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ORGANIZATIONAL BEHAVIOR RESEARCH
UTILIZATION PROCESSES

Office of Administration Final Report

Center for Research on Utilization
of Scientific Knowledge

The University of Michigan

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ORGANIZATIONAL BEHAVIOR RES' \RCH

UTILIZATION PROCESSES

A STUDY OF PROCESSES FOR THE UTILIZATION OF SCIENTIFIC FINDINGS FROM ORGANIZATIONAL BEHAVIOR RESEARCH

FINAL REPORT

NASA Grant No. NGR-23-005-116

October 27, 1967

Study Site: Office of Administration
National Aeronautics and Space Administration
Washington, District of Columbia

Submitted by

Center for Research on Utilization of Scientific Knowledge
Institute for Social Research
The University of Michigan
Ann Arbor, Michigan

OBJECTIVES

As stated in the original proposal, the objectives of the research performed under NASA Grant No. NGR-23-005-116 were five-fold:

1. To provide management officials and key staff members throughout NASA's Office of Administration with information about the important behavioral science research findings which pertain to: a) the "new patterns of management" and the "motivational approach" to supervision; b) the performance and productivity of people in groups in complex organizational settings; and c) the most effective practices of managing and supervising professional and scientific personnel.

2. To identify, describe, and assess the important problems relating to the practice of supervision and management throughout the Office of Administration, the solution of which would lead to more effective management and supervision.

3. To identify the specific behavioral science research findings which have potential applicability to the problems identified, in order to: a) determine the feasibility of applying behavioral science research findings which are related to such problems; b) develop the alternative methods, techniques, and planning which could be used for a systematic transfer and application of such research findings to these problems in a reasonably controlled manner.

4. To implement the utilization plan, to evaluate the comparative effectiveness of the alternative methods and techniques used, and to assess the results achieved.

5. To identify unique supervision and management problems and needs which have not been the subject of previous behavioral science research effort, which may be worthy of future research undertakings.

HOW THE OBJECTIVES WERE MET

These objectives were met in a variety of ways, involving a number of different activities and techniques, and resulting in several different types of end-products.

1) The first objective: provision of relevant behavioral science research information to key Office of Administration personnel.

This objective was met by making available to Office of Administration personnel appropriate readings from organizational research, and by providing a series of four-hour seminars held bi-weekly for division directors and their superiors from January through May, 1966, and periodically thereafter, in which additional research findings were presented and discussed. Two books of readings were provided to each seminar participant. Copies of other articles and books were also placed in the Management Analysis library. Other assignments were made as individual needs dictated. In addition, two separate literature reviews were prepared for the study participants. One, "Different Supervisory Practices and Their Effects," by Harold Bershady, was the core reading for a two-day retreat on supervisory-subordinate relations. The other, an annotated bibliography by Jill Evans entitled "Factors Related to the Performance of Scientists and Engineers: Synposes of Research Findings," was withheld pending inclusion of managers of scientists and engineers in the study. The seminar schedule, a list of assigned readings, and copies of the literature reviews are included in Appendix I.

2) The second objective: identification of management problems related to effectiveness in the Office of Administration.

This objective was met by means of interviewing, observing, and administering questionnaires throughout the Office of Administration. Early in the project the research team interviewed all division directors, their superiors, their key subordinates (branch chiefs), and a number of non-supervisory personnel in order to understand the nature

of their jobs and the workings of the Office of Administration. This interviewing process enabled identification of problem areas both unique to the Office of Administration and common to complex organizations in general. In addition to interviewing, observations of meetings and other business activities were made. The DAA/A's weekly staff meetings were tape recorded, and minutes of these and other meetings were monitored.

Using information gathered from these interviews and observations, and drawing on previous research done at the Institute for Social Research, a questionnaire was developed in collaboration with a steering committee of volunteer division directors. Items on the questionnaire dealt with division effectiveness, communication, coordination, supervisory-subordinate relations, relations with the field, the front office, influence, motivation, job satisfaction, and health. The questionnaire was administered to all members of the Office of Administration, including field personnel on the headquarters payroll, in October of 1965. A total of 437 persons returned usable questionnaires. A copy of the questionnaire, with response percentages and grand means typed in, is included in Appendix II.

3) The third objective: Utilization of findings to increase effectiveness.

This objective was met in a variety of ways. Utilization began in the seminars with division directors. In addition to presentations and discussions of previous research from other settings, the series of seminars listed in Appendix I dealt directly and extensively with findings from the questionnaire administered throughout the Office of Administration. Results were presented in two important ways. First, scores were broken down according to division, so that each division director could see how his division stood relative to other divisions in the Office of Administration. Second, results from the questionnaire were analyzed and presented in terms of their relationship to division effectiveness. This enabled division directors to

know which areas, i.e., of communication, coordination, etc., were affecting the effectiveness of the division. The two-fold approach to the presentation of findings served as an easy way to objectively identify problems unique to a division, problems shared by several divisions, and areas in which efforts at improvement could be expected to have pay-off in terms of increased effectiveness for the division. At all times division directors joined with the research team in discussing the meaning and implications of the findings. From time to time summary tables and reports were presented, in addition to division scores and relationships with effectiveness. Each division director received copies of all findings discussed in the seminars for inclusion in his personal seminar notebook. By the end of the study, these notebooks were of considerable size. Samples of the seminar materials are included in Appendix III.

In addition to the seminars with division directors, feedback and utilization activities were carried out directly within the divisions themselves. In fact, it was within the divisions that the major utilization efforts were developed and implemented. A number of different procedures were used, depending upon the particular problems of the division, the skills and desires of the division director, and the potential value of trying out alternative methods and techniques. Procedures ranged from intensive individual counseling of division directors to small group meetings of the division director and his key subordinates to large feedback sessions using vu-graphs of the findings to seminar series within the division similar to the seminars held for division directors. These activities within divisions began shortly after initial results were made available to division directors and continued for well over a year. Virtually all members of the twelve divisions for which data were available were exposed to some form of feedback of the results of the October 1965 questionnaire.

Involvement of the research team in the internal division utilization activities varied with the nature of those activities.

In some cases there was heavy involvement, in terms of personal counseling, preparation of additional data analyses, planning and conducting meetings, and visits to field offices. In other cases, particularly where the findings indicated a healthy state of affairs in the division, the research team merely observed or provided minor assistance. In addition, the research team recommended specific types of additional training such as management by objectives, the managerial grid, and sensitivity training, when it seemed appropriate.

4) The fourth objective: assessment of utilization activities.

This objective was met by administering evaluation sheets at the conclusion of each seminar, by administering a second questionnaire throughout the Office of Administration containing items identical to the first questionnaire, and by administering custom-tailored assessment instruments in those divisions in which considerable utilization efforts had been expended. Results of these questionnaires designed to measure change were reported to division directors.

The seminar series with division directors was an evolutionary process. Topics changed, but also, and perhaps more importantly, the conduct of the seminar itself changed, as the seminar leaders and participants worked together toward a better understanding of each other and the information under consideration. Methods of presenting the research changed in accordance with the desires and developing skills of the participants. To assess the success of the seminars as felt immediately by the participants, short "post meeting reaction sheets" were filled out by the participants at the conclusion of each session. A copy of one of these instruments is included in Appendix IV.

In addition, separate questionnaires were prepared for five divisions in which utilization activities were more extensive. Items were designed to measure the amount of change in particular areas toward which efforts had been directed, for example, the division director's behavior, the nature of assignments, etc., and to specify as much as possible the source of the change, recognizing that other forces besides the Michigan study were creating change. Two items

from these extra instruments were common to all five divisions; the remaining items were administered according to their relevance to the particular division. Samples of these items are included in Appendix IV.

Results of the March 1967 questionnaire and comparisons of these results with the October 1965 questionnaire were sent to division directors as the basis for a seminar to discuss the meaning of the measured change (or lack thereof). Subsequent analyses were also provided, including a summary of results of the extra questionnaires administered in the five divisions. Copies of these results and analyses are also included in Appendix IV.

5) The fifth objective: identification of unique problems worthy of future research.

This objective was met by comparing the problems and findings from the Office of Administration with research knowledge previously available. With respect to the substantive area of supervision and management of organizations, most of the findings from the Office of Administration were fairly typical of research findings gathered elsewhere. In fact, the similarity of relationships was a forceful argument for taking corrective action.

Although a few interesting leads developed during the course of the research analysis, the most significant organizational "problem" appearing worthy of future research is that of functional management. This was a topic of considerable concern to division directors and their superiors. There was much discussion of functional management during the course of the study, and an entire seminar was devoted to the topic. It became obvious that little research information was available on the topic, and, since the present study included only the Office of Administration itself, and not counterparts in the field or in program areas, it was not equipped to contribute much in the way of new knowledge to the topic. Perhaps a second important problem worthy of future research that was identified during the course

of the study is the effect of frequent turnover and interim leadership on organizational performance.

With respect to utilization, however, several topics worthy of future attention arose as a result of the study. Such topics include the advantages and limitations of using coded data; the effect of exposure to a first questionnaire, or findings therefrom, on answers to a second questionnaire; the role of higher management in utilization efforts; the effect of a strictly internal analysis on developing forces for change; and the relationship between cognitive and other types of input in producing change.

Professional articles

The scope and duration of the present study has made possible accumulation of a great deal of research information suitable for publication in scientific and professional journals. The action orientation of the project, however, as well as the necessity for waiting until the change analysis could be completed, has made preparation of such articles during the course of the project extremely difficult. At the present time plans have been developed for scientific papers in the following areas:

1. Organizational effectiveness--its meaning and measurement.
2. Leadership--leadership and organizational effectiveness; an extension and test of skill mix theory; supervisory behavior and personality; the concept, practice, and effectiveness of group methods of supervision.
3. Need satisfaction--dynamics of the relationship between individual and organizational need satisfaction; job congruence and effectiveness.
4. Change theory--anxiety and propensity to change; the applicability of theories of social change; the role of power in producing change.
5. Change practice--the transfer process; developing internal utilization capabilities; problems between social scientists and managers; techniques of transfer.

6. Methodology--the remeasurement problem; measuring and accounting for change.

CONCLUSIONS

Although specific, proven conclusions can best be presented in the scientific research articles mentioned above, a few summary statements of the results can be offered at this time with respect to the major features of the utilization process investigated in the present study: the seminar approach and utilization activities within divisions.

1. The seminar approach. The research performed under NASA Grant No. NGR-23-005-116 demonstrated that the slow feed-in, seminar-type approach is an effective method of providing managers with important and relevant knowledge from behavioral science research. Important features of the approach appear to be: a) presentation of research findings from the manager's own organization simultaneously with similar information gathered from other studies; b) seminars composed of small groups of managers, preferably managers whose functions require some working interaction with each other; c) a manner of transfer that changes with the increasing skill of the seminar participants, so that the rate of input increases while the amount of outside direction decreases with succeeding seminars. Evidence for the success of this approach may be found in oral and written comments from division directors, and by examining their responses as a group to the various instruments used to measure utilization.

The seminar approach as used in the present study is not without limitations, however. Even though much was learned about ways of presenting data, communication problems between social scientists and managers, and appropriate amounts of direction, there are other factors inherent in the method itself that tend to limit its effectiveness. The slow feed-in, seminar-type approach is,

because of its slowness and because of its use of small groups, relatively time-consuming and expensive, although surely such matters of efficiency should be judged in terms of whether or not, in the end, the method works.*

The seminar approach is also limited in that it deals primarily at the cognitive level. While there is little doubt that conceptual understanding is a vital part of the knowledge utilization process, understanding information is not the same thing as using it. Perhaps future seminar approaches should integrate problem-solving and skill-exercise activities with the cognitive inputs. Such integration would make even more necessary seminars composed of managers with interdependent roles. The result would be more immediate and direct attempts at using the information, as soon as it is understood.

A limitation of almost any method is that it will be of benefit only to those exposed to the method. Thus the seminars are of primary value only to the seminar participants. Unless the seminars become problem-solving, decision-making sessions, the effects of the seminars will not spread rapidly to the rest of the organization. It will be up to the individual manager, using whatever resources he can marshal, to put to work the new knowledge he has gained. Indeed, such was the paradigm of the present study. After the biweekly seminar series completed the initial input of information, division directors worked individually with the research team to pursue utilization activities within their own divisions. And, the data indicate that division directors reported more utilization and more effects of the study than did other supervisors or non-supervisors.

*A study of a comparable administrative unit in another government agency used a much more efficient feedback process. Like the NASA study, results from a questionnaire administered throughout the organization were presented to relevant managers, only in just two sessions, not biweekly for five months. After the two sessions, however, neither additional time nor additional money was allocated to expend further effort in working with the information. In short, very little use was made of the information.

2. Utilization within divisions. The Michigan study demonstrated that there are a variety of utilization techniques which will produce change. However, any measured change must take into account the particular situation in the organization, as well as the numerous non-utilization forces tending to produce change. Thus, such utilization activities as individual counseling and coaching, and problem-oriented seminars within divisions, produced some significant changes in some areas. But the amount of change was not usually very great, more often quite small or non-existent, and occasionally even negative. Furthermore, the perception of change tended to increase with increases in organizational level.

It seems clear that there are a number of important factors influencing the effectiveness of utilization activities. An obvious factor is involvement and effort. Generally, the more involvement and effort of relevant organizational members, the more likely is change. Different divisions expended quite different energies in utilization activities, and the research team was not able to assist all those in need of help. However, effort is not sufficient in and of itself. In one division considerable time and effort was expended, with the assistance of the research team, but no concrete actions materialized. The result was heightened expectation for change which, when the changes didn't occur, caused a downturn in answers to subsequent questionnaires. Thus, conditions in the division were seen as worsening rather than improving. Effort without action appears to be of little value, and may even make things worse.

Another important factor influencing utilization activities is support from higher management. Midway through the present study the Director of the Office of Administration, who had initiated the study, left NASA. His departure without a doubt tended to reduce the overall effect of the study. Even though his successors knew of the study, their lack of personal involvement served to lessen its import with the division directors. In fact, the great length of time it took to establish a permanent replacement created a general "wait and see" stance on the part of division directors. No one spoke favorably

of this delay, although each successor had at least some division directors who responded quite positively to his interim appointment. Generally speaking, however, turnover in the front office was viewed as not benefiting the Office of Administration, and it certainly did nothing to enhance the effectiveness of the Michigan study.

In some instances change was measured in areas and divisions where little or no utilization activities had taken place. While other forces no doubt created change, in a few of these instances it is likely that the measured change was spurious, the result of a desire to look good in areas in which the division had originally looked bad, or to keep the division's position at the top. A short experiment in two divisions produced evidence supporting the former possibility. Future research must give more attention to such specious change forces.

In summary, the present study demonstrated that the slow feed-in seminar approach is an effective method of transferring organizational research knowledge to managers. Results also suggest that there are a number of different techniques which can promote effective utilization of knowledge, but each of these techniques must be viewed in terms of the particular characteristics of the organization and its leadership. Finally, other forces producing change must be taken into account before a full understanding of the knowledge utilization process can be developed.

APPENDIX I: SEMINARS AND READINGS

A. Seminar Schedule

Dates	Seminar Topic
Jan. 20, 1966	Organizational Effectiveness
Feb. 3, 1966	Communication
Feb. 17, 1966	Communication
March 3, 1966	Summary of Effectiveness, Communication
March 17, 1966	Coordination
April 1-2, 1966	Supervisory-Subordinate Relations (Retreat at Charter House Motel)
April 14, 15, 1966	Human Relations
April 28, 29, 1966	Motivation - Job Satisfaction
May 12, 13, 1966	Organizational Stress and Health (Guest leader: Dr. John R. P. French, Jr.)
July 21, 1966	The Innovative Organization
August 18, 1966	Progress Sharing on the Transfer Process
Oct. 27, 1966	Training and Development (Guest leader: Mr. Kenneth Beach)
Nov. 10, 1966	Performance Appraisal (Guest leader: Dr. Herbert H. Meyer)
Dec. 8, 1966	Functional Management (Guest leader: Dr. Rensis Likert)
May 18, 19, 1967	Results of the Second Questionnaire

APPENDIX I: SEMINARS AND READINGS

B. Readings

Books: Each seminar participant received a copy of the following two books, from which frequent reading assignments were made:

Redding, W. Charles, and Sanborn, George A. (eds.) *Business and industrial communication: a source book.* New York, Harper, 1964.

Suttermeister, Robert A. (ed.) *People and productivity.* New York, McGraw-Hill, 1963.

Articles: Additional research articles were distributed to the seminar participants or placed in the Management Analysis Library, depending upon the available supply. A partial list includes the following:

Cumming, John, and Cummin, Elaine. Social equilibrium and social change in the large mental hospital.

Kaiser Aluminum News: Communications.

French, J. R. P., Jr. Status, Self-esteem and health.

Kahn, Robert L. Conflict and ambiguity in large organizations.

Journal of Social Issues: Work, health, and satisfaction. 1962, 18, #3.

Haider, Michael. Tomorrow's executive: a man for all countries.

General Electric Management Development and Employee Relations Service. Performance appraisal based on self review.

Meyer, H. H., Kay, E., and French, J. R. P., Jr. Split roles in performance appraisal.

Miles, Raymond E. Human Relations or Human Resources? *Harvard Business Review,* July-August, 1965.

Pelz, Donald C. Interaction and Attitudes between Scientists and the Auxiliary Staff II Viewpoint of Scientists *Administrative Science Quarterly,* 1959, 4, 410-425.

APPENDIX I: SEMINARS AND READINGS

C. Literature reviews prepared for the project:

Bershady, Harold. Different supervisory practices and their effects. (copy attached)

Evans, Jill. Factors related to the performance of scientists and engineers: synopses of research findings. (copy attached)

[NOTE: When it became clear that managers of scientists and engineers would not be included in the study, funding for this review was arranged from other sources in order to complete work underway.]

APPENDIX II: FIRST QUESTIONNAIRE

(Administered throughout the Office of Administration in October 1965. Results are for the 437 respondents who returned usable questionnaires.)

The University of Michigan
Institute for Social Research
Center for Research on Utilization
of Scientific Knowledge

Study of the Office of Administration
National Aeronautics and Space Administration

Project 1014

October 1965
Ann Arbor

This study is being conducted by the Institute for Social Research of The University of Michigan. One purpose of the study is to learn about the work situation of people in administrative units in NASA. A second purpose is to report what is learned to people in the Office of Administration so they can try to make that work situation more satisfying and more productive. To accomplish these purposes, we need to have everyone in the Office of Administration answer these questions if at all possible. Naturally, no one has to if he wishes not to.

If the study is to be helpful, it is important that answers to questions be as accurate as possible. For this reason, you are asked to read each question carefully, then give a thoughtful and frank answer. This is not a test; there are no right and wrong answers. The important thing is that you answer the questions the way you see things or the way you feel about them. All responses to all questions are completely CONFIDENTIAL. What you answer as an individual will be known only to The University of Michigan Research Team. Please do not place your name on the questionnaire.

Future studies of such things as the causes of people leaving an organization or the effects of changes in the work situation from one time to another can produce information of interest to people beyond the Office of Administration. The members of the research team from the Institute have a responsibility for developing knowledge about such things. In order to do these studies, we need to be able to match the responses to the questionnaire which an individual completed at one time with those he fills in at another, or with the fact that he left the organization. Sometimes people like yourselves are asked to sign their questionnaires. We decided, however, that using a personal code number would provide more assurance that a person's questionnaire answers were known only to the research staff at Michigan. In this way, confidentiality is protected, and research opportunities remain open.

Questionnaire
Code Number

As your code, please use the initials of the first names of your father and mother with the date of your birth between. For example, if the names of your father and mother are (were) Thomas and Mabel and your birthday was April 21, your code identification would be T21M. Since this identification will be known only to you, this system will insure confidentiality. Please write your code number in the box in the upper right hand corner of this page.

None of the questionnaires, once they are filled out, will ever be seen by anyone in NASA. Completed questionnaires are taken by the research staff (or you mail them) back to The University of Michigan for tabulation and analysis. Findings of the analysis will be reported back statistically so that the responses of individuals will not be revealed. In some cases, the answers of persons in particular groups (such as a division) may be combined for reporting purposes. In other cases, answers of everyone at a particular level will be combined, such as all branch chiefs in the Office of Administration. In any event, the answers will be combined in groups large enough so that individuals cannot be identified.

Thank you for your cooperation.

INSTRUCTIONS

1. Most questions can be answered by checking (✓) one of the answers. If you do not find the exact answer that fits your case, check the one that comes closest to it, or write in your own answer. For a few questions, empty space is provided and you are asked to write in the answers. Please, answer all questions.

2. Feel free to write in the margins and on the back of the questionnaire any explanations or comments you may have. If you do not understand something, feel free to ask at any time.

3. Please answer the questions in order.

4. Remember, the answers you give will be completely <u>confidential</u>. The value of the study depends upon your being as honest as you can in answering this questionnaire.

5. Ignore the numbers in parentheses in front of the questions. They help get the information onto IBM cards.

Please return your completed questionnaire directly to The University of Michigan representative (or in the accompanying self-addressed envelope).

(*Card* 1)

I. YOUR DIVISION

1. To what extent do the people
(I) within your division exchange
(21) helpful information and ideas?
CHECK ONE:

4% (1) We do not exchange helpful ideas and information at all
GM=3.43 20% (2) A small extent
25% (3) A fair extent
29% (4) A considerable extent
20% (5) We exchange helpful ideas and information to a great extent

2%=md

2. How satisfied are you with the
(I) amount of information you get
(22) about what is going on in the Office of Administration?
CHECK ONE:

14% (1) Not at all satisfied with the amount of information
GM=3.06 17% (2) Not very well satisfied
28% (3) Somewhat satisfied but could get more
25% (4) Fairly well satisfied
13% (5) Very well satisfied with the amount of information

3%=md

3. When a major change is being con-
(I) sidered in your division, how much
(23) opportunity is given to people who will be affected by the change to explain, and argue for, their needs and interests? CHECK ONE:

9% (1) People are given no opportunity to explain their needs and interests
GM=2.88 30% (2) Very little opportunity
26% (3) Some opportunity
19% (4) People are given considerable opportunity
8% (5) People are given a very great opportunity to explain their needs and interests

6%=md

4. Two important ways of finding out
(1) what is going on in any organiza-
(24) tion are via the "grapevine" or via formal channels, such as official notices and communication from the supervisor

How do you first find out what is going on in the Office of Administration? CHECK ONE:

8% (1) Almost always through the grapevine first
25% (2) Mostly through the grapevine first
GM=2.98 36% (3) About equally through formal and grapevine channels
20% (4) Mostly through formal channels first
9% (5) Almost always through formal channels first

3%=md

5. Are you able to do as much planning,
(I) scheduling, and otherwise laying
(25) things out in advance, as you would like? CHECK ONE:

4% (1) No, I don't do any of the planning I would like to do
13% (2) I plan less than half as much as I would like to
GM=3.50 19% (3) I plan about half as much as I would like to
30% (4) I do most of the planning I want to do
15% (5) Yes, I do all the planning I want to do

16% (8) My job does not require that I do planning

4%=md

(Card 1)

6. (I) (26) During any typical day, how frequently are you interrupted from doing the work you had planned to do by an unexpected problem, complication, or other unplanned event? CHECK ONE:

5% (1) Almost never. I can usually work without interruption on things I had planned to work on
GM=3.32 23% (2) Once in a while
23% (3) Fairly frequently
34% (4) Quite frequently
15% (5) Almost constantly. It is almost impossible for me to work on things I had planned to work on

1%=md

7. (I) (27) How do you feel about the amount of time you spend "fire-fighting" or otherwise attending to the everyday crises which are a part of most jobs? CHECK ONE:

1% (1) I spend far too little time "fire-fighting"
1% (2) Too little time
GM=3.54 45% (3) About the right amount of time
21% (4) Too much time
11% (5) I spend far too much time "putting out fires"
19% (8) "Fire-fighting is not part of my job

3%=md

Every worker produces something in his work. It may be a "product" or a "service." But sometimes it is very difficult to identify the product or service. Below are listed some of the products and services being produced in the Office of Administration.

Typed pages	Recommended policies and procedures
Delivered mail	New programs
Dispatched automobiles	Classified jobs
Staff papers and studies	Supplying new equipment
Coding systems	Contracts

These are just a few of the things being produced.

We would like you to think carefully of the things that you produce in your work and of the things produced by those people who work around you in your division.

