

An individual or group perceives that their job security is threatened. The perception of threatened job security is the essential component, irregardless of the actual situation.

V50 Insufficient job skills

An individual or group does not possess the necessary skills or knowledge to perform their work adequately. This occurs even though, for their classification or rate, they should be qualified to satisfactorily perform the work assigned.

V51 Inadequate job-skill match

The reasonably expected skills and abilities of job incumbents, given their assigned positions or billets, do not adequately meet the demands of the job. An extreme example of this would be assigning PN2 billets to a work group in which the actual work requires the skills and abilities of ET1s.

V52 Physical separation (of work group)

Members of the work group, either the supervisor or one or more group members, are physically separated to the extent that this contributes to dysfunctional behaviors.

V53 Inadequate work design/flow

The manner in which work procedures or methods have been set up leads to non-optimum behaviors that have a negative effect. This condition could occur even though individual work group members may be performing adequately within the constraints of the existing work design.

V54 Inadequate work policies/procedures

Work policies and procedures may be inefficient or not appropriate to job demands, or they may not be clearly specified or understood by work group members.

V55 Personal problems (non-work related)

An individual has personal problems in his non work activities that carry over to the job which affect work related behaviors. Examples might be death in

the family, divorce, financial problems, etc.

V56 Alcohol/drug abuse

An individual's use of alcohol or other drugs contributes to undesirable work behaviors.

V57 Inadequate planning

A manager has not sufficiently thought out and planned job related activities to the extent that adverse effects are observed.

IV. MANIFESTATIONS OF THE SITUATION

V58 Degraded performance: Quantity

The amount of work or output produced by an individual or group is below desired levels.

V59 Degraded performance: Quality

The work produced or processed by an individual or group is below desired standards for quality.

V60 Degraded performance: Timeliness

The output from an individual or group, although it may be produced in a large quantity with satisfactory quality, is nevertheless not produced in a timely manner to meet desired suspense or target dates.

V61 Degraded performance: Efficiency

The expenditure of resources (time, money, material, effort, etc.) to accomplish assigned tasks is in excess of desired expenditures given the nature of the task or benefits accrued from task accomplishment.

V62 Degraded performance: Inspections

The actual or expected outcome of formal inspections is below a desired level.

V63 Degraded performance: Mission accomplishment

An individual or group does not, or expects not to, reach a desired level of mission accomplishment.

V64 Insufficient motivation

An individual or group does not appear to be properly motivated to perform task-related activities.

V66 Insufficient initiative

An individual or group, although they may be working relatively hard at specific tasks, does not appear to show initiative to accomplish the overall task or

objective. For example, an individual may be very motivated to prepare for an operation, work diligently with obvious preparations, but not take the initiative to go beyond what he perceives to be his limited area of immediate concern.

V67 Indecisiveness

An individual does not appear to be capable of making a definitive, firm decision. Planned activities are frequently changed, although the situation has not.

V68 Dissatisfaction

An individual or group expresses unhappiness or dissatisfaction with specific aspects of their work situation over and above the amount of "gripping" considered normal or desired.

V69 Low morale

The level of positive feelings, good will, desire to be associated with the group, etc., in a work group is below desired levels.

V70 Poor interpersonal relations

The quality of interpersonal interactions is below desired levels. Individuals do not seem to get along; they tend to treat each other as adversaries at one extreme or as non-entities at the other.

V71 Discipline problems (military customs and courtesy, NJP, etc.)

The occurrence of discipline related incidents, such as non-acceptance of military customs and courtesy, NJP, fighting, sloppiness, overt disrespect for superiors, is above desired levels.

V72 Low retention/high turnover

The desire for individuals to remain with the organization is not at desired levels. This would be reflected in low retention rates in the group for military personnel, high turnover for civilian personnel, and high requests for transfer for both groups.

V73 Unusual absenteeism

The amount of absenteeism from assigned duties is above desired levels. Such absenteeism may be reflected in excessive UAs, use of sick leave, or non-presence at assigned tasks although present elsewhere in the activity.

V74 Poor habitability/appearance

The living conditions or physical appearance of an area is below desired levels.

V75 Unsafe conditions/accidents

Working conditions are considered not to meet desired standards for safety, given the nature of the work, or the frequency of accidents is above normal or desired levels.

V76 Health adversely affected

The health of one or more individuals, other than by accidental injuries, is adversely jeopardized due to the work situation.

V77 Undesirable personnel assignment/transfers

A manager is required, irregardless of his personal disagreement, to reassign, transfer or accept an individual or individuals into or out of his work group.

V78 Inadequate administrative procedures

Administrative procedures are perceived to be deficient in that they are too burdensome, ineffective, not clear, or not relevant.

V79 Fiscal irresponsibility

The handling of money, contracts, etc. does not conform with desired levels of responsibility and prudent judgment.

V80 Superior not responsive

A superior does not appear to be responsive to inputs from others—superior, peers, or subordinates. He may not listen to input, or if he listens, may not appear to react to the input.

V81 Lack of respect for superior

The amount of respect for a superior by his subordinates is not at a desired or appropriate level. An individual may agree with actions taken by his superior, or may disagree, yet not respect his superior.

V82 Interference with work group

A superior, or other outside individuals, interferes too much with the performance and activities of a work group.

V83 Insufficient coordination

The amount of coordination between two or more individuals or groups to accomplish specific tasks is not at a desired level.

V84 Insufficient cooperation

The amount of cooperation between two or more individuals or groups is not at a desired level. Cooperation implies a willingness to help or assist

on a preplanned or on an as needed basis.

V85 Discrimination complaints (racial, sex, etc.)

Formal or informal complaints occur revolving around issues of discrimination due to race, sex, religion, etc.

V86 Racial problems/incidents

Incidents or problems occur that are racial in nature. Such incidents may or may not lead to formal or informal complaints by one or more of the parties involved.

