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Optional Job-Rotation Program for New Professionals: An Evaluation

Naval Electronics Lab Center San Diego Calif

10 Sep 76

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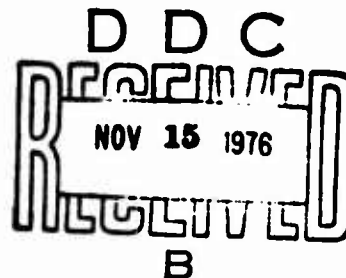Technical Document 487

OPTIONAL JOB-ROTATION PROGRAM FOR NEW PROFESSIONALS: AN EVALUATION

Prepared by

R. A. HAMILTON

10 September 1976

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NAVAL ELECTRONICS LABORATORY CENTER

San Diego, California 92152

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER NELC Technical Document 487 (TD 487)	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) OPTIONAL JOB-ROTATION PROGRAM FOR NEW PROFESSIONALS: AN EVALUATION		5. TYPE OF REPORT & PERIOD COVERED
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) RA Hamilton		8. CONTRACT OR GRANT NUMBER(s) N/A
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Electronics Laboratory Center San Diego, CA 92152		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS N/A
11. CONTROLLING OFFICE NAME AND ADDRESS Naval Electronics Laboratory Center San Diego, CA 92152		12. REPORT DATE 10 September 1976
		13. NUMBER OF PAGES 34
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution is 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)

Personnel relationships

Employee and organizational development

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

In fiscal year 1976, the Naval Electronics Laboratory Center established an optional job-rotation program for newly hired professionals. The program was extended to include also those who were hired in fiscal year 1975. New professionals are defined as those possessing bachelor, master, or doctoral degrees in physical science, engineering, mathematics, or operations research.

The purpose of the program is to provide the new professional assignments throughout the Center which tend to improve long-term utilization and enhance career development.

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20. ABSTRACT (Continued)

This study analyzes and evaluates the overall effectiveness of the Center's effort to integrate the needs and personal goals of the new professional employee with the organization's stated objective, "to improve the capability, composition, and morale of Center personnel."

Personal interviews were u ed to collect information from the professionals in this study. The interview findings led to the following major conclusions:

Most of the new professionals did not desire to participate in the job-rotation program although several did qualify their viewpoints regarding participation in the program. As a result of this conclusion and several statements regarding the low level of participation in the program, it may be inferred that: new professionals are satisfied with their existing assignments in that they are challenging and provide opportunities for professional growth; the program is designed for those who are dissatisfied with their present assignments and wish to be reassigned; the purpose or intent of the program is not clear to the new person; the manner in which the program is funded makes job rotation difficult.

The second major conclusion focusses on the length of time provided for job rotation. A 12-month period is too short for a program which does not operate in a formalized manner. During the first year, new persons begin to define themselves in relation to other professionals in their work environment. This is a period of adjustment and accommodation by the individual and the organization.

The third major conclusion concerns the supervisory-new professional relationship. This relationship is shaped by the situation, the supervisor's underlying assumptions and operating style, and the employee's own expectations.

The following recommendations are made:

The opportunity to request optional job rotation should be extended from 12 to 18 months.

The supervisor should help the new professional establish short-term and long-term goals and give regular feedback on job performance and progress. The supervisor should encourage the new person to become familiar with Center facilities and to attend regularly scheduled auditorium presentations.

The current NELC Notice 12340, Optional Job Rotation Program for New Professionals, should be amended to include a program-indoctrination meeting for all new professional employees and their supervisors.

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PREFACE

The purpose of this study was to evaluate the Center's optional job-rotation program for new professionals who were hired in fiscal year 1976. All new professionals hired during this period were interviewed to determine if they wished to participate in the Center's program.

The interview questionnaire was developed to assess the new professionals' attitudes and perceptions regarding the extent to which their job expectations and career goals were being met.

Included in this study is a comprehensive compilation of the interview findings with conclusions and recommendations.

This publication was prepared for RR Kraatz, Director of Civilian Personnel and GK Bostic, Deputy Director of Civilian Personnel, Naval Electronics Laboratory Center.

CONTENTS

INTRODUCTION

In fiscal year 1976, the Naval Electronics Laboratory Center established an optional job-rotation program for newly hired professionals. The program was expanded to include also those who were hired in fiscal year 1975. New professionals are defined as those possessing bachelor, master or doctoral degrees in physical science, engineering, mathematics, or operations research.

The purpose of the program is to provide assignments for the new professionals throughout the Center to improve their long-term utilization and to enhance career development. Other government research and development organizations have instituted such programs, and report them to be beneficial in improving the long-term value of the professional employee and in furthering the individual's professional growth.

The procedure for the new professional who wishes to participate in the Center's program is to request job rotation to a specific technology group. Three considerations or factors have a direct effect upon the probability of the individual's assignment. These considerations are:

Availability of project funds: An industrial-fund accounting system requires that the salary of a new professional be identified as a direct cost as opposed to an overhead expense.