8. (I) (28) Thinking now of the various things produced by the people you know in your division, how much are they producing? CHECK ONE:

1% (1) It is very low
10% (2) It is fairly low
GM=3.80 20% (3) It is neither high nor low
42% (4) It is fairly high
24% (5) Their production is very high

2%=md

9. (I) (29) How good would you say is the quality of the products or services produced by the people you know in your division? CHECK ONE:

1% (1) Their quality is poor
4% (2) Their quality is not too good
GM=3.96 17% (3) Fair quality
52% (4) Good quality
23% (5) Their products or services are of excellent quality

3%=md

10. (I) Do the people in your division seem to get maximum output from the resources (money, people, equipment, etc.) they have available? That is, how efficiently do they do their work? CHECK ONE:

3% (1) They do not work efficiently at all
13% (2) Not too efficient
GM=3.32 38% (3) Fairly efficient
36% (4) They are very efficient
7% (5) They are extremely efficient

2%=md

(*Card* 1)

11. (I) (31) In order to produce something or provide a service, you have to get from other work groups and divisions in NASA information or materials that are needed in your work. How easy is it for the people in your division to get the materials and information they need to do their job? CHECK ONE:

2%	(1)	It is very difficult to get needed materials and information
22%	(2)	It is fairly difficult
GM=3.50 15%	(3)	It is somewhat easy
42%	(4)	It is fairly easy
16%	(5)	It is very easy to get the needed materials and information

4%=md

12. (I) (32) Your products and services are often used by other people. How easy is it for the people in your division to get what they produce to other people in NASA who need them? CHECK ONE:

2%	(1)	It is very difficult to distribute our products or services
11%	(2)	It is fairly difficult
GM=4.00 10%	(3)	It is somewhat easy
34%	(4)	It is fairly easy
39%	(5)	It is very easy to distribute our products or services

4%=md

13. (I) (33) Some organizations have more trouble than others recruiting people who are good enough to do the jobs expected of them. To what extent does your division have recruiting difficulties? CHECK ONE:

5%	(1)	It is practically impossible for our division to get competent people
25%	(2)	It is quite difficult
GM=3.09 30%	(3)	It is somewhat difficult
20%	(4)	It is not too difficult
11%	(5)	It is not at all difficult for our division to get competent people

9%=md

14. (I) (34) Does the Front Office of the Office of Administration have effective ways of getting the people in your division to do their jobs the way the Front Office wants them done? CHECK ONE:

2%	(1)	Their ways of getting us to do what they want are not effective at all
6%	(2)	Their ways are not too effective
GM=4.43 8%	(3)	Their ways are somewhat effective
22%	(4)	They have fairly effective ways
34%	(5)	The Front Office has very effective ways of getting us to do what they want
3%=md 26%	(8)	I don't know

15. (I) (35) How easy is it for the people in your division to do their work in a way that is different from what the Front Office wants done? CHECK ONE:

13%	(1)	It is practically impossible to do the job a different way
12%	(2)	It is very difficult
GM=3.33 14%	(3)	It is fairly difficult
23%	(4)	It is not too easy
21%	(5)	It is fairly easy to do the job in a different way

17%=md

16. (I) (36) From time to time newer ways are discovered to organize work, and newer equipment and techniques are found with which to do the work. How good a job do the people in your division do at keeping up with these changes that could affect the way they do their work? CHECK ONE:

5%	(1)	They do a poor job of keeping up to date
GM=3.40 11%	(2)	Not too good a job
30%	(3)	A fair job
38%	(4)	They do a good job
11%	(5)	They do an excellent job of keeping up to date

5%=md

(Card 1)

17. (I) (37) When changes are made in the routines or equipment, how quickly do the people in your division accept and adjust to these changes? CHECK ONE:

- 2% (1) Most people accept and adjust to them very slowly
- 10% (2) Rather slowly
- GM=3.73 30% (3) Fairly rapidly
- 21% (4) They adjust very rapidly, but not immediately
- 32% (5) Most people accept and adjust to them immediately

4%=md

18. (I) (38) What proportion of the people in your division readily accept and adjust to these changes? CHECK ONE:

- 3% (1) Considerably less than half of the people accept and adjust to these changes readily
- 8% (2) Slightly less than half do
- GM=3.80 32% (3) The majority do
- 12% (4) Considerably more than half do
- 38% (5) Practically everyone accepts and adjusts to these changes readily

8%=md

19. (I) (39) From time to time emergencies arise; such as, crash programs, schedules moved ahead, or a breakdown in the flow of work occurs. When these emergencies occur, they cause work overloads for many people. Some work groups cope with these emergencies more readily and successfully than others. How good a job do the people in your division do at coping with these situations? CHECK ONE:

- 3% (1) They do a poor job of handling emergency situations
- 6% (2) They do not do very well
- GM=3.99 13% (3) They do a fair job
- 43% (4) They do a good job
- 33% (5) They do an excellent job of handling these situations

2%=md

20. (I) How good a job is done by the people in your division in anticipating problems that may come up in the future and preventing them from occurring or minimizing their effects? CHECK ONE:

- 6% (1) They do a poor job in anticipating problems
- 11% (2) Not too good a job
- GM=3.33 36% (3) A fair job
- 32% (4) They do a very good job
- 11% (5) They do an excellent job in anticipating problems

4%=md

21. (1) (41) Compared with other government groups you have worked in before coming to NASA (or NACA) how would you rate the effectiveness of your present division? CHECK ONE:

- 10% (1) My present division is far less effective than other government groups in which I have worked
- 22% (2) It is less effective than others in which I have worked
- GM=3.55
- 26% (3) It is about the same
- 18% (4) It is more effective than others in which I have worked
- 13% (5) My present division is far more effective than other government groups in which I have worked
- 9% (8) I have never had a non-NASA (or NACA) job in the government

3%=md

22. (I) (42) How well are the different jobs and work activities in your division geared together in the direction of meeting the objectives of the division? CHECK ONE:

- 7% (1) The jobs and activities are not at all well geared together
- GM=3.21 14% (2) Not so well
- 34% (3) Fairly well
- 35% (4) Very well
- 7% (5) The jobs and activities are geared together almost perfectly

3%=md

(Card 1)

23. (I) (43) To what extent do the people you work with in your division make an effort to avoid creating problems or interference with each other's duties and responsibilities? CHECK ONE:

	4%	(1) They try to avoid interfering with each other to a very small extent
	8%	(2) To a small estent
GM=3.75	25%	(3) To a fair extent
	31%	(4) To a great extent
	29%	(5) They try to avoid interfering with each other to a very great extent

3%=md

24. (I) (44) From time to time problems of coordinating the work of people who must work together arise. When they arise in your division, how well are these problems handled. CHECK ONE:

	4%	(1) They are not handled well at all
	13%	(2) Not very well handled
GM=3.43	32%	(3) Fairly well handled
	34%	(4) Very well handled
	15%	(5) These problems are extremely well handled

2%=md

25. (I) (45) How well planned are the work assignments of the people you have to work with in your division? CHECK ONE:

	7%	(1) The work assignments are not at all well planned
	18%	(2) Not so well planned
GM=3.15	34%	(3) Fairly well planned
	29%	(4) Very well planned
	9%	(5) The work assignments are extremely well planned

3%=md

26. (I) (46) Taking all things into consideration, how well do you feel your division does in fulfilling its mission or achieving its goals? CHECK ONE:

	8%	(1) Our division is doing rather poorly
	20%	(2) Fair
GM=3.28	22%	(3) Good
	33%	(4) Very good
	15%	(5) Our division is doing excellently

3%=md

27. (I) Below are listed some different groups of people. On the basis of your experience and information, what proportion of the people in each group would you say are competent to do the work expected of them?

CHECK ONE BOX IN EACH LINE:	Less than half (1)	About half (2)	Over half (3)	A great majority (4)	All or nearly all (5)	I have no dealings with this group (8)	GM
(47) A. People in your division .	2% [ ]	7% [ ]	11% [ ]	33% [ ]	43% [ ]	1% [ ]	4.12
(48) B. People in other divisions within the Office of Administration	1% [ ]	8% [ ]	11% [ ]	31% [ ]	16% [ ]	27% [ ]	3.80
(49) C. People in other Headquarters units	1% [ ]	6% [ ]	10% [ ]	34% [ ]	12% [ ]	30% [ ]	3.78
(50) D. People in the field centers	2% [ ]	7% [ ]	11% [ ]	31% [ ]	11% [ ]	32% [ ]	3.71
(51) E. People in other government (but not NASA) groups . .	1% [ ]	6% [ ]	14% [ ]	29% [ ]	8% [ ]	35% [ ]	3.63

(*Card* 1)

II. OTHER DIVISIONS IN THE OFFICE OF ADMINISTRATION

1. (II) (52) How often does your work require that you contact or work with people in other divisions in the Office of Administration? CHECK ONE:

GM=3.33

23% (1) I contact people in other divisions less than once a month or never
12% (2) Several times each month
7% (3) About once a week
21% (4) Several times each week
35% (5) I contact people in other divisions daily
2%=md

IF YOUR ANSWER TO THE ABOVE QUESTION WAS "LESS THAN ONCE A MONTH OR NEVER," THEN SKIP TO QUESTION III-1.

2. (II) Below are listed the various divisions in the Office of Administration. Please indicate how good a job you feel each division you contact is doing by placing a check in the appropriate column. If you have no contact with a particular division, then check the column headed "NO CONTACT." Do not rate your own division. Instead, check the column headed "My division."

The job this division is doing is . . . . . CHECK ONE BOX FOR EACH DIVISION:	NO CONTACT (8)	Not at all effective (1)	Not too effective (2)	Somewhat effective (3)	Fairly effective (4)	Very effective (5)	My division (9)
(53) A. Security - Headquarters	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(54) B. Security - Agency-wide	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(55) C. Personnel - Headquarters	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(56) D. Personnel - Agency-wide	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(57) E. Headquarters Contracts	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(58) F. Administrative Services	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(59) G. Financial Management	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(60) H. Management Information Systems	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(61) I. Audit	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(62) J. Transportation and Logistics	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(63) K. Property and Supply	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(64) L. Inspections	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(65) M. Management Analysis Staff	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(66) N. Safety	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(67) O. Occupational Medicine	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(68) P. Headquarters Budget Office	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

(*Card* 2)

3. (II) How much tension, conflict, or friction is there between your division and each of the following divisions?

	CHECK ONE BOX FOR EACH DIVISION:	NO CONTACT (8)	No tension, conflict or friction (1)	Little (2)	Some (3)	Considerable (4)	A great deal of tension, conflict or friction (5)	My division (9)
(21)	A. Security - Headquarters	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(22)	B. Security - Agency-wide	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(23)	C. Personnel - Headquarters	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(24)	D. Personnel - Agency-wide	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(25)	E. Headquarters Contracts	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(26)	F. Administrative Services	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(27)	G. Financial Management	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(28)	H. Management Information Systems	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(29)	I. Audit	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(30)	J. Transportation and Logistics	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(31)	K. Property and Supply	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(32)	L. Inspections	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(33)	M. Management Analysis Staff	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(34)	N. Safety	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(35)	O. Occupational Medicine	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
(36)	P. Headquarters Budget Office	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

4. (II) (37) To what extent do the people you work with in <u>other divisions</u> make an effort to avoid creating problems or interfering with your duties and responsibilities? CHECK ONE:

GM=3.66

- 5% (1) They try to avoid interfering to a very small extent
- 6% (2) To a small extent
- 16% (3) To a fair extent
- 28% (4) To a great extent
- 18% (5) They try to avoid interfering to a very great extent

26%=md

5. (II) (38) How cooperative are the people in other divisions about giving you help when you need it? CHECK ONE:

GM=4.10

- _____(1) The majority of people in other divisions are not cooperative
- 2% (2) They are not too cooperative
- 15% (3) They are fairly cooperative
- 31% (4) They are very cooperative
- 27% (5) The majority of people in other divisions are extremely cooperative

25%=md

(Card 2)

6. (II) (39) How much competition is there between the various divisions within the OA? CHECK ONE:

17% (1) There is virtually no competition between divisions
18% (2) A small amount
GM=2.37 18% (3) A fair amount
7% (4) A great deal
3% (5) There is a very great deal of competition between divisions
38%=md

7. (II) (40) To the extent that there is competition between divisions within the OA, would you describe it as healthy or harmful? CHECK ONE:

1% (1) The competition is much more harmful than healthy
10% (2) More harmful than healthy
GM=3.35 11% (3) The competition is as healthy as it is harmful
14% (4) More healthy than harmful
7% (5) The competition is much more healthy than harmful
20% (8) There is not enough competition to describe as either healthy or harmful
38%=md

8. (II) (41) In general, how easy is it for you to get together and exchange ideas and information with people from other divisions in the OA whose jobs and responsibilities are related to yours: CHECK ONE:

5% (1) It is very difficult
9% (2) It is rather difficult
GM=3.69 10% (3) Not too difficult
26% (4) Fairly easy
21% (5) It is very easy
29%=md

9. (II) (42) In general, how well do the people in other divisions whose jobs and responsibilities are related to yours understand the needs and problems faced by your division? CHECK ONE:

3% (1) They don't understand our problems at all
12% (2) They don't understand them very well
GM=3.38 24% (3) They have some understanding
24% (4) Fairly well
9% (5) They understand them very well
28%=md

10. (II) (43) In general, how well do the people in your division understand the needs and problems faced by people in the other divisions with whom they must work? CHECK ONE:

1% (1) We don't understand them at all
6% (2) We don't understand them very well
GM=3.69 21% (3) We have some understanding
33% (4) Fairly well
13% (5) We understand them very well
27%=md

11. (II) (44) In working with people from other divisions, problems are bound to arise from time to time. When these problems do occur, how satisfactorily and promptly are these problems handled for all concerned? CHECK ONE:

2% (1) Usually these problems are handled quite unsatisfactorily and slowly
6% (2) Rather unsatisfactorily
GM=3.47 32% (3) Fairly satisfactorily
22% (4) Very satisfactorily
11% (5) Usually these problems are handled completely satisfactorily and promptly
27%=md

12. (II) (45) What is the manner in which problems between divisions are generally resolved? CHECK ONE:

3% (1) Nothing much is done about these problems
17% (2) The problems are appealed to a higher level in the organization--and resolved there
5% (3) The problems are appealed to a higher level in the organization--but still aren't resolved
40% (4) The problems are worked out at my own level through mutual effort and understanding with the other party
34%=md

(*Card* 3)

III. RELATIONSHIPS WITH FIELD INSTALLATIONS

1. (III) (21) How often does your work require that you contact or work with people in the various field installations? CHECK ONE:

_____(1) It requires almost daily contact with people in the field installations
_____(2) A few times each week
_____(3) It requires contacts several times each month
_____(4) It requires a few contacts each month or less often
_____(5) My work does not require that I work with people in the field installations at all

IF YOUR ANSWER TO THE ABOVE QUESTION WAS "MY WORK DOES NOT REQUIRE CONTACT AT ALL," THEN SKIP TO QUESTION IV-1.

2. (III) Below are listed some of the larger field installations in NASA. (You will notice that Headquarters, other than the Office of Administration, has been included as a field installation.)

a. Please circle the names of three or fewer installations where it is easiest for you to get together and exchange ideas and information with people from the installations whose jobs and responsibilities are related to yours.

(22)	Ames Research Center	(26)	Lewis Research Center
(23)	Kennedy Space Center	(27)	Manned Spacecraft Center
(24)	Goddard Space Flight Center	(28)	Marshall Space Flight Center
(25)	Langley Research Center	(29)	Headquarters--other than the Office of Administration

b. Now look over the above list again and underline the names of three or fewer centers where it is most difficult for you to get together and exchange ideas and information.

3. (III) a. Please circle on the list below the names of three or fewer installations where you feel that the people you work with there best understand the needs and problems faced by your division.

(30)	Ames Research Center	(34)	Lewis Research Center
(31)	Kennedy Space Center	(35)	Manned Spacecraft Center
(32)	Goddard Space Flight Center	(36)	Marshall Space Flight Center
(33)	Langley Research Center	(37)	Headquarters--other than the Office of Administration

b. Now look over the above list again and underline the names of three or fewer installations where you feel that the people you work with there least understand the needs and problems faced by your division.

(*Card* 3)

4. (III)

a. Please circle on the list below the names of three or fewer installations whose needs and problems you feel people in your division understand best.

(38)	Ames Research Center	(42)	Lewis Research Center
(39)	Kennedy Space Center	(43)	Manned Spacecraft Center
(40)	Goddard Space Flight Center	(44)	Marshall Space Flight Center
(41)	Langley Research Center	(45)	Headquarters--other than the Office of Administration

b. Now look over the above list again and underline the names of three or fewer installations whose needs and problems you feel people in your division understand least.

5. (III)

a. Please circle on the list below the names of three or fewer installations with which your division has the least strained (most harmonious) relationships.

(46)	Ames Research Center	(50)	Lewis Research Center
(47)	Kennedy Space Center	(51)	Manned Spacecraft Center
(48)	Goddard Space Flight Center	(52)	Marshall Space Flight Center
(49)	Langley Research Center	(53)	Headquarters--other than the Office of Administration

b. Now underline the names of three or fewer installations with which your division has the most strained relationships.

6. (III)

a. Please circle the names of three or fewer installations where problems of mutual work relationships with your division are handled most promptly and satisfactorily.

(54)	Ames Research Center	(58)	Lewis Research Center
(55)	Kennedy Space Center	(59)	Manned Spacecraft Center
(56)	Goddard Space Flight Center	(60)	Marshall Space Flight Center
(57)	Langley Research Center	(61)	Headquarters--other than the Office of Administration

b. Now underline the names of three or fewer installations where problems of mutual work relationships with your division are handled least promptly and satisfactorily.

(*Card* 3)

7. (III)

a. Please circle the names of three or fewer installations where the people there make the greatest effort to avoid creating problems or interference with your mutual work activities.

(62) Ames Research Center	(66) Lewis Research Center
(63) Kennedy Space Center	(67) Manned Spacecraft Center
(64) Goddard Space Flight Center	(68) Marshall Space Flight Center
(65) Langley Research Center	(69) Headquarters--Other than the Office of Administration

b. Now underline the names of three or fewer installations where the people make the least effort to avoid creating problems or interference with your mutual work activities.

8. (III) (70) Have you had any experience working at a field installation either in NASA or another governmental agency? CHECK ONE:

_____(1) Yes, I have worked in field installations in NASA or another agency
_____(5) No, I have not

9. (III) (71) When you contact the field centers, are most of your contacts with administrative or technical people? CHECK ONE:

_____(1) Administrative people only
_____(2) Mostly administrative people
_____(3) Both technical and administrative people about equally
_____(4) Mostly technical people
_____(5) Technical people only

10. (III) How do you usually contact people at the field installations? CHECK AS MANY ANSWERS AS APPROPRIATE:

(72) _____(1) Only through the institutional representatives
(73) _____(2) Mostly through the institutional representatives
(74) _____(3) Telephone
(75) _____(4) Personal visits to the installations
(76) _____(5) Telegraph (TWX)
(77) _____(6) Letter (Mail)
(78) _____(7) Other (please specify)

_____

IF YOU DID NOT CHECK "PERSONAL VISITS" IN QUESTION III-10, SKIP TO QUESTION IV-1.

11. (III) (79) When you visit a field installation, how long do you usually stay at each center you visit? CHECK ONE:

_____(1) An average of one day or less at each installation
_____(2) 2-3 days
_____(3) 4-5 days
_____(4) 6-7 days
_____(5) An average of more than seven days at each installation

12. (III) (80) How long have you made it a regular practice to make personal visits to the field installations? CHECK ONE:

_____(1) I have begun making regular personal visits within the last six months
_____(2) Six months to one year
_____(3) Between the last one to two years
_____(4) The last two to four years
_____(5) For more than the last four years
_____(8) My field visits are not a regular practice

(Card 4)

Questions on this page are to be answered with reference to your supervisor as described on the previous page.

1. (IV) (21) How much does your supervisor know about doing each of the jobs in your area? CHECK ONE:

GM=3.61 DD=3.84 BC=3.48

- 9% (1) He knows very little about doing the jobs in my area
- 15% (2) Some
- 16% (3) Quite a bit
- 25% (4) A great deal
- 33% (5) He knows a very great deal about doing the jobs in my area

2%=md

2. (IV) (22) How well does your supervisor handle the technical side of his job--for example, general expertness, knowledge of job, technical skills needed, etc.? CHECK ONE:

GM=4.06 DD=4.28 BC=3.89

- 2% (1) He does not handle the technical side of his job at all well
- 6% (2) Not so well
- 18% (3) Fairly well
- 29% (4) Very well
- 42% (5) He handles the technical side of his job extremely well

3%=md

3. (IV) (23) How much help do you feel you get from your supervisor when you really need it? CHECK ONE:

GM=4.03 DD=4.24 BC=3.89

- 4% (1) He never gives me any help when I really need it
- 9% (2) Hardly ever gives me any help
- 15% (3) Sometimes gives me help
- 21% (4) Usually gives me help
- 48% (5) He always gives me help when I really need it

3%=md

4. (IV) (24) Do you feel that your supervisor will go to bat or stand up for you? CHECK ONE:

GM=3.88 DD=3.92 BC=3.86

- 6% (1) No, he won't go to bat for me
- 7% (2) Probably won't
- 19% (3) May or may not
- 26% (4) Probably will
- 40% (5) Yes, definitely he will go to bat for me

2%=md

5. (IV) (25) How free do you feel to discuss important things about your job with your supervisor? CHECK ONE:

GM=3.98 DD=4.03 BC=3.97

- 6% (1) I feel not at all free to discuss things about my job with my supervisor
- 11% (2) Not very free
- 13% (3) Fairly free
- 17% (4) Rather free
- 51% (5) I feel completely free to discuss things about my job with my supervisor

2%=md

6. (IV) (26) In solving job problems, does your supervisor generally try to get your ideas and opinions? CHECK ONE:

GM=3.06 DD=3.27 BC=3.01

- 16% (1) He seldom gets my ideas and opinions in solving job problems
- 21% (2) He sometimes does this
- 19% (3) He often does this
- 22% (4) He almost always does this
- 18% (5) He always gets my ideas and opinions in solving job problems

4%=md

(Card 4)

REMINDER: Questions on this page are to be answered with reference to your supervisor as described at the beginning of this section.

7. (IV) (27) To what extent do you feel that you, personally, can influence the activities and decisions of your supervisor on matters that are of concern to you? CHECK ONE:

GM=2.90 DD=3.07 BC=2.82

- 14% (1) I can't influence him at all
- 24% (2) To some extent
- 26% (3) To a moderate extent
- 25% (4) To a considerable extent
- 8% (5) I can influence him to a great extent

3%=md

8. (IV) (28) How well does your supervisor handle the human relations side of his job --for example, getting people to work well together, getting individuals to do the best they can, giving recognition for good work done, letting people know where they stand, etc.? CHECK ONE:

GM=3.27 DD=3.40 BC=3.24

- 13% (1) He does not handle the human relations side of his job at all well
- 14% (2) Not so well
- 24% (3) Fairly well
- 27% (4) Very well
- 20% (5) He handles the human relations side of his job extremely well

2%=md

9. (IV) (29) How frequently is work time lost because your supervisor fails to do the proper planning and scheduling? CHECK ONE:

GM=2.46 DD=2.24 BC=2.61

- 16% (1) Work time is never lost through his poor planning and scheduling
- 37% (2) Almost never
- 27% (3) Occasionally
- 7% (4) Frequently
- 6% (5) Work time is quite frequently lost through his poor planning and scheduling

6%=md

10. (IV) (30) In carrying out the basic tasks of your job, does your supervisor supervise you closely or does he put you on your own? CHECK ONE:

GM=1.95 DD=2.14 BC=1.89

- 36% (1) He uses very general supervision; I am definitely on my own
- 41% (2) He uses fairly general supervision; I am pretty much on my own
- 12% (3) He uses a moderate amount of supervision
- 6% (4) He uses fairly close supervision
- 3% (5) He uses very close supervision; he doesn't put me on my own

2%=md

11. (IV) (31) How well do you feel you understand the work problems and needs that your supervisor has? CHECK ONE:

GM=3.74 DD=3.78 BC=3.77

- 5% (1) I have no understanding of his work problems and needs
- 6% (2) A little understanding
- 17% (3) Some understanding
- 55% (4) Considerable understanding
- 16% (5) I have complete understanding of his work problems and needs

2%=md

12. (IV) (32) How well do you feel your supervisor understands the work problems and needs which you have? CHECK ONE:

GM=3.66 DD=3.79 BC=3.64

- 4% (1) He has no understanding of my work problems and needs
- 11% (2) A little understanding
- 18% (3) Some understanding
- 46% (4) Considerable understanding
- 19% (5) He has complete understanding of my work problems and needs

2%=md

(Card 4)

REMINDER: Questions on this page are to be answered with reference to your supervisor as described at the beginning of this section.

13. (IV) (33) How well does your supervisor handle the <u>administrative side</u> of his job--for example, planning and scheduling the work, indicating clearly when work is to be finished, assigning the right job to the right man, inspecting and following up on the work that is done, etc.? CHECK ONE:

6% (1) He does not handle the administrative side of his job at all well
GM=3.60
DD=3.87 8% (2) Not so well
BC=3.39 27% (3) Fairly well
32% (4) Very well
22% (5) He handles the administrative side of his job extremely well
4%=md

14. (IV) (34) How well does your supervisor understand the "big picture" of what NASA is all about--does he see how NASA's mission relates to the social, economic, and political environment of the country? CHECK ONE:

1% (1) He does not understand the "big picture" at all well
15% (8) I don't know
GM=4.20 2% (2) Not so well
DD=4.35 13% (3) Fairly well
BC=4.01 29% (4) Very well
37% (5) He understands the "big picture" extremely well
2%=md

15. (IV) (35) How good a job does your supervisor do at personally representing your work group in dealings with other groups in NASA or outside organizations? CHECK ONE:

7% (1) He does a rather poor job at representing us
GM=3.42 19% (2) Fair job
DD=3.87 18% (3) Good job
Bc=3.16 23% (4) Very good job
24% (5) He does an excellent job at representing us
9%=md

16. (IV) (36) To the best of your knowledge, is your supervisor a better <u>subordinate with his supervisor</u> than he is a <u>supervisor over his subordinates</u>? CHECK ONE:

11% (1) He is a much better subordinate than he is a supervisor
GM=2.70 16% (2) Better subordinate than
DD=2.64 supervisor
BC=2.71 53% (3) He is equally good as a subordinate and as a supervisor
7% (4) Better supervisor than subordinate
2% (5) He is a much better supervisor than he is a subordinate
11%=md

17. (IV) (37) How well does your supervisor handle the <u>institutional leadership side</u> of his job--for example, creating and formulating policy; handling matters of the agency's relationships to outside organizations, agencies, and groups; understanding the importance and relationships of the agency's mission on the political, social, and economic environment? CHECK ONE:

2% (1) He does not handle the institutional leadership side of his job at all well
19% (8) I don't know
GM=3.89 4% (2) Not so well
DD=4.07 18% (3) Fairly well
BC=3.66 29% (4) Very well
23% (5) He handles the institutional leadership side of his job extremely well
4%=md

(Card 4)

REMINDER: Questions on this page are to be answered with reference to your supervisor as described at the beginning of this section.

18. (IV) (38) How often does your supervisor belittle you, or act sarcastic toward you? CHECK ONE:

62% (1) He never belittles me
GM=1.69 15% (2) Seldom
DD=1.66 13% (3) Occasionally
BC=1.65 6% (4) Frequently
3% (5) He very frequently belittles me
2%=md

IF YOU CHECKED "He never belittles me" IN QUESTION 18, SKIP THE ITEMS IN THE BOX BELOW AND GO ON TO QUESTION 21.

19. (IV) (39) After your supervisor has belittled you or been sarcastic in his criticism of your work, how much trouble do you have getting back to work? CHECK ONE:

11% (1) I have no trouble at all getting back to work
GM=2.16 14% (2) Very little trouble
DD=2.16 7% (3) A fair amount of trouble
BC=2.06 3% (4) Considerable trouble
1% (5) I have a great deal of trouble getting back to work
63%=md

20. (IV) (40) After your supervisor has been sarcastic or belittling about your work, do you take it out on other people, either at work or at home? CHECK ONE:

17% (1) I never take it out on on other people
GM=1.85 12% (2) Seldom
DD=1.93 6% (3) Occasionally
BC=1.80 1% (4) Often
1% (5) I very often take it out on other people
63%=md

21. (IV) (41) How often do you become irritated or annoyed with your supervisor? CHECK ONE:

17% (1) I never become irritated or annoyed with my supervisor
GM=2.47 37% (2) Seldom
DD=2.40 31% (3) Occasionally
BC=2.50 8% (4) Often
6% (5) I am very often annoyed with my supervisor
2%=md

22. (IV) (42) How much confidence and trust do you have in your supervisor? CHECK ONE:

4% (1) I have no confidence and trust in my supervisor at all
GM=3.62 11% (2) Not very much confidence
DD=3.78 27% (3) A fair amount
BC=3.51 29% (4) A great deal
26% (5) I have complete confidence and trust in my supervisor
3%=md

23. (IV) (43) How much confidence and trust does your supervisor have in you? CHECK ONE:

10% (1) He has no confidence and trust in me at all
GM=3.72 5% (2) Not very much
DD=3.68 20% (3) A fair amount
BC=3.76 36% (4) A great deal
13% (5) My supervisor has complete confidence and trust in me
1%=md 23% (8) I don't know

(Card 4)

REMINDER: Questions on this page are to be answered with reference to your supervisor as described at the beginning of this section.

24. (IV) (44) Does your supervisor deal with his subordinates on a man-to-man basis, or does he deal with them primarily as a group? CHECK ONE:

12% (1) He uses man-to-man methods of supervision entirely
GM=2.43 45% (2) He uses man-to-man methods
DD=2.51 more than group methods
Bc=2.44 25% (3) He uses group and man-to-man methods about equally
9% (4) He uses group methods more than man-to-man methods
3% (5) He uses group methods of supervision entirely
5%=md

25. (IV) (45) Listed below are five reasons generally given by people when they are asked why they do the things their supervisors suggest or want them to do. Please read all five carefully. Then check the one reason that best describes why you do the things your supervisor suggests or wants you to do.