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

VI ORGANIZATIONAL SETTING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
SHIP	0.	7	1.5	1.5	1.5
SUBMARINE	1.	118	26.0	26.0	27.5
SQUADRON	2.	7	1.5	1.5	29.1
OP STAFF	3.	83	18.3	18.3	47.4
ADMIN	4.	44	9.7	9.7	57.0
FINANCE	5.	32	7.0	7.0	64.1
SUPPLY	6.	10	2.2	2.2	66.3
MAINTENANCE	7.	48	10.6	10.6	76.9
R AND D	8.	27	5.9	5.9	82.8
TRAINING	9.	10	2.2	2.2	85.0
CONSTRUCTION	10.	32	7.0	7.0	92.1
OTHER	11.	19	4.2	4.2	96.3
	12.	16	3.5	3.5	99.8
	13.	1	0.2	0.2	100.0
	TOTAL	454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

APPENDIX E

FREQUENCIES

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V2 FUNCTION OF MANAGER

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	0.	9	2.0	2.0	2.0
CCMMAND	1.	172	37.9	37.9	39.9
CPERATIONS	2.	60	13.2	13.2	53.1
SUPPLY	3.	55	12.1	12.1	65.2
FINANCE	4.	13	2.9	2.9	68.1
PERSONNEL	5.	30	6.6	6.6	74.7
MAINTENANCE	6.	54	11.9	11.9	86.6
TECHNICAL	7.	15	3.3	3.3	89.9
ENGINEERING	8.	17	3.7	3.7	93.6
PROJ MANAGEMENT	9.	13	2.9	2.9	96.5
CTHER	10.	14	3.1	3.1	99.6
WEAPONS	11.	2	0.4	0.4	100.0
	TOTAL	454	100.0	100.0	
VALID CASES		454			
MISSING CASES					0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V3 LEVEL CF MANAGER

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	0.	1	0.2	0.2	0.2
CCMMAND	1.	189	41.6	41.6	41.9
DEPARTMENT	2.	152	33.5	33.5	75.3
DIVISICN	3.	104	22.9	22.9	98.2
WORK CENTER	4.	8	1.8	1.8	100.0
	TOTAL	454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V4 TIME OF OCCURRENCE

CODE	FREQ	ADJ PCT	CUM PCT	CODE	FREQ	ADJ PCT	CUM PCT	CODE	FREQ	ADJ PCT	CUM PCT
0.	33	7	7	58.	10	2	17	68.	25	6	61
47.	2	0	8	59.	10	2	19	69.	18	4	65
49.	2	0	8	60.	21	5	24	70.	40	9	74
50.	4	1	9	61.	7	2	25	71.	33	7	81
52.	3	1	10	62.	14	3	28	72.	41	9	91
53.	1	0	10	63.	9	2	30	73.	15	3	94
54.	1	0	10	64.	28	6	37	74.	18	4	98
55.	4	1	11	65.	37	8	45	75.	9	2	100
56.	10	2	13	66.	19	4	49	76.	1	0	100
57.	7	2	15	67.	32	7	56				

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREAT ICN CATE = 09/08/77)

V5 PROBLEM TYPE - PEOPLE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NGT IMPORTANT	0.	28	6.2	6.2	6.2
MODERATE IMPORTANT	1.	64	14.1	14.1	20.3
EXTREMELY IMPORT	2.	359	79.1	79.1	95.3
	3.	3	0.7	0.7	100.0
	TOTAL	454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V6 PROBLEM TYPE-RESOURCES

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT IMPORTANT	0.	401	88.3	88.3	88.3
MODERATE IMPORTANT	1.	30	6.6	6.6	94.9
EXTREMELY IMPORT	2.	23	5.1	5.1	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V7 PROBLEM TYPE-SYSTEM

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT IMPORTANT	0.	236	52.0	52.0	52.0
MODERATE IMPORTANT	1.	72	15.9	15.9	67.8
EXTREMELY IMPORT	2.	144	31.7	31.7	99.6
	3.	2	0.4	0.4	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V8 DECISION MAKING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
UNRELATED	0.	203	44.7	44.7	44.7
RELATED	1.	251	55.3	55.3	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V9 ORGANIZING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
UNRELATED	0.	250	55.1	55.1	55.1
RELATED	1.	204	44.9	44.9	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V10 STAFFING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
UNRELATED	0.	372	81.9	81.9	81.9
RELATED	1.	82	18.1	18.1	100.0
TOTAL		454	100.0	100.0	
VALID CASES	454				
MISSING CASES					0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V11 PLANNING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
UNRELATED	0.	235	51.8	51.8	51.8
RELATED	1.	219	48.2	48.2	100.0
TOTAL		454	100.0	100.0	
VALID CASES	454				
MISSING CASES					0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V12 CCNTRCLLNG

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
UNRELATED	0.	224	49.3	49.3	49.3
RELATED	1.	230	50.7	50.7	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V13 COMMUNICATING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
UNRELATED	0.	148	32.6	32.6	32.6
RELATED	1.	306	67.4	67.4	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES  
 FILE MGTCASES (CREATION DATE = 09/C8/77)

V14 DIRECTING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
UNRELATED	0.	262	57.7	57.7	57.7
RELATED	1.	192	42.3	42.3	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V15 REALM CF PROBLEM

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	0.	2	0.4	0.4	0.4
CIVILIAN	1.	26	5.7	5.7	6.2
MILITARY	2.	315	69.4	69.4	75.6
MIXED	3.	111	24.4	24.4	100.0
TOTAL		454	100.0	100.0	

VALID CASES            454            MISSING CASES            0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V16 MANAGER HIMSELF INVOLVED

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	213	46.9	46.9	46.9
PRESENT	1.	241	53.1	53.1	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V17 MGR'S SUPERIOR INVOLVED

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	309	68.1	68.1	68.1
PRESENT	1.	145	31.9	31.9	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V18 INDIVIDUAL SUBORDINATE INVOLVED

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	345	76.0	76.0	76.0
PRESENT	1.	109	24.0	24.0	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V19 MGR'S WORK GROUP INVOLVED

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	224	49.3	49.3	49.3
PRESENT	1.	230	50.7	50.7	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V20 OTHER GROUP IN CCMAND INVCLVED

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	383	84.4	84.4	84.4
PRESENT	1.	71	15.6	15.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V21 EXTERNAL POLICIES INVOLVED

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	347	76.4	76.4	76.4
PRESENT	1.	107	23.6	23.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES  
 FILE MGT CASES (CREATION DATE = 09/08/77)

V22 ONSET CF PROBLEM

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	0.	2	0.4	0.4	0.4
ACUTE	1.	161	35.5	35.5	35.5
CHRONIC	2.	290	63.9	63.9	99.8
	3.	1	0.2	0.2	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V23 IMPACT ON MISSION EFFECTIVENESS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	0.	2	0.4	0.4	0.4
LOW	1.	22	4.8	4.8	5.3
MODERATE	2.	158	34.8	34.8	40.1
HIGH	3.	214	47.1	47.1	87.2
VERY HIGH	4.	58	12.8	12.8	100.0
	TOTAL	454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGT CASES (CREATION DATE = 09/08/77)

