NAVAL POSTGRADUATE SCHOOL
Monterey, California

DEPARTMENT OF THE NAVY
NAVAL POSTGRADUATE SCHOOL

THESIS

MID-CAREER PATTERNS IN THE NAVY'S CIVILIAN PROFESSIONAL WORK FORCE

by

Jerry Woodrow Reshew

March 1978

Thesis Advisors: C.B. Derr
R.A. McGonigal

Approved for public release; distribution unlimited
**Title**: Mid-Career Patterns in the Navy's Civilian Professional Work Force.

**Author**: Jerry Woodrow/Reshew

**Performing Organization Name and Address**: Naval Postgraduate School, Monterey, CA 93940

**Report Date**: March 1978

**Number of Pages**: 56

**Security Class. (of this report)**: Unclassified

**DISTRIBUTION STATEMENT (of this Report)**: Approved for public release; distribution unlimited

**KEY WORDS**
- career
- mid-career
- career pattern
- educational costs

**ABSTRACT**
A survey of mid-level professional civil service Navy employees disclosed manifestations of frustration exist in sixty percent of the respondents. This characteristic relates to the mid-career and mid-life crisis identified by researchers and directly affects the fabric of which organizations are woven. Certain organizational identification is described and age groupings within the population are correlated with existing theories. Removal of the element of...
frustration from the perceived career patterns has a benefit which can be measured and the affect on the organization is material. A long term educational experience is suggested as a device for allowing introspection and revitalization of the employee, thereby creating a challenge which has rewards to the organization and the employee. A cost/benefit analysis is presented.
Mid-Career Patterns in the Navy’s Civilian Professional Work Force

by

Jerry Woodrow Reshew

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
March 1978
ABSTRACT

A survey of mid-level professional civil service Navy employees disclosed manifestations of frustration exist in sixty percent of the respondents. This characteristic relates to the mid-career and mid-life crisis identified by researchers and directly affects the fabric of which organizations are woven. Certain organizational identification is described and age groupings within the population are correlated with existing theories.

Removal of the element of frustration from the perceived career patterns has a benefit which can be measured and the affect on the organization is material. A long term educational experience is suggested as a device for allowing introspection and revitalization of the employee, thereby creating a challenge which has rewards to the organization and the employee. A cost/benefit analysis is presented.
# TABLE OF CONTENTS

## I. INTRODUCTION
- A. BACKGROUND 7
- B. CAREER MANAGEMENT IN THE NAVY 8
- C. OBJECTIVE 10
- D. METHODOLOGY 10

## II. DATA PRESENTATION
- A. ADJECTIVE SELECTION AND SIGNIFICANCE 12
- B. ORGANIZATIONAL CLASSIFICATION 12
- C. CAREER PATTERNS 16
- D. MANAGER RESPONSIBILITY 18
- E. INTERNAL AND EXTERNAL CAREER STAGES 19
- F. MID-CAREER CRISIS 21
- G. ORGANIZATIONAL CHARACTERISTICS 24
- H. THE CAREER CUBE 26
- I. INDIVIDUAL CAREER STYLES 28
- J. GENERAL CHARACTERISTICS 29

## III. AN EDUCATIONAL EXPERIENCE AS A REVITALIZING INFLUENCE
- A. EDUCATIONAL PATTERN 32
- B. EDUCATIONAL HALF-LIFE 33
- C. PATTERNS IN PROFESSIONAL EDUCATION 34
- D. DESCRIPTION OF AN EDUCATED PERSON 35
  1. The Problem Oriented Model 35
  2. The Concentric-Circle Model 36
  3. Self-Directed Education 36
- F. EDUCATION FOR MANAGERS 36
I. INTRODUCTION

A. BACKGROUND

The Navy has historically been a service which divides manpower resources into uniformed and civilian populations. Much of the civilian complement are people involved in the construction and maintenance trades, but there are also a significant number of professional and technical employees who are tasked with much of the vital operational support activities of the shore establishment. It is towards this latter group that this study is directed.

Many Navy field activities and laboratories are staffed almost exclusively by federal civilian workers of the General Schedule, the category of salaried civil servants which encompasses all engineers, scientists, technicians, and administrators. While command and highest echelon organizational positions are occupied by Navy officers, there is generally a parallel organizational staff of civilians of mid-level which provides functional continuity and expert advice and recommendations for decision making. In organizations of large size it is possible to have Navy officers at lower echelons of the organization working side-by-side with civilians in varied technical and managerial capacities.

Industrial psychologists, management analysts, and other practitioners of the social sciences have in the past twenty years been devoting significant research to the career patterns of people in the work force, and have postulated theories of
organizational and individual behavior regarding these careers. A condition of cyclical behavior related to career stage has been observed by these investigators. The recognition of the career dynamics of the civilian employee beyond short term perceptions of the Navy officer temporarily in a duty assignment is important. Without the civilian side, the Navy cannot perform its mission. The success of the mission depends to a great extent on human relations and communications. It is to the mutual benefit of the Navy and its employees to enhance the understanding between people whose career is the Navy.

B. CAREER MANAGEMENT IN THE NAVY

Career management of Navy personnel is limited to the uniformed service. A Navy officer's career is professionally managed from the first assignment through eventual retirement. A detailer and placement officer confer over each duty assignment, matching the needs of the individual to the needs of the Navy. Training and education are woven into the fabric of the career, and the family situation of each member is considered whenever possible. An aggressive and positive quality selection program assures regular promotion to the best qualified people. Upon completion of a rewarding career, most Navy officers can look forward to retirement after serving between 20 and 25 years, thereby allowing the Navy member a variety of options for second careers, travel, etc., while still at a relatively young age. This is not the case for the civilian employee.
There is no program of career management at any level for civilian employees on a Navy-wide basis. Given the situation that complete career management requires great mobility on the part of the individual whose career is being managed, it is a fact of life that the superb system used for Navy officers cannot be used for civilians. The gulf between a complete career management system and no system at all is, unfortunately for those in the Navy, not being bridged. Recognition of career management at the early stages of an employee's service is a perception which the individual believes in, but no real program exists. The civilian does not have the organizational stability that is enjoyed by the uniformed member, his promotional objectives are unclear, and he is regarded by many Navy officers as a hired hand rather than a careerist in the Navy.