I do the things my supervisor suggest or wants me to do because: (CHECK ONE)

42% (1) I respect his competence and good judgment, particularly about things with which he is more experienced than I.
5% (2) I admire him for his personal qualities and want to act in a way that merits his respect and admiration.
4% (3) He is in a good position to recommend promotions and/or step increases based on his knowledge of my work.
5% (4) He can apply pressure and penalize those who do not cooperate.
42% (5) I respect his authority, which gives him the right to expect that his suggestions will be carried out.
2%=md

26. (IV) (46) Does your supervisor have the authority he needs in order to carry out his responsibilities? CHECK ONE:

2% (1) No, my supervisor has almost no authority to carry out his responsibilities
GM=3.65 15% (2) Not really; on most
DD=3.70 matters he does not have
BC=3.51 the authority he needs
20% (3) Maybe; for some responsibilities, yes; for others, no
35% (4) Yes, for most matters he has the authority he needs
24% (5) Yes, he has all the authority he needs
4%=md

27. (IV) (47) How much pressure to "get out the work" do you think your supervisor receives, over and above what you think is reasonable? CHECK ONE:

7% (1) He receives no pressure
GM=3.28 14% (2) A little
DD=3.20 30% (3) Some
BC=3.15 27% (4) Considerable
13% (5) He receives a great deal of pressure
9%=md

28. (IV) (48) How often do you discuss things with your supervisor that are not related to work? CHECK ONE:

13% (1) I never discuss things with my supervisor that are not related to work
GM=2.67 30% (2) Rarely
DD=2.70 36% (3) Sometimes
BC=2.71 14% (4) Often
5% (5) I very often discuss non-work matters with my supervisor
1%=md

(Card 4)

REMINDER: Questions on this page are to be answered with reference to your supervisor as described at the beginning of this section.

29. (IV) (49) Some people can be described as "approachable" (easy to talk with), while other are "distant" (not easy to talk with). Would you describe your supervisor as "approachable" or "distant?" CHECK ONE:

	4%	(1) My supervisor is very definitely distant
GM=3.86	9%	(2) More distant than
DD=3.88		approachable
BC=3.92	21%	(3) Approachable on some things, distant on others
	24%	(4) More approachable than distant
	39%	(5) My supervisor is very definitely approachable
	2%=md	

30. (IV) (50) To what extent are decisions in your division made by groups; that is, by a supervisor and his subordinates working through a matter together and agreeing on what should be done? CHECK ONE:

	8%	(1) Such group decision making is never done in my division
GM=3.31	16%	(2) It is rarely done
DD=3.50	27%	(3) Sometimes done
BC=3.23	25%	(4) Fairly often done
	18%	(5) Such group decision making is done very frequently in my division
	7%=md	

31. How do you think your supervisor would feel about how effective a job your division is doing? How well do you think he feels the division is doing in fulfilling its mission or achieving its goals? CHECK ONE:

	4%	(1) He probably feels that we are doing rather poorly
GM=3.64	11%	(2) Fair
DD=3.82	22%	(3) Good
BC=3.56	37%	(4) Very good
	22%	(5) He probably feels that we are doing an excellent job
	4%=md	

32. (IV) (52) All in all, how effective a job do you think your supervisor is doing? CHECK ONE:

	7%	(1) He is doing a rather poor job
GM=3.43	17%	(2) A fair job
DD=3.66	22%	(3) A good job
BC=3.24	30%	(4) A very good job
	21%	(5) He is doing an excellent job
	3%=md	

(Card 4)

V. THE FRONT OFFICE OF THE OFFICE OF ADMINISTRATION

REMINDER: The term "Front Office" refers to the three people who head up the Office of Administration. This includes the Deputy Associate Administrator for Administration (Mr. Young), the Director of Headquarters Administration (Mr. Hodgson), and the Director of Management of Coordination (Mr. Cushman).

1. (V) (53) How clearly defined are the policies and the various rules and regulations of the Office of Administration (OA) that affect your job? CHECK ONE:

GM=3.60

- 8% (1) They should be defined much more clearly
- 10% (2) They should be defined more clearly
- 18% (3) They should be defined somewhat more clearly
- 27% (4) They are defined almost as clearly as they should be defined
- 25% (5) They are defined as clearly as they should be defined.

11%=md

2. (V) (54) How closely do the people in the Front Office of the OA follow the policies they establish that affect your work as well as theirs? CHECK ONE:

GM=3.48

- 1% (1) They don't follow them at all
- 38% (8) I don't know
- 7% (2) They don't follow them too closely
- 19% (3) They follow them fairly closely
- 17% (4) They follow them very closely
- 9% (5) They follow their own policies extremely closely

8%=md

3. (V) (55) How often do the people in the Front Office of the OA change their policies affecting your work without advance notification?

GM=2.46

- 12% (1) They never change policies without advance notice
- 33% (2) They seldom change policies without advance notice
- 21% (3) They occasionally change policies without advance notice
- 11% (4) They often change policies without advance notice
- 2% (5) They are constantly changing policies without advance notice

21%=md

4. (V) (56) How well do the people in the Front Office of the OA understand your needs and problems in your work? CHECK ONE:

GM=2.79

- 9% (1) They don't understand my needs and problems well at all
- 37% (8) I don't know
- 14% (2) Not too well
- 16% (3) Fairly well
- 15% (4) They understand them very well
- 3% (5) They understand my needs and problems perfectly

7%=md

(Card 4)

5. (V) (57) To what extent are the people in the Front Office of the OA fair and reasonable in their decisions that affect your work, regardless of whether those decisions are favorable to you or not? CHECK ONE:

GM=3.41

2%	(1) They are not at all fair and reasonable
35%	(8) I don't know
8%	(2) They are not too fair and reasonable
19%	(3) They are somewhat fair and reasonable
20%	(4) They are very fair and reasonable
8%	(5) They are extremely fair and reasonable

8%=md

6. (V) (58) How easy is it for you to communicate your needs and problems related to your work up to the people in the Front Office of the OA? CHECK ONE:

GM=2.70

21%	(1) It is not at all easy to communicate my work needs and problems up to the Front Office
23%	(2) Not too easy
6%	(3) Somewhat easy
17%	(4) Fairly easy
12%	(5) It is very easy to communicate my work needs and problems up to the Front Office

21%=md

7. (V) (59) To what extent do you understand the viewpoints, needs, and problems of the people in the Front Office of the OA? CHECK ONE:

GM=2.57

24%	(1) To a very small extent, I understand the views and problems of the Front Office
15%	(2) To a small extent
28%	(3) To some extent
15%	(4) To a considerable extent
6%	(5) I understand the views and problems of the people in the Front Office to a very great extent

12%=md

8. (V) (60) To what extent do you bend the rules and regulations in order to get the job done? CHECK ONE?

GM=2.28

18%	(1) I never bend the rules and regulations in order to get the job done
38%	(2) I bend the rules and regulations a little bit
17%	(3) I bend the rules and regulations to a fair extent
6%	(4) I bend the rules and regulations to a considerable extent
4%	(5) I bend the rules and regulations a great deal in order to get the job done

17%=md

9. (V) (61) How would you rate the Front Office of the OA on overall effectiveness? How well does it do in fulfilling its mission or achieving its goals? CHECK ONE:

GM=3.30

4%	(1) The Front Office is doing rather poorly
35%	(8) I don't know
11%	(2) Fair
13%	(3) Good
22%	(4) Very good
8%	(5) The Front Office is doing excellently

7%=md

10. (V) (62) How well do the people in the Front Office work together to achieve the mission of the Office of Administration? CHECK ONE:

GM=3.78

0%	(1) The people in the Front Office don't work together at all well
61%	(8) I don't know
3%	(2) They don't work together very well
9%	(3) They work fairly well together
14%	(4) They work very well together
6%	(5) The people in the Front Office work extremely well together

7%=md

(Card 5)

11. (V) (63) How much of a team feeling would you say there is throughout the OA? CHECK ONE:

GM=2.69

17%	(1)	There is hardly any team feeling in the OA
13%	(2)	A small amount
30%	(3)	A fair amount
16%	(4)	A great amount
4%	(5)	There is a tremendous amount of team feeling in the OA

20%=md

12. (V) (64) Still thinking about a sense of "teamness," what effect does the behavior of the Front Office have on the development of a team feeling in the OA? CHECK ONE:

GM=3.52

4%	(1)	They seem to be doing everything they can to prevent the development of a team feeling
1%	(2)	They try to keep a team feeling from developing
16%	(3)	They do nothing one way or another about a sense of teamness
20%	(4)	They do try to develop a team feeling
7%	(5)	The Front Office does a great deal to foster a team feeling
43%	(8)	I don't know

8%=md

(*Card* 5)

VI. CHARACTERISTICS OF YOUR JOB

1. (VI) Listed below are different kinds of opportunities which a job might afford. If you were to seek another job, how much importance would you personally attach to each of these (disregarding whether or not your present job provides them)?

CHECK ONE BOX IN EACH LINE:	Importance I would attach: Slight or None (1)	Mod-erate (2)	Consid-erable (3)	Great (4)	Utmost (5)	md	Grand mean
(21) A. to make full use of my knowledge and skills	0% [ ]	2% [ ]	18% [ ]	36% [ ]	43% [ ]	1%	4.21
(22) B. to earn a good salary	1% [ ]	7% [ ]	33% [ ]	37% [ ]	20% [ ]	1%	3.69
(23) C. to advance in authority and status	7% [ ]	20% [ ]	36% [ ]	23% [ ]	13% [ ]	1%	3.15
(24) D. to be a member of a hard-working team	3% [ ]	8% [ ]	24% [ ]	40% [ ]	24% [ ]	2%	3.74
(25) E. to work for competent, fair supervisors	1% [ ]	2% [ ]	18% [ ]	36% [ ]	42% [ ]	1%	4.18
(26) F. to associate with important people in the organization . . .	26% [ ]	35% [ ]	22% [ ]	10% [ ]	5% [ ]	3%	2.32
(27) G. to work on difficult and challenging problems	2% [ ]	8% [ ]	24% [ ]	42% [ ]	23% [ ]	2%	3.78
(28) H. to have freedom to carry out my own ideas	2% [ ]	10% [ ]	30% [ ]	37% [ ]	20% [ ]	1%	3.65
(29) I. to have clear objectives toward which I can aim my work	2% [ ]	7% [ ]	24% [ ]	40% [ ]	26% [ ]	1%	3.82
(30) J. to be evaluated fairly in proportion to what I contribute	2% [ ]	6% [ ]	18% [ ]	38% [ ]	35% [ ]	2%	4.00
(31) K. to have job security	5% [ ]	21% [ ]	28% [ ]	24% [ ]	21% [ ]	1%	3.34
(32) L. to have a lot of responsibility	3% [ ]	22% [ ]	38% [ ]	25% [ ]	11% [ ]	2%	3.19

REMINDER: Did you check one box in each line?

(*Card* 5)

2. Now, to what extent does your present job actually provide an opportunity for
(VI) each of these factors?

CHECK ONE BOX IN EACH LINE:	Slight or None (1)	Mod-erate (2)	Consid-erable (3)	Great (4)	Utmost (5)	md	Grand Mean
(33) A. making full use of my knowledge and skills	8% [ ]	28% [ ]	33% [ ]	19% [ ]	10% [ ]	1%	2.95
(34) B. earning a good salary	10% [ ]	28% [ ]	40% [ ]	18% [ ]	3% [ ]	2%	3.06
(35) C. advancing in authority and status	38% [ ]	31% [ ]	20% [ ]	7% [ ]	1% [ ]	2%	2.01
(36) D. being a member of a hard-working team	14% [ ]	24% [ ]	30% [ ]	23% [ ]	9% [ ]	2%	2.90
(37) E. working for competent, fair supervisors	10% [ ]	21% [ ]	24% [ ]	26% [ ]	17% [ ]	2%	3.20
(38) F. associating with important people in the organization	27% [ ]	30% [ ]	25% [ ]	12% [ ]	4% [ ]	1%	2.30
(39) G. working on difficult and challenging problems	16% [ ]	28% [ ]	25% [ ]	20% [ ]	9% [ ]	2%	2.78
(40) H. having freedom to carry out my own ideas	17% [ ]	32% [ ]	25% [ ]	18% [ ]	6% [ ]	2%	2.63
(41) I. having clear objectives toward which I can aim my work	14% [ ]	33% [ ]	30% [ ]	16% [ ]	5% [ ]	2%	2.66
(42) J. being evaluated fairly in proportion to what I contribute	14% [ ]	22% [ ]	30% [ ]	24% [ ]	7% [ ]	2%	2.88
(43) K. having hob security	5% [ ]	18% [ ]	31% [ ]	31% [ ]	13% [ ]	2%	3.30
(44) L. having a lot of responsibility	16% [ ]	31% [ ]	27% [ ]	18% [ ]	6% [ ]	2%	2.65

REMINDER: Did you check one box in each line?

(Card 5)

3. (VI) (45) How satisfied are you with the amount of pay your job provides you? CHECK ONE:

9% (1) Very dissatisfied
16% (2) Fairly dissatisfied
GM=3.30 23% (3) Neither satisfied nor dissatisfied
37% (4) Fairly well satisfied
13% (5) Completely satisfied
2%=md

4. (VI) (46) How hard, would you say, are the people you know in your division trying to achieve a high level of performance? CHECK ONE:

1% (1) They are not trying hard at all to achieve a high level of performance
10% (2) Not so hard
GM=3.76 22% (3) Fairly hard
43% (4) They are trying hard
21% (5) They are trying their hardest to achieve a high level of performance
3%=md

5. (VI) (47) Do you ever think about quitting your present job? CHECK ONE:

19% (1) No, I have never thought about quitting
30% (2) I've thought about it once or twice
GM=2.58 26% (3) I think about quitting every so often
14% (4) I think about quitting fairly frequently
7% (5) I think about quitting nearly every day
3%=md

6. (VI) (48) How do you feel about your own chances for promotion to a better job in the Office of Administration? CHECK ONE:

26% (1) I am very dissatisfied with my chances for promotion
GM=2.58 18% (2) Quite dissatisfied
30% (3) Neither satisfied nor dissatisfied
16% (4) Quite satisfied
7% (5) I am very satisfied with my chances for promotion
3%=md

7. (VI) What do you think actually counts the most today in getting a promotion in the Office of Administration? CHECK ONE:

32% (1) Performance and potential
3% (2) Seniority
27% (3) Who likes you
34% (4) I don't know
4%=md

8. (VI) (50) How much pressure to "get out the work" do you feel, over and above what you think is reasonable?

32% (1) I feel no pressure over and above what is reasonable
19% (2) A little pressure
GM=2.48 21% (3) Some pressure
18% (4) Considerable pressure
7% (5) I feel a great deal of pressure over and above what is reasonable
3%=md

9. (VI) (51) How successful has NASA been in getting you to meet its needs--for example, getting you to produce what they want, when they want it, in the manner they want? CHECK ONE:

1% (1) They have not been successful at all at getting me to meet NASA's needs
2% (2) Not too successful
GM=4.36 8% (3) Somewhat successful
33% (4) Fairly successful
51% (5) They have been very successful at getting me to meet NASA's needs
4%=md

10. (VI) (52) How good a job has NASA done at meeting your needs--for example, interesting work, adequate pay, a chance to use or develop your talents, or whatever it is that you want from your job? CHECK ONE:

9% (1) NASA has not done a good job at all at meeting my needs
17% (2) Not too good a job
GM=3.13 35% (3) A fair job
28% (4) A very good job
10% (5) NASA has done an excellent job at meeting my needs
2%=md

(Card 5)

11. (VI) (53) How much time do you spend reading technical journals, monographs, or other papers related to your field of work? CHECK ONE:

14% (1) None
15% (2) An hour a month or so
GM=3.02 35% (3) Several hours a month
26% (4) Several hours a week
9% (5) More than five hours a week
2%=md

12. (VI) (54) Do you ever attend seminars, conferences, conventions, etc., where people in your field of work gather to discuss common problems and interests? CHECK ONE:

34% (1) No, I have never attended such gatherings
GM=2.28 19% (2) I have once or twice
29% (3) I do once in a while
17% (4) I go often, whenever I can
1%=md

13. (VI) (55) How frequently do you work on job-related matters at home? CHECK ONE:

38% (1) Never
25% (2) Once a month or so
GM=2.24 14% (3) About once a week
17% (4) Several times a week
4% (5) Every day
2%=md

14. (VI) (56) People view their professions in different ways. Which of the ways listed below is most like the way you view your profession?

49% (1) I see my profession primarily as a means of rendering public service
18% (2) I see my profession primarily as a means of getting ahead in the government
26% (3) I am interested primarily in the practice of my profession.
7%=md

15. (VI) (57) All in all, how satisfied are you with your present job? CHECK ONE:

7% (1) Very dissatisfied
16% (2) Fairly dissatisfied
20% (3) Neither satisfied nor dissatisfied
GM=3.42 40% (4) Fairly satisfied
16% (5) Very satisfied
1%=md

16. (VI) (58) Thinking about working for the government in Washington and all the various departments and agencies (Labor, DOD, Agriculture, etc.), how satisfied are you to be working in NASA? CHECK ONE:

4% (1) Very dissatisfied
8% (2) Quite dissatisfied
GM=3.76 23% (3) Neither satisfied nor dissatisfied
36% (4) Quite satisfied
27% (5) Very satisfied
2%=md

(*Card* 5)

VII. INFLUENCE

1. (VII) We are interested in finding out how much influence people at different levels in the Office of Administration have. How much influence do the people and groups listed below have <u>within</u> the Office of Administration?

	CHECK ONE BOX IN EACH LINE:	Little or no influence (1)	Some influence (2)	Quite a bit of influence (3)	A great deal of influence (4)	A very great deal of influence (5)	I don't know (8)	Grand Mean
(59)	A. The Deputy Associate Administrator for Administration (Jack Young)	1% [ ]	1% [ ]	2% [ ]	7% [ ]	64% [ ]	23% [ ]	4.68
(60)	B. The Director of Management Coordination (Mike Cushman)	1% [ ]	3% [ ]	9% [ ]	22% [ ]	17% [ ]	45% [ ]	3.97
(61)	C. The Director of Headquarters Administration (Al Hodgson)	1% [ ]	8% [ ]	15% [ ]	19% [ ]	18% [ ]	36% [ ]	3.74
(62)	D. The director of your division	7% [ ]	22% [ ]	18% [ ]	16% [ ]	14% [ ]	18% [ ]	3.09
(63)	E. The branch chiefs in your division	19% [ ]	29% [ ]	14% [ ]	6% [ ]	6% [ ]	16% [ ]	2.36
(64)	F. The non-supervisory professionals in your division	32% [ ]	30% [ ]	7% [ ]	3% [ ]	2% [ ]	19% [ ]	1.81
(65)	G. The non-supervisory non-professionals in your division	54% [ ]	15% [ ]	3% [ ]	1% [ ]	2% [ ]	20% [ ]	1.41
(66)	H. Yourself (Skip this if you are "D" above.)	45% [ ]	24% [ ]	8% [ ]	2% [ ]	1% [ ]	11% [ ]	1.62

(*Card* 5)

2. We are also interested in knowing whether you feel that each of these persons or groups has about the right amount of influence or not.

	CHECK ONE BOX IN EACH LINE:	Has far too much influence (1)	Has too much influence (2)	Has about the right amount of influence (3)	Has too little influence (4)	Has far too little influence (5)	I don't know (8)	Grand Mean
(67)	A. The Deputy Associate Administrator for Administration (Jack Young)	5% [ ]	11% [ ]	42% [ ]	1% [ ]	[ ]	35% [ ]	2.97
(68)	B. The Director of Management Coordination (Mike Cushman)	1% [ ]	4% [ ]	35% [ ]	3% [ ]	[ ]	53% [ ]	2.96
(69)	C. The Director of Headquarters Administration (Al Hodgson)	2% [ ]	3% [ ]	35% [ ]	9% [ ]	1% [ ]	45% [ ]	3.12
(70)	D. The director of your division	[ ]	1% [ ]	36% [ ]	21% [ ]	10% [ ]	25% [ ]	3.57
(71)	E. The branch chiefs in your division	1% [ ]	1% [ ]	32% [ ]	20% [ ]	14% [ ]	21% [ ]	3.69
(72)	F. The non-supervisory professionals in your division	[ ]	[ ]	37% [ ]	15% [ ]	13% [ ]	27% [ ]	3.60
(73)	G. The non-supervisory non-professionals in your division	[ ]	2% [ ]	43% [ ]	8% [ ]	11% [ ]	29% [ ]	3.43
(74)	H. Yourself (Skip this if you are "D" above.)	1% [ ]	1% [ ]	30% [ ]	21% [ ]	14% [ ]	21% [ ]	3.69

3. (VII) (75) How do you feel about the amount of authority you have to carry out your responsibilities? CHECK ONE:

2.48

1%(1) I have more authority than I need to carry out my responsibilities
55%(2) I have about the right amount of authority
22%(3) I have less authority than I need
10%(4) I have far too little authority to carry out my responsibilities

(Card 6)

VIII. PERSONAL CHARACTERISTICS

The following questions ask about personal characteristics such as health, sleep, worry, etc. The Institute for Social Research has been studying the relationship of these factors to the job situation in a number of different organizations. A limited amount of information has been gathered from people who work in government, and we would like to gather more. We remind you that your individual answers are kept in the strictest confidence and will never be known by people in your organization. We also remind you that you may, if you prefer, answer none or only some of these questions, and go on to the next section.

1. (VIII) How good would you say that your appetite is? CHECK ONE:

GM=4.28

1%	(1) My appetite is usually poor
1%	(2) Usually not too good
8%	(3) Usually fair
49%	(4) My appetite is usually very good
39%	(5) My appetite is always excellent

2%=md

2. (VIII) Do you have any trouble digesting your food? CHECK ONE:

GM=1.86

40%	(1) I never have trouble digesting my food
37%	(2) Seldom
17%	(3) Occasionally
3%	(4) Often
1%	(5) I have trouble digesting my food most of the time

2%=md

3. (VIII) How often are you bothered by acid indigestion, heartburn, or an acid stomach? CHECK ONE:

GM=2.23

27%	(1) Never
44%	(2) A few times a year--hardly ever
13%	(3) Once or twice a month
6%	(4) About once a week
8%	(5) Two or three times a week or more

2%=md

4. (VIII) (24) Have you ever had pains in the stomach (any painful feelings or anything like that)? CHECK ONE:

49%	(1) No
46%	(5) Yes

5%=md

IF YES, ANSWER THE FOLLOWING QUESTIONS (see next column) IN THE BOX:

5. (VIII) They usually come on . . . CHECK ONE OR MORE:

4%	(1) Before eating
1%	(2) While eating
7%	(3) Right after eating
11%	(4) Two or more hours after eating
23%	(5) The pains have no relation to eating

6. (VIII) Is the pain relieved by any of the following? CHECK ONE OR MORE:

4%	(1) Eating
7%	(2) Drinking milk
5%	(3) Belching
10%	(4) Resting
19%	(5) Bicarbonate of soda, Tums, or anti-acids like that
7%	(6) Other (please specify) _____

7. (VIII) Does the pain ever wake you or keep you awake at night? CHECK ONE:

32%	(1) No
11%	(5) Yes

8. (VIII) How often do you suffer from constipation or difficulty in having bowel movements? CHECK ONE:

GM=1.69

47%	(1) Never
37%	(2) Less than once a month
5%	(3) Every week or two
3%	(4) Once or twice a week
2%	(5) Just about every day

6%=md

(Card 6)

9. (VIII) Have you ever had an ulcer? CHECK ONE:

87% (1) No
5% (3) I think so, but there was no proof
6% (5) Yes, it was proven by an x-ray or by an operation
2%=md

10. (VIII) Do you ever have any trouble getting to sleep? CHECK ONE:

31% (1) I never have trouble getting to sleep
39% (2) Once in a great while
GM=2.04 23% (3) Occasionally
4% (4) Pretty often
1% (5) I have trouble getting to sleep nearly all the time
2%=md

11. (VIII) Do you ever have any trouble staying asleep? CHECK ONE:

37% (1) I never have trouble staying asleep
37% (2) Once in a great while
GM=1.95 18% (3) Occasionally
4% (4) Pretty often
2% (5) I have trouble staying asleep nearly all the time
2%=md

12. (VIII) In general, how would you describe your health? CHECK ONE:

1% (1) I don't have very good health
9% (2) Fairly good health
.92 20% (3) Good health
38% (4) Very good health
31% (5) I have excellent health
2%=md

13. (VIII) How often have you been absent from work due to minor ailments like colds, severe headaches, or similar problems? CHECK ONE:

28% (1) Never or almost never
44% (2) Once or twice a year
GM=2.03 20% (3) Several times a year
5% (4) About once a month
1% (5) A few times a month or more
2%=md

14. (VIII) Do you think that you are getting adequate medical attention both at work and privately? CHECK ONE:

3% (1) I am not receiving adequate medical attention at all
4% (2) Not too adequate
GM=4.34 7% (3) Somewhat adequate
27% (4) Fairly adequate
55% (5) I am receiving very adequate medical attention
4%=md

15. (VIII) Do you think that the various pressures and strains people experience in their work in NASA could have an adverse effect on their health? CHECK ONE:

3% (1) It very definitely could not have an adverse effect
GM=4.16 6% (2) It probably couldn't
46% (4) It probably could
38% (5) It very definitely could have an adverse effect
6%=md

16. (VIII) Thinking now of the people you work with in your division, how well do you think their health is holding up under the various pressures and strains in their work? CHECK ONE:

1% (1) Their health is not holding up well at all
6% (2) Their health is not holding up too well
GM=3.61 34% (3) Fairly well
38% (4) Very well
13% (5) Their health is holding up extremely well
5% (8) There aren't really any serious pressures or strains in our work
4%=md

17. (VIII) Do you know of any individuals in NASA whose health has been adversely affected by the pressures and strains in their work? CHECK ONE:

47% (1) No, I know of no one whose health has been affected
49% (5) Yes, I know of one or more such persons
4%=md

(Card 7)

IX. BACKGROUND INFORMATION

1. How long have you worked in:

(IX) (21-22) A. your present division — WRITE IN: _____ years _____ months

(23-24) B. your present job in this division — _____ years _____ months

(25-26) C. the Office of Administration — _____ years _____ months

(27-28) D. NASA (including NACA) — _____ years

(29-30) E. the Federal Government (including military) — _____ years

2. (IX) What is the name of the Division and Branch (or Regional Office) in which you work? WRITE IN:

(31-32) A. Division _____

(33-34) B. Branch (or Regional Office) _____

NOTE: If the person you described as your supervisor earlier in the questionnaire was your division director (and not your branch chief), you need not name your branch here.

3. (IX) What is your present GS grade level or Wage Board Classification level? WRITE IN: (if excepted, check here ☐)

(35-36) A. GS Grade _____

(37) B. Wage Board Classification _____

4. (IX) My NASA Classification Code Group is: (CHECK ONE)

(38)

_____ 600, 200, 700, 900 (Professional)

_____ 500 (Secretarial and Clerical)

_____ 300 (Technician)

_____ 100 (Wage Board)

5. (IX) (39) CHECK ONE OF THE FOLLOWING:

I am a . . .