V24 EASE OF RESOLUTION

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	0.	2	0.4	0.4	0.4
STRAIGHTFORWARD	1.	58	12.8	12.8	13.2
MODERATE DIFFICULT	2.	220	48.5	48.5	61.7
VERY DIFFICULT	3.	162	35.7	35.7	97.4
IMPOSSIBLE	4.	12	2.6	2.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V25 RESP-ALTH NOT CLEAR

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	271	59.7	59.7	59.7
PRESENT	1.	183	40.3	40.3	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V26 AUTHORITY NOT APPRCPRIATE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	365	80.4	80.4	80.4
PRESENT	1.	89	19.6	19.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGT CASES (CREATION DATE = 09/08/77)

V27 NOT AWARE CHANGE IN RESPONSIBILITY

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	363	80.0	80.0	80.0
PRESENT	1.	91	20.0	20.0	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGT CASES (CREATION DATE = 09/08/77)

V28 ORDERS FROM MULTIPLE SOURCES

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	364	80.2	80.2	80.2
PRESENT	1.	90	19.8	19.8	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V29 CHAIN OF COMMAND VIOLATED

CATEGORY LABEL	CCODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	344	75.8	75.8	75.8
PRESENT	1.	110	24.2	24.2	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V30 PUBLIC CRITICISM

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	384	84.6	84.6	84.6
PRESENT	1.	70	15.4	15.4	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V31 AUTH-RESP CONFLICTS NOT RESOLVED

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	334	73.6	73.6	73.6
PRESENT	1.	120	26.4	26.4	100.0
	TOTAL	454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V32 PERS ACTION NOT APPROVED BY SUPERIOR

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	433	95.4	95.4	95.4
PRESENT	1.	21	4.6	4.6	100.0
	TOTAL	454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/C8/77)

V33 INDIVIDUAL BOTH CRITIC-ASSISTANT

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	429	94.5	94.5	94.5
PRESENT	1.	25	5.5	5.5	100.0
	TOTAL	454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/C8/77)

V34 INDEPENDENT INSPECTIONS NOT AVAILABLE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	423	93.2	93.2	93.2
PRESENT	1.	31	6.8	6.8	100.0
	TOTAL	454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V35 FAIL TO DELEGATE AUTHORITY

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	339	74.7	74.7	74.7
PRESENT	1.	115	25.3	25.3	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V36 LACK OF INITIATIVE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	401	88.3	88.3	88.3
PRESENT	1.	53	11.7	11.7	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V37 INADEQUATE COORDINATION

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	288	63.4	63.4	63.4
PRESENT	1.	166	36.6	36.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V58 LACK OF FULL COOPERATION

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	335	73.8	73.8	73.8
PRESENT	1.	119	26.2	26.2	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V39 INADEQUATE COMMUNICATIONS

CATEGORY LABEL	CCODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	186	41.0	41.0	41.0
PRESENT	1.	268	59.0	59.0	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V40 INAPPROPRIATE WORK-GROUP GOALS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	330	72.7	72.7	72.7
PRESENT	1.	124	27.3	27.3	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V41 LACK CF CONFIDENCE-TRUST

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	326	71.8	71.8	71.8
PRESENT	1.	128	28.2	28.2	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V42 INAPPRCF SUPERVISICN-TOO CLOSE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	395	86.6	86.6	86.6
PRESENT	1.	61	13.4	13.4	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V43 INAPPROP SUPERVISION--NOT ENOUGH

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	387	85.2	85.2	85.2
PRESENT	1.	67	14.8	14.8	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V44 INAPPRCP SUPERVISION--NOT TASK ORIENTED

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	408	89.9	89.9	89.9
PRESENT	1.	46	10.1	10.1	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V45 ACCOUNTABILITY LACKING

CATEGORY LABEL	CCODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	374	82.4	82.4	82.4
PRESENT	1.	80	17.6	17.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V46 COMPLIANCE WITH EXTERNAL POLICIES

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	364	80.2	80.2	80.2
PRESENT	1.	90	19.8	19.8	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGT\_CASES (CREATION DATE = 09/08/77)

V47 PERSONALITY PROBLEMS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	397	87.4	87.4	87.4
PRESENT	1.	57	12.6	12.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGT\_CASES (CREATION DATE = 09/08/77)

V48 AUTOMATION

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	443	97.6	97.6	97.6
PRESENT	1.	11	2.4	2.4	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/C8/77)

V49 LACK CF JOB SECURITY

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	434	95.6	95.6	95.6
PRESENT	1.	20	4.4	4.4	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V50 INSUFFICIENT JOB SKILLS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	380	83.7	83.7	83.7
PRESENT	1.	74	16.3	16.3	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V51 INADEQUATE JOB-SKILL MATCH

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	412	90.7	90.7	90.7
PRESENT	1.	42	9.3	9.3	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V52 PHYSICAL SEPARATION OF WORK GROUP

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	418	52.1	92.1	92.1
PRESENT	1.	36	7.9	7.9	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V53 INADEQUATE WORK DESIGN-FLOW

CATEGORY LABEL	CCDE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	394	86.8	86.8	86.8
PRESENT	1.	60	13.2	13.2	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V54 INADEQUATE WORK POLICIES-PROCEDURES

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	326	71.8	71.8	71.8
PRESENT	1.	128	28.2	28.2	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V55 PERSONAL PROBLEMS

CATEGORY LABEL	CCODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	418	92.1	92.1	92.1
PRESENT	1.	36	7.9	7.9	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V56 ALCCHCL-DRUG ABUSE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	425	95.8	95.8	95.8
PRESENT	1.	19	4.2	4.2	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/C8/77)

V57 INADEQUATE PLANNING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	296	65.2	65.2	65.2
PRESENT	1.	158	34.8	34.8	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/C8/77)

V58 DEGRADED PERFORMANCE-QUANTITY

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	377	83.0	83.0	83.0
PRESENT	1.	77	17.0	17.0	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES  
 FILE MGTCASES (CREATION DATE = 09/08/77)

V59 DEGRADED PERFORMANCE-QUALITY

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	274	60.4	60.4	60.4
PRESENT	1.	180	39.6	39.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V60 DEGRADED PERFORMANCE-TIMELINESS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	331	72.9	72.9	72.9
PRESENT	1.	123	27.1	27.1	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/C8/77)

V61

CATEGORY LABEL	CCODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	279	61.5	61.5	61.5
PRESENT	1.	175	38.5	38.5	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGT CASES (CREATION DATE = 09/08/77)