Perceptions of civilian employees towards their jobs vary, but it is the exceptional case where some mention of career awareness by management is made. Mid-level careerists are particularly discouraged and feel frustrated. It is the recognition of the causes of the feelings of frustration in these mid-level people that can eventually lead to some solutions for the problem. Mid-career employees can be a vital asset if they are given an opportunity for introspection and reflection. Greater use should be made of educational programs which allow for separation from the familiar work environment. Career seminars should be held throughout the person's career and career counseling should become a Navy responsibility, not an option for the employee to instigate.
C. OBJECTIVE

The objective of this study is to present the manager with a series of organizational descriptions and ideas which will demonstrate the dynamics of the relationship between people and organizations. By establishing the causal connection between the characteristics of people in mid-career and the personality and style of organizations, the possibility of beneficial change is presented. Factors which create a sense of frustration in government service are investigated and a correlation between employee perceptions of their careers and the organizational goals is developed.

A cost/benefit analysis is used to introduce the manager to one aspect of human resource accounting and an estimate of material benefits which might occur if frustration was reduced is presented. An increase of long term educational opportunities for mid-career Navy employees is a method of reducing frustration and the study refers to existing literature to demonstrate this approach.

D. METHODOLOGY

The procedures used to accomplish the study consisted of the following:

1. A literature review in the areas of industrial psychology, education, sociology, and management theory was conducted, with particular emphasis on careers and career development. The purpose of this review was to determine if there were any accepted reasons for employee dissatisfaction which might explain comments obtained in employee interviews.
2. A survey of professional civil servants who were students at the Naval Postgraduate School was undertaken during 1977 in an attempt to determine general perceptions of the respondents towards their jobs. Those interviewed were all mid-level civil servants in Navy activities, both at the field and headquarters levels.

3. An interview agenda included an instrument which presented fifteen adjective perceptions similar to those used by Vough and Asbell [1] in their morale survey of IBM personnel. Of the selected adjectives there were five which are considered positive perceptions towards the job (satisfying, responsible, exciting, important, and challenging) when viewed in the context of employees in the professional series. Five perceptions were considered negative (frustrating, unimportant, wasted, unfulfilled, and uncertain) for purposes of the interview, and five neutral adjectives were included. Vough and Asbell indicate that employee morale is sampled quarterly at IBM since the trends of morale are significant, whereas a time point sample is not indicative of any overall situation. Since the perceptions of the interviewees have been muted by separation from the work environment by periods of up to one year, the general impression of career evaluation can be considered an indication of overall perception. The instrument presented all fifteen adjectives and the interviewer requested the respondents to select any number of adjectives which applied to their perceptions of their careers.

Data obtained during the interviews was interpreted by correlation with fundamental concepts obtained through the literature review.
II. DATA PRESENTATION

A. ADJECTIVE SELECTION AND SIGNIFICANCE

The adjective perceptions of a civilian career in the Navy were identified in the following percentages:

<table>
<thead>
<tr>
<th>Adjective</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfying</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>Responsible</td>
<td>60</td>
<td>10</td>
</tr>
<tr>
<td>Exciting</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>Important</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>Challenging</td>
<td>70</td>
<td>20</td>
</tr>
</tbody>
</table>

It would seem that positive perceptions are predominant in the survey group, with the exception that as many people selected frustration as a characteristic of their government careers as selected any of the positive characteristics.

B. ORGANIZATIONAL CLASSIFICATION

The organizational structure of any Navy activity which is predominately civilian staffed is delineated by an organizational chart. This hierarchal structure restricts communication, and perceptions of the true relationship of the employee to the organization are structured in a top-down fashion. While organizational structure is considered a routine decision for managers, it is in fact one of the most troublesome elements of the working environment. In the Navy shore establishment it is an unusual new commander who does not institute a reorganization upon assuming his new duties. This action is
perceived by those in the hierarchy as being a manifestation of privilege, something which "comes with the territory." Official organizational lines are drawn to connect functional groups in such a way as to increase "efficiency" and make the organization more responsive to command guidance and direction.

It is possible to categorize organizations in different ways reflecting judgemental factors of those personally involved. Such efforts result in adjectives such as "formal," "stuffy," "loose," etc., and do not provide a reference system for further analysis. The people interviewed all characterized their activity organizations using some adjective description related only slightly to the general career perception. In order to describe the structure of Navy organizations the categorizations of Rensis Likert were adopted. The relatively industrial rather than purely academic approach taken by Likert seems a good fit to the Navy situation.

Characteristics described by Likert [2] in his study of upper and middle level managers fit those perceived by the civil service professional. He classified both the feelings and functions of top and mid-level managers into four systems:

**SYSTEM 1:**
EXPLOITATIVE
AUTHORITATIVE
Top management feels much responsibility; lower levels, less. Rank and file often hostile to company goals.

**SYSTEM 2:**
BENEVOLENT
AUTHORITATIVE
Top management and most middle-level managers feel responsibility. Rank and file feel relatively little.
Subservient and hostile attitudes toward superiors, hostility toward peers, and contempt for subordinates. Widespread distrust.

Very little communication; goals initiated at top and directed downward. Received with great suspicion.

SYSTEM 3:
CONSULTATIVE

Substantial proportion of personnel feel responsibility; generally try to achieve goals.
Reasonably cooperative attitudes, but with some competitive hostility toward peers and condescension toward subordinates.
Communication on goals sometimes initiated at lower levels, but patterned on communication from top. Often accepted, but sometimes with suspicion.

SYSTEM 4:
PARTICIPATIVE GROUP

Personnel feel real responsibility; are motivated to achieve goals.
Cooperative attitudes throughout, with mutual trust and confidence.
Much communication among both individuals and groups. Communication is down, up, and with peers. Goals are initiated at all levels. Are generally accepted, or at least openly and candidly questioned.

Likert feels that as the organizational character approaches System 4 individual productivity increases and the worker becomes more committed to the group. Such feelings of group commitment were cited as being exceptional occurrences by the people interviewed.

Participative group management (Likert's System 4) is the system most desired by those affected, but the basic needs of the bureaucracy requires a more formal system such as the Likert System 2 (benevolent-authoritative) or System 3.
(consultative). Interview discussions indicate that this is indeed the case. Recognition of organizational involvement is a first step towards operating at Likert's System 4.

The Likert classifications of the structures of organizations relate to individual careers through degree of personal involvement. Such personal involvement was reported by N. C. Morse [3] in his studies of office workers. These studies correlate with the civil service technical professional. Most civil servants start government employment immediately upon entering the job market, and the retention rate compares favorably with industry. Morse defined company involvement in such a way as to imply the importance of the company success as one of the concerns of the employee. A relationship exists as well between age and involvement. Results of the studies are summarized in the following tables.