_____(1) division director

_____(2) branch chief or manager

_____(3) other type of supervisor

_____(4) non-supervisor

6. (IX) (40) Have you ever held a full-time job at a NASA field center? CHECK ONE:

_____(1) Yes

_____(5) No

7. (IX) (41) Have you ever held a full-time job outside the Federal Government? CHECK ONE:

_____(1) Yes

_____(5) No

APPENDIX III: SAMPLES OF SEMINAR MATERIALS

EFFECTIVENESS

1. Mean Scores - Effectiveness Items
2. Analysis of Effectiveness by all Supervisory and Professional Personnel
3. Division Scores on Factor I
4. Comparison of Effectiveness - Primary Factor
5. Division Ranks on Effectiveness Measures

COMMUNICATION

6. The Relationship of Internal Communication to Effectiveness
7. Division Ranks on Communication Items and Effectiveness
8. Communication Item Means for Professional by Rank
9. The Relationship of External Communication to Effectiveness
10. Organizational Legitimacy Item Means for Professionals by Rank
11. Table C-19 - SUMMARY: Interrelationships Among Perceptions of Front Office, Team Feeling, Job Satisfaction and Effectiveness

COORDINATION

12. Internal Coordination Item Means by NASA Classification Code
13. Internal Coordination Items
14. Summary: Division Ranks on Internal Coordination Items and Effectiveness
15. External Coordination Item Means for Professionals by Rank
16. The Relationship of External Coordination to Effectiveness
17. External Coordination Items
18. Summary: Division Ranks on External Coordination Items and Effectiveness

SUPERVISORY-SUBORDINATE RELATIONS

19. Memorandum of March 25, 1966
20. Supervisory Effectiveness
21. Human Relations
22. Summary: The Effect of GS Level, NASA Classification Code, Education, Sex, and Rank on Descriptions of Supervisory Behavior
23. Summary: Rank Order Correlations Among Division Ranks on Selected Variables
24. Summary: Interrelationships Among Selected Variables
25. Retreat at Charter House

(continued on next page)

APPENDIX III: (continued)

MOTIVATION-SATISFACTION

26. Memorandum of April 22, 1966
27. Motivation-Satisfaction Item Means
28. What Counts Most for Promotion in Office of Administration
29. Individual Needs-Organizational Needs
30. Job Satisfaction
31. Summary: The Provision of Selected Job Characteristics, Satisfaction, and Effectiveness
32. Job Characteristics and Effectiveness
33. NASA Office of Administration Job Characteristics - Professionals
34. NASA Office of Administration Job Characteristics - Non-Professionals

HEALTH

35. Division Health Hold-Up
36. Pressure and Health
37. Relationships of Job Factors to Frequency of Ulcer
38. Causes and Consequences of Role Conflict and Ambiguity
39. Division Health Hold-up and Effectiveness - All Personnel
40. Division Health Hold-up, Considerate Supervision, Firefighting, Job Congruence - All Personnel

Mean Scores: Effectiveness Items

Item Description	Div. Dirs. & Br. Chfs. (N=49)	Other Sups. (N=44)	Secretarial (Code 500) (N=125)	Nonsup. Nonprof. (N=141)
8. Div. production quantity	3.82	3.77	4.05	3.77
9. Div. production quality	3.86	3.90	4.04	4.00
10. Div. efficiency	3.35	3.35	3.44	3.29
11. Availability of materials & info.	3.10	3.67	3.76	3.62
12. Distribution of div. products	3.88	4.07	4.13	4.02
13. Ease of div. recruitment	2.98	2.61	3.25	3.16
14. Front office procedural control	3.66	4.23	4.24	4.12
15. Ease of deviating from front office procedures	3.33	3.42	3.46	3.18
16. Div. adaptation to change	3.39	3.33	3.44	3.41
17. Rapidity of adjustment	3.57	3.50	3.89	3.74
18. Proportion adjusting readily	3.46	3.63	3.90	3.88
19. Handle emergencies	4.22	4.12	3.95	4.05
20. Anticipate problems	3.48	3.48	3.44	3.20
21. Div. effectiveness compared with non NASA gov't. groups	3.31	3.08	3.04	2.99
26. Div. achieves its goals	3.49	3.43	3.50	3.14

Analysis of Effectiveness of All Supervisory and Professional Personnel

Primary Pattern P

Oblimin rotation Matrix
N=162

		1	2	3	4
8.	Div. production quantity	.87894	-.19988	-.06779	.00383
9.	Div. production quality	.78559	.11322	-.04755	-.03869
10.	Div. efficiency	.82721	-.04650	.09391	-.08835
11.	Availability of materials & info.	-.12840	.48899	.33297	-.05327
12.	Distribution of div. products	.13134	-.02385	.73709	.31974
13.	Ease of div. recruitment	-.00883	.77978	-.21612	.05059
14.	Front office procedural control	.04853	-.05224	.81959	-.14996
15.	Ease of deviating from front office procedures	-.03582	.01797	.04634	.95071
16.	Div. adaptation to change	.22856	.33585	.37615	-.15236
17.	Rapidity of adjustment	.46543	.50187	.12239	-.05191
18.	Proportion adjusting readily	.44409	.52736	.13586	.02772
19.	Handle emergencies	.70481	.14222	-.00459	.12186
20.	Anticipate problems	.58064	.00001	.39214	-.05146

Division Scores on Factor I

	Score	Rank
A	17.61	8
B	19.73	2
C	17.57	9
D	19.50	4
E	16.74	11
F	16.32	12
G	18.38	7
H	18.85	6
I	21.98	1
J	19.67	3
K	19.05	5
L	17.16	10

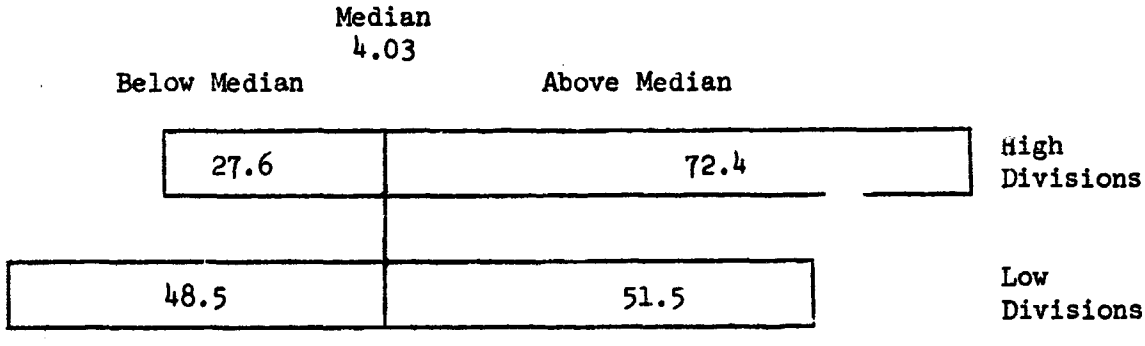
Note: Factor I scores are the sums of division means on questionnaire items #8, 9, 10, 19 & 20. The means used are based on data from all personnel.

COMPARISON OF EFFECTIVENESS -- PRIMARY FACTOR
Item 19

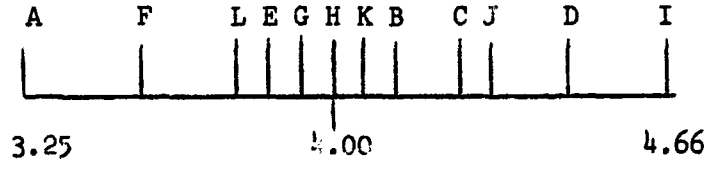
From time to time emergencies arise; such as, crash programs, schedules move ahead, or breakdown in the flow of work occurs. When these emergencies occur, they cause work overleads for many people. Some work groups cope with these emergencies more readily and successfully than others. How good a job do the people in your division do at coping with these situations? CHECK ONE:

____ (1) They do a poor job of handling emergency situations
____ (2) They do not do very well
____ (3) They do a fair job
____ (4) They do a good job
____ (5) They do an excellent job of handling these situations

Below the responses of the three high divisions and the three low divisions on the index created from the primary factor of the factor analysis are compared by plotting the percentages above and below the median for the high and low divisions.



The second plotting positions the means of the twelve included divisions upon a line which represents the range between the mean of the lowest division and the mean of the highest division on the above item.



Division Ranks on Effectiveness Measures

Div.	Top Mgt. Ranking	Factor I Index	Item # 21	Item # 26	Other Div. Rating
A	10	8	10	10	7
B	3	2	3	2	5
C	4.5	9	8	8	2
D	6	4	2	3	4
E	11	11	12	11	11
F	12	12	11	12	12
G	7	7	4	5	10
H	2	6	7	7	6
I	1	1	1	1	3
J	4.5	3	5	4	1
K	8	5	6	6	8
L	9	10	9	9	9

Rank order correlations between:

a.	Top Mgt. Ranking and Factor I Index	.80
b.	Top Mgt. Ranking and Item # 21.	.76
c.	Top Mgt Ranking and Item # 26.	.81
d.	Top Mgt. Ranking and Other Div. rating.	.77
e.	Factor I Index and Item # 21.	.90
f.	Factor I Index and Item #26.	.95
g.	Factor 1 Index and Other Div. rating	.70
h.	Item # 21 and Item # 26.	.98
i.	Item # 21 and Other Div. rating.	.59
j.	Item # 26 and Other Div. rating.	.66

The Relationship of Internal Communication to Effectiveness

Item # 1

Item # 1

To what extent do the people within your division exchange helpful information and ideas?

Means on Factor I Items

		# 8	# 9	# 10	# 19	# 20		Factor I Score	# 26
1.	We do not exchange helpful ideas and information at all	3.53	3.50	3.07	3.07	2.64	*	15.81	2.46
2.	A small extent	3.57	3.54	2.92	3.59	2.80	*	16.42	2.66
3.	A fair extent	3.54	3.88	3.11	3.77	3.22	*	17.52	2.91
4.	A considerable extent	3.99	4.05	3.47	4.17	3.50	*	19.18	3.62
5.	We exchange helpful ideas and information to a great extent	4.15	4.42	3.78	4.60	3.86	*	20.81	4.05

Division Ranks on Internal Communication Items and Effectiveness

	Item 1	Item 2	Item 3	Item 4	Factor I
A	10.5	6	10	10	8
B	2.5	3	2	2.5	2
C	2.5	2	4	5	9
D	5	5	3	2.5	4
E	9	9	8	8	11
F	12	12	12	11	12
G	8	10	9	12	7
H	10.5	11	11	9	6
I	1	1	1	1	1
J	4	8	5	7	3
K	7	7	7	6	5
L	6	4	6	4	10

Rank order correlations between:

a.	Factor I and Item # 1	.78
b.	Factor I and Item # 2	.43
c.	Factor I and Item # 3	.65
d.	Factor I and Item # 4	.56
e.	Item # 1 and Item # 2	.84
f.	Item # 1 and Item # 3	.96
g.	Item # 1 and Item # 4	.84
h.	Item # 2 and Item # 3	.66
i.	Item # 2 and Item # 4	.85
j.	Item # 3 and Item # 4	.91

NASA 1014
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Table C-8a

Internal Communication Item Means
for Professionals by Rank
(Section I, Item #'s 1 - 4)

Rank	N	Item 1	Item 2	Item 3	Item 4
Non-Sup.	123	3.41	3.03	2.87	3.02
"Other Sup."	51	3.56	3.20	3.10	2.87
Br. Chf.	42	3.74	3.57	3.29	3.33
Div. Dir.	15	4.67	4.00	3.79	3.33

Item # 1: Extent of idea and information exchange within division.

Item # 2: Satisfaction with amount of information about happenings in Office of Administration.

Item # 3: Opportunity for people in division to explain and argue for their needs and interests when major change is being considered.

Item # 4: Hear things first via formal channels rather than grapevine.

The Relationship of External Communication to Effectiveness

Item # 8

Item # 8

In general, how easy is it for you to get together and exchange ideas and information with people from other divisions in the OA whose jobs and responsibilities are related to yours?

Means on Factor I Items

		# 8	# 9	# 10	# 19	# 20		Factor I Score	# 26
1.	It is very difficult	3.86	3.86	3.14	3.54	3.36	*	17.76	3.22
2.	It is rather difficult	3.90	3.80	3.34	3.93	2.85	*	17.82	2.97
3.	Not too difficult	3.91	3.72	3.30	3.30	3.00	*	17.23	2.83
4.	Fairly easy	3.67	3.92	3.32	4.18	3.46	*	18.55	3.29
5.	It is very easy	4.04	4.12	3.51	4.26	3.50	*	19.43	3.70

Organizational Legitimacy Item Means
for Professionals by Rank
(Section V, Item #'s 1 - 7, 11 - 12)

		Item								
Rank	N	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 11	# 12
Non-Sup	113	3.59	3.49	2.55	2.94	3.57	2.81	2.63	2.66	3.56
"Other Sup."	47	3.48	3.59	2.45	2.94	3.55	2.59	2.81	2.49	3.56
Br. Chfs.	39	3.67	3.23	2.28	2.58	3.44	2.74	2.97	2.32	3.50
Div. Dirs.	15	3.67	3.57	2.33	3.00	3.40	3.80	3.67	2.80	3.60

Item # 1: Clarity of policies and rules of OA that affect your job.

Item # 2: Closeness with which Front Office follows own policies.

Item # 3: Frequency Front Office changes policies without advance notice.

Item # 4: Extent Front Office understands your work needs and problems.

Item # 5: Fairness of Front Office decisions.

Item # 6: Ease of communication up to Front Office.

Item # 7: Extent you understand views and problems of Front Office.

Item #11: Amount of team feeling in the Office of Administration.

Item #12: Extent Front Office tries to develop a team feeling.

Table C-19

SUMMARY:

Interrelationship Among Perceptions of Front Office, Team Feeling, Job Satisfaction and Effectiveness

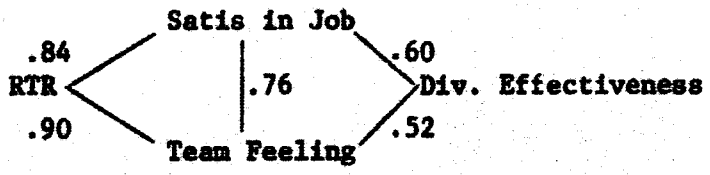
Div.	Items # 2, 4, 5 Rational Trust Relationship Score	Rank	Item #11 (V) Rank	Item #12 (V) Rank	Item #15 (Job Satis) Mean	Rank	Factor I. Rank	Top Mgt. Ranking
A	10.49	4	2	10.5	3.50	6	8	10
B	10.85	3	3	2	3.88	2	2	3
C	9.68	6	8	10.5	3.67	3	9	4.5
D	10.17	5	6	6	3.52	4	4	6
E	9.15	9	12	9	3.07	11	11	11
F	8.32	11	10	12	2.97	12	12	12
G	8.05	12	11	5	3.14	9	7	7
H	9.26	8	7	8	3.09	10	6	2
I	12.26	1	1	1	4.33	1	1	1
J	8.85	10	9	7	3.23	8	3	4.5
K	9.60	7	5	4	3.49	7	5	8
L	10.95	2	4	3	3.51	5	10	9

Rank Order Correlations

	#11	#12	#15	FI	TMR
RTR	.90	.53	.84	.38	.35
#11		.53	.76	.52	.38
#12			.59	.68	.51
#15				.60	.58
FI					.80

RTR: Rational trust relationship
#11: Team feeling in OA
#12: FO tries to get team feeling
#15: Job satisfaction
FI: Factor I (Division Effectiveness)
TMR: Top Management Ranking

Note: The rational trust relationship index is the sum of division means on Items # 2, 4 and 5 from Section V of the questionnaire. These items measure how closely the FO follows its own policies, the FO's understanding of your work needs and problems, and the fairness of FO decisions.



Internal Coordination Item Means
by NASA Classification Code
(Section I, Item #'s 22 - 25)

Code	N	Item 22	Item 23	Item 24	Item 25
100	13	3.46	3.39	3.62	3.54
300	31	2.94	3.43	3.22	3.03
500	123	3.33	3.70	3.43	3.12
600	235	3.17	3.83	3.44	3.14

Item #22: Jobs and activities in division well geared together.

Item #23: People in division try to avoid creating problems with each other's duties and responsibilities.

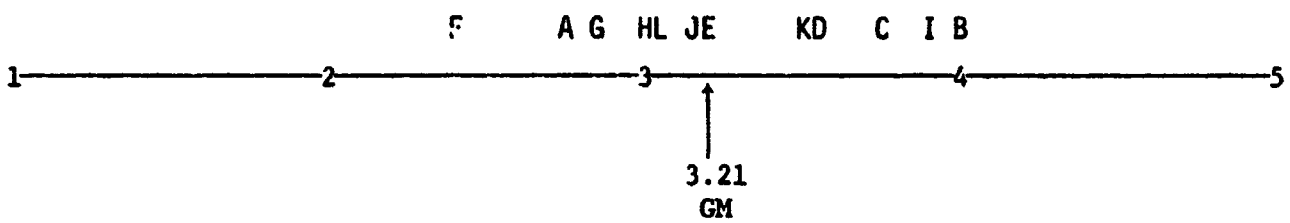
Item #24: Problems of coordination within division well handled.

Item #25: Work assignments within division well planned.

INTERNAL COORDINATION

Item #22

How well are the different jobs and work activities <u>in your division</u> geared together in the direction of meeting the objectives of the division?



7%	14%	34%	35%	7%
Not at all well geared together	Not so well	Fairly well	Very well	Almost perfectly geared together

The more jobs and activities are well geared together in the division, the more effective is the division. (rho = .62 for Factor I and Item #22)

	Division Scores Mean	Rank
A	2.75	11
B	4.00	1
C	3.75	3
D	3.56	4
E	3.21	6
F	2.42	12
G	2.85	10
H	3.01	9
I	3.88	2
J	3.15	7
K	3.52	5
L	3.06	8

SUM[illegible].

Division Ranks on Internal Coordination Items and Effectiveness

	Item 22	Item 23	Item 24	Item 25	Factor I
A	11	12	12	12	8
B	1	2	2	2	2
C	3	4	3	5	9
D	4	3	4	3	4
E	6	7	7.5	6	11
F	12	10	11	11	12
G	10	11	6	8	7
H	9	9	10	10	6
I	2	1	1	1	1
J	7	6	7.5	7	3
K	5	5	5	4	5
L	8	8	9	9	10

Rank Order Correlations

	#22	#23	#24	#25
FI	.62	.65	.61	.67
#22		.96	.91	.94
#23			.89	.94
#24				.96

FI: Factor I (Division Effectiveness)

#22: Jobs and activities well geared together

#23: Avoid creating problems with each other

#24: Coordination problems well handled

#25: Work assignments well planned

External Coordination Item Means
for Professionals by Rank
(Section II, Item's 4 - 7)

Rank	N	Item 4	Item 5	Item 6	Item 7	% "8" on Item 7
Non-Sup.	85	3.72	4.17	2.59	3.38	-- 15%
"Other-Sup."	34	3.50	4.19	2.42	3.44	-- 12%
Br. Chfs.	34	3.74	3.97	2.56	3.10	-- 21%
Div. Dirs.	15	3.87	3.93	2.50	3.50	-- 27%

Item # 4: Extent people in other divisions try to avoid creating problems with your duties and responsibilities.

Item # 5: Cooperativeness of people in other divisions.

Item # 6: Amount of competition between divisions in OA.

Item # 7: Healthiness of competition between divisions in OA.
("8" -- "There is not enough competition to describe as either healthy or harmful.")

The Relationship of External Coordination to Effectiveness

Item # 4

Item # 4

To what extent do the people you work with in other divisions make an effort to avoid creating problems or interfering with your duties and responsibilities?

Means on Factor I Items

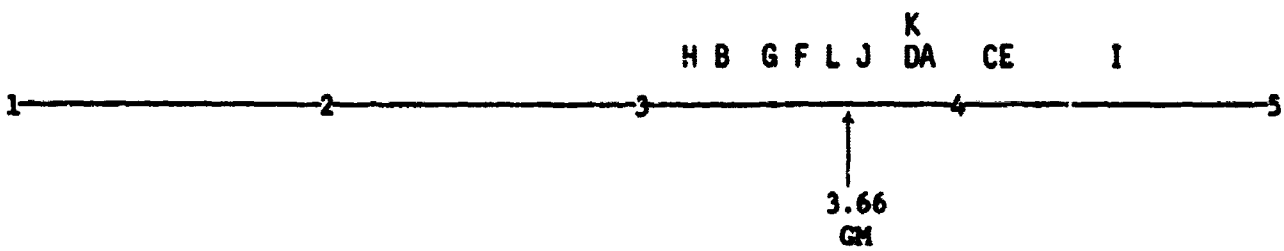
		# 8	# 9	# 10	# 19	# 20		Factor I Score	# 26
1.	They try to avoid interfering to a very small extent	4.00	4.05	3.43	3.91	2.91	*	18.30	3.05
2.	To a small extent	3.75	3.58	2.83	3.67	2.65	*	16.48	2.58
3.	To a fair extent	3.70	3.71	3.16	3.77	3.09	*	17.43	3.01
4.	To a great extent	3.86	4.01	3.39	4.19	3.56	*	19.01	3.49
5.	They try to avoid interfering to a very great extent	4.08	4.22	3.65	4.24	3.64	*	19.83	3.68

#8: Quantity
#9: Quality
#10: Efficiency
#19: Handle emergencies
#20: Anticipate problems
#26: Overall effectiveness

EXTERNAL COORDINATION

Item #4

To what extent do the people you work with <u>in other divisions</u> make an effort to avoid creating problems or interfering with your duties and responsibilities?



5%	6%	16%	28%	18%
To a very small extent	To a small extent	To a fair extent	To a great extent	To a very great extent

There is no relationship between inter-divisional avoidance coordination and division effectiveness. (rho = -.01 for Factor I and Item #4)

	Division Scores Mean	Rank
A	3.88	4
B	3.25	11
C	4.11	3
D	3.87	5
E	4.16	2
F	3.52	9
G	3.42	10
H	3.15	12
I	4.50	1
J	3.71	7
K	3.84	6
L	3.60	8

SUMMARY:

Division Ranks on External Coordination

Items and Effectiveness

	Coordination		Competition			
	Item 4	Item 5	Item 6	Item 7	Factor I	Other Div. Rating
A	4	2.5	6	3	8	7
B	11	1	11	2	2	5
C	3	4	4.5	5	9	2
D	5	6.5	10	10	4	4
E	2	8	7	6	11	11
F	9	5	4.5	8	12	12
G	10	6.5	1	12	7	10
H	12	12	12	9	6	6
I	1	2.5	8	1	1	3
J	7	9.5	9	4	3	1
K	6	9.5	2	11	5	8
L	8	11	3	7	10	9

Rank Order Correlations

	ODR	# 4	# 5	# 6	# 7
FI	.70	-.01	.22	-.50	.31
ODR		.24	.19	-.50	.48
# 4			.20	.12	.39
# 5				-.07	.59
# 6					-.41

ODR: Other division effectiveness rating
FI: Factor I (Division Effectiveness)
#4: Avoid creating problems with each other
#5: Cooperation of people in other divisions
#6: Competition between divisions
#7: Healthiness of competitions

MEMORANDUM

March 25, 1966

TO: NASA Office of Administration Seminar Participants

FROM: The University of Michigan Research Team

SUBJECT: Some Preliminary Information for the Retreat
Individual Needs - Organizational Needs

In recent years it has become increasingly popular for social scientists to talk about "individual needs" and "organizational needs." The readings which were assigned for the retreat contain many references (in some cases implicit) to this conceptual notion. Our questionnaire provides data right at the heart of the matter.

As you will see, our attack on the problem of measuring the extent to which individual needs and organizational needs were satisfied in the OA was simple and straightforward. Given information on the satisfaction of these needs, certain relevant questions could then be answered. For example, what bearing does the satisfaction of these needs have on division effectiveness? How do they relate to job satisfaction? And, what is the relationship of supervisory practices to the satisfaction of individual and organizational needs?

In answering these questions, we were interested in the way the two variables (individual need satisfaction and organizational need satisfaction) worked together. For this reason we set up special tables that are somewhat different from the ones you've seen in the seminars so far. These tables attempt to show how the satisfaction of individual and organizational needs, <u>considered simultaneously</u>, relates to division effectiveness, job satisfaction, and supervisory practices.

On the next few pages is presented a step by step account of how we answered these questions.

Step 1. The satisfaction of organizational needs.

The question we used to measure this variable, and the responses to it, are given below. (Data for this question and for all subsequent questions in this analysis are from all personnel in the Office of Administration.)

How successful has NASA been in getting you to meet its needs- for example, getting you to produce what they want, when they want it, in the manner they want?

1%	(1)	They have not been successful at all at getting me to meet NASA's needs
2%	(2)	Not too successful
8%	(3)	Somewhat successful
34%	(4)	Fairly successful
51%	(5)	They have been very successful at getting me to meet NASA's needs

Step 2. The satisfaction of individual needs.

How good a job has NASA done at meeting your needs-- for example, interesting work, adequate pay, a chance to use or develop your talents, or whatever it is that you want from your job?

9%	(1)	NASA has not done a good job at all at meeting my needs
17%	(2)	Not too good a job
35%	(3)	A fair job
28%	(4)	A very good job
10%	(5)	NASA has done an excellent job at meeting my needs

Step 3. The simultaneous satisfaction of individual and organizational needs.

Responses to the "NASA Needs Met" question were divided into two categories: High, responses "4" and "5", and Low, responses "1", "2", and "3". Responses to the "Own Needs Met" question were combined into three categories: High, responses "4" and "5", Mid, response "3", and Low, responses "1" and "2". (A three-way break was not possible on the NASA Needs Met question because of the low frequency of responses at the low end of the scale.)

A table showing the percentages for each category is presented below. This table serves as the basis for the analysis relating need satisfaction to effectiveness, job satisfaction, and supervisory practices.

Response Percentages on NASA Needs Met and Own Needs Met

OWN Needs Met	NASA Needs Met: High (4-5)	NASA Needs Met: Low (1-3)	
High (4-5)			38%
Mid (3)			35%
Low (1-2)			26%
	85%	11%	

The table above indicates that 85% of personnel in the Office of Administration say NASA's needs are being met at a "high" level, and 11% say NASA's needs are being met at a "low" level. Regarding the satisfaction of individual needs, 38% respond in the "high" category, 35% in the "mid" category, and 26% in the "low" category.

Already the data have said a good deal about working for NASA in the Office of Administration, What is your interpretation so far?

NASA 1014
Time 1

Individual Needs -- Organizational Needs
and
DIVISION EFFECTIVENESS
(Item #26)

NASA Needs Met

OWN Needs Met	High (4-5)	Low (1-3)
High (4-5)	3.77	3.10
Mid (3)	3.31	2.40
Low (1-2)	2.95	1.94

Item #26: Taking all things into consideration, how well do you feel your division does in fulfilling its mission or achieving its goals?

NOTES:

Step 4. Relating "NASA Needs Met--OWN Needs Met" to other variables.

With the construction of the 2 X 3 table on the preceding page, it becomes possible to look at the way people within each category answered other questions. Will there be differences between the "High-High's" and the "Low-Low's"? Will responses vary systematically as we move from high to low on NASA Needs Met and from high to low on Own Needs Met? What is the best "match" of individual and organizational need satisfaction?

The table on the next page shows the relationship between division effectiveness and the satisfaction of individual and organizational needs. The number within each cell is the mean on Item #26 from people reporting a particular level of individual and organizational need satisfaction. Thus, people who report that both their own needs and NASA's needs are being met at a high level report a division effectiveness score of 3.77, the highest mean on the table. Those who say their own needs are being met at a high level, but NASA's needs are being met at a low level, give a division effectiveness score of 3.10. The Mid group on Own Needs Met reports division effectiveness of 3.31 if NASA's needs are being met at a high level, and 2.40 if NASA's needs are being met at a low level. When individual needs are being met at a low level, division effectiveness is 2.95 for the high NASA Needs Met group and 1.94 for the low NASA Needs Met group.

The relationship between the satisfaction of individual needs, organizational needs, and division effectiveness is clear: the more both the individual's needs and the organization's needs are being satisfied, the higher is reported division effectiveness. Division effectiveness is highest when both the individual's and the organization's needs are being met at a high level. Even if the organization's needs are being met at a high level, effectiveness will decrease unless the individual's needs are also being satisfied.

NASA 1014
Time 1

Individual Needs - Organizational Needs
and
ADMINISTRATIVE SKILLS
of the supervisor
(Item #13)

NASA Needs Met

OWN Needs Met		High (4-5)	Low (1-3)
	High (4-5)		
	Mid (3)	3.54	
	Low (1-2)		2.88

Item #13: How well does your supervisor handle the administrative side of his job-- for example, planning and scheduling the work, indicating clearly when work is to be finished, assigning the right job to the right man, inspecting and following up on the work that is done, etc.?