V62 DEGRADED PERFORMANCE-INSPECTIONS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	409	90.1	90.1	90.1
PRESENT	1.	45	9.9	9.9	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGT CASES (CREATION DATE = 09/08/77)

V63 DEGRADED PERFORMANCE-MISSICN ACCOMPLISH

CATEGORY LABEL	CCDE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	329	72.5	72.5	72.5
PRESENT	1.	125	27.5	27.5	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V64 DEGRADED PERFORMANCE-EQUIP FAILURE

CATEGORY LABEL	CCODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	407	89.6	89.6	89.6
PRESENT	1.	47	10.4	10.4	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V65 INSUFFICIENT MOTIVATION

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	347	76.4	76.4	76.4
PRESENT	1.	107	23.6	23.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V66 INSUFFICIENT INITIATIVE

CATEGORY LABEL	CCODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	382	84.1	84.1	84.1
PRESENT	1.	72	15.9	15.9	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V67 INDECISIVENESS

CATEGORY LABEL	CCODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	409	90.1	90.1	90.1
PRESENT	1.	45	9.9	9.9	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES  
 FILE MGT CASES (CREATION DATE = 09/C8/77)

V68

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	300	66.1	66.1	66.1
PRESENT	1.	154	33.9	33.9	100.0
	TOTAL	454	100.0	100.0	
VALID CASES		454			
	MISSING CASES				0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V65 LGW MORALE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	196	43.2	43.2	43.2
PRESENT	1.	258	56.8	56.8	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V70 PCOR INTERPERSONAL RELATIONS

CATEGORY LABEL	CCDE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	343	75.6	75.6	75.6
PRESENT	1.	111	24.4	24.4	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V71 DISCIPLINE PROBLEMS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NCT PRESENT	0.	396	87.2	87.2	87.2
PRESENT	1.	58	12.8	12.8	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V72 LOW RETENTION-HIGH TURNOVER

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	403	88.8	88.8	88.8
PRESENT	1.	51	11.2	11.2	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V73 UNUSUAL ABSENTEEISM

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	424	93.4	93.4	93.4
PRESENT	1.	30	6.6	6.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V74 POOR HABITABILITY

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	436	96.0	96.0	96.0
PRESENT	1.	18	4.0	4.0	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V75 UNSAFE CONDITIONS-ACCIDENTS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	433	95.4	95.4	95.4
PRESENT	1.	21	4.6	4.6	100.0
	TOTAL	454	100.0	100.0	
VALID CASES	454	MISSING CASES	0		

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V76 HEALTH ADVERSELY AFFECTED

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	440	96.9	96.9	96.9
PRESENT	1.	14	3.1	3.1	100.0
	TOTAL	454	100.0	100.0	
VALID CASES	454	MISSING CASES	0		

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V77 UNDESIRABLE PERSONNEL ASSIGNMENTS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	412	90.7	90.7	90.7
PRESENT	1.	42	9.3	9.3	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V78 INADEQUATE ADMIN PROCEDURES

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	320	70.5	70.5	70.5
PRESENT	1.	134	29.5	29.5	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/C8/77)

V79 FISCAL IRRESPONSIBILITY

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	433	95.4	95.4	95.4
PRESENT	1.	21	4.6	4.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V80 SUPERIOR NOT RESPNSIVE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	364	80.2	80.2	80.2
PRESENT	1.	90	19.8	19.8	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/08/77)

V81 LACK CF RESPECT FCR SUPERIOR

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	338	74.4	74.4	74.4
PRESENT	1.	116	25.6	25.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/C8/77)

V82 INTERFERENCE WITH WORK GROUP

CATEGORY LABEL	CCODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	349	76.9	76.9	76.9
PRESENT	1.	105	23.1	23.1	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES

FILE MGTCASES (CREATION DATE = 09/C8/77)

V83 INSUFFICIENT COORDINATION

CATEGORY LABEL	CCODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	278	61.2	61.2	61.2
PRESENT	1.	176	38.8	38.8	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES  
 FILE MGTCASES (CREATION DATE = 09/08/77)

V84 INSUFFICIENT COOPERATION

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	345	76.0	76.0	76.0
PRESENT	1.	109	24.0	24.0	100.0
	TOTAL	454	100.0	100.0	
VALID CASES		454			
	MISSING CASES				0

MANAGEMENT CASE STUDIES

FILE MGT CASES (CREATION DATE = 09/08/77)

V85 DISCRIMINATION COMPLAINTS

CATEGORY LABEL	CCODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	433	95.4	95.4	95.4
PRESENT	1.	21	4.6	4.6	100.0
TOTAL		454	100.0	100.0	

VALID CASES 454 MISSING CASES 0

MANAGEMENT CASE STUDIES  
 FILE MGTCASES (CREATION DATE = 09/08/77)

V86 RACIAL PROBLEMS--INCIDENTS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOT PRESENT	0.	444	97.8	97.8	97.8
PRESENT	1.	10	2.2	2.2	100.0
TOTAL		454	100.0	100.0	
VALID CASES		454			
MISSING CASES		0			

## APPENDIX F

### UNROTATED FACTOR MATRIX AND COMMUNALITY ESTIMATES

The unrotated factor matrix is presented in the following table. The columns of the matrix define the principal factors; the rows refer to variables. The loadings or numbers in each row are correlation coefficients between variables and factors. The solution is based on the principal component method with communality estimates in the main diagonal of the correlation coefficients. An iterative procedure for improving the estimates of communality was employed; 23 iterations were required. Also presented in this appendix is the eigenvalue for each factor, and the estimates of communality for each variable.