Transferability of skills: There needs to be a positive relationship between the person's educational background and the requirements of the job.

Managerial concurrence: There needs to be mutual agreement between the manager who permits the new professional to rotate and the manager of the receiving organizational unit.

Rotational assignments are for a period of three months, but may be extended beyond this period by agreement between the new professional and the supervisor.

The purpose of this study, then, is to analyze and evaluate the overall effectiveness of the Center's effort to integrate the needs and personal goals of the new professional employee with the organization's stated objective, "to improve the capability, composition, and morale of Center personnel."

METHODOLOGY

Sensing interviews were used to collect information from the new professionals in this study. This type of interview is not used as a formal process of research and analysis but is rather a more eclectic and impressionistic approach. The objectives of the sensing interviews were:

To generate data in the language of the new professionals as a group.

To provide the interviewer a means of checking out his understanding of the social system with the persons constituting the group with which he/she is working.

To increase ownership of the data through involvement of the new professionals of the group in generating the data.

Some of the chief advantages of this interview method are:

There is the opportunity for the interviewer to check out his understanding of what the respondent is saying.

Responses can be expanded by soliciting examples and further explanations on the part of the person being interviewed. This is seldom possible by using more objective methods.

There is an opportunity for the interviewer to check out the expectations of the person being interviewed as well as his own expectations which he brings to the interview.

Data gathered from the interviews are often more credible than data gathered through instruments. The persons who participate need to believe that the data are useful and truthful. If they have participated in a "live" sense, they are more likely to place faith in the information.

The act of interviewing members of the new professional group provides an opportunity for personal contact between the interviewer and the new professional.

It is possible, in the atmosphere of a private interview, to heighten the openness of response of the person being interviewed.

It is more possible, in the personal interview than in surveys, to establish rapport between the respondent and the interviewer.

There is an opportunity for the interviewer to explain his role in the process.

No strategy nor method with so many advantages can be without drawbacks and the following is a list of the major disadvantages when the sensing interview is used:

Interviews can take time and require an area away from the respondent's usual place of activity.

Sometimes it is difficult in an interview to stay away from counseling/therapy concerns. The goals of the interviewer may not be shared by the person being interviewed.

The data gathered from interviews are not directly comparable to those gathered by other methods.

Data generated in interviews cannot be standardized nor summarized easily. Judgement is required to determine the comparability of statements across interviewees and sometimes data get lost in the summarizing process.

To be interviewed may constitute a potential threat to the respondents and it is incumbent on the interviewer to be sensitive to the possibility that persons being interviewed may be doing so involuntarily or reluctantly.

In an organization where people are not physically present in the same building at all times, occasionally it is very difficult to gain access to those persons who need to be interviewed.

The interview questions elicit responses about specific areas of discussion. It is useful to begin the interview with questions that are anticipated to result in relatively little threat and to move toward more sensitive areas later in the interview when, presumably, a higher level of rapport has been achieved. The interview questions are presented in appendix A.

INTERVIEWER VERBAL TECHNIQUES

It is important that interview questions be explored rather than simply asked. The person hearing the questions may not interpret them in the same way as the interviewer intended them. It is, therefore, critical that the questions be phrased in a nonthreatening manner and that they be checked for understanding before they are asked.

Three categories of verbal techniques employed by the interviewer which promote exploration are: probing, understanding, and supporting. The following list illustrates some of the variations of probing responses on the part of the interviewer.

General Leads: This category includes nonspecific questions such as "What part do you play in this organization?" It is important not to make these questions "loaded" in the sense that they imply a particular acceptable response.

Binary Questions: The interviewer should avoid questions that elicit a yes/no response, since this tends to limit the discussion to a particular area. For example, "How happy are you with your job?" rather than, "Are you happy with your job?"

Cue Exploration Leads: Often persons being interviewed emit signals which indicate particular areas or subjects that they would like to talk about. These cues need to be picked up and explored if they are relevant to the objectives of the interview.

The following list illustrates some of the response options available to the interviewer that can be classified under the heading understanding.

Restatement: A replay of the statement that the interviewee has just made.

Paraphrase: The interviewer enhances understanding by putting in his own words what he is hearing from the person he is interviewing.

Reflection: This is a "mirroring" technique in that the interviewer plays back to the person being interviewed the feelings that he believes are being experienced by the interviewee.

In addition to the probing and understanding techniques that have been listed, a number of verbal behaviors on the part of the interviewer can be classified as "supporting" and the following are illustrations of these techniques.

Sharing: Sometimes it is useful for the interviewer to briefly share an experience or an attitude with the interviewee. This is sometimes seen by the interviewee that he is not the only person in the world who has the same problems and concerns.

Expressing Caring: Interviewing is not a mechanical impersonal activity, and sometimes it is useful for the interviewer to express whatever caring he feels about the person and the person's situation which he is exploring in the interview. This is largely a matter of style, but it is important to consider that the data are no better than the perceptions of the relationship formed by the two persons engaged in the interview.