NOTES:

All of this brings us to the area of supervisory-subordinate relations, the topic for the retreat. How are the satisfaction of individual and organizational needs related to supervisory practices? If supervisors were to concern themselves with the satisfaction of both individual and organizational needs (and the preceding table on effectiveness suggests they should), what areas of their supervisory behavior are relevant? Technical skills? Human Relations skills? Administrative skills? Our data suggest some answers.

The tables on the next two pages show how individual and organizational need satisfaction relates to the technical skills and human relations skills of the supervisor. In both tables the means in the cells "behave" in a consistent and meaningful way. Technical skills and human relations skills of the supervisor are reported to be greatest for those groups where both individual and organizational need satisfaction is highest; i.e., where need satisfaction is matched at a high level. A lower level of supervisory skill is reported with every move to a lower level of either individual or organizational need satisfaction. CONCLUSION: Supervisory technical skills and supervisory human relations skills are highly related to the satisfaction of individual and organizational needs.

The last table in this bit of preliminary information has been set up for you, but some data have been left out. In what way will a supervisor's administrative skills relate to the satisfaction of individual and organizational needs? Are administrative skills as relevant as technical and human relations skills? What is your prediction?

ASSIGNMENT FOR THE RETREAT: Into each of the empty cells on the last table write your predictions of the means on the administrative skills item.

NASA 1014
Time 1

Individual Needs - Organizational Needs
and
TECHNICAL SKILLS
of the supervisor
(Item #2)

NASA Needs Met

OWN Needs Met		High (4-5)	Low (1-3)
	High (4-5)	4.47	4.30
	Mid (3)	4.02	3.76
	Low (1-2)	3.62	3.41

Item #2: How well does your supervisor handle the technical side of his job-- for example, general expertness, knowledge of job, technical skills needed, etc.?

NOTES:

NASA 1014
Time 1

Individual Needs - Organizational Needs
and
HUMAN RELATIONS SKILLS
of the supervisor
(Item #8)

NASA Needs Met

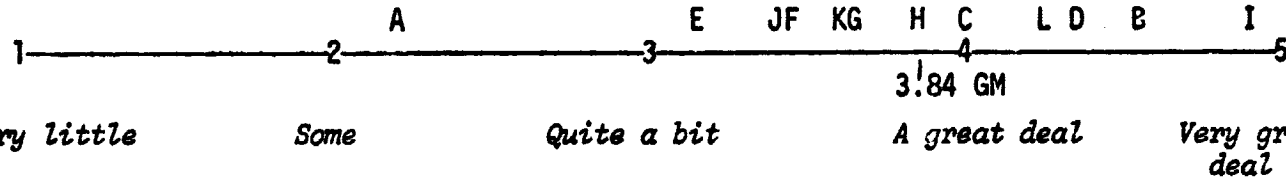
OWN Needs Met		High (4-5)	Low (1-3)
	High (4-5)	3.77	3.60
	Mid (3)	3.23	2.86
	Low (1-2)	2.77	2.41

Item #8: How well does your supervisor handle the human relations side of his job-- for example, getting people to work well together, getting individuals to do the best they can, giving recognition for good work done, letting people know where they stand, etc.?

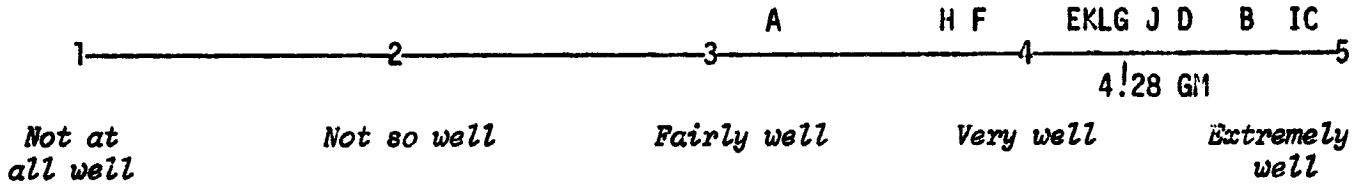
NOTES:

Technical Skills

Item # 1: How much does your supervisor know about doing each of the jobs in your area?



Item # 2: How well does your supervisor handle the technical side of his job--for example, general expertness, knowledge of job, technical skills needed, etc.?



NOTES:

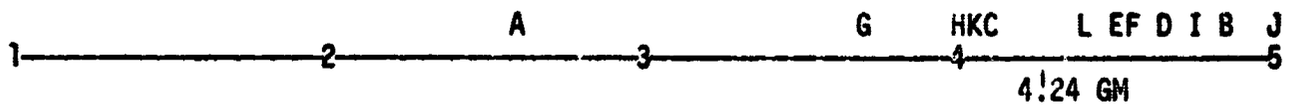
NASA 1014
Time 1

21

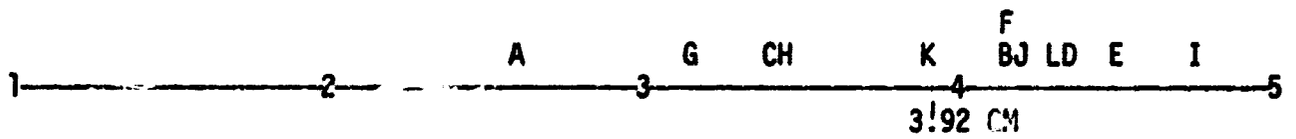
Human Relations:

Supportiveness

Item # 3: How much help do you feel you get from your supervisor when you really need it?



Item # 4: Do you feel that your supervisor will go to bat or stand up for you?



NOTES:

SUMMARY:

The Effect of GS Level, NASA Classification Code, Education, Sex, and Rank on Descriptions of Supervisory Behavior

(Section IV)

GS Level

There was *NO RELATIONSHIP* between respondents' GS level and their descriptions of their supervisor's behavior.

NASA Classification Code

For most of the items, NASA Classification Code had *LITTLE EFFECT* on descriptions of supervisory behavior. For Item # 6, "Sup gets my opinions," and # 7, "Personal influence with sup," professionals scored significantly higher than wage boards, technicians, and secretarial-clericals.

Education

Amount of education had *NO SIGNIFICANT EFFECT* on *MOST ITEMS*. On the "Sup gets my opinions" and "Personal influence with sup" items, there was a positive relationship: the more education, the higher the score on the item, except that persons in the "some graduate work" category scored lower than persons in the "college degree" category.

Sex

On a *MAJORITY OF ITEMS*, and especially on the skill mix and effectiveness items, *WOMEN* had *SLIGHTLY MORE FAVORABLE* responses about their supervisors than did men. However, on the "Sup gets my opinions" and "Personal influence with sup" items, women scored significantly lower than men.

Rank

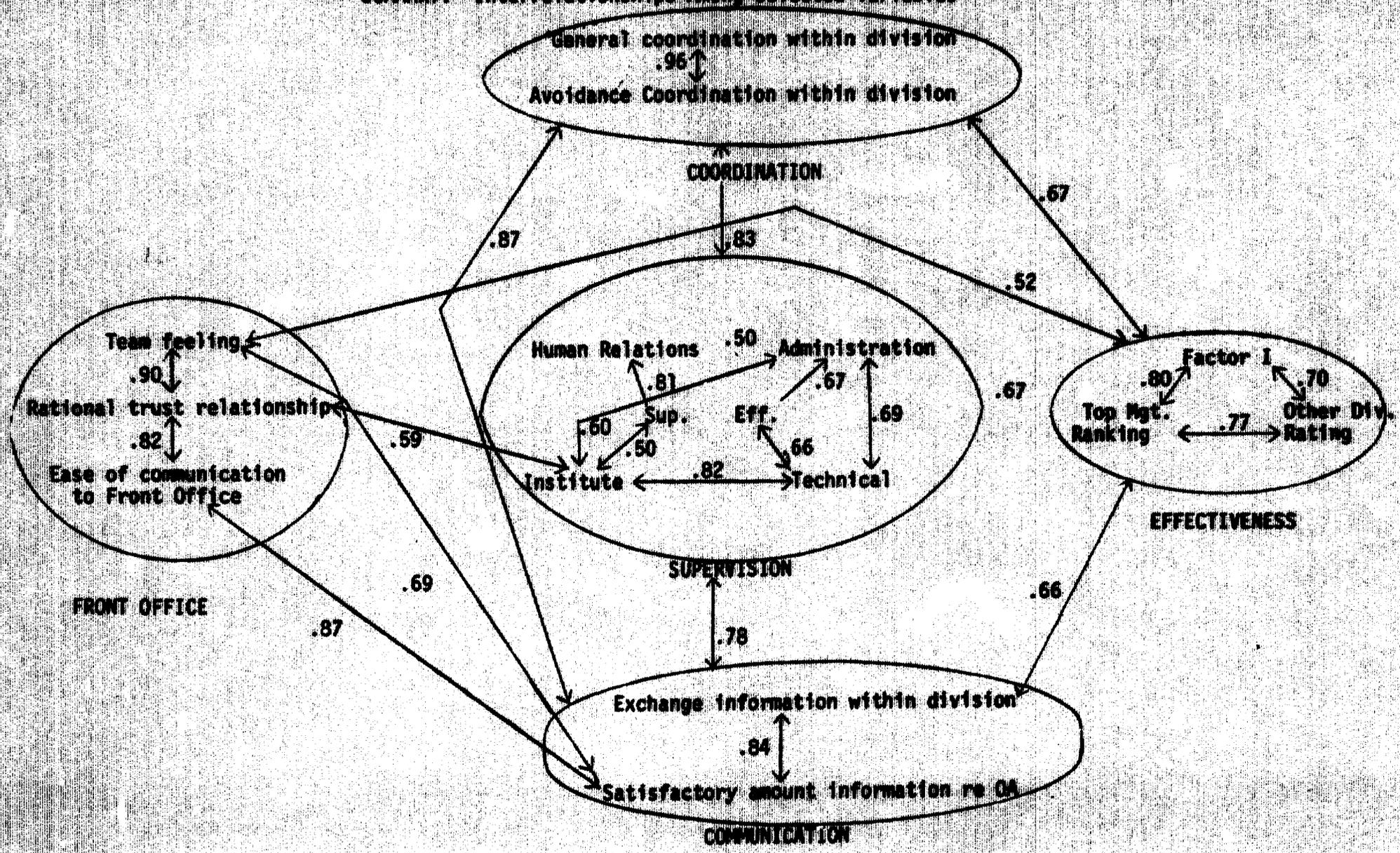
Respondents' rank in the organization had *NO EFFECT* on the way they described their supervisor.

SUMMARY: RANK ORDER CORRELATIONS AMONG DIVISION RANKS ON SELECTED VARIABLES (N=12)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Factor I (Effectiveness)																
2. Top Mgt. Ranking	.80															
3. Other Div. Rating	.70	.77														
4. Exchange info & ideas w/in div (I-1)	.66	.67	.75													
5. Satis w amt info re OA (I-2)	.45	.46	.60	.84												
6. Exchange info/ideas w/other divs (II-8)	.02	-.12	-.22	.35	.26											
7. Ease of communicating to FO (V-6)	.46	.43	.62	.65	.87	.20										
8. Team feeling in OA (V-11)	.52	.38	.38	.40	.69	-.14	.71									
9. Rational trust relationship (V-2,4,5)	.38	.35	.38	.55	.86	.06	.82	.90								
10. General coordination w/in div (II-22)	.62	.61	.60	.87	.77	.51	.79	.37	.55							
11. Avoidance cord w/in div (II-23)	.65	.61	.62	.86	.71	.37	.73	.37	.52	.96						
12. Avoidance cord w/other divs (II-4)	-.01	-.10	.24	.33	.49	.09	.54	.15	.33	.35	.34					
13. Competition between divs (II-6)	-.50	-.56	-.50	-.19	-.10	.30	-.33	-.22	-.24	-.34	-.39	.12				
14. Sup technical skills (IV-2)	.52	.60	.65	.94	.73	.37	.52	.17	.34	.80	.80	.27	-.09			
15. Sup hum rel skills (IV-8)	.76	.59	.47	.51	.21	.13	.22	.26	.25	.56	.66	-.23	-.67	.38		
16. Sup admin skills (IV-13)	.53	.56	.55	.70	.59	.32	.66	.23	.41	.88	.90	.41	-.33	.69	.50	
17. Sup instit skills (IV-17)	.45	.59	.57	.87	.83	.36	.56	.47	.59	.73	.68	.21	.11	.82	.25	.60
18. Overall sup effectiveness (IV-32)	.67	.53	.56	.78	.53	.32	.44	.24	.40	.76	.83	.30	-.45	.66	.81	.67
(Numbers in parentheses refer to question numbers in questionnaire)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

(rho .50 = p .05 one-tailed; rho .58 = p..05 two-tailed)

SUMMARY: Interrelationships Among Selected Variables



Retreat at Charter House

Reports to large groups of small group discussions

on Saturday morning, April 2, 1966

LESSONS

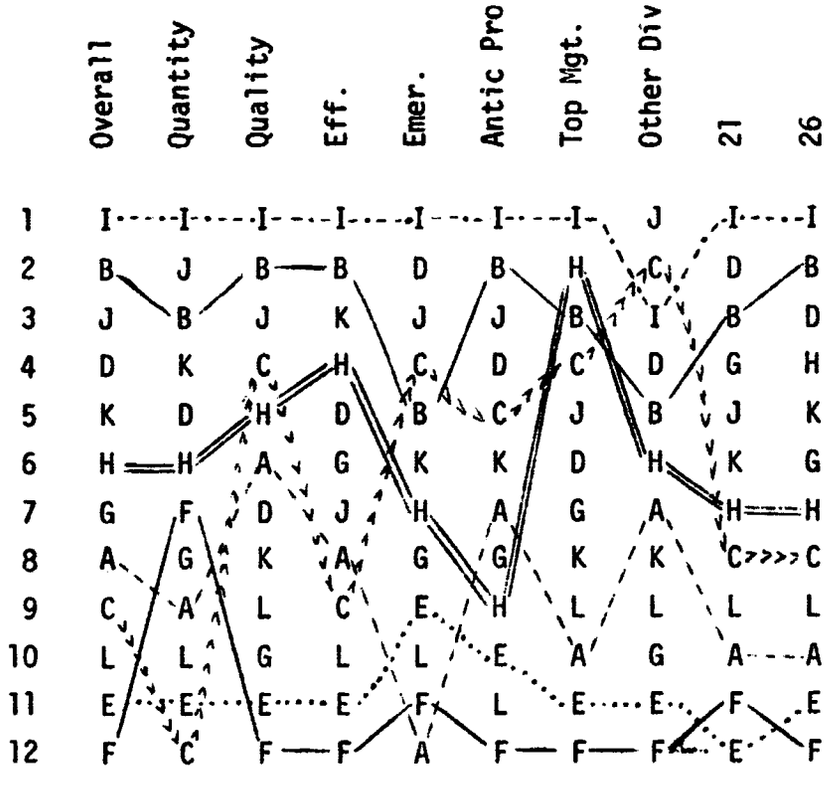
General

Effectiveness Correlations

Human Relations

Communications

Deviation Analysis (started afternoon)



PROCESS

Small teams

Approach

- Background
- Baseline
- Divisions
- Selected data

Display and Analysis

- Absolute
- Rank
- Deviations

I. WHAT HAVE WE LEARNED.

1. Lot of useful data
2. Value of communication
3. Areas of specific deficiency
4. Have not identified what to do to improve
5. Have not learned enough about good patterns
6. Musts in communication have not been communicated to DD's.

II. WHAT WE HAVE LEARNED ABOUT PROCESS

1. How difficult it is to present large amounts of data
2. Large groups not good for training of this type
3. Has taught us better how to work as a group - each other

III. WHAT WE HAVE LEARNED ABOUT GROUPS TRYING TO LEARN

1. Size of group important
2. Can't avoid built-in defense mechanism
3. Importance of timing and stage setting
4. Teacher - as well as pupil can learn

IV. WHAT WE HAVE LEARNED ABOUT OURSELVES

1. How good-bad a job OA is doing
2. How good-bad a job Division is doing
3. How good-bad a job Division Directors are going
4. Where do I (D.D.) need to improve

Confirmed weaknesses
Affirmed strengths

EFFECTIVENESS AND SUPERVISORY SKILLS

AS MEASURED BY SUBORDINATES

Technical competence

A) 4 of 5 highest were also in 5 highest FI
B) 4 of 5 highest were also in 5 highest by Top Mgt.
C) 5 of 5 highest were also by others.

Human relations

A) 4 of 5 in FI
B) 4 of 5 in Top Mgt.
C) 4 of 5 in others.

Administration skills

A) 4 of 5 in FI
B) 3 of 5 in Top Mgt.
C) 4 of 5 in others

Worst 5

Generally runs 3 out of 5.

Supervisory skills

Rank Order Correlations

	Tech.	H.R.
ODR	.65	.47
TMR	.60	.59
FI	.52	.76

High Correlation between

Coordination ⟶ Supervisory Skills ⟵ Communication

(Effectiveness of) (Effectiveness of)

REACTION

1. Not productive as could be
2. Too large a group
   Inhibited by FO?
3. Comes difficult -- not geared to make such quick analyses
   Personal impact sidetracks
4. Need better organized agenda
   Advance notice of specific areas
   Material AHEAD OF TIME
5. Allow time for absorption
6. University of Michigan summary
   What we missed
   Significance
   Other studies
   More on where individuals can go from here (bibliography)

New light on some individuals

Motivation - Satisfaction Item Means

by Rank

(Section VI)

Item #	Description	Rank Non-Sup N=277	"Other Sup" N=85	Br Chf N=46	Div. Dir. N=15
3.	Satisfaction with pay	3.21	3.33	3.61	4.00
4.	Achievement effort	3.78	3.63	3.65	4.31
5.	Think of quitting	2.58	2.68	2.70	2.31
6.	Chances for promotion	2.49	2.54	2.65	3.38
8.	Unreasonable pressure	2.33	2.59	2.85	3.19
9.	NASA needs met	4.36	4.42	4.22	4.50
10.	Own needs met	3.06	3.12	3.22	4.06
11.	Reading technical papers	2.81	3.13	3.78	3.81
12.	Attend conference	2.03	2.48	3.15	3.19
13.	Work at home	1.90	2.60	3.20	3.69
15.	Overall job satisfaction	3.34	3.36	3.59	4.25
16.	NASA job satisfaction	3.71	3.77	3.75	4.56

NASA 1014
Time 1

26

MEMORANDUM

TO: Participants, Michigan Seminar April 22, 1966

FROM: Tony Butterfield

SUBJECT: Motivation-Satisfaction Data for April 28 Seminar

At your request, here are some data for your perusal prior to our sessions next week. The following questions may assist you in looking at the data.

Regarding motivation-satisfaction items -

1. Which NASA classification code and which rank group are most satisfied? ...least satisfied?
2. On which motivation-satisfaction items is the spread of responses largest? ...smallest?

Regarding job characteristics -

3. For which job characteristics is the difference between importance and provision largest? ...smallest?
4. Which job characteristics can you do something about?
5. How does NASA OA compare with other government agencies on the provision of various job characteristics?

Regarding what counts for promotion -

6. What do the data say and what <u>should</u> they say?

Regarding professional orientation -

7. What is the predominant professional orientation of the people in the OA?

No doubt you will be asking your own questions about the data. Next week we can "share answers"- and questions too.

As you can see, the format in which the data are displayed is not much different from earlier formats. Although there have been suggestions that the data "could be displayed better," no specific changes have been suggested. Perhaps you could think about how you would like to see the data displayed, and can discuss such modifications next time.

Motivation - Satisfaction Item Means

by Rank

(Section VI)

Item #	Description	Rank: Non-Sup N=277	"Other Sup" N=85	Br Chf N=46	Div. Dir. N=15
3.	Satisfaction with pay	3.21	3.33	3.61	4.00
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8.	Unreasonable pressure	2.33	2.59	2.85	3.19
9.	NASA needs met	4.36	4.42	4.22	4.50
10.	Own needs met	3.06	3.12	3.22	4.06
11.	Reading technical papers	2.81	3.13	3.78	3.81
12.	Attend conference	2.03	2.48	3.15	3.19
13.	Work at home	1.90	2.60	3.20	3.69
15.	Overall job satisfaction	3.34	3.36	3.59	4.25
16.	NASA job satisfaction	3.71	3.77	3.75	4.56

What Counts Most for Promotion in Office of Administration:
(VI-7)

Response Percentages by Division, NASA Classification Code, and Rank

7. What do you think actually counts the most today in getting a promotion in the Office of Administration?
CHECK ONE:

	DIVISION												
	A	B	C	D	E	F	G	H	I	J	K	L	Total
Performance and potential	50%	50%	17%	33%	28%	21%	21%	27%	75%	16%	32%	44%	33%
Seniority	-	-	-	08%	04%	-	-	01%	-	-	02%	08%	03%
Who likes you	13%	13%	33%	17%	24%	48%	43%	34%	06%	48%	24%	15%	27%
I don't know	38%	38%	50%	42%	44%	30%	36%	38%	19%	36%	24%	32%	34%

7. What do you think actually counts the most today in getting a promotion in the Office of Administration?
CHECK ONE:

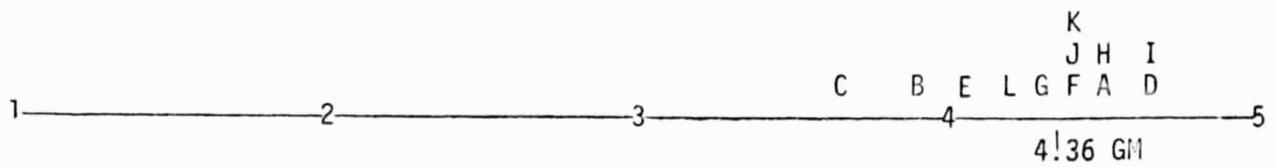
	NASA CLASSIFICATION CODE				RANK				
	100	300	500	600					
	Wg Bd N=14	Tech N=32	Secr'l N=129	Profs N=238	Non-sup N=277	"Other" N=85	BrCf N=46	Div.Dir N=15	Total
Performance and potential	31%	26%	31%	37%	29%	32%	38%	80%	33%
Seniority	-	-	03%	03%	03%	02%	-	-	03%
Who likes you	46%	32%	31%	23%	30%	26%	27%	07%	27%
I don't know	23%	42%	34%	36%	38%	38%	36%	13%	34%

Individual Needs - Organizational Needs

(Section VI - Items 9 & 10)

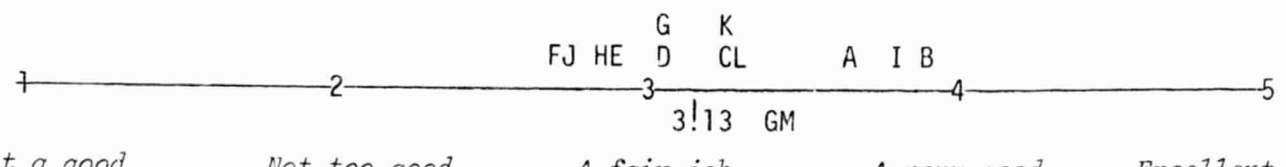
DIVISION SCORES

Item # 9: How successful has NASA been in getting you to meet its needs--for example, getting you to produce what they want, when they want it, in the manner they want?



Not at all successful — *Not too successful* — *Somewhat successful* — *Fairly successful* — *Very successful*

Item #10: How good a job has NASA done at meeting your needs--for example, interesting work, adequate pay, a chance to use or develop your talents, or whatever it is that you want from your job?



Not a good job at all — *Not too good a job* — *A fair job* — *A very good job* — *Excellent job*

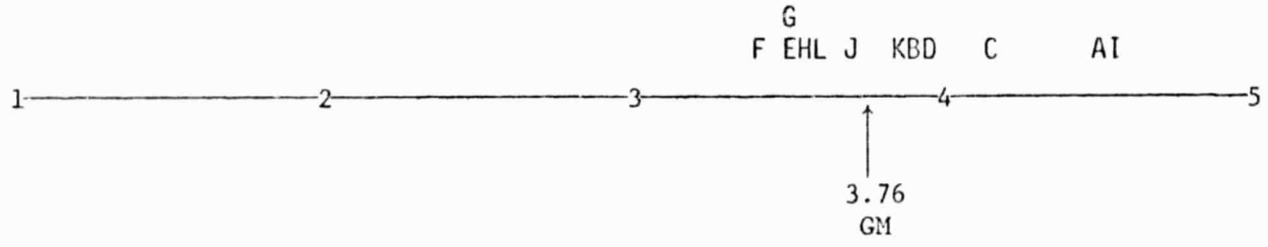
Neither of these items, taken alone, is significantly related to effectiveness. However, when they are taken together, the correlation with effectiveness is significant. The more both organizational and individual needs are satisfied, the more effective is the division. (rho = .64 for Items 9 and 10, and Factor I.)

NOTES:

NASA JOB SATISFACTION

(Section VI-16)

Thinking about working for the government in Washington and all the various departments and agencies (Labor, DOD, Agriculture, etc.), how satisfied are you to be working in NASA?