FACTOR MATRIX USING PRINCIPAL FACTOR WITH ITERATIONS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 9	FACTOR 10
V25	0.21709	0.08105	0.50591	0.03135	0.06425	0.01749	0.25125	0.04607	0.05804	0.08312
V26	0.12532	0.02851	0.38536	0.04701	0.022108	0.01749	0.20188	0.01089	0.00501	0.15637
V27	0.12104	0.18606	0.41716	0.01392	0.022108	0.01749	0.20188	0.01089	0.00501	0.15637
V28	0.19886	0.26406	0.43083	0.01528	0.022108	0.01749	0.20188	0.01089	0.00501	0.15637
V29	0.15156	0.51228	0.36558	0.01154	0.03345	0.0015774	0.015025	0.02536	0.00690	0.12816
V30	0.15560	0.28428	0.35207	0.01154	0.03345	0.0015774	0.015025	0.02536	0.00690	0.12816
V31	0.15189	0.16289	0.19425	0.01055	0.01155	0.0017191	0.22859	0.05562	0.04215	0.17447
V32	0.14278	0.30055	0.20544	0.01451	0.01890	0.004808	0.21103	0.08480	0.09825	0.02563
V33	0.14569	0.25575	0.22929	0.01709	0.18672	0.02456	0.06322	0.08480	0.09825	0.06702
V34	0.47202	0.16195	0.19289	0.01099	0.02694	0.04027	0.00632	0.13762	0.03316	0.04535
V35	0.30646	0.05717	0.04952	0.00545	0.20949	0.02353	0.00513	0.08196	0.00844	0.17089
V36	0.21626	0.36185	0.08176	0.02258	0.01589	0.03534	0.01693	0.0662	0.00844	0.04903
V37	0.16661	0.48185	0.01797	0.00510	0.15883	0.02036	0.45938	0.05377	0.00756	0.00343
V38	0.16771	0.29064	0.04342	0.00510	0.08191	0.03692	0.19430	0.05377	0.00756	0.00343
V39	0.31592	0.04147	0.10622	0.02094	0.01454	0.02779	0.11918	0.07332	0.02286	0.21554
V40	0.06441	0.13534	0.03462	0.00384	0.23742	0.02871	0.06085	0.04584	0.00264	0.20550
V41	0.21359	0.27348	0.04554	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V42	0.14592	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V43	0.06441	0.27348	0.04554	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V44	0.21359	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V45	0.14592	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V46	0.06441	0.27348	0.04554	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V47	0.21359	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V48	0.14592	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V49	0.06441	0.27348	0.04554	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V50	0.21359	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V51	0.14592	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V52	0.06441	0.27348	0.04554	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V53	0.21359	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V54	0.14592	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V55	0.06441	0.27348	0.04554	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V56	0.21359	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V57	0.14592	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V58	0.06441	0.27348	0.04554	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V59	0.21359	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V60	0.14592	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V61	0.06441	0.27348	0.04554	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V62	0.21359	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V63	0.14592	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V64	0.06441	0.27348	0.04554	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V65	0.21359	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V66	0.14592	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V67	0.06441	0.27348	0.04554	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V68	0.21359	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V69	0.14592	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V70	0.06441	0.27348	0.04554	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V71	0.21359	0.13528	0.03254	0.00919	0.02139	0.02779	0.11918	0.07332	0.02286	0.21554
V72	0.16295	0.06654	0.15450	0.01386	0.04059	0.02049	0.01962	0.00176	0.15093	0.00894
V73	0.08205	0.01968	0.18670	0.08152	0.00111	0.17549	0.00755	0.13381	0.06319	0.19908
V74	0.29140	0.02379	0.27983	0.02250	0.03399	0.02994	0.04834	0.00466	0.15641	0.15446
V75	0.37574	0.01874	0.09661	0.04389	0.0180	0.0918	0.04612	0.01913	0.04851	0.09152
V76	0.31125	0.1922	0.17087	0.04248	0.15856	0.04405	0.28796	0.02623	0.04010	0.00307
V77	0.33463	0.04566	0.21882	0.00526	0.0526	0.02022	0.24366	0.04237	0.08645	0.06772
V78	0.51319	0.04319	0.34086	0.01199	0.23003	0.13457	0.00932	0.08013	0.03625	0.01440
V79	0.21629	0.06654	0.15450	0.01386	0.04059	0.02049	0.01962	0.00176	0.15093	0.00894
V80	0.08205	0.01968	0.18670	0.08152	0.00111	0.17549	0.00755	0.13381	0.06319	0.19908
V81	0.29140	0.02379	0.27983	0.02250	0.03399	0.02994	0.04834	0.00466	0.15641	0.15446
V82	0.37574	0.01874	0.09661	0.04389	0.0180	0.0918	0.04612	0.01913	0.04851	0.09152
V83	0.31125	0.1922	0.17087	0.04248	0.15856	0.04405	0.28796	0.02623	0.04010	0.00307
V84	0.33463	0.04566	0.21882	0.00526	0.0526	0.02022	0.24366	0.04237	0.08645	0.06772
V85	0.51319	0.04319	0.34086	0.01199	0.23003	0.13457	0.00932	0.08013	0.03625	0.01440

	FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17
V50	0.02514	0.04457	0.00144	0.04777	-0.13251	-0.13532	0.07208
V51	0.12492	0.01226	0.11335	0.01060	-0.05622	-0.05553	-0.04526
V52	0.00732	0.01822	0.01082	-0.07033	0.00410	-0.15689	-0.02044
V53	-0.01402	0.00112	-0.06013	-0.01456	0.00458	0.01410	0.05871
V54	0.00492	0.00980	0.03460	-0.04083	0.00587	0.15024	0.13386
V55	-0.00128	0.00519	0.04663	-0.03897	0.00564	0.15024	0.06238
V56	0.00188	0.03701	0.03507	0.01272	-0.03008	-0.00907	0.03199
V57	0.17235	0.01285	0.26600	0.01368	0.04812	0.07121	0.01731
V58	-0.06548	0.00706	-0.04160	0.13608	-0.07121	0.12009	0.20271
V59	0.08262	0.00601	0.06610	-0.20806	0.13954	0.00268	-0.00152
V60	0.02602	0.01778	-0.01064	-0.02133	0.00694	0.03071	0.01771
V61	0.00625	0.04725	-0.01120	-0.01723	-0.05146	0.04262	-0.00325
V62	0.00130	0.12586	-0.07362	-0.01723	0.00158	0.03716	0.19066
V63	-0.04750	0.12559	-0.05835	0.20518	-0.01272	0.04760	-0.09204
V64	0.00190	0.03592	-0.15023	0.03011	0.01027	-0.06876	0.00476
V65	0.03040	0.19269	-0.06503	0.00800	-0.03359	0.03276	0.02176
V66	-0.00402	0.10601	-0.04871	0.02448	-0.01190	-0.09170	-0.05112
V67	-0.01062	0.08883	-0.00850	-0.02448	-0.01082	0.06052	0.08192
V68	-0.02698	0.09660	-0.06377	-0.02565	-0.01082	0.21229	0.18398
V69	0.01792	0.13703	0.04461	-0.05505	-0.03942	0.05903	0.02979
V70	-0.08280	0.11950	-0.07461	0.00376	0.03678	-0.05226	0.09465
V71	0.08492	-0.11074	-0.02004	-0.14636	-0.01683	0.03461	0.04365
V72	0.01930	0.14559	-0.05997	0.14766	-0.11573	0.10341	0.14007
V73	-0.08280	0.28148	0.07344	-0.07620	0.11583	0.05143	0.13248
V74	-0.10624	0.00407	0.14803	-0.02447	0.11583	0.10707	-0.05442
V75	-0.06526	-0.09378	0.05151	-0.09927	0.11583	0.00228	0.05325
V76	-0.01510	-0.16289	-0.05050	-0.02142	-0.02260	-0.04116	-0.06239
FACTOR 11		FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17
V60	-0.01622	0.05414	-0.01334	0.00957	-0.15763	0.03504	-0.05506
V61	-0.04657	0.09525	-0.06864	-0.00945	-0.10985	0.11511	-0.00152
V62	-0.10165	-0.15709	-0.21800	-0.00165	0.15221	0.03970	0.04362
V63	-0.07363	0.01392	0.25734	0.11279	0.11278	-0.06486	-0.03422
V64	-0.07932	-0.18364	-0.14225	-0.01719	0.01759	-0.04068	0.08844
V65	-0.06524	0.02614	-0.02269	0.04719	0.05261	0.10190	0.20261
V66	-0.15060	-0.09114	-0.02954	0.03634	0.01113	-0.11039	0.03451
V67	0.12801	-0.05523	-0.03172	-0.03702	-0.01745	0.05495	-0.04518
V68	-0.45515	-0.22082	-0.05978	-0.13570	-0.00411	-0.16524	-0.04828
V69	-0.10595	-0.19209	0.08346	0.05478	0.04259	0.07703	-0.01531
V70	-0.06059	0.04711	-0.08497	-0.00010	-0.01000	0.06825	0.10118
V71	-0.18505	0.04930	-0.18589	0.18914	0.04699	0.05816	0.07743
V72	0.04968	-0.09390	-0.05626	0.04887	-0.08703	0.00353	0.04675
V73	0.12349	0.06331	-0.12845	0.20831	0.04700	0.16251	0.07016
V74	-0.09913	0.07376	0.04145	-0.03735	0.02600	0.03764	0.06954
V75	-0.20949	-0.00301	0.05001	-0.05883	0.05945	0.10205	-0.13199
V76	-0.19592	0.11921	-0.12980	0.06226	0.08142	0.04075	-0.23199
V77	-0.01588	-0.09392	-0.05180	-0.02246	0.01821	0.04031	-0.10950
V78	0.08586	0.00856	-0.08741	-0.12794	0.03739	0.12794	0.06592
V79	-0.07318	0.07318	-0.06190	-0.00718	-0.17459	-0.04122	-0.06286

FACTOR	EIGENVALUE	PCT OF VAR	CUM PCT
1	4.51558	8.7	8.7
2	3.42659	6.5	15.3
3	3.26997	6.3	21.6
4	2.07552	4.0	25.6
5	1.92255	3.7	29.3
6	1.71271	3.3	32.5
7	1.58116	3.0	35.6
8	1.53993	3.0	38.5
9	1.46483	2.8	41.4
10	1.34808	2.6	44.0
11	1.26799	2.4	46.4
12	1.25092	2.4	48.8
13	1.23385	2.4	51.2
14	1.14030	2.2	53.4
15	1.07129	2.1	55.4
16	1.03925	2.0	57.4
17	1.00527	1.9	59.4
18	0.95107	1.8	61.2
19	0.94519	1.8	63.0
20	0.90270	1.7	64.7
21	0.88970	1.7	66.5
22	0.86024	1.7	68.1
23	0.82791	1.6	69.7
24	0.79999	1.5	71.2
25	0.78340	1.5	72.7
26	0.75897	1.5	74.2
27	0.73865	1.4	75.6
28	0.69793	1.3	77.0
29	0.63518	1.3	78.3
30	0.63116	1.3	79.6
31	0.67106	1.3	80.9
32	0.63724	1.2	82.1
33	0.62258	1.2	83.3
34	0.60978	1.2	84.5
35	0.59068	1.1	85.6
36	0.57648	1.1	86.7
37	0.55767	1.1	87.8
38	0.54128	1.0	88.8
39	0.53565	1.0	89.9
40	0.51921	1.0	90.9
41	0.48784	0.9	91.8
42	0.46144	0.9	92.7
43	0.44671	0.9	93.6
44	0.43315	0.8	94.4
45	0.42501	0.8	95.2
46	0.40050	0.8	96.0
47	0.39416	0.8	96.7
48	0.38254	0.7	97.5
49	0.35333	0.7	98.1
50	0.34136	0.7	98.8
51	0.32295	0.6	99.4
52	0.30079	0.6	100.0

VARIABLE	EST COMMUNALITY
V25	0.43833
V26	0.23182
V27	0.26185
V28	0.36793
V29	0.42506
V30	0.34500
V31	0.31624
V33	0.19301
V34	0.20668
V35	0.35642
V36	0.33956
V37	0.44345
V38	0.38714
V39	0.22575
V40	0.28716
V41	0.27299
V42	0.40229
V43	0.29876
V44	0.28741
V45	0.28561
V46	0.18045
V47	0.31338
V50	0.22803
V51	0.22757
V52	0.17102
V53	0.23252
V54	0.25582
V55	0.26558
V57	0.30787
V58	0.36570
V59	0.34932
V60	0.34923
V61	0.29547
V62	0.24850
V63	0.24412
V64	0.25685
V65	0.41662
V66	0.44911
V67	0.23454
V68	0.28895
V69	0.32674
V70	0.35614
V71	0.24816
V72	0.23185
V73	0.23941
V77	0.22391
V78	0.33981
V80	0.29480
V81	0.36235
V82	0.38842
V83	0.46854
V84	0.29307

## APPENDIX G

### VARIMAX ROTATED FACTOR MATRIX

The following table presents the terminal solution of orthogonally rotated factors. The VARIMAX rotation criterion was employed. A summary of this matrix is presented in the text as Table 1, with loadings greater than or equal to .30 being reported.