ROLE OF THE INTERVIEWER

Before beginning the interview, it is important that the interviewer clarify his relationship to the organization, the purpose of the interview, what is going to happen with the data after the interview, and give a brief explanation concerning the interview method and the limits of confidentiality.

In opening an interview, small talk is sometimes useful in breaking the ice, but an expectation from the beginning that time is important should be established. If the interviewer is going to take notes, this needs to be explained in the beginning; it is critical that notetaking not get in the way of the interview process.

During the interview, the interviewer needs to continually remind himself of the need to communicate his understanding of what the interviewee is saying.

Sometimes it is difficult to close the interview, particularly if the person being interviewed is highly verbal. A number of techniques to end the interview are available; eg, restating the purpose of the interview, what's going to happen next, and by standing up and terminating the interview. It is the interviewer's primary responsibility to end the interview on time and in a comfortable, businesslike way.

After the set of interviews is completed, the interviewer tabulates the aggregate responses to each question and does an analysis to discover any trends emerging from the data. The trends represent summary statements made by the interviewer. It is important during this analysis phase that he keep himself out of the analysis in the sense that he stays within the frame of reference of the new professionals who are interviewed.

The data are then published. It is important that direct quotations from those interviewed be embedded in the report in such a way as not to violate their confidentiality expectations. Arrangements should be made by the interviewer to be accessible to any new professional who wishes to discuss the published report and trends on a private basis.

FINDINGS

Interviews were conducted on a private one-to-one basis with all of the eleven new professionals hired in fiscal year 1976. All were told that their names would not be used but that the data would be organized and published without reference to the interviewee. A brief explanation concerning the mechanics of organizing the data and the interview method was given. The length of each interview was one hour. The interviews were conducted in July 1976 and away from the respondent's immediate work area. Immediately after the interviews, the findings were analyzed and tabulated according to aggregate responses to each question and overall trends. From the aggregate responses to each question, appendix B, the following trends emerged from various interview questions. The quotations that accompany the trends or major themes which were factored out are provided to reinforce and "bring alive" the interview data.

What personal goals are you meeting at work?

Learning more about the job.

Furthering professional growth.

"Gaining more experience."

"To become more professional."

What are your long-range career goals?

Additional education.

"To get my masters degree and my professional license."

Increased managerial responsibility.

"Would like to advance into management."

Developing state-of-the art expertise.

"To improve the Navy's state-of-the-art and practice."

What would you like to be doing 10 years from now?

Managing a project at NELC.

"A group leader."

"Project management."

W'.at kind of work would you like to be doing next inside this organization?

"To stay where I am."

"Would like to continue on the project I am on."

What do you see to be the predominant positive aspects of the job right now?

The work is challenging and interesting.

"Challenging work."

"Being on a project that has educational and learning potential."

"The experience."

What are its negative aspects?

No negative aspects.

"None."

Unnecessary paperwork.

What parts of your job have the most personal meaning for you?

The training, experience and knowledge acquired.

"Gaining valuable experience that is important to me."

"The opportunity to work on a project and increase the knowledge."

What things do you do that seem not worth doing?

None.

"Not too much."

Repetitious work.

"Running the same kind of experiment."

What areas of responsibility might you have that you don't now have?

None.

What things do you do that might best be done by someone else?

Nothing.

What is it about this organization that contributes to your effectiveness on the job?

The help received from others.

"Helpful people."

The autonomy permitted in the organization.

"I'm pretty much on my own."

"Given free rein to utilize all your talents."

"Given freedom in what you like."

What factors around here hinder your performance?

None.

Administrative process involved in getting equipment and materials.

"Purchasing approval."

"It sometimes takes a long time to order materials and components."

What makes it worthwhile to work for this organization?

The opportunity to make a significant contribution.

"The opportunity to do research."

"The division is concentrating on problems that need to be done."

"To contribute to the Navy's mission."

Why do people sometimes leave?

Lack of money and promotions.

"Financial reasons."

"Lack of promotions."

Unchallenging and repetitive work.

"Not enough challenging work."

What are the major problems facing your work group right now?

Monetary and time constraints.

"Time and money."

"Getting military specifications written and reviewed on time."

"Lack of projects and insufficient funds."

"Systems Design Laboratory cutback in funds."

How are decisions made in your group?

A participative approach is used.

"Usually a democratic method."

"As a group."

"Inputs from us as needed by the project leader."

What is the most serious concern that you believe the group needs to face at this time?

None right now.

Monetary and equipment constraints.

"Financial."

"We do not have enough new equipment which results in time lost due to waiting for the equipment."

What other job areas in the laboratory would you like to be considered for assignment?

None at this time.

What feelings do you have about this interview?

Positive.

"Good."

"Positive."

"A chance to express my concerns."

What kinds of feelings do you have about me and what I am up to?

Positive.

"Think it's great that someone is interested in what's going on."

"Good."