The Relationship of Length of Service to Company Involvement

<table>
<thead>
<tr>
<th>Length of service</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under a year</td>
<td>44%</td>
<td>41%</td>
<td>15%</td>
<td>100%</td>
</tr>
<tr>
<td>1 year to 2 years</td>
<td>30</td>
<td>42</td>
<td>28</td>
<td>100</td>
</tr>
<tr>
<td>2 years to 3 years</td>
<td>23</td>
<td>45</td>
<td>32</td>
<td>100</td>
</tr>
<tr>
<td>5 years to 10 years</td>
<td>33</td>
<td>34</td>
<td>33</td>
<td>100</td>
</tr>
<tr>
<td>10 years to 20 years</td>
<td>36</td>
<td>42</td>
<td>22</td>
<td>100</td>
</tr>
<tr>
<td>20 years or over</td>
<td>49</td>
<td>30</td>
<td>21</td>
<td>100</td>
</tr>
<tr>
<td>Not ascertained</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Relationship of Age and Company Involvement

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-20</td>
<td>36%</td>
<td>42%</td>
<td>22%</td>
<td>100%</td>
</tr>
<tr>
<td>21-24</td>
<td>27</td>
<td>36</td>
<td>37</td>
<td>100</td>
</tr>
<tr>
<td>25-30</td>
<td>28</td>
<td>47</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>31-44</td>
<td>43</td>
<td>36</td>
<td>21</td>
<td>100</td>
</tr>
<tr>
<td>45 or over</td>
<td>56</td>
<td>24</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Not ascertained</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Since the mid-level employee has been a resident in a System 2 or System 3 organization, and is of an age when the involvement in the organization should be high, it is possible to relate the career to the organization. Specifically, it is the mid-level professional who is both beneficiary and contributor to the organizational character. If the Likert System 4 style is to be recognized as a goal by the employee, is he ready to accept the responsibility? It is important to relate the individual career stage to the organization style.

C. CAREER PATTERNS

A construction of each interviewed employee's career pattern was a resultant of the questions asked about length of time spent in each GS grade in the professional series. Figure 1 describes an envelope which encompasses all of the individual careers in respect to time.

Comparing the tables developed by Morse against these data, it appears that the age and length of service of the civil servants place them in an area of high involvement with their organizations. The organizations themselves have a set of values and associated behaviors which may not coincide with those of the people in their employ. Dunnette [4] describes this situation and predicts that organizations will be more flexible and structured around temporary task project teams (Likert's System 4) in the future.
Piotrowskie [5] evaluated 110 top executives in industry and correlated their performance to age. Distribution of ages indicates that relationship of high performance executives in the 40-50 year old groups to the civil service employee career patterns is consistent with the rapid rise to mid-level GS grades demonstrated in the careers of the employees interviewed. Since the relationship of the employee goals is connected to his involvement, and involvement can have both
positive and negative aspects (Diggory [6] describes positive value involvement as that action which seeks to preserve or increase value), it is the enhancement of positive involvement which is a legitimate management goal.

D. MANAGER RESPONSIBILITY

Gould [7] in his study of technical managers, quotes a Census Bureau report of 1961 which reports industrial spending at about $261 billion. This annual expenditure was prorated according to a Harvard estimate of 154,000 technical managers in industry to yield a fiscal responsibility of over $1 million per year for each manager. Defense Department spending in the same year was about 50% of the total U. S. Industrial Budget (Fox [8]). While the actual numbers of people involved in the decision making process cannot be determined within the scope of this study, it is a rough approximation that no less than 150,000 civilian employees in the Defense agencies have any financial decision responsibility (the percentage being assumed the same as in the private sector, but no less than 1%). Using the same base as Gould, the responsibility of each technical manager in DOD approximates $.5 million. The importance of assuring an aggressive, interested employee
becomes one of protecting scarce fiscal resources. Frustration must be removed from the career wherever possible and emphasis should be placed on reinforcing the positive factors upon which the career is structured. Zalenznick [9] describes three types of executive behavior as functions which he terms homeostatic, mediative, and proactive. The latter function underlies interpersonal behavior and relates to goals which are part of the individual's adaptive mode. It is emphasized in this study that the individual's ego organization is manifested by his career and his way of working, all of which are exhibited in the transactions within his environment. The goals which are a manifestation of his ego organization should be in harmony with the organizational goals of his employer for maximum mutual benefit.

E. INTERNAL AND EXTERNAL CAREER STAGES

Van Maanen and Schein [10] have correlated internal stages and processes with external stages and individual processes of a career. The career is identified as having four divisions:

1. The Exploration Stage, in which the decision as to which career to follow is made. This may be an active decision requiring planning on the part of the individual, or it may be a career decision which is in effect forced on the person by circumstances. The career may be in one or many organizations, doing one or many things, but all within the tenuous structure of a career path. Since the average person makes five significant job changes in the course of a work life [11], it may be part of the career design to be mobile, or it may be an
integral part of the scheme to establish roots early in the career selection process.

2. The Establishment Stage (early career) is characterized by subdivisions of mutual recruitment, acceptance and entry, first job assignment, leveling off, transfer, promotion, and tenure. It is during this stage that the fabric of the career is woven. Growth in the career is congruent with growth both chronologically and in the family milieu.

3. Maintenance Stage is the mature, relatively stable part of the career.

4. The Decline Stage is a phasing out of the employee and is recognized by the rituals associated with retirement.

The early part of the maintenance stage is the mid-career and is the segment of the working life which will be discussed in relation to the civilian employee of the Navy. During the transition from the establishment to the maintenance stages of a career the internal stages and processes of the employee are generally in harmony with the situation in the work environment. An accommodation between family and work issues is reached, and the growing feeling of success and competence encourage commitment to the organization. With the granting of tenure the organization has fully accepted the individual. In the case of most Navy activities, promotion to the grade of GS-13 is considered recognition of management capability and and it is at this level that the perquisites are made evident (the interviewed subjects averaged 35 years of age when promoted to this level). With this recognition there is an
increased responsibility and the person is given more crucial and important work. The employee may not recognize the gradual approach of a mid-life crisis [12], which reaches a peak in managers and applied professionals in their forties.