4%	8%	23%	36%	27%
Very dissatisfied	Quite dissatisfied	Neither satisfied nor dissatisfied	Quite satisfied	Very satisfied

The more people are satisfied to be working in NASA, the more effective is the division. (rho = .58 for Factor I and Item #16)

	Division Scores Mean	Rank
A	4.50	2
B	3 88	5
C	4.17	3
D	3.96	4
E	3.50	10.5
F	3.42	12
G	3.50	10.5
H	3.54	9
I	4.56	1
J	3.69	7
K	3.87	6
L	3.59	8

SUMMARY:

THE PROVISION OF SELECTED JOB CHARACTERISTICS, SATISFACTION AND EFFECTIVENESS

(Section VI)

		A	B	C	D	E	F	G	H	I	J	K	L
A.	Use knowledge & skills*	2	3	12	6	11	9	7.5	7.5	1	10	5	4
D.	Hard working team*	3	2	10	4	9	12	11	6	1	7.5	7.5	5
E.	Competent, fair sups.*	12	2	10	3	6	9	8	11	1	4	7	5
H.	Free carry out ideas*	6	1.5	12	3	9	7	8	10	1.5	5	11	4
I.	Clear objectives*	9	3	10	2	7	11	12	5	1	4	6	8
J.	Fair evaluation*	5	2	10	3	7	9	12	11	1	6	8	4
15.	Job satisfaction	5	2	3	4	11	12	9	10	1	8	6.5	6.5
32.	Sup. effectiveness (IV)	12	3.5	8	3.5	5	11	10	9	1	2	7	6
	Other Div. rating	7	5	2	4	111	12	10	6	3	1	8	9
	Top Mgt. ranking	10	3	4.5	6	11	12	7	2	1	4.5	8	9
	Factor I	8	2	9	4	11	12	7	6	1	3	5	10

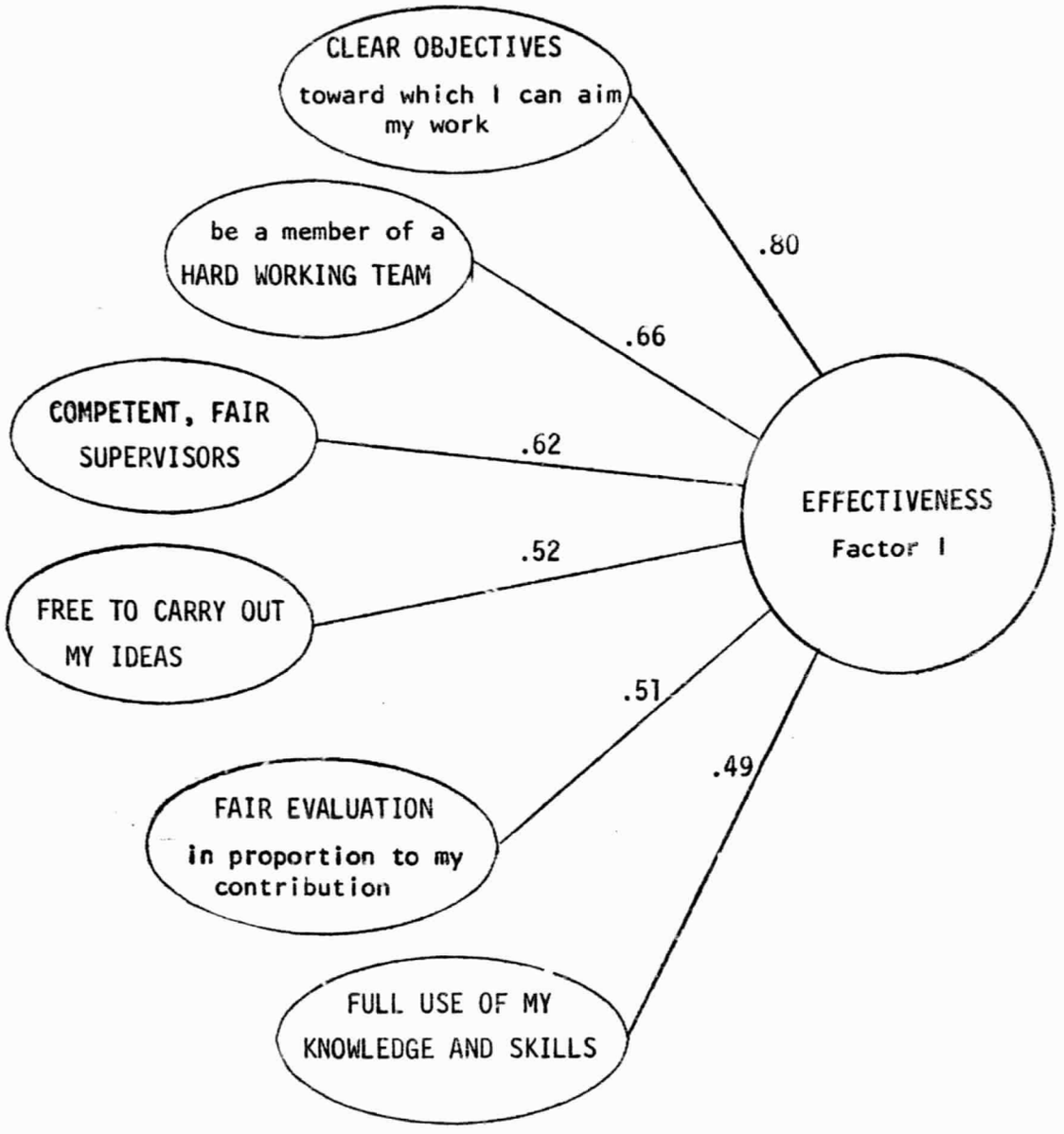
Rank Order Correlations

		A	D	E	H	I	J	15	32	ODR	TMR
A.	Use knowledge & skills**										
D.	Hard working team**	.82									
E.	Competent, fair sups**	.33	.49								
H.	Free carry out ideas**	.64	.71	.75							
I.	Clear objectives**	.41	.75	.73	.58						
J.	Fair evaluations**	.66	.83	.75	.86	.71					
15.	Job satisfaction	.56	.72	.46	.48	.51	.66				
32.	Sup effectiveness	.15	.49	.91	.57	.83	.68	.47			
	Other div. rating	.06	.45	.33	.25	.59	.35	.68	.56		
	Top Mgt. ranking	.22	.49	.38	.26	.64	.22	.58	.53	.77	
	Factor I	.49	.66	.62	.52	.80	.51	.64	.67	.70	.80

* Divisions are here rank ordered in terms of the provision of the job characteristics.

** Correlations are based on division rank orders of the provision of the job characteristics.

JOB CHARACTERISTICS AND EFFECTIVENESS



The numbers represent rank order correlations between division scores on the PROVISION of the job characteristic and division scores on effectiveness. A correlation of .50 would occur by chance alone 5 times, or less, in one-hundred. Thus, the more a division provides the above job characteristic, the greater is its effectiveness.

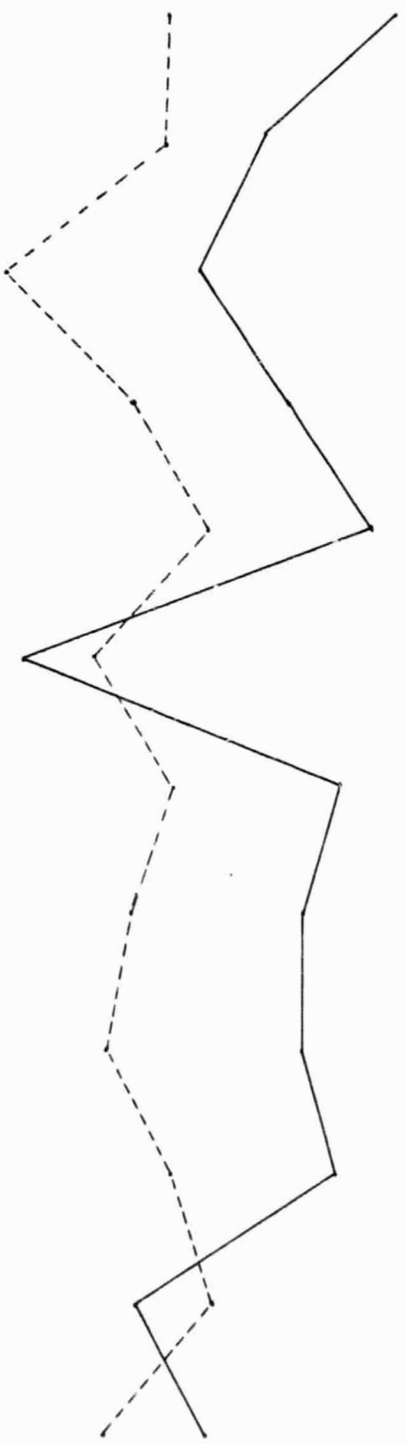
NASA 1014
Time 1

NASA OFFICE OF ADMINISTRATION

JOB CHARACTERISTICS

Professionals

	Slight or None (1)	Mod-erate (2)	Consid-erable (3)	Great (4)	Utmost (5)
A. Use knowledge and skills					
B. Earn good salary					
C. Adv in auth and status					
D. Hard-working team					
E. Competent, fair sups					
F. Assoc w imp pers in org					
G. Wk on challenging probs					
H. Free to carry out ideas					
I. Clear objectives					
J. Fair evaluation					
K. Job security					
L. A lot of responsibility					



_____ Importance

------ Provision

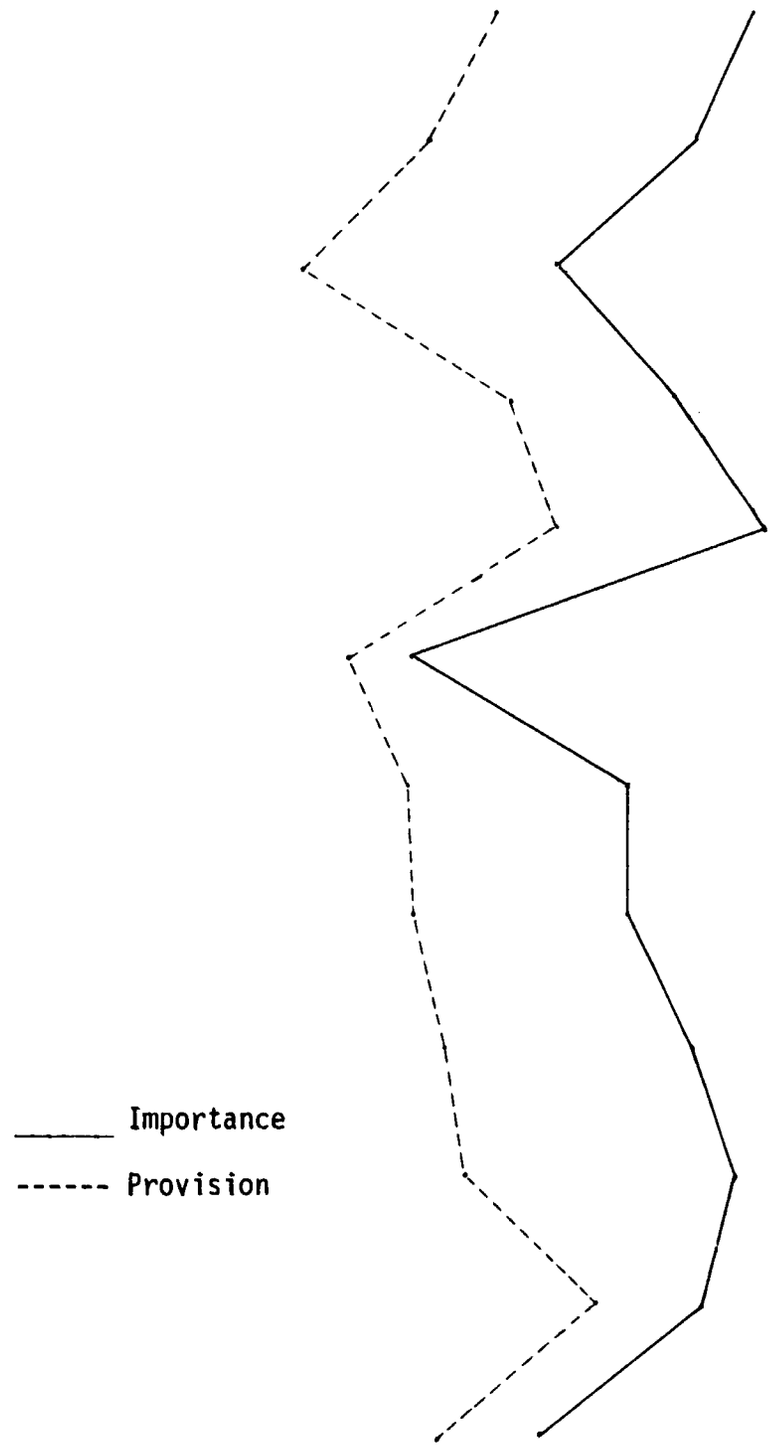
NASA 1014
Time 1

NASA OFFICE OF ADMINISTRATION

JOB CHARACTERISTICS

Non-Professionals

	Slight or None (1)	Mod-erate (2)	Consid-erable (3)	Great (4)	Utmost (5)
A. Use knowledge and skills					
B. Earn good salary					
C. Adv in auth and status					
D. Hard-working team					
E. Competent, fair sups					
F. Assoc w imp pers in org					
G. Wk on challenging probs					
H. Free to carry out ideas					
I. Clear objectives					
J. Fair evaluation					
K. Job security					
L. A lot of responsibility					

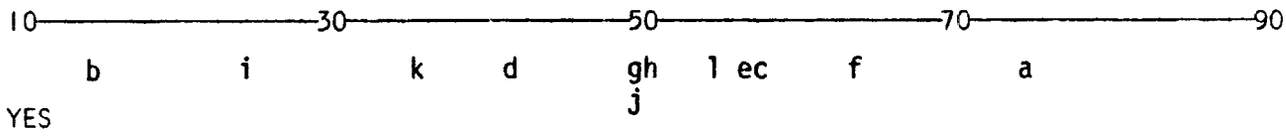


ADVERSE AFFECTS

(Section VIII)

Do you know of any individuals in NASA whose health has been adversely affected by the pressures and strains in their work?

Percentages



PRESSURE AND HEALTH

#8. How much pressure to "get out the work" do you feel, over and above what you think is reasonable?

		N	Functional * Syndrome	Ulcer ** Incidence	Absence Item 13
1.	No pressure	138	1.71	16%	2.04
2.	A little	80	1.69	11%	1.93
3.	Some	92	1.72	19%	2.24
4.	Considerable	75	1.72	19%	1.85
5.	A great deal of pressure	31	2.06	42%	2.23

* An index of time-oriented body functions- the sum of items #1, #2 (reversed), #8, #10 (reversed) and #11 (reversed) from Section VIII of the questionnaire. Those items deal with appetite, digestion, constipation, trouble getting to sleep, and trouble staying asleep.

** The percent of people reporting the presence of an ulcer, or definite ulcer symptoms.

RELATIONSHIPS OF JOB FACTORS

TO FREQUENCY OF ULCER

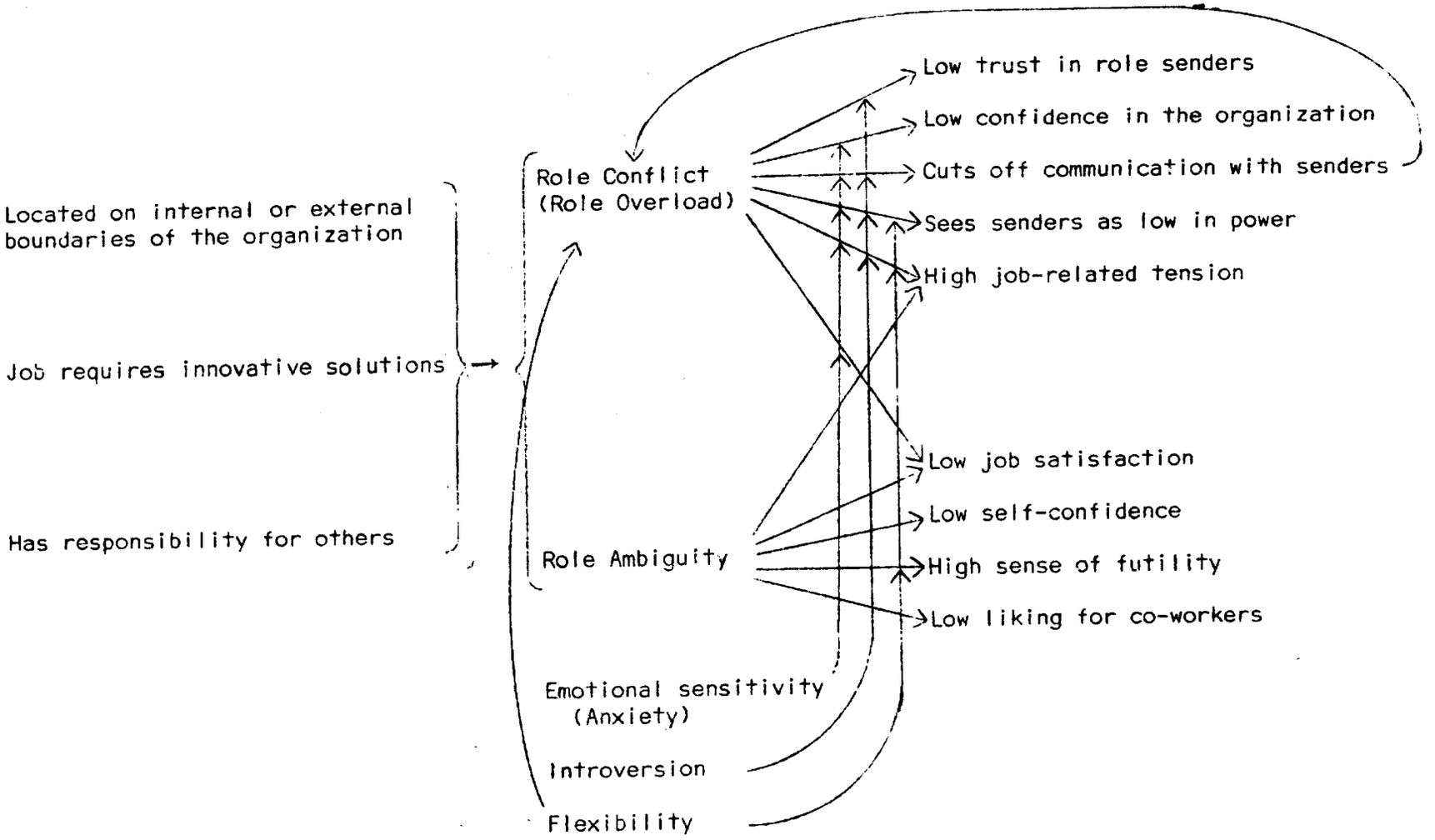
(Item #25 - Section I)

	Work Assignments well planned (4 - 5)	Work Assignments poorly planned (1 - 3)
Individuals with ulcers	46	31
Individuals without ulcers	267	80

(Item #18 - Section VI)

	Pressures generally reasonable (1 - 3)	Pressures less reasonable (4 - 5)
Individuals with ulcers	32	46
Individuals without ulcers	190	157

CAUSES AND CONSEQUENCES OF ROLE CONFLICT AND AMBIGUITY



DIVISION HEALTH HOLD-UP AND EFFECTIVENESS

ALL PERSONNEL

(N = 438)

	(20)	(21)	(27)	(28)	(29)	(30)	(33)	(16)
(20) Cope with fires	—	.40	.80	.39	.58	.53	.39	.27
(21) Effective leadership		—	.46	.30	.44	.44	.34	.22
(27) Factor I Effectiveness			—	.42	.58	.51	.51	.29
(28) Div. avoids creating problems				—	.51	.40	.34	.22
(29) Div. handles problems					—	.61	.41	.30
(30) Quality of work planning						—	.35	.26
(33) Achievement effort							—	.20
(16) Division health hold-up								—

NASA 1014
Time 1

DIVISION HEALTH HOLD-UP AND CONSIDERATE SUPERVISION,
FIREFIGHTING, JOB CONGRUENCE
ALL PERSONNEL
(N = 438)

		Considerate Supervision			
	(22)	(38)	(40)	(16)
(22) Leadership Factor II	—	.63	.54	-.15
(38) Supervisor belittles		—	.52	-.17
(40) Frequently annoyed with sup.			—	-.22
(16) Division health hold-up				—

		Frequency of Fires	
	(19)	(41)	(16)
(19) Frequency of fires	—	-.31	-.21
(41) Able to plan ahead		—	.15
(16) Division health hold-up			—

		Person - Environment Fit			
	(2)	(24)	(25)	(37)	(16)
(2) Own needs met	—	.59	.47	.29	.21
(24) JC factor I (larger)		—	.62	.27	.19
(25) JC factor II (smaller)			—	.29	.19
(37) R's authority relation to responsibility				—	.20
(16) Division health hold-up					--

APPENDIX IV: ASSESSMENT OF UTILIZATION

1. Seminar Evaluation Sheet
2. Second Questionnaire (March 1967)
3. Results of Second Questionnaire
4. Samples from Second Questionnaire Follow-On

Analysis of Change - Sample Seminar Tables

5. Table Notations
6. Effectiveness - Production
7. Effectiveness - Accept Change
8. Communication - Information
9. Coordination - Avoid Creating Problems
10. Supervision - Technical Skills
11. Supervision - Human Relations Skills
12. Motivation-Satisfaction - Pay
13. Motivation-Satisfaction - NASA
14. Michigan Study - Discuss Data
15. Michigan Study - Data Valid
16. Michigan Study - Over-all Effects

Analysis of Change - Sample T Test Tables

17. Organizational Items
18. Supervisory Items

Analysis of Change - Follow-On Questionnaire

19. Increase in Clarity of Objectives
20. Summary of Results

April 14 - 15
A.M. P.M.

NASA 1014
Time 1

POST MEETING REACTIONS

1. How satisfied are you with today's meeting?

   Very satisfied Satisfied So-so Dissatisfied Very dissatisfied

2. How interesting was today's meeting?

   Very interesting Interesting So-so Not interesting Very interesting

3. How helpful was today's meeting?

   Very helpful Fairly helpful So-so Not too helpful Not at all helpful

4. What, if anything, did you especially like about today's meeting?

5. What, if anything, did you especially dislike about today's meeting?

ADDITIONAL COMMENTS:

ISR

INSTITUTE FOR SOCIAL RESEARCH / THE UNIVERSITY OF MICHIGAN / ANN ARBOR, MICHIGAN

March 1967

Study of the Office of Administration
National Aeronautics and Space Administration

This questionnaire is part of a study being conducted by the Institute for Social Research of The University of Michigan. Many of you in the Office of Administration filled out a similar questionnaire about a year and a half ago. As you may remember, the purpose of this study, in the broadest sense, is to learn more about how people work together in organizations and how to use what is learned for making the work situation more satisfying and productive.

If this study is to be helpful it is important that you answer each question as thoughtfully and frankly as possible. This is not a test; there are no right and wrong answers. The important thing is that you answer the questions the way you see things or the way you feel about them.

None of the questionnaires, once they are filled out, will ever be seen by anyone in NASA. Completed questionnaires are taken by the research staff (or you mail them) back to The University of Michigan for tabulation and analysis. Findings of the analysis will be reported back statistically so that the responses of individuals will not be revealed. In some cases, the answers of persons in particular groups (such as a division) may be combined for reporting purposes. In other cases, answers of everyone at a particular level will be combined, such as all branch chiefs in the Office of Administration. In any event, the answers will be combined in groups large enough so that individuals cannot be identified.

Thank you for your cooperation.

Paul Mott and Tony Butterfield
Institute for Social Research
The University of Michigan

Project 1014

Questionnaire
Code Number

INSTRUCTIONS

Personal Code Number

Because this study involves more than one questionnaire, we need to be able to match the questionnaire which an individual filled out at one time with those he fills in at another. Since we are not interested in names of individuals, we are asking you to devise your own code number which only you know.

As your code, please use the initials of the first names of your father and mother with the date of your birth between. For example, if the names of your father and mother are (were) Thomas and Mabel and your birthday was April 21, your code identification would be T21M. Since this identification will be known only to you, this system will insure confidentiality. Please write your code number in the box in the upper right hand corner of this page.

If you did not fill out a questionnaire like this one a year and a half ago, there is no need for a code number. Leave the box empty.

Answering the questions

1. Most questions can be answered by checking (√) one of the answers. If you do not find the exact answer that fits your case, check the one that comes closest to it, or write in your own answer. For a few questions, empty space is provided and you are asked to write in the answers. Please, answer all questions.

2. Feel free to write in the margins and on the back of the questionnaire any explanations or comments you may have. If you do not understand something, feel free to ask at any time.

3. Please answer the questions in order.

4. Remember, the answers you give will be completely confidential. The value of the study depends upon your being as honest as you can in answering this questionnaire.

5. Ignore the numbers in the margins. They help get the information onto IBM cards.

Please return your completed questionnaire directly to The University of Michigan representative (or in the accompanying self-addressed envelope).

1

YOUR DIVISION

1. To what extent do the people within your division exchange helpful information and ideas? CHECK ONE:

_____(1) We do not exchange helpful ideas and information at all

_____(2) A small extent

11:21 _____(3) A fair extent

_____(4) A considerable extent

_____(5) We exchange helpful ideas and information to a great extent

2. How satisfied are you with the amount of information you get about what is going on in the Office of Administration? CHECK ONE:

_____(1) Not at all satisfied with the amount of information

_____(2) Not very well satisfied

11:22 _____(3) Somewhat satisfied but could get more

_____(4) Fairly well satisfied

_____(5) Very well satisfied with the amount of information

3. When a major change is being considered in your division, how much opportunity is given to people who will be affected by the change to explain, and argue for, their needs and interests? CHECK ONE:

_____(1) People are given no opportunity to explain their needs and interests

_____(2) Very little opportunity

11:23 _____(3) Some opportunity

_____(4) People are given considerable opportunity

_____(5) People are given a very great opportunity to explain their needs and interests

4. During any typical day, how frequently are you interrupted from doing the work you had planned to do by an unexpected problem, complication, or other unplanned event? CHECK ONE:

_____(1) Almost never. I can usually work without interruption on things I had planned to work on

_____(2) Once in a while

11:24 _____(3) Fairly frequently

_____(4) Quite frequently

_____(5) Almost constantly. It is almost impossible for me to work on things I had planned to work on

Every worker produces something in his work. It may be a "product" or a "service." But sometimes it is very difficult to identify the product or service. Below are listed some of the products and services being produced in the Office of Administration.

Typed pages	Recommended policies and procedures
Delivered mail	New programs
Dispatched automobiles	Classified jobs
Staff papers and studies	Supplying new equipmen
Coding systems	Contracts

These are just a few of the things being produced.

We would like you to think carefully of the things that you produce in your work and of the things produced by those people who work around you in your division.

5. Thinking now of the various things produced by the people you know in your division, how much are they producing? CHECK ONE:

_____(1) Their production is very high

_____(2) It is fairly high

11:25 _____(3) It is neither high nor low

_____(4) It is fairly low

_____(5) It is very low

6. How good would you say is the quality of the products or services produced by the people you know in your division? CHECK ONE:

_____(1) Their quality is poor

_____(2) Their quality is not too good

11:26 _____(3) Fair quality

_____(4) Good quality

_____(5) Their products or services are of excellent quality

7. Do the people in your division seem to get maximum output from the resources (money, people, equipment, etc.) they have available? That is, how efficiently do they do their work? CHECK ONE:

_____(1) They are extremely efficient

_____(2) They are very efficient

11:27 _____(3) Fairly efficient

_____(4) Not too efficient

_____(5) They do not work efficiently at all

8. From time to time newer ways are discovered to organize work, and newer equipment and techniques are found with which to do the work. How good a job do the people in your division do at keeping up with these changes that could affect the way they do their work: CHECK ONE:

_____(1) They do a poor job of keeping up to date

_____(2) Not too good a job

11:28 _____(3) A fair job

_____(4) They do a good job

_____(5) They do an excellent job of keeping up to date

9. When changes are made in the routines or equipment, how quickly do the people in your division accept and adjust to these changes? CHECK ONE:

_____(1) Most people accept and adjust to them very slowly

_____(2) Rather slowly

11:29 _____(3) Fairly rapidly

_____(4) They adjust very rapidly, but not immediately

_____(5) Most people accept and adjust to them immediately

10. What proportion of the people in your division readily accept and adjust to these changes? CHECK ONE:

_____(1) Considerably less than half of the people accept and adjust to these changes readily

_____(2) Slightly less than half do

11:30 _____(3) The majority do

_____(4) Considerably more than half do

_____(5) Practically everyone accepts and adjusts to these changes readily

11. From time to time emergencies arise; such as, crash programs, schedules moved ahead, or a breakdown in the flow of work occurs. When these emergencies occur, they cause work overloads for many people. Some work groups cope with these emergencies more readily and successfully than others. How good a job do the people in your division do at coping with these situations? CHECK ONE:

_____(1) They do an excellent job of handling these situations

_____(2) They do a good job

11:31 _____(3) They do a fair job

_____(4) They do not do very well

_____(5) They do a poor job of handling emergency situations

12. How good a job is done by the people in your division in <u>anticipating</u> problems that may come up in the future and preventing them from occurring or minimizing their effects? CHECK ONE:

_____(1) They do a poor job in anticipating problems

_____(2) Not too good a job

11:32 _____(3) A fair job

_____(4) They do a very good job

_____(5) They do an excellent job in anticipating problems

13. Compared with other government groups you have worked in before coming to NASA (or NACA) how would you rate the effectiveness of <u>your present</u> division? CHECK ONE:

_____(1) My present division is far less effective than other government groups in which I have worked

_____(2) It is less effective than others in which I have worked

11:33 _____(3) It is about the same

_____(4) It is more effective than others in which I have worked

_____(5) My present division is far more effective than other government groups in which I have worked

_____(9) I have never had a non-NASA (or NACA) job in the government

14. How well are the different jobs and work activities <u>in your division</u> geared together in the direction of meeting the objectives of the division? CHECK ONE:

_____(1) The jobs and activities are geared together almost perfectly

_____(2) Very well

11:34 _____(3) Fairly well

_____(4) Not so well

_____(5) The jobs and activities are not at all well geared together

15. To what extent do the people you work with <u>in your division</u> make an effort to avoid creating problems or interference with each other's duties and responsibilities? CHECK ONE:

_____(1) They try to avoid interfering with each other to a very small extent

_____(2) To a small extent

11:35 _____(3) To a fair extent

_____(4) To a great extent

_____(5) They try to avoid interfering with each other to a very great extent

16. From time to time problems of coordinating the work of people who must work together arise. When they arise <u>in your division</u>, how well are these problems handled. CHECK ONE:

_____(1) These problems are extremely well handled

_____(2) Very well handled

11:36 _____(3) Fairly well handled

_____(4) Not very well handled

_____(5) They are not handled well at all

17. Taking all things into consideration, how well do you feel your division does in fulfilling its mission or achieving its goals? CHECK ONE:

_____(1) Our division is doing rather poorly

_____(2) Fair

11:37 _____(3) Good

_____(4) Very good

_____(5) Our division is doing excellently

INSTRUCTIONS FOR SUPERVISORY-SUBORDINATE RELATIONS SECTION

The questions on the next few pages are about supervisory-subordinate relations. Because the organizational makeup of the various divisions in the Office of Administration varies greatly, and in order to gather meaningful data from large enough groups, it is necessary to define the term supervisor according to the division you are in. This means that in some cases people will not be describing the person to whom they report directly, but rather the next supervisor up the line.