CONCLUSIONS

The trend analysis, the interview findings, and additional comments from the new professionals lead to the following major conclusions:

Most of the new professionals did not desire to participate in the job-rotation program. Of these, several qualified their desire not to participate with the following statements:

"Would appreciate a temporary assignment to a real project provided I could return to my present code."

"A week ago I would have liked to be considered for another assignment but my work situation has now improved."

"It's nice to know the program exists, but I'm lucky enough not to require optional job rotation."

As a result of the foregoing it may be inferred that:

New professionals are satisfied with their existing assignments in that they are challenging and provide opportunities for professional growth.

The optional job-rotation program is designed for new professionals who are dissatisfied with their present assignment and wish to be reassigned to a more promising technology area. There is some apprehension on the part of the new professional that a desire to rotate may be perceived as a sign of job dissatisfaction.

The purpose underlying the program needs to be further clarified. Its intention is to provide the new professional exposure to as many areas as possible throughout the laboratory. Being placed in new situations results in a broader knowledge base and additional contacts which are invaluable for the individual's long-term utilization and professional development. An individual who participated in the program related that he has been given quite a bit of freedom. He could set his own pace and learning was really encouraged. Additionally, this person found that initiative and resourcefulness are required by the new professional to look after his own career.

The way the program is funded provides an impediment to optional job rotation. Divisions may be reluctant to accept the new professional. The need to reallocate finances so that the new person can be accommodated is an obstacle. If funds are not available in a desired area, the new professional cannot be assigned. This situation, however, will improve in that future new professionals may be assigned to a centralized funding area which will facilitate

job rotation. At the present time, for those hired in fiscal year 1976, their salary is a direct cost paid out of project funds.

The second major conclusion focusses on the length of time provided for job rotation.

Some of the new professionals stated that a 12-month optional job-rotation period was too short. During the first year, new hires begin to define themselves in relation to other professionals in their work environment. The first year becomes a period of adjustment and accommodation by the individual and the organization. Expectations regarding job goals, roles, procedures, and performance are usually established by the end of the person's probationary period.

It is at this early stage in the individual's career that an opportunity to rotate can improve communications, further contacts, and, in general, reduce the probability of developing what might become a parochial perspective regarding Center mission and goals.

The third major conclusion concerns the supervisory-new professional relationship.

This is probably the new professional's first major work experience upon graduating from college. Many of the individual's initial impressions about work and organizational climate are formed during this critical period. It's the supervisor's role to provide the new professional a behavior pattern to emulate during this period. The new professional's expectations are very high in that there is anticipation that the job is going to provide an opportunity to apply in the real world what has been learned in college.

The supervisor's relationship to the employee is, therefore, shaped by the situation, the supervisor's underlying assumptions and operating style, and the employee. Some factors that contribute to the situation are: personnel practices; the nature of the job assignment and level of accountability; time demands; funding pressures; and the extent to which the supervisor has control and influence over the desired outcomes.

The supervisor's underlying assumptions, values, and expectations regarding the employee's potential either can be a source of motivation and positive direction or can lead to dissatisfaction and disillusionment. Two theories, labeled "X" and "Y", describe two sets of assumptions about the basic nature of people. Theory X, a traditional view of people, and theory Y, a developmental orientation toward people, are contrasting reference points designed to help supervisors examine their interpersonal relationships. One way to describe these theories is to present their antithetical assumptions:

People are lazy and indolent; they would rather do nothing (X).

People are naturally active; they enjoy setting goals and striving for objectives (Y).

People work only for money; they respond only to pecuniary motivation (X).

People seek many satisfactions and take pride in achievement and personal contribution (Y).

Fear (of demotion or discharge) works to stimulate people (X). Workers have a desire to achieve personal and organizational goals (Y).

The worker is totally dependent upon his supervisor (X). The worker seeks responsibility, self-fulfillment, independence, and self-control (Y).

The worker is dependent upon direction from above (X). The worker seeks self-direction (Y).

The worker needs to be told and shown (X). The worker is capable of finding his own methods (Y).

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The worker must be closely supervised (X). The worker is responsible and capable of self-correction (Y).

The worker resists change (X). The worker enjoys new experiences and a chance to be creative (Y).

People need to be fitted into the job without regard for their needs (X). The individual is capable of self-actualization or the realization of his/her full potential (Y).

Individuals must somehow be inspired, driven, or pushed (X). Individuals need to be released, encouraged, and assisted by their supervisor, whose actions should show that he/she wants to help the employee develop and realize his/her objectives (Y).

A questionnaire in appendix C is designed to help the supervisor find out his/her relationship to these underlying assumptions we make about people.

The supervisor's operating style is another important factor which influences the relationship. A questionnaire developed by Stuart Atkins and Allen Katcher entitled "Life Orientation Analysis" (LIFO) identifies four basic operating styles and strengths.

The styles are: Supporting/giving; controlling/taking; conserving/holding; adapting/dealing. There are 72 statements organized in 18 four-statement blocks to which the respondent allocates four scores: 4, 3, 2, 1. The philosophy behind the instrument is that one's weaknesses are one's strengths in excess.