F. MID-CAREER CRISIS

The mid-career years of the professional civil servant in the Navy Department are characterized by a leveling off of recognition through promotion. Opportunities for advancement to upper GS levels are limited by high grade restrictions imposed by the Office of Civilian Personnel and the chances for advancement occur primarily upon retirement of one in the immediate hierarchy. The employee also begins to feel a threat from younger, better trained, more energetic and what he perceives to be more ambitious persons. There is generally a revision of the employee's personal timetable in recognition of the reality of the situation. While the employee is sorting out his mid-life dilemma the organization also participates by expecting the affected individual to become a teacher/mentor rather than a learner as had previously been expected. It is at this stage in the career that the organization considers the employee as a plateaued person.

It is not only a biosocial crisis which has occurred in the mid-years, but also an awareness that life is half over. Mortality has become a meaningful condition. Biological and emotional changes create unrest and concern in the life outside the work environment. Physically active people become aware of decreasing endurance in sports, and aches and pains become
more frequent. Hall describes a set of physical changes that occur in the forties and fifties which are always unexpected but nonetheless inevitable to varying degrees. Problems arise in hearing, sight, blood pressure, digestion, and sexual performance. These are manifestations of the aging process which affect one's physical appearance, such as receding hairline, loss of skin elasticity, a downward shift of body weight from chest to abdomen, etc.

The home environment is changing concurrently with the change in the career and in the physical well being of the person. The spouse has, in the case of the mother, raised children and taken charge of the home. Now that the offspring are maturing and leaving home to pursue their own careers, the wife is in a position to meet a new set of challenges, to solve her own mid-life conflict. The phenomenon is one of a last chance to succeed outside the home, this agenda being one of prime importance to the wife. Hall quotes a marriage counselor as saying, "between the ages of 40 and 50, a man changes jobs or changes wives." The mid-career, mid-life conflicts occur to both marriage partners and can create havoc in otherwise orderly lives.

Civilian employees working for the Navy have a further mid-career condition not shared by the worker in the private sector. A typical mid-career manager at the GS-13 level works closely with Naval officers of roughly comparable levels and age. Fox [13] presents age/rank breakdowns of the DOD which were used to create the envelope in Figure 2.
Naval officers can retire after 20 years of service with an annuity which allows them to pursue a second career, in fact the military retiree usually becomes involved in the second career [14]. The civilian does not have this opportunity except in certain unusual legislated conditions such as base closure, or reduction in force. Civil service employees can retire at the age of 55 if they have 30 years of service without being penalized by annuity reduction, or at 55 years of age regardless of service length as long as they have at least 20 years of federal service and accept an annuity reduction based on a time/age formula. While the employee is retained and witness to the retirement of Naval officers his chronological
junior, the feeling is one of deceleration in momentum [15].
The officer is assisted in preparation for a second career
by the military service and includes family considerations in
the plans [16], whereas the recognition of the career crisis
affecting the civilian employee, if recognized at all, is a
personal one. The transition from the maintenance stage to
the decline stage as described by Van Maanen and Schein can
be abrupt if the mid-career is not looked after.

G. ORGANIZATIONAL CHARACTERISTICS

Dyer [17] characterizes organizations as being either
custodial or creative, and also applies these adjectives to
people within the organizational structure. The overlap
between the maintenance and decline stages appears as the
custodial attitude. While Dyer states the need for both types
of person in the society, it is the creative organization which
the Navy strives for in the technical fields. The question is
one of maintaining a creative attitude in the individual as he
undergoes the stress conditions in mid-career and mid-life.

Van Maanen describes a socialization process in which
the more homogeneous the group, whether by age, sex, prior
education, geographical origin, or prior work experience, the
more likely the group will develop a single perspective. It
is the relationship of the mid-career federal employee in the
Navy with other mid-career peers, in a surrounding of regularly
seeing their Naval officer counterparts moving into retirement
and second careers, which creates a socialization and moulds
the group into a custodial professional work force. This
COMPARISONS BETWEEN CUSTODIAL ATTITUDES AND CREATIVE ATTITUDES

CUSTODIAL VS. CREATIVE LEADERSHIP

**CUSTODIAL**

Maintains routines. When questioned about them, automatically defends them.

Shows ingenuity only in improving efficiency of present methods, which are characterized by:

- Simplification
- Streamlining
- Mechanization
- Repetivity
- Predictability

Represents creative persons by custodial ones.

Seeks perfection of the status quo—drill and inspect, drill and inspect.

Fears any change; resents new ideas; cannot understand why anyone wants to change what is already working well enough.

Finds that leadership can be summed up in formulas like: "Be firm, fair, and friendly; know your job; know your men; work through people; and be a man."

**CREATIVE**

Ignores routines. When made aware of a routine procedure, automatically tries to think of different ways of accomplishing or by-passing the work.

Develops completely new missions and products; operations are characterized by:

- Basic design changes
- New breakthroughs
- Variations
- Unpredictability

Represents custodial persons by creative ones.

Seeks new horizons—speculates and imagines; devises and guesses.

Resents frustration; cannot understand reluctance to try new ideas.

Equates good leadership with anyone who is willing to listen to ideas, to be permissive and enthusiastic, and to encourage ways of discussing and trying the ideas.

The acceptance of the obsolescence of the employee is an institutionalized perspective in many organizations and the result is a self-fulfilling prophecy. The result of this self-fulfilling prophecy is that the obsolescence is considered irreversible. Kaufman's [18] observation is entirely in harmony with the categorizations of Van Maanen, Schein, and Dyer. In reality, the professional competence/age relationship does not exist in a linear fashion but varies by case.
Studies [19] have shown three distinct competence relationships: early career peaks, later career peaks, and combinations of the two peaks. The second type of career peak relationship is one in which a consistent upward trend in performance and professional output is demonstrated in scientists and technical people over the age of 50.

Frustration is described by Levinson [20] as a typical feeling among mid-career professionals and notes that this feeling can be part of the psychological makeup of an employee in the 30-40 age bracket. The high percentage of interviewees which selected frustration as an adjective which fits their career perception therefore has validity as a characteristic which might be applied to the general population of technically operational employees in about the same percentage.

H. THE CAREER CUBE

Long employment in an organization which has developed a custodial character by its own inaction will cause conflict. Schein [10] and Bailyn developed a three dimensional model which demonstrates the interdependence of the worker's career, the family, and the self-development of the individual. A most important influence on each of the cube's dimensions is the culture or social structure. This social structure is described by the cube's conceivers as being outside the work environment, but this appears to be an arbitrary limitation. The work environment occupies about one-half of an individual's time and the effect of the work social structure is as profound as any other. If the frustration is caused by the environment,
it too has a pervasive effect on the forces of the cube. The implication is that the frustrated career can affect all other aspects of the employee's life.