VARI-MAX ROTATED FACTOR MATRIX

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 5	FACTOR 10
V25	0.3477	0.02822	-0.07212	0.05143	0.22967	0.10935	0.07139	-0.09289	0.30281	0.02373
V26	-0.17083	-0.086622	-0.037805	0.00298	0.42954	-0.012624	-0.004805	-0.006917	0.000774	-0.02541
V27	0.02091	-0.006733	-0.03784	0.000915	0.50120	0.010115	-0.004805	-0.009174	0.000774	-0.012633
V28	-0.02472	-0.014527	0.03590	-0.004955	-0.17010	0.13031	-0.006399	-0.025623	-0.003473	0.007736
V30	0.16225	-0.011777	-0.08983	0.005201	0.04010	0.050144	0.010094	-0.001013	-0.02588	0.013905
V33	0.07735	-0.010085	0.12576	0.008462	0.36206	0.020538	0.014647	-0.007030	-0.013007	-0.006159
V34	-0.08673	0.023458	0.09177	-0.00705	0.09810	0.005542	0.007705	-0.04062	-0.014647	-0.00361
V36	0.016563	0.011277	0.042803	-0.003074	0.19409	-0.15846	0.010736	-0.014415	0.019393	0.014444
V37	0.06175	0.04277	0.02319	0.004255	0.02931	0.027146	0.011658	0.012463	-0.018075	0.000774
V39	0.16223	0.00010	0.03719	0.002255	0.02931	0.006916	0.004546	0.02263	0.000775	0.000775
V40	0.29527	0.05527	0.04281	0.000965	0.05331	0.07916	0.004546	0.044099	0.009099	0.000775
V41	0.29528	0.08307	0.01876	0.002405	0.006642	0.35889	0.004546	0.007353	0.002571	0.003773
V43	-0.05333	0.08307	0.10815	-0.000569	0.07408	-0.22240	0.011827	0.004733	-0.002571	0.002390
V44	0.01810	-0.03139	-0.18715	-0.000569	0.03745	0.016735	0.005795	0.004733	0.002571	0.002390
V45	0.06910	0.003499	0.04200	-0.000569	0.01237	-0.05888	0.003570	0.004733	0.002571	0.002390
V47	0.55753	0.007499	0.07816	-0.000569	0.04540	0.05888	0.003570	0.004733	0.002571	0.002390
V50	0.09702	0.083530	0.02308	0.000569	0.06540	0.00022	0.003570	0.004733	0.002571	0.002390
V51	0.12533	0.05373	0.04692	0.000569	0.01575	0.001228	0.003570	0.004733	0.002571	0.002390
V53	0.09719	0.083530	0.03195	0.000569	0.03792	0.04029	0.003570	0.004733	0.002571	0.002390
V54	0.07119	0.02253	0.03195	0.000569	0.06093	0.05099	0.003570	0.004733	0.002571	0.002390
V55	0.12449	0.08070	0.0822	0.000569	0.05099	0.04029	0.003570	0.004733	0.002571	0.002390
V57	0.07392	0.06107	0.0822	0.000569	0.07858	0.09092	0.003570	0.004733	0.002571	0.002390
V58	0.06337	0.09526	0.02133	0.000569	0.01868	0.08942	0.003570	0.004733	0.002571	0.002390
V61	0.03373	0.03730	0.02639	0.000569	0.02124	0.06942	0.003570	0.004733	0.002571	0.002390
V62	0.03165	0.049120	0.02639	0.000569	0.02124	0.06942	0.003570	0.004733	0.002571	0.002390
V63	0.00936	0.049120	0.02639	0.000569	0.01084	0.03000	0.003570	0.004733	0.002571	0.002390
V64	0.04327	0.02233	0.00775	0.000569	0.10842	0.03000	0.003570	0.004733	0.002571	0.002390
V66	0.04327	0.02233	0.00775	0.000569	0.06239	0.03000	0.003570	0.004733	0.002571	0.002390
V67	0.04327	0.02233	0.00775	0.000569	0.06239	0.03000	0.003570	0.004733	0.002571	0.002390
V68	0.02613	0.006151	0.02544	0.000569	0.01009	0.01811	0.003570	0.004733	0.002571	0.002390
V70	0.02613	0.006151	0.02544	0.000569	0.01009	0.01811	0.003570	0.004733	0.002571	0.002390
V71	0.02613	0.006151	0.02544	0.000569	0.01009	0.01811	0.003570	0.004733	0.002571	0.002390

	FAKTOR 1	FAKTOR 2	FAKTOR 3	FAKTOR 4	FAKTOR 5	FAKTOR 6	FAKTOR 7	FAKTOR 8	FAKTOR 5	FAKTOR 10
V72	0.01193	0.04601	0.10482	-0.11445	-0.01358	0.01640	0.14082	0.25011	0.08826	0.29144
V73	0.00332	0.10816	0.07705	-0.01074	-0.03884	-0.00108	0.02442	-0.08725	-0.01315	0.09747
V74	-0.02182	0.07166	0.02154	0.08352	0.03084	0.01409	0.01402	-0.34775	0.00382	0.18427
V75	-0.01762	0.07955	0.09293	-0.01752	0.04886	-0.00932	0.04503	0.18615	-0.47774	0.04811
V76	0.02002	-0.01845	0.02927	0.02364	-0.13986	0.02435	1.4070	0.09078	0.04978	0.09078
V77	0.01107	0.12587	0.11442	-0.01776	0.02412	0.24541	-0.01244	-0.01283	0.08352	0.15622
V78	-0.01107	0.01107	0.08670	0.17181	0.08670	0.36342	0.12244	-0.01244	0.03026	0.09054
V79	-0.05331	0.15578	0.05762	-0.04199	0.17973	-0.02447	0.00836	-0.03856	0.02715	0.01800
V80	0.33999	0.04231	0.21174	0.34620	0.02029	0.01967	0.13610	-0.06194	-0.02289	-0.01930