Each of the four LIFO style scores is divided into use of a style productively (+) and use of a style excessively (-).

The supporting/giving LIFO style is characterized as thoughtful, modest, loyal, receptive. People with these traits in excess are characterized as self-denying, gullible, obligated, and passive.

The controlling/taking LIFO style tends to be quick to act, seeks change, forceful, a risk taker. In excess, the person is impulsive, arrogant, coercive, and a gambler.

The conserving/holding LIFO style tends to be tenacious, economical, factual, and thorough. In excess he/she is uncreative, stingy, unfriendly, and stubborn.

The adapting/dealing LIFO style is characterized as flexible, experimenting, socially skilled, and animated. In excess the person may become incompetent, childlike, agitated, and without conviction.

The LIFO questionnaire can be used to make the supervisor aware of his/her characteristic style of handling problems, accomplishing goals, and interacting or communicating with new professionals. With an awareness of one's main style of approaching people plus knowledge of the style that should be avoided, the supervisor can intelligently analyze where a conflict of styles may be expected, under what conditions he/she is most effective, and how he/she can best help the new professional develop.

In essence, this questionnaire helps each of us accept ourselves, realize what we can contribute as leaders and employees in the organization, know where we need help, and be aware of the dysfunctions our style is prone to.

The third factor that influences the relationship is the new professional's own needs and expectations. A predominant need that new professional employees have is for the supervisor to effectively help them define their role concerning their job expectations in relationship to the organization's goals. New people want to know how their job fits into the organizational structure.

Other concerns that the new professional has are:

What are the organization's policies regarding promotions?

What constitutes professional growth?

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What educational resources are available that will help keep me abreast of the latest developments in my field?

What help and guidance can I receive from my supervisor as to career patterns and options beneficial in the rotation program?

RECOMMENDATIONS

The opportunity for new professionals to request rotation should be extended from 12 to 18 months. A 12-month period is too short for a program which does not operate in a formalized manner. Three benefits can be gained by extending the rotation period:

The new professionals can acquire in-depth knowledge, exposure and broaden their contact base.

Additional time beyond the normal 3-month rotation period spent in a division enhances the individual's utilization.

Additional lead time allows for planning and takes into account time needed to make decisions regarding future job rotations.

The supervisor should present the optional job rotation program to the new professional as a positive approach which benefits the Center, the supervisor, and the employee.

The new professional's long-term value to the organization is further enhanced by having regularly scheduled meetings with the supervisor. The supervisor should help the new professionals establish short- and long-term goals and give regular feedback on their job performance and progress. In the area of goals, the supervisor should also see it as part of his/her responsibility to help the individual formulate a career plan. The supervisor should encourage the new person to become familiar with the library, publications, supply, and duplication facilities. There are also regularly scheduled auditorium presentations which broaden the individual's knowledge base and professional development.

The current NELC Notice 12340, Optional Job Rotation Program for Junior Professionals, should be amended to include a program-indoctrination meeting which focusses on the purpose of job rotation. All new professionals and their supervisors should attend this meeting conducted by a representative of the Civilian Personnel Office (see appendix D).

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APPENDIX A: INTERVIEW QUESTIONS

ROLES: What areas of responsibility are you responsible for in this organization?

How would you describe your job to another person?

GOALS: What are you trying to get done on your job right now?

What short-term goals do you have for your job?

What personal goals are you meeting at work?

What are your long-range career goals?

What would you like to be doing 10 years from now?

What kind of work would you like to be doing next inside this organization?

THE JOB
ITSELF: What do you see to be the predominant positive aspects of the job right now?

What are its negative aspects?

What parts of your job have the most personal meaning for you?

What things do you do that seem not worth doing?

What areas of responsibility might you have that you do not now have?

What things do you do that might best be done by someone else?

ORGANIZA-
TION: What is it about this organization that contributes to your effectiveness on the job?

What factors around here hinder your performance?

What makes it worthwhile to work for this organization?

Why do people sometimes leave?

WORK
GROUP: What are the major problems facing your work group right now?

How are decisions made in your group?

What is the most serious concern that you believe the group needs to face at this time?

**REASSIGN-
MENT:** What other job areas in the laboratory would you like to be considered for assignment?

**HERE AND
NOW:** What feelings do you have about this interview?

What kinds of feelings do you have about me and what I am up to?

APPENDIX B: AGGREGATE RESPONSES TO INTERVIEW QUESTIONS

WHAT AREAS OF RESPONSIBILITY ARE YOU RESPONSIBLE FOR IN THIS ORGANI-ZATION?

Twenty percent of my time on the Laser Communication System (OCCULT Project) and later on all my time will be on the Electro-Optical Processor.

Will be in charge of the ORMS Project.

Command support system technology.

Refining a product. Working on various projects.

Ion implanter and the processing lab.

Supervising a contract student and the software and hardware for the project.

System Design Laboratory – design phase methodology.

Speech processing.

Research in semiconductor materials.

HOW WOULD YOU DESCRIBE YOUR JOB TO ANOTHER PERSON?