Career growth, or more precisely perceived lack of career growth, is the factor which most significantly causes the manifestation of frustration. Gutteridge [21] states that there are some historical management attitudes which are typified by expressions such as "no one ever helped me," "you just raise false hopes," or "it cannot be done, it's too difficult to plan ahead." It is an attitude which similarly relegates an employee from the creative to the custodial level in the career. Perceptions of obsolescence are varied, but the younger Naval officer administratively responsible for
supervision of older civil servants can easily be of a mind-set which is not flexible. It is not only the classical writers of the 1920s and 1930s that portrayed the older worker as minimally productive. Bienvenu [22], as recently as 1969 discussed industrial workers;

"Older workers may have reached a degree of satisfaction with their skill and status and may also be concerned about their ability to grasp new concepts. The process of retraining can be particularly distressing to this group if they feel that they may be placed in a situation (for example, with younger, better educated workers) where they will find it difficult to keep up with the rest and where the little confidence which they have in themselves may be destroyed. The seniority system may be so structured that older workers do not have to worry about technological change to enjoy job security and so find little reason to be cooperative. Probably they have endured numerous setbacks and still survived; in any case they have become conditioned to accepting their position and are disinclined to seek a change."

While this description referred to industrial workers, it is not inconceivable that the same set of characteristics can be ascribed to the mid-career employee in a military/civilian work environment.

I. INDIVIDUAL CAREER STYLES

Four career styles followed by individuals are described by Rapaport [23] as being:

1. Maintainers. Characterized by doing the minimum necessary to retain their jobs.

2. Convergers. The career style is one of improving methods and coordinating things in the organization.

3. Impersonal. A style of manipulation in order to assure survival in the organization.
4. Metamorphic. A concern with improvement and creativity. The employee tends to be decisive and self-confident to the point where he is not intimidated to taking risks. The similarity of the employee agenda in Rapaport's categorization and that of the custodial and creative people described by Dyer allows for an even finer line to be drawn about the mid-career employee as he really is and as he may be characterized in the words of Bienvenu.

J. GENERAL CHARACTERISTICS

An accurate portrayal of a typical mid-career professional in the federal service is not any more possible of construction than the typical senior Naval officer can be represented, but it is possible to state some comparative generalities:

1. The typical mid-career employee at the GS-13 - 15 level is between the ages of 33 and 47, is a white male, and is married.

2. About 15 years of federal service remain before the employee can retire.

3. A promotion was last received about 6 years ago.

4. High grade level restrictions make future promotions unlikely within the near future.

5. The Impersonal or Metamorphic classifications of Rapaport are more likely to describe the career style than are other subdivisions of the creative career. This evaluation is extrapolated from 1973 surveys conducted by Louis Harris and George Gallup, as reported by Haldane [24].
6. There is an uncomfortable feeling of having reached a plateau and a sense of frustration at not having momentum in the organization.

7. Physical changes are occurring due to biological aging.

The organizations in the Navy are being continually subjected to budget reductions and manpower constraints which make the goals of the organization more demanding upon those within, but the concern expressed by the manager with staffing responsibility is normally with obtaining adequate new manpower and not an effective use of the trained senior professionals already on the rolls. This milieu is detected by the employee as being a maintenance stage towards him and is not the environment conducive to an innovative and creative outlook [25]. While some writers believe the maintenance career position is a virtue [26] and is the logical outcome of a rewarding career, it is the contention of the author that the Navy cannot afford the maintenance position in people who have a minimum of 15 years of service before being eligible for retirement.

The organizational style of Likert's middle systems combines with Dyer's custodial description of both people and organizations to create a homogeneous group. While the forces in the career situation are dynamic, they are by no means unalterable. Perceptions of obsolescence are related to lack of challenge and are enhanced by the observation of the efforts of biological aging. It is in this part of the complex career makeup that management has the ability to change the situation.
A conscious effort to recognize the impact of all elements of the organization/employee interaction will perhaps prove too large a task for the manager, but one area can be addressed as a matter of policy. Revitalizing the employee through an organizational initiative involving an educational experience is an objective which can prove profitable in terms of human investment. Training is not used as a synonym for education in this context since the implication is that training develops a higher level of competence in one's field of endeavor. It is the educational experience itself which is the benefit to be gained.
III. AN EDUCATIONAL EXPERIENCE AS A REVITALIZING INFLUENCE

A. EDUCATIONAL PATTERNS

Gould [27] indicates that about 45% of technical managers are between the ages of 45 and 65, and had technical degrees at the undergraduate level. Those interviewed for this study were in the age group 33-54 and 45% were above the age of 44. The average age of the interviewed group was 42. Since the sample of those interviewed is small compared with the number of civilians employed by the Navy, it is assumed that the correlation with the National Science Foundation figures quoted by Gould applies to all the technical managers in the Navy.

While 60% of the interviewees had some postgraduate education, it was the exception for an employee to enroll in a full course of study. Most cases were isolated after hours experiences taken at extension facilities, usually as part of a cooperative arrangement whereby the sponsoring university taught courses at the Navy installation. Twenty percent of those interviewed had graduate degrees in their technical specialty. The average length of government service was 16 years, and most of those interviewed had entered Navy service upon graduation from college.

Considering the data compiled by Adkins [28], which indicates that after the age of 42 the chances of an individual attaining a second level degree are less than 2% in engineering and related fields, it appears that the mid-career self-fulfilling
prophecy is in force. The probability of obtaining graduate education leading to a second level degree decreases as shown in Figure 3. Since the average length of service of the sampled employees relates directly to years since receipt of the first degree (in all but 5% of the cases), the graph can be used to estimate probability of completion of graduate education, assuming that no management initiative is involved to change the pattern.

![Figure 3](image)

**B. EDUCATIONAL HALF-LIFE**

The minimum educational level of the newly hired civil servant is determined by qualification standards for professional employment. An undergraduate degree or its equivalent is the minimum qualification for most engineering and scientific series. Since the people interviewed had been
employed immediately upon completion of their college education and had been employed for an average of sixteen years, and since most of them had not been to a structured graduate program after employment, it is most probable that they are less competent in their specialty than younger employees. Kaufman [29] and other researchers have estimated that the half-life of an engineer's education is about five years. The half-life of a professional is defined as the time after completion of professional training when these people become roughly half as competent as they were upon entering their field of endeavor. Kaufman estimates the educational half-life of management and business education to be the same as that of scientific fields. The half-life phenomena creates a perceived sense of obsolescence which was mentioned by some of the people.