	FAKTOR 11	FAKTOR 12	FAKTOR 13	FAKTOR 14	FAKTOR 15	FAKTOR 16	FAKTOR 17
V26	0.07473	0.03165	-0.13580	0.10946	0.25573	-0.01944	-0.08748
V27	-0.05018	-0.12781	0.06695	-0.02267	0.04902	-0.06886	-0.05015
V28	-0.00028	0.00056	0.01044	-0.02036	0.06132	0.07106	0.02040
V29	-0.06330	0.02927	-0.07325	0.05690	-0.50117	0.03413	-0.02169
V30	-0.03934	0.18208	-0.09818	0.01334	0.69000	0.11768	0.00090
V31	-0.04226	-0.06135	0.13147	-0.01334	0.35586	0.08559	0.03693
V32	-0.00859	0.02130	0.03654	-0.03855	0.28681	0.07595	-0.08361
V33	0.05977	0.43108	0.03200	-0.02697	0.04578	0.10295	0.02137
V34	0.13234	-0.03357	-0.13754	0.08677	-0.01321	-0.01720	-0.04350
V35	-0.04687	0.10824	0.08017	-0.05599	0.26664	0.15337	0.26063
V36	-0.03849	0.05942	-0.10250	0.14179	-0.00162	0.09488	0.00709
V37	0.05997	-0.02132	0.06805	0.13161	0.12126	0.06811	0.05125
V38	-0.02902	0.07733	-0.08845	-0.01761	-0.10926	0.09743	0.09353
V39	0.02974	-0.05980	0.08845	-0.15032	0.05779	0.12043	-0.07844
V40	-0.06214	0.19910	-0.29113	-0.01857	-0.18188	0.02232	-0.00147
V41	-0.00957	-0.01692	0.03062	0.02390	-0.02201	0.08847	-0.08074
V42	0.09352	0.08987	-0.13383	-0.05016	0.12733	0.00419	0.08057
V43	0.04678	-0.01446	0.53432	0.02047	0.05902	0.00440	0.10782
V44	-0.01335	0.01895	-0.08918	-0.01622	-0.02884	-0.00440	-0.03610
V45	0.15942	0.06418	0.13483	-0.04477	0.04418	0.10777	-0.01722
V46	-0.13692	-0.04710	-0.06112	-0.05962	-0.06170	-0.05177	-0.01915
V47	-0.01007	0.20415	-0.13495	-0.09085	-0.10960	0.01805	0.00834
V48	-0.01007	0.11832	0.03175	-0.09485	0.00251	0.00716	0.02008
V49	-0.01007	-0.05532	0.06844	-0.09485	-0.02596	0.02813	1.4482
V50	0.05207	0.14807	-0.04732	0.34406	-0.06876	0.01744	-0.00131
V51	-0.01102	-0.01102	-0.10657	0.16116	0.08952	0.13245	0.01136

	FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17
V60	0.14268	-0.10599	-0.00701	0.19027	-0.00392	-0.14451	0.05908
V61	-0.03495	-0.01234	-0.08139	-0.24560	0.05524	-0.14398	0.05091
V62	-0.04251	-0.02649	-0.03287	0.51897	0.13251	0.24140	0.12873
V63	-0.01529	0.14000	-0.03260	0.51897	0.07662	0.02728	-0.05197
V64	0.03326	0.02370	-0.03216	0.46402	-0.01210	0.00035	0.14905
V65	0.03912	-0.23711	-0.03237	-0.05423	0.01621	0.19088	-0.03012
V66	0.02450	-0.10097	0.11677	-0.06573	0.10235	-0.11766	-0.03779
V67	0.10080	-0.02285	-0.06922	-0.07089	0.09703	0.11496	0.05190
V68	-0.00963	-0.02535	-0.04530	0.02090	-0.01287	0.05219	0.05299
V69	-0.14164	-0.02736	-0.06963	-0.07174	0.00700	0.18481	0.38069
V70	0.24656	-0.05423	0.00143	-0.07122	-0.05107	-0.05377	0.17064
V71	0.17071	-0.08793	0.02017	-0.04142	0.06118	0.00830	0.52042
V72	0.03348	-0.10652	0.02955	-0.05668	-0.07195	0.16004	-0.05188
V73	0.05376	-0.02620	-0.01064	0.06804	0.06709	0.59808	-0.08557
V74	-0.02597	-0.08463	0.05364	-0.05865	0.13191	0.52756	0.04336
V75	-0.02597	-0.01376	-0.03105	-0.05064	0.51004	-0.00961	-0.03963
V76	-0.10292	-0.01029	-0.19449	-0.08649	-0.09063	0.02222	-0.11320
V77					-0.01031	0.06355	-0.02356

## LIST OF REFERENCES

1. Bass, B., Leadership, Psychology, and Organizational Behavior, p. 372, Harper and Brothers, New York, 1960.
2. Cattell, R., Factor Analysis, p. 14 to 23, Greenwood Press, Connecticut, 1975.
3. Drucker, P., Management: Tasks, Responsibilities, Practices, p. 30, Harper and Row, New York, 1974.
4. Gellerman, S., Managers and Subordinates, p. 34, The Dryden Press, Illinois, 1976.
5. Herzberg, F., "One More Time: How Do You Motivate Employees?", Harvard Business Review, vol. 46, no. 1, p. 53, January - February, 1968.
6. Katz, D., "Approaches to Managing Conflict", (power and Conflict in Organizations, p. 95, Basic Books, Inc., New York, 1964.
7. Koontz, H., "Making Sense of Management Theory", Harvard Business Review, vol. 40, no. 4, p. 24 to 30, July - August, 1962.
8. Koontz, H. and O'Donnell, C., Principles of Management: An Analysis of Managerial Functions, 5th. ed., p. 34, McGraw-Hill Book Company, New York, 1972.
9. Lawrence, P. and Lorsch, J., Developing Organizations: Diagnosis and Action, p. 23 to 40, Addison-Wesley Publishing Co., Massachusetts, 1969.

10. Likert, R., The Human Organization: Its Management and Value, p. 4 to 48, McGraw-Hill Book Company, New York, 1967.
11. Massie, J., Essentials of Management, 2nd. ed., p. 49 to 105, Prentice-Hall, New Jersey, 1971.
12. Nie, N., et. al., Statistical Package for the Social Sciences, 2nd. ed., p. 468 to 508, McGraw-Hill, Inc., New York, 1975.
13. Rummell, R., Applied Factor Analysis, p. 156 to 177, 518 to 522, Northwestern University Press, Evanston, 1970.
14. Webber, R., Management: Basic Elements of Managing Organizations, p. 330 to 342, Richard D. Irwin, Inc., Illinois, 1975.

## INITIAL DISTRIBUTION LIST

	No. Copies
1. Defense Documentation Center Cameron Station Alexandria, Virginia 22314	2
2. Library, Code 0142 Naval Postgraduate School Monterey, California 93940	2
3. Department Chairman, Code 54Js Department of Administrative Sciences Naval Postgraduate School Monterey, California 93940	1
4. Professor WM. Howard Church, Code 54Cy Naval Postgraduate School Monterey, California 93940	1
5. Asst. Professor R. L. Forbes, Code 54Fb Naval Postgraduate School Monterey, California 93940	1
6. Dr. Linda Doherty, Code 301 Naval Personnel Research and Development Center San Diego, California 92152	1
7. LT J. M. Croll U. S. Navy Office FPO, San Francisco 96699	1