It's part circuit design and part system programming.

I am now involved in rewriting military specifications to make future ships systems compatible with the ORMS project. In the future, I will be looking at areas of technical investigation similar to ORMS.

System technology.

Drafting work.

A job with potential for learning.

A system engineer.

Becoming familiar in the field of design methodology as applicable to the Navy.

I am doing research work.

Primarily research in semiconductor materials, electro-optics and related problems.

WHAT ARE YOU TRYING TO GET DONE ON YOUR JOB RIGHT NOW?

Writing a program to increase the refresh rate for a liquid-crystal display.

Rewriting military specifications and looking into areas of investigation similar to ORMS.

Hardware aspects of the project.

Trying to economize and make a modular rack system better.

To learn the processing area and integrate the ion implanter.

Trying to integrate the software I have developed.

Researching documents.

Investigating multiple voice-input systems.

To identify impurities in the growth of semiconductor materials.

WHAT SHORT-TERM GOALS DO YOU HAVE FOR YOUR JOB?

To have a successful sea test and wind up the OCCULT Project.

Rewriting military specifications and looking into areas of investigation similar to ORMS.

To accomplish milestones before the deadline.

Trying to save the government money.

To become competent to take over responsibilities and to get promoted.

Demonstration of a single processor system.

Getting on top of methodologies.

None.

To identify impurities in the growth of semiconductor materials.

WHAT PERSONAL GOALS ARE YOU MEETING AT WORK?

Learning more about computers.

Learning to write more effectively.

Gaining more experience in microprocessors and computer systems.

Passed the engineer-in-training exam. The first step toward getting my professional license. Have put in my application for graduate school.

Learning about things that will give me more insight in my interest areas.

To further my understanding of the systems engineering problems in the distributor processor field.

Getting on top of methodologies.

To become more professional.

The opportunity to do research and interesting work.

WHAT ARE YOUR LONG-RANGE CAREER GOALS?

A masters degree in Electrical Engineering.

To develop state-of-the-art expertise in communication aspects of command and control systems and utilize the expertise to benefit the Navy.

To become a senior engineer.

To get my masters degree and my professional license. Someday would like to branch off into administration.

In one-year I should be able to assume complete responsibility for the processing lab and the ion implanter.

Would like to advance into management.

To improve the Navy's state-of-the-art and practice in computer science.

To become a technical writer.

Opportunity to direct research of a project management nature.

WHAT WOULD YOU LIKE TO BE DOING TEN YEARS FROM NOW?

To become a senior engineer on a project.

Project management.

Working with microprocessors and computer systems on an advanced scale.

Running my own business.

As a minimum, a group leader. I want to also obtain my doctorate.

A project manager or group leader at NELC.

I have attained a level of professional expertise.

A group leader.

Directing large scale research.

WHAT KIND OF WORK WOULD YOU LIKE TO BE DOING NEXT INSIDE THIS ORGANIZATION?

No special preferences. I have gotten involved in most areas that I desire.

To be involved with the ORMS Test Bed.

Stay with microprocessors and computers.

To stay in design work but I need a new and challenging job.

To assume more responsibility and become more effective in physics and electrical engineering.

Would like to continue on the project I am on.

Doing real system development.

Some television work.

Like to do some device applications.

WHAT DO YOU SEE TO BE THE PREDOMINANT POSITIVE ASPECTS OF THE JOB RIGHT NOW?

The various electrical engineering assignments.

Challenging work.

The experience.

None.

General working conditions.

Being on a project that has educational and learning potential.

I'm doing something that interests me.

Design work of a hardware nature.

To increase the knowledge of materials so that I can make good materials and devices.

WHAT ARE ITS NEGATIVE ASPECTS?

Hassle to get purchasing approvals. No consistent policy on the use of overtime.

None.

Nothing.

Lack of challenge. No work.

Not any.

Trying to procure equipment.

Paperwork and sponsor demands that seem unrealistic.

None.

None.

WHAT PARTS OF YOUR JOB HAVE THE MOST PERSONAL MEANING FOR YOU?

Producing a product that can meet the goals for which it was intended.

Development of the ORMS concept.

Hardware work.

Putting an idea on paper and watching it materialize.

To gain the kind of valuable experience that is important to me.

Seeing something work that I worked hard to put together.

The people I work with and the opportunities to meet people in the field.

To get more training and experience so that I can feel more capable and creative.

The opportunity to work on a project and increase the knowledge.

WHAT THINGS DO YOU DO THAT SEEM NOT WORTH DOING?

Doing nonengineering work for an extended period of time.

None.

Time delays in getting materials.

Repetitious drawing.

None.

Should not have to fight the procurement process.

Not too much.

None.

Running the same kind of experiment.

WHAT AREAS OF RESPONSIBILITY MIGHT YOU HAVE THAT YOU DON'T NOW HAVE?

That's hard to say. Things are in a state of flux right now.

In the future. project management.

More control of what goes on in the project.

None.

Processing lab and small projects.

None.