C. PATTERNS IN PROFESSIONAL EDUCATION

During the years 1952 - 1962, the increase of expenditure by industry on professional education ranged from three to eight times what had been spent previously. Estimates of amounts spent by industry for educational activities by the mid-1960s were $17 billion [30]. With the apparent emphasis on educational opportunity and the financial commitment of industry, it would be expected that the participation of professional employees in these programs would be high. Studies referred to by Kaufman indicate quite the opposite. A nationwide survey conducted in the mid-1960s revealed that over two-thirds of all engineers had never attended any graduate
school, and over half had never attended any non-credit education or training courses.

The fact that the Navy also encourages professional education does not create a situation which will yield any higher percentage of participation. It seems that resistance to opportunity is in some way connected to the manifestations of the mid-career discussed in Chapter II.

D. DESCRIPTION OF AN EDUCATED PERSON

A premise of government sponsored education is that it is in the interests of the organization to "train" only to the level required in a particular job. Enrollment in a degree program is only incidental to the purpose of the experience. The word "educate" is used sparingly, as if it implied a wasteful and frivolous approach to a businesslike training requirement. It is as if an educated person would not enhance the organizational capability to accomplish the mission.

The orthodoxy of the Harvard General Education Report of 1939 has been the standard for definition of an educated person for almost two generations. An educated person was considered to have a mixture of breadth and depth through a minimal exposure to the humanities, social sciences, and physical sciences, with concentration in one major field or discipline. Bailey [31] describes some different definitions which are beginning to emerge.

1. The Problem Oriented Model

Under the formulation described by Bailey and attributed to Weidner, the educated person becomes one who
can put various fields of knowledge together for solving important professional, technological or social problems.

2. The Concentric-Circle Model

The definition of this level of education resembles the problem oriented model in the essence, but it emphasizes the relationship of a field of specialization to other areas of knowledge and specialization. An illustration would be the master plumber who had understood physical theories of water pressure, levers, and valves, and who had extended his interest in pipes to include the physical and musical principles underlying the trombone.

3. Self-Directed Education

An interdisciplinary approach which allows the person to select the combinations of intellectual and aesthetic fields in which he wishes to cultivate excellence.

F. EDUCATION FOR MANAGERS

Calkins [32], writing in 1948, stated that in the future he would need more men of large capacity, of broad comprehension and adequate training for business responsibilities. He points out the trend to train for jobs rather than educate for careers. It is precisely this situation which has existed in the Navy's educational program for civilian employees through the 1970s.

The training experience for the typical military officer occupies about one-third of his active duty time [33]. Part of this time is spent in technical and operational training within the specialty field at service schools, but an increasingly significant number of officers are attending after-hours courses at civilian universities.
Civilian personnel in the professional series, at mid-level, attend short courses sponsored by headquarters activities or the local command. These courses normally are of less than forty class hours duration and are keyed to the area of Navy interest at the time. Typical courses attended in 1976 by the people interviewed were focused on Equal Employment Opportunity programs, Zero-base Budgeting, Transactional Analysis, and Procurement Regulations. Most managers assign employees to the courses and there is a rather mixed reaction to the worth of the majority of the offerings. Long term "training" is an exceptional situation in most activities. In one field activity, the Naval Oceanographic Office, civilians attended long term training in the following numbers over an eight year period:

<table>
<thead>
<tr>
<th>Year</th>
<th>GS-9</th>
<th>GS-11</th>
<th>GS-12</th>
<th>GS-13</th>
<th>GS-14</th>
<th>GS-15</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>1971</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>1972</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>1973</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>1974</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>1975</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>1976</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>1977</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td>2</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Totals</td>
<td>2</td>
<td>7</td>
<td>15</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>34</td>
</tr>
</tbody>
</table>

This activity has a civilian work force of about 1400, of which about 600 are professionals. (Of the 34 attending second level educational institutions, only three received graduate education in the administrative/management field.)
G. BENEFITS OF THE EDUCATIONAL EXPERIENCE

When queried about their feelings towards the educational experience at the Postgraduate School, all of the respondents were enthusiastic about the benefits perceived. Positive statements were made about the opportunity to be away from normal routine and trials of the daily work situation. Some mention was made of the opportunity to reflect on their careers from a detached viewpoint. It is this separation which is seen as a great benefit by the participants. While none of the interviewed employees made a direct mention of what has been referred to in this paper as mid-career or mid-life conflicts between their personal and organizational relationships, the separation was referred to as a stress relieving action. When asked about career perceptions, the respondents generally had positive predictions of what the future held for them.

The adjective evaluators which yielded a large percentage of "frustration" factors did not seem to carry over into the learning environment. Haldane [34] described career modification as a process in which many undesirable aspects of a career can be changed. A first step in the process is role disengagement, in which the individual analyzes the different life and career roles which he must play. It is the contention of this writer that only by separation from the work environment for a significant time can a proper evaluation be made, and through this mechanism can a person make a career decision which will be in harmony with the true organizational goals. The stimulating and challenging situation which is presented
in a graduate program of study raises the career expectations of those participating and serves as a revitalizing influence.

Follow-up discussions were held three months after some of the respondents returned to their jobs. When asked about the true value of the experience at school, none of those interviewed felt that any significant change had occurred in the organization's relations with them. The individuals had been exposed to change but the organization had not, and it seems that while frustration was not mentioned specifically in the impressions relayed by the ex-students, it might well return unless the people are allowed to operate at a higher level of independence. Mere exposure to an educational experience does not alter the previous man/organization relationship in the long term unless the organization uses the employee in a more imaginative and dynamic position.
IV. COST/BENEFIT ANALYSIS

The data needed for any rigid cost/benefit analysis of long term education in the civilian employee mid-levels is not available. During the six month period in which the author of this study was reviewing the literature and interviewing employees of the Navy, the Office of Civilian Personnel was asked for what appears to be easily obtainable data a total of six times. No data were made available, and it therefore seems that either the data files are inadequate, or that no one really feels that inquiries of this nature are important. The data requested were: total number of civilian employees of the Navy, by grades GS-12 through GS-15, sent to long term training in each of the years from 1972 to 1977; types of programs in which they were enrolled; and program costs. Since these data are unavailable, field activity data from several installations were obtained by telephone and will be used to construct an analysis.