Please find your division below, and place a checkmark by the name of the person you are instructed to describe as your supervisor. You should check only one name. This person, and no one else, is the one you are to describe as your supervisor on the following questions.

A) All persons in:

Inspections
Property and Supply
11:38-40 Transportation and Logistics
Security-Agency-Wide
Management Information Systems

Describe as your supervisor your division director and check his name below:

_____(114) Charles Haynes
_____(115) Lavern Hanson
_____(116) James McCollom
_____(117) Lloyd Blankenbaker
_____(190) Walter Haase

* * * * * * * * * * *

B) Administrative Services Division

1) All branch chiefs, and all persons not assigned to a branch, describe the division director, and check his name below:

_____(160) Buck Shea

2) All persons assigned to either a section or a branch, describe your branch chief, and check his name below:

_____(261) James Poland
_____(262) David King
_____(263) Stephen Saliga
_____(264) Sidney Newman
_____(265) Herman Nader
_____(267) Sidney Musselman

C) All persons in:

Headquarters Security
Headquarters Personnel
Personnel-Agency-Wide
Headquarters Contracts

1) All branch chiefs, and all persons not assigned to a branch, describe their division director, and check his name below:

_____(120) Bartley Fugler
_____(130) Philip Sload
_____(140) Grove Webster
_____(150) Albert Clagett

2) All persons assigned to a branch, including those persons assigned to a section within a branch, describe their branch chief, and check his name below:

_____(221) Frank Dukes
_____(222) Arnold Garrett
_____(231) Bernard Unger
_____(232) Helga Wood
_____(234) Furman Layman
_____(235) Gwynne Berry
_____(241) William Wesp
_____(242) Patrick Gavin
_____(243) Madison Smith
_____(244) Robert Huddleston
_____(251) Herbert Snyder
_____(252) Carl Grey
_____(253) Ralph Scroggs
_____(254) Clara Hardee

* * * * * * * * * * *

D) Financial Management

1) All persons in the Headquarters Accounts and Reports Branch describe the branch chief, and check his name below:

_____(271) Herbert Brooks

2) Everyone else in the Financial Management Division describe the division director, and check his name below:

_____(170) John Croxall

E) Audit

1) All regional audit managers, and all persons in the Washington office, describe as your supervisor the division director, and check his name here (Washington audit managers will be described separately on an additional form):

_____(180) Raymond Einhorn

2) All field personnel except Michoud and Daytona, describe your regional audit manager and check his name below:

_____(281) Robert Voigt
_____(284) George Noel
_____(286) Norbert Crowe
_____(287) Earle Smith
_____(288) Eugene Nettles
_____(289) James McNamara

3) Michoud and Daytona personnel describe your audit office manager, and check his name below:

_____(283) William Norwalk

_____(285) Searcy Smith

Questions on this page are to be answered with reference to your supervisor whose name you checked at the beginning of this section.

18. How well does your supervisor handle the technical side of his job--for example, general expertness, knowledge of job, technical skills needed, etc.? CHECK ONE:

_____(1) He handles the technical side of his job extremely well

_____(2) Very well

11:41 _____(3) Fairly well

_____(4) Not so well

_____(5) He does not handle the technical side of his job at all well

19. To what extent does your supervisor show you how to improve your performance? CHECK ONE:

_____(1) Not at all

_____(2) To a very little extent

11:42 _____(3) To some extent

_____(4) To a considerable extent

_____(5) To a very great extent

20. Do you feel that your supervisor will go to bat or stand up for you? CHECK ONE:

_____(1) No, he won't go to bat for me

_____(2) Probably won't

11:43 _____(3) May or may not

_____(4) Probably will

_____(5) Yes, definitely he will go to bat for me

REMINDER: Questions on this page are to be answered with reference to your supervisor whose name you checked at the beginning of this section.

21. How free do you feel to discuss important things about your job with your supervisor? CHECK ONE:

_____(1) I feel completely free to discuss things about my job with my supervisor

_____(2) Rather free

11:44 _____(3) Fairly free

_____(4) Not very free

_____(5) I feel not at all free to discuss things about my job with my supervisor

22. In solving job problems, does your supervisor generally try to get your ideas and opinions? CHECK ONE:

_____(1) He seldom gets my ideas and opinions in solving job problems

_____(2) He sometimes does this

11:45 _____(3) He often does this

_____(4) He almost always does this

_____(5) He always gets my ideas and opinions in solving job problems

23. To what extent does your supervisor encourage extra effort? CHECK ONE:

_____(1) He encourages extra effort to a great extent

_____(2) To a considerable extent

11:46 _____(3) To some extent

_____(4) To a very little extent

_____(5) He does not encourage extra effort at all

REMINDER: Questions on this page are to be answered with reference to your supervisor whose name you checked at the beginning of this section.

24. To what extent does your supervisor maintain high standards of performance? CHECK ONE:

_____(1) He does not maintain high standards of performance at all

_____(2) To a very little extent

11:47 _____(3) To some extent

_____(4) To a considerable extent

_____(5) He maintains high standards of performance to a very great extent

25. To what extent do you feel that you, personally, can influence the activities and decisions of your supervisor on matters that are of concern to you? CHECK ONE:

_____(1) I can't influence him at all

_____(2) To some extent

11:48 _____(3) To a moderate extent

_____(4) To a considerable extent

_____(5) I can influence him to a great extent

26. How well does your supervisor handle the human relations side of his job--for example, getting people to work well together, getting individuals to do the best they can, giving recognition for good work done, letting people know where they stand, etc.? CHECK ONE:

_____(1) He handles the human relations side of his job extremely well

_____(2) Very well

11:49 _____(3) Fairly well

_____(4) Not so well

_____(5) He does not handle the human relations side of his job at all well

REMINDER: Questions on this page are to be answered with reference to your supervisor whose name you checked at the beginning of this section.

27. How frequently is work time lost because your supervisor fails to do the proper planning and scheduling? CHECK ONE:

_____(1) Work time is never lost through his poor planning and scheduling

_____(2) Almost never

11:50 _____(3) Occasionally

_____(4) Frequently

_____(5) Work time is quite frequently lost through his poor planning and scheduling

28. In carrying out the basic tasks of your job, does your supervisor supervise you closely or does he put you on your own? CHECK ONE:

_____(1) I am definitely on my own

_____(2) I am pretty much on my own

11:51 _____(3) He uses a moderate amount of supervision

_____(4) He uses fairly close supervision

_____(5) He uses very close supervision; he doesn't put me on my own

29. How well do you feel your supervisor understands the work problems and needs which you have? CHECK ONE:

_____(1) He has no understanding of my work problems and needs

_____(2) A little understanding

11:52 _____(3) Some understanding

_____(4) Considerable understanding

_____(5) He has complete understanding of my work problems and needs

REMINDER: Questions on this page are to be answered with reference to your supervisor whose name you checked at the beginning of this section.

30. How good a job does your supervisor do at solving problems? CHECK ONE:

_____(1) He does an excellent job at solving problems

_____(2) A very good job

11:53 _____(3) A good job

_____(4) A fair job

_____(5) He does a poor job at solving problems

31. How much does your supervisor encourage the members of your work group to work together as a team? CHECK ONE:

_____(1) He gives team work a great deal of encouragement

_____(2) Considerable encouragement

11:54 _____(3) Some encouragement

_____(4) Little encouragement

_____(5) He doesn't encourage teamwork at all

32. How well does your supervisor handle the <u>administrative side</u> of his job--for example, planning and scheduling the work, indicating clearly when work is to be finished, assigning the right job to the right man, inspecting and following up on the work that is done, etc.? CHECK ONE:

_____(1) He does not handle the administrative side of his job at all well

_____(2) Not so well

11:55 _____(3) Fairly well

_____(4) Very well

_____(5) He handles the administrative side of his job extremely well

REMINDER: Questions on this page are to be answered with reference to your supervisor whose name you checked at the beginning of this section.

33. How well does your supervisor understand the "big picture" of what NASA is all about--does he see how NASA's mission relates to the social, economic, and political environment of the country? CHECK ONE:

_____(1) He does not understand the "big picture" at all well

_____(2) Not so well

11:56 _____(3) Fairly well

_____(4) Very well

_____(5) He understands the "big picture" extremely well

_____(9) I don't know

34. How good a job does your supervisor do at personally representing your work group in dealings with other groups in NASA or outside organizations? CHECK ONE:

_____(1) He does a rather poor job

_____(2) Fair job

11:57 _____(3) Good job

_____(4) Very good job

_____(5) He does an excellent job at representing us

35. How well does your supervisor handle the <u>institutional leadership side</u> of his job--for example, creating and formulating policy; handling matters of the agency's relationships to outside organizations, agencies, and groups; understanding the importance and relationships of the agency's mission on the political, social, and economic environment? CHECK ONE:

_____(1) He does not handle the institutional leadership side of his job at all well

_____(2) Not so well

11:58 _____(3) Fairly well

_____(4) Very well

_____(5) He handles the institutional leadership side of his job extremely well

_____(9) I don't know

REMINDER: Questions on this page are to be answered with reference to your supervisor whose name you checked at the beginning of this section.

36. How much influence does your supervisor have with his superiors and others up the line? CHECK ONE:

_____(1) He has a great deal of influence upward

_____(2) Considerable influence

11:59 _____(3) Some influence

_____(4) Little influence

_____(5) He doesn't have any influence upwards at all

37. How often does your supervisor belittle you, or act sarcastic toward you? CHECK ONE:

_____(1) He never belittles me

_____(2) Seldom

11:60 _____(3) Occasionally

_____(4) Frequently

_____(5) He very frequently belittles me

38. How often do you become irritated or annoyed with your supervisor? CHECK ONE:

_____(1) I am very often annoyed with my supervisor

_____(2) Often

11:61 _____(3) Occasionally

_____(4) Seldom

_____(5) I never become irritated or annoyed with my supervisor

REMINDER: Questions on this page are to be answered with reference to your supervisor whose name you checked at the beginning of this section.

39. How much confidence and trust do you have in your supervisor? CHECK ONE:

_____(1) I have no confidence and trust in my supervisor at all

_____(2) Not very much confidence

11:62 _____(3) A fair amount

_____(4) A great deal

_____(5) I have complete confidence and trust in my supervisor

40. How much confidence and trust does your supervisor have in you? CHECK ONE:

_____(1) He has no confidence and trust in me at all

_____(2) Not very much

11:63 _____(3) A fair amount

_____(4) A great deal

_____(5) My supervisor has complete confidence and trust in me

_____(9) I don't know

41. Does your supervisor deal with his subordinates on a man-to-man basis, or does he deal with them primarily as a group? CHECK ONE:

_____(1) He uses group methods of supervision entirely

_____(2) He uses group methods more than man-to-man methods

11:64 _____(3) He uses group and man-to-man methods about equally

_____(4) He uses man-to-man methods more than group methods

_____(5) He uses man-to-man methods of supervision entirely

REMINDER: Questions on this page are to be answered with reference to your supervisor whose name you checked at the beginning of this section:

42. People often have more than one supervisor; that is, more than one person who can tell them what to do. How often does it happen that you are given different priorities for each of the various jobs or projects you do? CHECK ONE:

_____(1) This almost never happens

_____(2) This seldom happens

11:65 _____(3) This happens occasionally

_____(4) This happens often

_____(5) This happens just about all the time

43. Does your supervisor have the authority he needs in order to carry out his responsibilities? CHECK ONE:

_____(1) No, my supervisor has almost no authority to carry out his responsibilities

_____(2) Not really; on most matters he does <u>not</u> have the authority he needs

11:66 _____(3) Maybe; for some responsibilities, yes; for others, no

_____(4) Yes, for most matters he has the authority he needs

_____(5) Yes, he has all the authority he needs

44. People who work together sometimes have rather different points of view. To the extent that there are different viewpoints among those you work with, how successful is your supervisor in using these differences to get an effective end product?

_____(1) He is very successful at utilizing different viewpoints

_____(2) Quite successful

11.67 _____(3) Fairly successful

_____(4) Not too successful

_____(5) He is not at all successful at utilizing different viewpoints

_____(9) There really aren't any differences among our group

REMINDER: Questions on this page are to be answered with reference to your supervisor whose name you checked at the beginning of this section.

45. Some people can be described as "approachable" (easy to talk with), while others are "distant" (not easy to talk with). Would you describe your supervisor as "approachable" or "distant?" CHECK ONE:

_____(1) My supervisor is very definitely distant

_____(2) More distant than approachable

11:68 _____(3) Approachable on some things, distant on others

_____(4) More approachable than distant

_____(5) My supervisor is very definitely approachable

46. Which of the following ways comes closest to describing how <u>the important decisions</u> are made in your division? CHECK ONE:

_____(1) The division director makes the important decisions. He rarely asks for advice; he just gives orders.

_____(2) The division director makes the <u>final</u> decisions, but he relys on other people in the division for advice and recommendations.

11:69 _____(3) Some important decisions are made by the division director; but about as many are made by other people in the division.

_____(4) Several different people make the important decisions in our division. The division director <u>really</u> doesn't have much more influence than any of them.

_____(5) A number of people are about equally involv They usually get together and discuss the problem and agree on a solution.

_____(9) I don't know how the important decisions are made in my division

REMINDER: Questions on this page are to be answered with reference to your supervisor whose name you checked at the beginning of this section.

47. All in all, how effective a job do you think your supervisor is doing? CHECK ONE:

11:70

_____(1) He is doing a rather poor job

_____(2) A fair job

_____(3) A good job

_____(4) A very good job

_____(5) He is doing an excellent job

CHARACTERISTICS OF YOUR JOB

48. Listed below are different kinds of opportunities which a job might afford. If you were to seek another job, how much importance would you personally attach to each of these (disregarding whether or not your present job provides them)?

		CHECK ONE BOX IN EACH LINE:	Importance I would attach: Slight or None (1)	Moderate (2)	Considerable (3)	Great (4)	Utmost (5)
12:21	A.	to make full use of my knowledge and skills . . .	[ ]	[ ]	[ ]	[ ]	[ ]
12:22	B.	to be a member of a hard-working team	[ ]	[ ]	[ ]	[ ]	[ ]
12:23	C.	to work for competent, fair supervisors	[ ]	[ ]	[ ]	[ ]	[ ]
12:24	D.	to have freedom to carry out my own ideas	[ ]	[ ]	[ ]	[ ]	[ ]
12:25	E.	to have clear objectives toward which I can aim my work	[ ]	[ ]	[ ]	[ ]	[ ]
12:26	F.	to be evaluated fairly in proportion to what I contribute	[ ]	[ ]	[ ]	[ ]	[ ]

REMINDER: Did you check one box in each line?

49. Now, to what extent does your present job actually provide an opportunity for each of these factors?

		CHECK ONE BOX IN EACH LINE:	Slight or None (1)	Mod-erate (2)	Consid-erable (3)	Great (4)	Utmost (5)
12:27	A.	making full use of my knowledge and skills . . .	[ ]	[ ]	[ ]	[ ]	[ ]
12:28	B.	to be a member of a hard-working team	[ ]	[ ]	[ ]	[ ]	[ ]
12:29	C.	to work for competent, fair supervisors	[ ]	[ ]	[ ]	[ ]	[ ]
12:30	D.	to have freedom to carry out my own ideas	[ ]	[ ]	[ ]	[ ]	[ ]
12:31	E.	to have clear objectives toward which I can aim my work	[ ]	[ ]	[ ]	[ ]	[ ]
12:32	F.	to be evaluated fairly in proportion to what I contribute	[ ]	[ ]	[ ]	[ ]	[ ]

REMINDER: Did you check one box in each line?

50. How satisfied are you with the amount of pay your job provides you? CHECK ONE:

_____(1) Very dissatisfied

_____(2) Fairly dissatisfied

12:33 _____(3) Neither satisfied nor dissatisfied

_____(4) Fairly well satisfied

_____(5) Completely satisfied

51. How hard, would you say, are the people you know in your division trying to achieve a high level of performance? CHECK ONE:

_____(1) They are not trying hard at all to achieve a high level of performance

_____(2) Not so hard

12:34 _____(3) Fairly hard

_____(4) They are trying hard

_____(5) They are trying their hardest to achieve a high level of performance

52. Do you ever think about quitting your present job? CHECK ONE:

_____(1) No, I have never thought about quitting

_____(2) I've thought about it once or twice

12:35 _____(3) I think about quitting every so often

_____(4) I think about quitting fairly frequently

_____(5) I think about quitting nearly every day

53. How do you feel about your own chances for promotion to a better job in the Office of Administration? CHECK ONE:

_____(1) I am very dissatisfied with my chances for promotion

_____(2) Quite dissatisfied

12:36 _____(3) Neither satisfied nor dissatisfied

_____(4) Quite satisfied

_____(5) I am very satisfied with my chances for promotion

54. How much pressure to "get out the work" do you feel, over and above what you think is reasonable? CHECK ONE

_____(1) I feel a great deal of pressure over and above what is reasonable

_____(2) Considerable pressure

12:37 _____(3) Some pressure

_____(4) A little pressure

_____(5) I feel no pressure over and above what is reasonable

55. How successful has NASA been in getting you to meet its needs--for example, getting you to produce what they want, when they want it, in the manner they want? CHECK ONE:

_____(1) They have not been successful at all at getting me to meet NASA's needs

_____(2) Not too successful

12:38 _____(3) Somewhat successful

_____(4) Fairly successful

_____(5) They have been very successful at getting me to meet NASA's needs

56. How good a job has NASA done at meeting your needs--for example, interesting work, adequate pay, a chance to use or develop your talents, or whatever it is that you want from your job? CHECK ONE:

_____(1) NASA has done an excellent job at meeting my needs

_____(2) A very good job

12:39 _____(3) A fair job

_____(4) Not too good a job

_____(5) NASA has not done a good job at all at meeting my needs

57. All in all, how satisfied are you with your present job? CHECK ONE:

_____(1) Very dissatisfied

_____(2) Fairly dissatisfied

12:40 _____(3) Neither satisfied nor dissatisfied

_____(4) Fairly satisfied

_____(5) Very satisfied

58. Thinking about working for the government in Washington and all the various departments and agencies (Labor, DOD, Agriculture, etc.), how satisfied are you to be working in NASA? CHECK ONE:

_____(1) Very satisfied

_____(2) Quite satisfied

12:41 _____(3) Neither satisfied nor dissatisfied

_____(4) Quite dissatisfied

_____(5) Very dissatisfied

THE OFFICE OF ADMINISTRATION

If you came to work in the Office of Administration after Al Siepert left as head (he left in the Spring of 1963), move on to question 70.

The following questions ask you to compare how things were when you first came to work in the Office of Administration (O. A.) with the way they are today.

59. How do the opportunities for most people to move to a better job in the Office of Admiristration today compare with such opportunities when you first came to work in the Office of Administration? CHECK ONE:

_____(1) The opportunities for most people are much greater today

_____(2) Somewhat greater today

12:42 _____(3) About the same today

_____(4) Somewhat fewer today

_____(5) The opportunities today are much fewer

60. How much freedom and autonomy do most people have in doing their work now as compared with their freedom and autonomy when you first came to work in the Office of Administration? CHECK ONE:

_____(1) Freedom and autonomy are much less now

_____(2) Somewhat less

12:43 _____(3) About the same

_____(4) Somewhat greater

_____(5) Freedom and autonomy are much greater now

61. How much pressure and strain do you feel on the job now, as compared with when you first came to work in the O. A.? CHECK ONE:

_____(1) Pressure and strain are much greater now

_____(2) Somewhat greater

12:44 _____(3) About the same

_____(4) Somewhat less

_____(5) Pressure and strain are much less now

62. How clear are the goals of your division now, as compared with when you first came to work in the O. A.? CHECK ONE:

_____(1) The division goals are much less clear now

_____(2) Somewhat less clear

12:45 _____(3) About the same

_____(4) Somewhat clearer

_____(5) The division goals are much clearer now

63. How many rules, regulations, and procedures that affect your job are there now as compared with when you first came to work in the O. A.? CHECK ONE:

_____(1) There are many fewer rules, regulations, and procedures now

_____(2) Somewhat fewer

12:46 _____(3) About the same

_____(4) Somewhat more

_____(5) There are many more rules, regulations, and procedures

64. Are these rules, regulations, and procedures more or less helpful now then when you first came to work in the O. A.? CHECK ONE:

_____(1) The rules, regulations, and procedures are much more helpful now

_____(2) Somewhat more helpful

12:47 _____(3) About as helpful

_____(4) Somewhat less helpful

_____(5) The rules, regulations, and procedures are much less helpful now

65. How cooperative are the people you work with now, as compared with when you first came to work in the O. A.? CHECK ONE:

_____(1) The people are much more cooperative now

_____(2) Somewhat more cooperative

12:48 _____(3) About as cooperative

_____(4) Somewhat less cooperative

_____(5) The people are much less cooperative now

66. How much paperwork is there now, as compared with when you first came to work in the O. A.? CHECK ONE:

_____(1) There is much more paperwork now

_____(2) Somewhat more

12:49 _____(3) About the same

_____(4) Somewhat less

_____(5) There is much less paperwork now

67. How much importance is attached to efficiency in work performance now, as compared with when you first came to work in the O.A.? CHECK ONE:

_____(1) Much more importance is attached to efficiency now

_____(2) Somewhat more

12:50 _____(3) About the same

_____(4) Somewhat less

_____(5) Much less importance is attached to efficiency now

68. How much of an opportunity to be creative is there now, as compared with when you first came to work in the O. A. CHECK ONE:

_____(1) There is much more opportunity to be creative now

_____(2) Somewhat more

12:51 _____(3) About the same

_____(4) Somewhat less

_____(5) There is much less opportunity to be creative now

69. How hard are most people trying to do their best now, as compared with when you first came to work in the O. A.? CHECK ONE:

_____(1) Most people are trying much less hard to do their best now

_____(2) Somewhat less hard

12:52 _____(3) About the same

_____(4) Somewhat harder

_____(5) Most people are trying much harder to do their best now

THE MICHIGAN STUDY

70. Have you seen any of the data (findings) from the first questionnaire; for example, tables, charts, viewgraphs, etc., showing average scores on the questionnaire items? CHECK ONE:

_____(1) Yes, I have seen data from the first questionnaire

12:53 _____(3) I'm not sure; I don't remember

_____(5) No, I haven't seen any data from the first questionnaire

71. Did the data have any meaning for you; did you understand them? CHECK ONE:

_____(1) No. I didn't understand the data at all

_____(2) Not really. I understood them only a little bit

12:54 _____(3) The data had some meaning for me

_____(4) The data had a good deal of meaning for me

_____(5) Yes. I understood the data enough so they had a great deal of meaning for me.

_____(9) I didn't see any data

72. Did the data from your division show that, compared with others in the Office of Administration, your division was in general: CHECK ONE:

_____(1) Well above average

_____(2) Slightly above average

12:55 _____(3) About average

_____(4) Slightiy below average

_____(5) Well below average

_____(9) I didn't see any data

73. Among the people you work with at your level, how much discussion and talk about the data has there been? CHECK ONE:

_____(1) There has been a great deal of discussion of the data

_____(2) A considerable amount

12:56 _____(3) A fair amount

_____(4) Some discussion, but not much

_____(5) There hasn't been any discussion at all at my level

74. To what extent have the people you work with used the data as a basis for improving things? CHECK ONE:

_____(1) People I work with have used the data to a great extent

_____(2) To a considerable extent

12:57 _____(3) To a fair extent

_____(4) To a small extent

_____(5) People I work with haven't really used the data at all

_____(9) I don't know

75. How valid do you feel the data were; that is, did they present a true picture of the way things really are? CHECK ONE:

_____(1) I feel the data were very valid

_____(2) Quite valid

12:58 _____(3) Fairly valid

_____(4) Not too valid

_____(5) I feel the data were not valid at all

_____(9) I didn't see any data

76. To what extent has the Michigan Study had harmful, as well as helpful effects? CHECK ONE:

_____(1) The Michigan Study hasn't had any harmful effects at all

_____(2) The harmful effects have been very slight

12:59 _____(3) There have been harmful effects, but on the whole the net effect has been positive

_____(4) The harmful effects have just about cancelled out the helpful ones

_____(5) The harmful effects have been greater than the positive effects

_____(9) The Michigan Study hasn't really had any effects at all, one way or the other

77. All in all, to what extent has the Michigan Study had any effect in your division? CHECK ONE:

_____(1) The Michigan Study has had virtually no effect in my division

_____(2) A very slight effect

12:60 _____(3) Some effect

_____(4) Moderate effect

_____(5) The Michigan Study has had a rather considerable effect in my division

NASA OFFICE OF ADMINISTRATION

Division and Branch Roster

78. Please place a checkmark ! the division you are in, and, if it is listed, your branch as well. Note that the list continues on the next page.

12:61-63

____ 14 Inspections

____ 15 Property and Supply

____ 16 Transportation and Logistics

____ 17 Security-Agency-Wide

____ 20 Headquarters Security Operations

- ____ 1 Personnel Security Branch
- ____ 2 Physical Security Branch

____ 30 Headquarters Personnel Operations

- ____ 1 Classification Branch
- ____ 2 Training Branch
- ____ 3 Personnel Management Asst. Branch
- ____ 4 Processing Records and Reports Branch
- ____ 5 Program Development Branch

____ 40 Personnel-Agency-Wide

- ____ 1 Classification and Compensation Branch
- ____ 2 Personnel Management Branch
- ____ 3 Program Management Branch
- ____ 4 Training and Employee Development Branch

____ 50 Headquarters Contracts

- ____ 1 MSF and ART Negotiation Branch
- ____ 2 SSA and TDA Negotiation Branch
- ____ 3 Contract Administration Branch
- ____ 4 Support Staff

_____ 60 Administrative Services

_____ 1 Transportation and Communication

_____ 2 Supply

_____ 3 Visual Aids

_____ 4 Buildings Management

_____ 5 Printing

_____ 7 Administrative Standards

_____ 70 Financial Management

_____ 1 Headquarters Accounting and Reports Branch

_____ 80 Audit

_____ 1 MSC - Houston

_____ 2 Headquarters - Washington

_____ 3 Daytona Beach

_____ 4 MSFC - Huntsville

_____ 5 Michoud

_____ 6 Lewis

_____ 7 Western

_____ 8 Kennedy

_____ 9 Goddard - NEO

_____ 90 Management Information Systems

REMINDER: Everyone should have checked his division; and, if it was listed, his branch also.