None.

Writing articles for engineering journals.

None.

WHAT THINGS DO YOU DO THAT MIGHT BEST BE DONE BY SOMEONE ELSE?

Technician work when it's carried too far.

None.

Some of the documentation and some hardware could be handled by a person with more experience.

Drawing.

Nothing.

Nothing.

None.

None.

Running repetitive experiments.

WHAT IS IT ABOUT THIS ORGANIZATION THAT CONTRIBUTES TO YOUR EFFECTIVENESS ON THE JOB?

Helpfulness of others.

I'm pretty much on my own.

WHY DO PEOPLE SOMETIMES LEAVE?

Promotions. Purchasing approvals.

Financial reasons. Not enough challenging work.

I do not know.

Work that is not in their position description. Unchallenging. Repetitious work.

I'm not sure.

Low performance. The organizational climate becomes intolerable.

Management not understanding technical problems.

To get more money and lack of promotions.

I have no idea.

WHAT ARE THE MAJOR PROBLEMS FACING YOUR WORK GROUP RIGHT NOW?

Getting the gear ready for the sea test.

Getting military specifications written and reviewed on time.

Time and money.

Lack of projects and insufficient funds.

Just formed the group and it's hard to answer that question.

The time required to shift our orientation from analog to digital control.

SDL cutback in funds.

Financial.

Trying to grow pure materials for device applications.

HOW ARE DECISIONS MADE IN YOUR GROUP?

Opinions are listened to and then the supervisor decides.

Interaction with ORMS management.

Discussions in our group meetings precede final decision making.

Usually a democratic method.

I have input on decisions that affect me.

Helpful people.

Given free rein to utilize all your talents.

Accessibility to my group leader and the division head.

A pleasant working environment.

Being on our own to get the job done.

Good supervision.

Given freedom in what you like.

WHAT FACTORS AROUND HERE HINDER YOUR PERFORMANCE?

Purchasing approval.

Crowded working conditions.

Nothing.

Lack of challenge.

None.

The procurement process.

Management layers and people who do not understand what it is you have to do.

Lack of financial support.

It sometimes takes a long time to order materials and components.

WHAT MAKES IT WORTHWHILE TO WORK FOR THIS ORGANIZATION?

My exposure to different aspects of electrical engineering.

To contribute to the Navy's mission.

The people in my code.

The knowledge that bigger and better jobs will be coming up.

Beginning to feel more productive and have something to contribute.

A pleasant learning environment and a lot to be learned.

This division is concentrating on problems that need to be done.

To earn a living.

The opportunity to do research.

As a group.

Inputs from us as needed by the project leader.

Usually by the supervisor.

Mostly made by management.

WHAT IS THE MOST SERIOUS CONCERN THAT YOU BELIEVE THE GROUP NEEDS TO FACE AT THIS TIME?

Finding a way for the device to be applied to Navy problems.

Getting military specification written and reviewed on time.

I do not know.

To bring in some challenging work.

The interrelationship of our new group with other parts of the organization.

None right now.

Level of commitment towards SDL. We should be out getting funds from other Navy sponsors.

Financial.

We do not have enough new equipment which results in time lost due to waiting for the equipment.

WHAT OTHER JOB AREAS IN THE LABORATORY WOULD YOU LIKE TO BE CONSIDERED FOR ASSIGNMENT?

None at this time.

None.

None.

None.

A few weeks ago I would have liked to be considered for another assignment, but now my situation has improved. The work I am now doing is quite challenging.

With this project I hope to get involved in microprocessors.

Would like sometime a temporary reassignment to a real project in 5300.

None.

None at the present time.

WHAT FEELINGS DO YOU HAVE ABOUT THIS INTERVIEW?

Positive.

Positiv..

This information would be helpful to the department head.

A chance to express my concerns.

Good.

OK.

OK.

Informative.

It's all right.

WHAT KINDS OF FEELINGS DO YOU HAVE ABOUT ME AND WHAT I AM UP TO?

Positive.

Positive.

Doing my job.

Here doing my job.

Good.

A job I am doing and I am getting it done.

Think it's great that someone interested in what's going on.

Quite good at interviewing.

Good.

APPENDIX C: THEORY X AND THEORY Y QUESTIONNAIRE

In each question, check the choice that most accurately describes your activities. Be sure to make one choice for each question.

	USUALLY	OFTEN	SOMETIMES	SELDOM
1. I supervise my subordinates closely in order to get better work from them.	☐	☐	☐	☐
2. I provide my subordinates with my goals and objectives and sell them on the merit of my plans.	☐	☐	☐	☐
3. I set up controls to assure that my subordinates are getting the job done.	☐	☐	☐	☐
4. I believe that since I carry the responsibility my subordinates must accept my decisions.	☐	☐	☐	☐
5. I make sure that my subordinates' major workload is planned for them.	☐	☐	☐	☐
6. I check with my subordinates daily to see if they need any help.	☐	☐	☐	☐
7. I step in as soon as reports indicate that the job is slipping.	☐	☐	☐	☐
8. I have frequent meetings to keep in touch with what is going on.	☐	☐	☐	☐
9. I back up spontaneous but unauthorized decisions made by my employees.	☐	☐	☐	☐
10. I push my people to meet schedules if necessary.	☐	☐	☐	☐

(For more realistic results, do not score this questionnaire until you have completed figure C-2.)