A. HUMAN RESOURCE VALUE

A definition of the economic value of an individual to an organization in the private sector is presented by Flamholtz [35] as the present worth of future services during the period in which the individual remains in the organization. The organizational value is not merely the sum of individual values, since synergism exists (either a positive or negative influence).
It is toward increasing the individual value and the positive synergy that the educational experience is directed.

1. Conditional value is defined as a part of total individual value and consists of interrelated parts which focus on productivity:

   - Promotability
   - Productivity
   - Transferability

   Productivity influences promotability, and in the examples developed both will always be considered as having only positive values.

2. Satisfaction is a determinant of the productivity element, but Flamholtz guides the reader to be cautious in relating the determinant and the element. He states that satisfaction is just as likely to be caused by productivity, as is productivity to be caused by satisfaction. The writer of this thesis feels that this is an irrelevant difference in analysis of government employees, since either relationship has a positive effect on conditional value.

3. Expected realizable value of the individual is shown by Flamholtz to be directly related to the conditional value.
Productivity increase is easily measured in production or sales activities, but becomes a less easily quantified element in managerial or technical employees. Haldane reports polls conducted by Harris and Gallup in 1973 which indicate that 63 percent of all employed persons are not interested in greater productivity, but over half of them feel that they could be more productive to an increased level of 20 to 50 percent. A study made by Haldane in 1963 showed that managers believed that productivity could rise 40 percent or higher. Using an approximation of 35 percent possible increase in productivity will allow some quantitative input to Flamholtz's model.
If satisfaction can be increased it will have a direct influence on conditional value, the most conservative estimate being that it will increase the elements by equal amounts. Since the premise of this study requires a lowering of the perceptions of frustration in mid-level employees, it is assumed that the frustration/satisfaction ratio is inversely proportional. Sixty percent of those interviewed expressed some feelings of frustration and it will be assumed that the sample was inconclusive and that only 35 percent of mid-level employees are frustrated to some extent by their Navy careers. The following calculations are based on total Navy civilian employees as of 30 September 1977:

<table>
<thead>
<tr>
<th>GRADE</th>
<th>NUMBER(N)</th>
<th>SATISFACTION INCREASE (.35N)</th>
<th>B</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS-13</td>
<td>11,535</td>
<td>4,037</td>
<td>$32,831</td>
<td>$132,538,747</td>
</tr>
<tr>
<td>GS-14</td>
<td>4,105</td>
<td>1,787</td>
<td>38,726</td>
<td>69,203,362</td>
</tr>
<tr>
<td>GS-15</td>
<td>2,062</td>
<td>722</td>
<td>45,475</td>
<td>32,832,950</td>
</tr>
</tbody>
</table>

\[ P = \text{productivity increase} = \frac{.35N}{3} \times B \]

\( B \) = average salary and benefits [36]

The impact of increasing productivity of all mid-level professionals by about one-third (at a cost of about .1 million) therefore has a recurring benefit of almost $235 million to the Navy.
The number of mid-level employees who have attended a long term educational program were extrapolated from data provided from several Navy activities:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>N=210</th>
<th>N=68</th>
<th>N=19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GS-13</td>
<td>GS-14</td>
<td>GS-15</td>
</tr>
<tr>
<td>1972</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1974</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1976</td>
<td>7</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1977</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

A = Average Per Year
A/N

Assuming these percentages apply to all Navy activities, the A/N figure becomes the multiplier for determining possible average productivity increase to the Navy, $\$P(A/N)$, using the present level of long term education and training:

$\$0.009(132,538,747) + 0.008(69,203,362) + 0.02(32,832,950)$

$\$P(A/N) = \$2,403,135$

**B. VALUE OF EXPANDED PROGRAM**

If the Navy can increase the conditional value of an employee in mid-level, the synergism (S) of a production enhanced manager will have some additive effect on the conditional value, thereby increasing the realizable value. The effect of an increase of 20 percent in the level of training would thereby
demonstrate a benefit of \( \frac{SP(A/N)}{5} + S \) over the present level (where \( P = \) productivity increase, \( A = \) average per year, \( N = \) total number), or a minimum of about $500,000 plus any synergistic benefits. Since the average employee at the levels under consideration has a 15 year career expectancy, the total benefit of the program to the Navy of a program expanded by 20 percent is in the neighborhood of $44 million, plus the effects of synergism.

C. COSTS

The long term costs of such an expanded program are the one year costs amortized over the 15 year period (present value is neglected in the calculations, since benefits are assumed to reflect the future value).

<table>
<thead>
<tr>
<th>GRADE</th>
<th>B</th>
<th>TUITION</th>
<th>TRANSPORTATION</th>
<th>PER-DIEM</th>
<th>TOTAL</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS-13</td>
<td>$32,831</td>
<td>$5,000</td>
<td>$6,000</td>
<td>$600</td>
<td>$44,431</td>
<td>$2,962</td>
</tr>
<tr>
<td>GS-14</td>
<td>38,726</td>
<td>5,000</td>
<td>6,000</td>
<td>600</td>
<td>50,326</td>
<td>3,355</td>
</tr>
<tr>
<td>GS-15</td>
<td>45,475</td>
<td>5,000</td>
<td>6,000</td>
<td>600</td>
<td>57,075</td>
<td>3,805</td>
</tr>
</tbody>
</table>

At present manpower levels the expanded program would annually cost:

<table>
<thead>
<tr>
<th></th>
<th>GS-13</th>
<th>GS-14</th>
<th>GS-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>( N(\text{number in grade level}) )</td>
<td>11,535</td>
<td>5,105</td>
<td>2,062</td>
</tr>
<tr>
<td>( A(\text{average per year in program}) )</td>
<td>104</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>( E = A + .20A )</td>
<td>125</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>( E \times \text{cost per student} )</td>
<td>( \frac{370,258}{15} )</td>
<td>( \frac{164,398}{15} )</td>
<td>( \frac{186,445}{15} )</td>
</tr>
</tbody>
</table>
D. COST MINUS BENEFIT

The annual benefit of a program expanded by 20 percent is about $2.9 million and the cost is a differential increment, amortized over 15 years, of $721 thousand. The benefit therefore has an after cost value of over $2 million plus any synergism which benefits the organization.

The true benefit of a program which represents the mid-career employee in mid-life cannot be rigidly determined by use of the meager data available, but the concepts of human resource accounting indicate some definite advantage to increasing the elemental factors of the conditional value equation. Behavior of the productivity enhancement may be quantified as some result of minimizing frustration, recognizing that it is a tenuous estimate at best, but synergism may behave in any form. If the effect of synergism is multiplicative rather than additive, benefits to the organization of a much higher order may be developed through an expanded program.