Figure C-1.

Read the definitions of X and Y and then, on the first scale below in figure C-2, try to estimate where your attitudes lie.

THEORY X

The average human being has an inherent dislike of work and will avoid it if he can.

Because of this human characteristic of dislike of work, most people must be coerced, controlled, directed, or threatened with punishment to get them to put forth adequate effort toward the achievement of organizational goals.

The average human being prefers to be directed, wishes to avoid responsibility, has relatively little ambition, and wants security above all.

THEORY Y

The expenditure of physical and mental effort in work is as natural as play or rest.

External control and the threat of punishment are not the only means of bringing about effort toward organizational goals. Man will exercise self-direction and self-control in the service of objectives to which he is committed.

Commitment to objectives is a function of the rewards associated with their achievement.

The capacity to exercise a high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population.

Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized.

-20	0	+20
THEORY X	neutral	THEORY Y

→ On the scale below, indicate the type of superior you could best work with:

-20	0	+20
THEORY X	neutral	THEORY Y

(Using the table in figure C-3, score the questionnaire you completed in figure C-1. When you are finished, be sure to compare your attitude estimate with your actual score.)

Figure C-2.

How to Score Your Questionnaire

Score all questions except number nine as follows:

-2 for USUALLY (that you checked)

-1 for OFTEN

1 for SOMETIMES

2 for SELDOM

Reverse the process for question number nine. Score:

2 for USUALLY

1 for OFTEN

-1 for SOMETIMES

-2 for SELDOM

Total your score.

Figure C-3.

Canc frp: Apr 75

NELCNOTE 12340
Code 201
25 Nov 1975

**NAVAL ELECTRONICS LABORATORY CENTER
SAN DIEGO, CALIFORNIA 92152**

NELC NOTICE 12340

To: Distribution List

Subj: Optional job rotation program for junior professionals

1.   Purpose.   To establish the Center's policy and procedures for the rotational reassignment of junior professionals in order to improve their long-term utilization at the Center and to enhance their career development.

2.   Background.   Two Junior Professional Personnel Study Groups and a recent independent investigation based on in-depth interviews with 29 junior professionals hired during FY1975 recommended the implementation of a job rotation program for junior professionals. Some other Navy RDT&E activities have instituted such programs, and report them to be beneficial in improving the long-term value of the junior professionals to the organization and in furthering the individual development. Some of these programs require job rotations during periods of up to two years, while others provide options regarding the duration of the program and the number of job rotations for a given individual. NELC's management believes that a job rotation program should be established at the Center, and that it should be flexible in accommodating the needs of the Center and of the junior professionals.

3.   Policy.   In furtherance of one of the Center's stated objectives, "to improve the capability, composition, and morale of Center personnel," it shall be the policy of the Center to provide job rotation opportunities for junior professionals during their first year of employment.

4.   Definition.   For the purpose of this notice junior professionals are those personnel hired as GS-05, 07, or 09 and possessing either bachelors or masters degrees in physical science, engineering, mathematics, or operations research. They will be eligible for rotational reassignments as a part of this program during their first year of employment at the Center. However, those hired during FY1975 will be eligible during FY1976.

5.   Procedures.

    a.   On a quarterly basis a designated representative of the Civilian Personnel Office will conduct follow-up placement interviews with each junior professional to determine if he or she wishes to be reassigned to another area of work, and, if so, if the employee has any specific work area desire.

    b.   The Civilian Personnel Office representative will also solicit from the department heads the names of junior professionals whom the department head believes would profit from a reassignment together with any recommendations regarding appropriate areas of work.

    c.   The Civilian Personnel Officer will provide the Associate Technical Director for Plans and Programs and the department heads with the information obtained, and the Associate Technical Director will negotiate rotational reassignments with the appropriate department heads.

    d.   The ceiling point and labor charges will accompany the junior professionals until a final assignment is made upon which time they become a part of that department's total ceiling and labor base.

    e.   At any time during the year the junior professional may, with the concurrence of his department head, opt for no further job rotations.

    f.   At the end of each junior professional's first year at the Center (except for those covered by (e) above), the Associate Technical Director for Plans and Programs will negotiate his or her "permanent" assignment with the junior professional and the department heads.

6.   <u>Indoctrination</u>. None required.

7.   <u>Management Audit.</u> The Civilian Personnel Director will report program status to the Executive Board semiannually.

8.   <u>Cancellation Contingency</u>. This notice is cancelled when its provisions have been incorporated into NELCINST 12000.7, Personnel Manual, no later than 30 April 1976.

                                                B. L. MUNGER
                                                Acting

Distribution:
List E (Professional and Scientific Personnel)