Benefit in the material sense is limited to the relationship of complete productivity to perceived productivity. Since most mid-level professional employees are not involved in processes which lend themselves to simple quantitative measurements, the evaluation of productivity becomes difficult. Synergy acts most probably as a mechanism which moves the employee towards the upper right hand edge of Schein and Bailyn's career cube. This domain is the objective towards which one moves if the Likert System 4 characteristics are present.
Goal motivation is high and personal involvement in the job creates an environment for innovation. It is this setting which becomes the true benefit of removing frustration as an element of the career.
V. CONCLUSIONS

The reviewed literature provided a framework upon which to structure the mid-career patterns of the civilian employee of the Navy. Information obtained during employee interviews had a high degree of correlation to the models constructed by the researchers, particularly the works of Likert and Dyer. Feelings of frustration, described as typical in mid-career by Levinson, were expressed by many of those interviewed. Some cogent points which should be considered by managers are:

1. The career for a civilian professional reaches a stage of stability in promotional opportunity about 15 years prior to the earliest time at which the employee can retire. It is at this chronological period that the employee is also undergoing a mid-life change. The patterns of career and personal life conflict at this time in such a way as to create a situation of unrest and confusion. It is at this point in the career that technical obsolescence has reduced the capability and level of employee contribution to the organizational goals.

2. Organizations themselves manifest some of the mid-career and mid-life characteristics of the employees. As the organization matures it becomes less dynamic and tends to accomplish objectives of a more routine nature and innovation is less frequent. Recent initiatives of management in creating affirmative action programs to place women and minority employees in mid and upper level positions will have a revitalizing
effect on the organization, in that the established growth and aging patterns will have been altered. However, it is the individual motivation and career perceptions of the preponderence of employees which create the organizational climate.

3. Organizations are most adaptable to environmental change as they approach Likert's System 4. The hierarchal system which exists in the Navy seems to aspire to the System 3 level as an attainable goal, partly as a result of rotation of senior managers desirous of making a significant personal statement through directed organizational restructuring. Mutual trust and confidence are not characteristic at this level, and employees in mid-career experience a feeling of frustration.

4. There is no overall career management program for the Navy civilian employee. The constraints imposed by a reduced total number of civilian employees, the imposed ceilings on numbers of GS-13 and higher positions at any activity, the general economic situation, and the centralization of classification authority at the Office of Civilian Personnel have restricted career opportunities for advancement. Merit promotion policies have been enforced as an element of the affirmative action and equal employment opportunity programs, thereby creating a better defined avenue for advancement for all qualified people, but the stability of the upper levels of the job pyramid creates its own limits. Career management must be treated as other than merely preparation for promotion.
Employee attitudes of creativity should be developed by sensitive awareness of the situation by the manager who can be a mentor to the mid-career employee and develop mutual respect and understanding. While it is unrealistic to expect total career management in a basically immobile employee society, organizational attention paid to basic theories of good management would do much to alleviate the sense of frustration felt by the mid-career professional.

5. A management initiative towards increasing long term educational opportunity for mid-career professionals will have a material benefit. The exposure of an employee to a new set of challenges in an environment different than the normal surroundings of the Naval activity serves as a revitalizing factor and removes an element of frustration. Productivity of the employee may experience a gain of 30% and the organization may be positively affected by creating a climate conducive to innovation. The benefits can only be estimated, but they seem to exceed costs by a factor of 3.

6. The long term educational opportunity offered to mid-level civilians in the Navy is significantly less than that afforded Navy officers. Official statements and policies imply a strong program of graduate education, but in reality it is only a small percentage of employees who are provided the graduate training.

7. Revitalization of mid-level career employees through long term educational experiences is of mutual benefit and has an economic value to the Navy.
Argyris [37] quotes Hans Selye as suggesting that people and organizations do not die of old age, the parts just wear out and that event kills the individual. The model of Flamholtz demonstrates that only positive inputs can increase the value of the parts and the whole, thereby avoiding premature mortality.
VI. RECOMMENDATIONS

Managers of Navy activities should evaluate their organizations in terms of Dyer's categories. The custodial organization may fit the mission assigned to it, but it should be a matter of plan which gives this status to the activity, not the mid-career patterns of the employees creating such a climate. An honest analysis with a constructive objective is called for.

All mid-level employees should be counseled by a professional who recognizes the influences of mid-life on a career. A strong program of management oriented short courses which allow free exchange of ideas should be presented to technical people, followed up with a program of extended education away from home for those who have been encouraged and accept the challenge.

Data relating to the Navy's human resources should be handled in such a way as to be available in a useful and timely manner. A university might be able to provide data collection services which are cheaper and more effective than the system which now is used.

Civilian employees in mid-level should not be considered as less than fully productive. Relegation of the senior employee to mundane tasks creates a self-fulfilling prophecy of organizational decline in effectiveness.
LIST OF REFERENCES


<table>
<thead>
<tr>
<th>No.</th>
<th>Name and Address</th>
<th>No. Copies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Defense Documentation Center&lt;br&gt;Cameron Station&lt;br&gt;Alexandria, VA 22314</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Library, Code 0142&lt;br&gt;Naval Postgraduate School&lt;br&gt;Monterey, CA 93940</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Department Chairman, Code 54&lt;br&gt;Administrative Sciences Department&lt;br&gt;Naval Postgraduate School&lt;br&gt;Monterey, CA 93940</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>Assoc. Professor C. B. Derr, Code 54&lt;br&gt;Administrative Sciences Department&lt;br&gt;Naval Postgraduate School&lt;br&gt;Monterey, CA 93940</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>CDR R. A. McGonigal, Code 54&lt;br&gt;Administrative Sciences Department&lt;br&gt;Naval Postgraduate School&lt;br&gt;Monterey, CA 93940</td>
<td>1</td>
</tr>
<tr>
<td>6.</td>
<td>Commander&lt;br&gt;Naval Oceanographic Office&lt;br&gt;Washington, D. C. 20373</td>
<td>20</td>
</tr>
<tr>
<td>7.</td>
<td>Mr. Jerry W. Reshew&lt;br&gt;Walnut Hill&lt;br&gt;Port Tobacco, MD 20677</td>
<td>1</td>
</tr>
</tbody>
</table>