BACKGROUND INFORMATION

79. How long have you worked in your present division? CHECK ONE:

_____(1) Less than six months

_____(2) 6 months to a year and a half

12:64 _____(3) 1 1/2 to 3 years

_____(4) 3 to 5 years

_____(5) 5 to 9 years

_____(6) More than 9 years

80. How long have you worked for NASA (including NACA)? CHECK ONE:

_____(1) Less than six months

_____(2) 6 months to a year and a half

12:65 _____(3) 1 1/2 to 3 years

_____(4) 3 to 5 years

_____(5) 5 to 9 years

_____(6) More than 9 years

81. My present GS grade level or Wage Board Classification level is:

12:66-67 _____
(Write in)

82. My NASA Classification Code Group is: CHECK ONE:

_____(6) 600, 200, 700, 900 (Professional)

12:68 _____(5) 500 (Secretarial and Clerical)

_____(4) Other

83. CHECK ONE OF THE FOLLOWING:

I am a . . .

_____(1) Non-supervisor

_____(2) Section head

12:69 _____(3) Branch chief or manager

_____(4) Asst. division director, deputy director, etc.

_____(5) Division director

84. Check the highest level of education you have completed. CHECK ONE:

_____(1) High school or less

_____(2) Some college

12:70 _____(3) College degree

_____(4) Some graduate work

_____(5) Graduate degree

85. In what age bracket do you fall? CHECK ONE:

_____(0) Less than 21 years

_____(1) 21 to 25 years

_____(2) 26 to 30 years

12:71 _____(3) 31 to 35 years

_____(4) 36 to 40 years

_____(5) 41 to 45 years

_____(6) 46 to 50 years

_____(7) 51 to 60 years

_____(8) More than 60

86. What is your sex?

_____(1) Male

12:72 _____(2) Female

87. Did you fill out The University of Michigan questionnaire like this one about a year and a half ago (October 1965)? CHECK ONE:

_____(1) No

12:73 _____(2) Yes

Thank you very much for your cooperation in filling out this questionnaire.

If you have any further ideas or comments you would like us to know about, please feel free to write them below or on the following page.

11:21 1. To what extent do the people within your division exchange helpful information and ideas? CHECK ONE:

3% (1) We do not exchange helpful ideas and information at all

17% (2) A small extent

GM=3.33

36% (3) A fair extent

30% (4) A considerable extent

13% (5) We exchange helpful ideas and information to a great extent

11:21 2. How satisfied are you with the amount of information you get about what is going on in the Office of Administration? CHECK ONE:

9% (1) Not at all satisfied with the amount of information

17% (2) Not very well satisfied

GM=3.20

28% (3) Somewhat satisfied but could get more

32% (4) Fairly well satisfied

11% (5) Very well satisfied with the amount of information

11:23 3. When a major change is being considered in your division, how much opportunity is given to people who will be affected by the change to explain, and argue for, their needs and interests? CHECK ONE:

11% (1) People are given no opportunity to explain their needs and interests

26% (2) Very little opportunity

GM=2.87

27% (3) Some opportunity

22% (4) People are given considerable opportunity

7% (5) People are given a very great opportunity to explain their needs and interests

11:24 4. During any typical day, how frequently are you interrupted from doing the work you had planned to do by an unexpected problem, complication, or other unplanned event? CHECK ONE:

3% (1) Almost never. I can usually work without interruption on things I had planned to work on

26% (2) Once in a while

GM=3.22

23% (3) Fairly frequently

37% (4) Quite frequently

9% (5) Almost constantly. It is almost impossible for me to work on things I had planned to work on

Every worker produces something in his work. It may be a "product" or a "service." But sometimes it is very difficult to identify the product or service. Below are listed some of the products and services being produced in the Office of Administration.

Typed pages	Recommended policies and procedures
Delivered mail	New programs
Dispatched automobiles	Classified jobs
Staff papers and studies	Supplying new equipment
Coding systems	Contracts

These are just a few of the things being produced.

We would like you to think carefully of the things that you produce in your work and of the things produced by those people who work around you in your division.

11:25 5. Thinking now of the various things produced by the people you know in your division, how much are they producing? CHECK ONE:

2% (1) It is very low

7% (2) It is fairly low

GM=3.76

21% (3) It is neither high nor low

48% (4) It is fairly high

18% (5) Their production is very high

11:26 6. How good would you say is the quality of the products or services produced by the people you know in your division? CHECK ONE:

1% (1) Their quality is poor

3% (2) Their quality is not too good

GM=3 88

19% (3) Fair quality

57% (4) Good quality

17% (5) Their products or services are of excellent quality

11:27 7. Do the people in your division seem to get maximum output from the resources (money, people, equipment, etc.) they have available? That is, how efficiently do they do their work? CHECK ONE:

3% (1) They do not work efficiently at all

10% (2) Not too efficient

GM=3.34

39% (3) Fairly efficient

38% (4) They are very efficient

6% (5) They are extremely efficient

11:28 8. From time to time newer ways are discovered to organize work, and newer equipment and techniques are found with which to do the work. How good a job do the people in your division do at keeping up with these changes that could affect the way they do their work? CHECK ONE:

4% (1) They do a poor job of keeping up to date

7% (2) Not too good a job

GM=3.50

32% (3) A fair job

45% (4) They do a good job

9% (5) They do an excellent job of keeping up to date

11:29 9. When changes are made in the routines or equipment, how quickly do the people in your division accept and adjust to these changes? CHECK ONE:

1% (1) Most people accept and adjust to them very slowly

8% (2) Rather slowly

GM=3.70

37% (3) Fairly rapidly

23% (4) They adjust very rapidly, but not immediately

26% (5) Most people accept and adjust to them immediately

11:30 10. What proportion of the people in your division readily accept and adjust to these changes? CHECK ONE:

3% (1) Considerably less than half of the people accept and adjust to these changes readily

6% (2) Slightly less than half do

GM=3.75

35% (3) The majority do

17% (4) Considerably more than half do

32% (5) Practically everyone accepts and adjusts to these changes readily

11:31 11. From time to time emergencies arise; such as, crash programs, schedules moved ahead, or a breakdown in the flow of work occurs. When these emergencies occur, they cause work overloads for many people. Some work groups cope with these emergencies more readily and successfully than others. How good a job do the people in your division do at coping with these situations? CHECK ONE:

1% (1) They do a poor job of handling emergency situations

4% (2) They do not do very well

GM=4.00

17% (3) They do a fair job

46% (4) They do a good job

28% (5) They do an excellent job of handling these situations

11:32 12. How good a job is done by the people in your division in anticipating problems that may come up in the future and preventing them from occurring or minimizing their effects? CHECK ONE:

7% (1) They do a poor job in anticipating problems

13% (2) Not too good a job

GM=3.26

32% (3) A fair job

38% (4) They do a very good job

7% (5) They do an excellent job in anticipating problems

11:33 13. Compared with other government groups you have worked in before coming to NASA (or NACA) how would you rate the effectiveness of your present division? CHECK ONE:

8% (1) My present division is far less effective than other government groups in which I have worked

20% (2) It is less effective than others in which I have worked

GM=3.07

25% (3) It is about the same

25% (4) It is more effective than others in which I have worked

8% (5) My present division is far more effective than other governemnt groups in which I have worked

_____(9) I have never had a non-NASA (or NACA) job in the government

11:34 14. How well are the different jobs and work activities in your division geared together in the direction of meeting the objectives of the division? CHECK ONE:

4% (1) The jobs and activities are not at all well geared together

13% (2) Not so well

M=3.34

32% (3) Fairly well

40% (4) Very well

7% (5) The jobs and activities are geared together almost perfectly

11:35 15. To what extent do the people you work with <u>in your division</u> make an effort to avoid creating problems or interference with each other's duties and responsibilities? CHECK ONE:

6% (1) They try to avoid interfering with each other to a very small extent

11% (2) To a small extent

GM=3.46

29% (3) To a fair extent

35% (4) To a great extent

17% (5) They try to avoid interfering with each other to a very great extent

11:36 16. From time to time problems of coordinating the work of people who must work together arise. When they arise <u>in your division</u>, how well are these problems handled? CHECK ONE:

2% (1) They are not handled well at all

14% (2) Not very well handled

GM=3.41

34% (3) Fairly well handled

34% (4) Very well handled

12% (5) These problems are extremely well handled

11:37 17. Taking all things into consideration, how well do you feel your division does in fulfilling its mission or achieving its goals? CHECK ONE:

6% (1) Our division is doing rather poorly

15% (2) Fair

GM=3.38

25% (3) Good

37% (4) Very good

13% (5) Our division is doing excellently

11:41 18. How well does your supervisor handle the technical side of his job--for example, general expertness, knowledge of job, technical skills needed, etc.? CHECK ONE:

4% (1) He does not handle the technical side of his job at all well

7% (2) Not so well

GM=3.92 18% (3) Fairly well

35% (4) Very well

34% (5) He handles the technical side of his job extremely well

11:42 19. To what extent does your supervisor show you how to improve your performance? CHECK ONE:

14% (1) Not at all

16% (2) To a very little extent

GM=3.00 32% (3) To some extent

28% (4) To a considerable extent

8% (5) To a very great extent

11:43 20. Do you feel that your supervisor will go to bat or stand up for you? CHECK ONE:

8% (1) No, he won't go to bat for me

7% (2) Probably won't

GM=3.82 19% (3) May or may not

26% (4) Probably will

39% (5) Yes, definitely he will go to bat for me

11:44 21. How free do you feel to discuss important things about your job with your supervisor? CHECK ONE:

8% (1) I feel not at all free to discuss things about my job with my supervisor

13% (2) Not very free

GM=3.86

13% (3) Fairly free

17% (4) Rather free

48% (5) I feel completely free to discuss things about my job with my supervisor

11:45 22. In solving job problems, does your supervisor generally try to get your ideas and opinions? CHECK ONE:

20% (1) He seldom gets my ideas and opinions in solving job problems

23% (2) He sometimes does this

GM=2.90

18% (3) He often does this

23% (4) He almost always does this

15% (5) He always gets my ideas and opinions in solving job problems

11:46 23. To what extent does your supervisor encourage extra effort? CHECK ONE:

7% (1) He does not encourage extra effort at all

9% (2) To a very little extent

GM=3.58

25% (3) To some extent

34% (4) To a considerable extent

23% (5) He encourages extra effort to a great extent

11:47 24. To what extent does your supervisor maintain high standards of performance? CHECK ONE:

5% (1) He does not maintain high standards of performance at all

5% (2) To a very little extent

GM=3.92 18% (3) To some extent

37% (4) To a considerable extent

34% (5) He maintains high standards of performance to a very great extent

11:48 25. To what extent do you feel that you, personally, can influence the activities and decisions of your supervisor on matters that are of concern to you? CHECK ONE:

14% (1) I can't influence him at all

24% (2) To some extent

GM=2.87 28% (3) To a moderate extent

26% (4) To a considerable extent

7% (5) I can influence him to a great extent

11:49 26. How well does your supervisor handle the human relations side of his job--for example, getting people to work well together, getting individual to do the best they can, giving recognition for good work done, letting people know where they stand, etc.? CHECK ONE:

12% (1) He does not handle the human relations side of his job at all well

15% (2) Not so well

GM=3.31 22% (3) Fairly well

28% (4) Very well

21% (5) He handles the human relations side of his job extremely well

11:50 27. How frequently is work time lost because your supervisor fails to do the proper planning and scheduling? CHECK ONE:

17% (1) Work time is never lost through his poor planning and scheduling

40% (2) Almost never

GM=2.39

24% (3) Occasionally

10% (4) Frequently

3% (5) Work time is quite frequently lost through his poor planning and scheduling

11:51 28. In carrying out the basic tasks of your job, does your supervisor supervise you closely or does he put you on your own? CHECK ONE:

30% (1) I am definitely on my own

48% (2) I am pretty much on my own

GM=2.02

13% (3) He uses a moderate amount of supervision

7% (4) He uses fairly close supervision

2% (5) He uses very close supervision; he doesn't put me on my own

11:52 29. How well do you feel your supervisor understands the work problems and needs which you have? CHECK ONE:

6% (1) He has no understanding of my work problems and needs

14% (2) A little understanding

GM=3.48

20% (3) Some understanding

43% (4) Considerable understanding

15% (5) He has complete understanding of my work problems and needs

11:53 30. How good a job does your supervisor do at solving problems? CHECK ONE:

10% (1) He does a poor job at solving problems

11% (2) A fair job

GM=3.48 20% (3) A good job

33% (4) A very good job

22% (5) He does an excellent job at solving problems

11:54 31. How much does your supervisor encourage the members of your work group to work together as a team? CHECK ONE:

6% (1) He doesn't encourage teamwork at all

12% (2) Little encouragement

GM=3.57 22% (3) Some encouragement

32% (4) Considerable encouragement

24% (5) He gives team work a great deal of encouragement

11:55 32. How well does your supervisor handle the administrative side of his job--for example, planning and scheduling the work, indicating clearly when work is to be finished, assigning the right job to the right man, inspecting and following up on the work that is done, etc.? CHECK ONE:

6% (1) He does not handle the administrative side of his job at all well

9% (2) Not so well

GM=3.61 24% (3) Fairly well

34% (4) Very well

23% (5) He handles the administrative side of his job extremely well

11:56 33. How well does your supervisor understand the "big picture" of what NASA is all about--does he see how NASA's mission relates to the social, economic, and political environment of the country? CHECK ONE:

__1%__ (1) He does not understand the "big picture" at all well

__2%__ (2) Not so well

GM=4.13 __13%__ (3) Fairly well

__32%__ (4) Very well

__31%__ (5) He understands the "big picture" extremely well

_____(9) I don't know

11:57 34. How good a job does your supervisor do at personally representing your work group in dealings with other groups in NASA or outside organizations? CHECK ONE:

__7%__ (1) He does a rather poor job

__11%__ (2) Fair job

M=3.61 __17%__ (3) Good job

__31%__ (4) Very good job

__25%__ (5) He does an excellent job at representing us

11:58 35. How well does your supervisor handle the <u>institutional leadership side</u> of his job--for example, creating and formulating policy; handling matters of the agency's relationships to outside organizations, agencies, and groups; understanding the importance and relationships of the agency's mission on the political, social, and economic environment? CHECK ONE:

__3%__ (1) He does not handle the institutional leadership side of his job at all well

__5%__ (2) Not so well

GM=3.75 __18%__ (3) Fairly well

__30%__ (4) Very well

__17%__ (5) He handles the institutional leadership side of his job extremely well

_____(9) I don't know

11:59 36. How much influence does your supervisor have with his superiors and others up the line? CHECK ONE:

3% (1) He doesn't have any influence upwards at all

11% (2) Little influence

GM=3.41 26% (3) Some influence

38% (4) Considerable influence

8% (5) He has a great deal of influence upward

11:60 37. How often does your supervisor belittle you, or act sarcastic toward you? CHECK ONE:

58% (1) He never belittles me

19% (2) Seldom

GM=1.71 15% (3) Occasionally

4% (4) Frequently

2% (5) He very frequently belittles me

11:61 38. How often do you become irritated or annoyed with your supervisor? CHECK ONE:

18% (1) I never become irritated or annoyed with my supervisor

39% (2) Seldom

GM=2.42 28% (3) Occasionally

9% (4) Often

5% (5) I am very often annoyed with my supervisor

11:62 39. How much confidence and trust do you have in your supervisor? CHECK ONE:

5% (1) I have no confidence and trust in my supervisor at all

12% (2) Not very much confidence

GM=3.58 23% (3) A fair amount

35% (4) A great deal

22% (5) I have complete confidence and trust in my supervisor

11:63 40. How much confidence and trust does your supervisor have in you? CHECK ONE:

2% (1) He has no confidence and trust in me at all

5% (2) Not very much

GM=3.65 21% (3) A fair amount

35% (4) A great deal

11% (5) My supervisor has complete confidence and trust in me

____ (9) I don't know

11:64 41. Does your supervisor deal with his subordinates on a man-to-man basis, or does he deal with them primarily as a group? CHECK ONE:

10% (1) He uses man-to-man methods of supervision entirely

41% (2) He uses man-to-man methods more than group methods

GM=2.55 29% (3) He uses group and man-to-man methods about equally

11% (4) He uses group methods more than man-to-man methods

4% (5) He uses group methods of supervision entirely

11:65 42. People often have more than one supervisor; that is, more than one person who can tell them what to do. How often does it happen that you are given different priorities for each of the various jobs or projects you do? CHECK ONE:

35% (1) This almost never happens

23% (2) This seldom happens

GM=2.26

24% (3) This happens occasionally

11% (4) This happens often

5% (5) This happens just about all the time

11:66 43. Does your supervisor have the authority he needs in order to carry out his responsibilities? CHECK ONE:

3% (1) No, my supervisor has almost no authority to carry out his responsibilities

12% (2) Not really; on most matters he does not have the authority he needs

GM=3.58

24% (3) Maybe; for some responsibilities, yes; for others, no

42% (4) Yes, for most matters he has the authority he needs

15% (5) Yes, he has all the authority he needs

11:67 44. People who work together sometimes have rather different points of view. To the extent that there are different viewpoints among those you work with, how successful is your supervisor in using these differences to get an effective end product? CHECK ONE:

4% (1) He is not at all successful at utilizing different viewpoints

12% (2) Not too successful

GM=3.41

29% (3) Fairly successful

35% (4) Quite successful

11% (5) He is very successful at utilizing different viewpoints

_____(9) There really aren't any differences among our group

11:68 45. Some people can be described as "approachable" (easy to talk with), while others are "distant" (not easy to talk with). Would you describe your supervisor as "approachable" or "distant?" CHECK ONE:

7% (1) My supervisor is very definitely distant

12% (2) More distant than approachable

GM=3.81

18% (3) Approachable on some things, distant on others

21% (4) More approachable than distant

42% (5) My supervisor is very definitely approachable

11:69 46. Which of the following ways comes closest to describing how the important decisions are made in your division? CHECK ONE:

11% (1) The division director makes the important decisions. He rarely asks for advice; he just gives orders.

55% (2) The division director makes the final decisions, but he relys on other people in the division for advice and recommendations.

GM=2.21

10% (3) Some important decisions are made by the division director; but about as many are made by other people in the division.

1% (4) Several different people make the important decisions in our division. The division director really doesn't have much more influence than any of them.

5% (5) A number of people are about equally involved. They usually get together and discuss the problem and agree on a solution.

____ (9) I don't know how the important decisions are made in my division

11:70 47. All in all, how effective a job do you think your supervisor is doing? CHECK ONE:

8% (1) He is doing a rather poor job

16% (2) A fair job

GM=3.45

19% (3) A good job

34% (4) A very good job

21% (5) He is doing an excellent job

CHARACTERISTICS OF YOUR JOB

48. Listed below are different kinds of opportunities which a job might afford. If you were to seek another job, how much importance would you personally attach to each of these (disregarding whether or not your present job provides them)?

		CHECK ONE BOX IN EACH LINE:	Importance I would attach: Slight or None (1)	Moderate (2)	Considerable (3)	Great (4)	Utmost (5)	
12:21	A.	to make full use of my knowledge and skills . . .	[ ] 1%	[ ] 2%	[ ] 16%	[ ] 39%	[ ] 42%	GM=4.19
12:22	B.	to be a member of a hard-working team	[ ] 3%	[ ] 10%	[ ] 29%	[ ] 37%	[ ] 21%	GM=3.64
12:23	C.	to work for competent, fair supervisors	[ ] 1%	[ ] 1%	[ ] 13%	[ ] 38%	[ ] 45%	GM=4.27
12:24	D.	to have freedom to carry out my own ideas	[ ] 1%	[ ] 7%	[ ] 30%	[ ] 35%	[ ] 24%	GM=3.75
12:25	E.	to have clear objectives toward which I can aim my work	[ ] 1%	[ ] 4%	[ ] 21%	[ ] 37%	[ ] 36%	GM=4.04
12:26	F.	to be evaluated fairly in proportion to what I contribute	[ ] 1%	[ ] 2%	[ ] 16%	[ ] 35%	[ ] 46%	GM=4.24

49. Now, to what extent does your present job actually provide an opportunity for each of these factors?

	CHECK ONE BOX IN EACH LINE:	Slight or None (1)	Mod-erate (2)	Consid-erable (3)	Great (4)	Utmost (5)	
12:27	A. making full use of my knowledge and skills . . .	[ ] 8%	[ ] 24%	[ ] 32%	[ ] 22%	[ ] 13%	GM=3.08
12:28	B. to be a member of a hard-working team	[ ] 9%	[ ] 26%	[ ] 26%	[ ] 24%	[ ] 13%	GM=3.07
12:29	C. to work for competent, fair supervisors	[ ] 8%	[ ] 23%	[ ] 20%	[ ] 28%	[ ] 19%	GM=3.29
12:30	D. to have freedom to carry out my own ideas	[ ] 13%	[ ] 25%	[ ] 26%	[ ] 25%	[ ] 9%	GM=2.91
12:31	E. to have clear objectives toward which I can aim my work	[ ] 12%	[ ] 28%	[ ] 29%	[ ] 21%	[ ] 9%	GM=2.87
12:32	F. to be evaluated fairly in proportion to what I contribute	[ ] 11%	[ ] 21%	[ ] 24%	[ ] 29%	[ ] 14%	GM=3.15

12:33 50. How satisfied are you with the amount of pay your job provides you? CHECK ONE:

8% (1) Very dissatisfied

17% (2) Fairly dissatisfied

GM=3.37

20% (3) Neither satisfied nor dissatisfied

40% (4) Fairly well satisfied

15% (5) Completely satisfied

12:34 51. How hard, would you say, are the people you know in your division trying to achieve a high level of performance? CHECK ONE:

3% (1) They are not trying hard at all to achieve a high level of performance

7% (2) Not so hard

GM=3.63

28% (3) Fairly hard

44% (4) They are trying hard

16% (5) They are trying their hardest to achieve a high level of performance

12:35 52. Do you ever think about quitting your present job? CHECK ONE:

17% (1) No, I have never thought about quitting

35% (2) I've thought about it once or twice

GM=2.60

24% (3) I think about quitting every so often

17% (4) I think about quitting fairly frequently

6% (5) I think about quitting nearly every day

12:36 53. How do you feel about your own chances for promotion to a better job in the Office of Administration? CHECK ONE:

22% (1) I am very dissatisfied with my chances for promotion

17% (2) Quite dissatisfied

GM=2.70 33% (3) Neither satisfied nor dissatisfied

20% (4) Quite satisfied

5% (5) I am very satisfied with my chances for promotion

12:37 54. How much pressure to "get out the work" do you feel, over and above what you think is reasonable? CHECK ONE:

35% (1) I feel no pressure over and above what is reasonable

19% (2) A little pressure

GM=2.38 24% (3) Some pressure

16% (4) Considerable pressure

6% (5) I feel a great deal of pressure over and above what is reasonable

12:38 55. How successful has NASA been in getting you to meet its needs--for example, getting you to produce what they want, when they want it, in the manner they want? CHECK ONE:

1% (1) They have not been successful at all at getting me to meet NASA's needs

4% (2) Not too successful

GM=4.26 8% (3) Somewhat successful

42% (4) Fairly successful

43% (5) They have been very successful at getting me to meet NASA's needs

12:39 56. How good a job has NASA done at meeting your needs--for example, interesting work, adequate pay, a chance to use or develop your talents, or whatever it is that you want from your job? CHECK ONE:

6% (1) NASA has not done a good job at all at meeting my needs

15% (2) Not too good a job

GM=3.23 36% (3) A fair job

33% (4) A very good job

9% (5) NASA has done an excellent job at meeting my needs

12:40 57. All in all, how satisfied are you with your present job? CHECK ONE:

7% (1) Very dissatisfied

16% (2) Fairly dissatisfied

GM=3.49 14% (3) Neither satisfied nor dissatisfied

42% (4) Fairly satisfied

18% (5) Very satisfied

12:41 58. Thinking about working for the government in Washington and all the various departments and agencies (Labor, DOD, Agriculture, etc.), how satisfied are you to be working in NASA? CHECK ONE:

4% (1) Very dissatisfied

9% (2) Quite dissatisfied

GM=3.74 26% (3) Neither satisfied nor dissatisfied

32% (4) Quite satisfied

28% (5) Very satisfied

THE OFFICE OF ADMINISTRATION

If you came to work in the Office of Administration after Al Siepert left as head (he left in the Spring of 1963), move on to question 70.

The following questions ask you to compare how things were when you first came to work in the Office of Administration (O.A.) with the way they are today.

12:42 59. How do the opportunities for most people to move to a better job in the Office of Administration today compare with such opportunities when you first came to work in the Office of Administration? CHECK ONE:

8% (1) The opportunities today are much fewer

9% (2) Somewhat fewer today

GM=2.65 16% (3) About the same today

6% (4) Somewhat greater today

2% (5) The opportunities for most people are much greater today

12:43 60. How much freedom and autonomy do most people have in doing their work now as compared with their freedom and autonomy when you first came to work in the Office of Administration? CHECK ONE:

7% (1) Freedom and autonomy are much less now

6% (2) Somewhat less

GM=2.70 21% (3) About the same

6% (4) Somewhat greater

0% (5) Freedom and autonomy are much greater now

12:44 61. How much pressure and strain do you feel on the job now, as compared with when you first came to work in the O. A.? CHECK ONE:

3% (1) Pressure and strain are much less now

9% (2) Somewhat less

GM=3.09 14% (3) About the same

11% (4) Somewhat greater

4% (5) Pressure and strain are much greater now

12:45 62. How clear are the goals of your division now, as compared with when you first came to work in the O. A.? CHECK ONE:

3% (1) The division goals are much less clear now

3% (2) Somewhat less clear

GM=3.50 13% (3) About the same

14% (4) Somewhat clearer

8% (5) The division goals are much clearer now

12:46 63. How many rules, regulations, and procedures that affect your job are there now as compared with when you first came to work in the O. A.? CHECK ONE:

0% (1) There are many fewer rules, regulations, and procedures now

1% (2) Somewhat fewer

GM=3.94 12% (3) About the same

16% (4) Somewhat more

12% (5) There are many more rules, regulations, and procedures

12:47 64. Are these rules, regulations, and procedures more or less helpful now then when you first came to work in the O. A.? CHECK ONE:

2% (1) The rules, regulations, and procedures are much less helpful now

4% (2) Somewhat less helpful

GM=3.40

16% (3) About as helpful

13% (4) Somewhat more helpful

5% (5) The rules, regulations, and procedures are much more helpful now

12:48 65. How cooperative are the people you work with now, as compared with when you first came to work in the O. A.? CHECK ONE:

1% (1) The people are much less cooperative now

5% (2) Somewhat less cooperative

GM=3.18

23% (3) About as cooperative

10% (4) Somewhat more cooperative

2% (5) The people are much more cooperative now

12:49 66. How much paperwork is there now, as compared with when you first came to work in the O. A.? CHECK ONE:

0% (1) There is much less paperwork now

2% (2) Somewhat less

GM=3.88

13% (3) About the same

14% (4) Somewhat more

12% (5) There is much more paperwork now

12:50 67. How much importance is attached to efficiency in work performance now, as compared with when you first came to work in the O. A.? CHECK ONE:

0% (1) Much less importance is attached to efficiency now

2% (2) Somewhat less

GM=3.58 17% (3) About the same

15% (4) Somewhat more

5% (5) Much more importance is attached to efficiency now

12:51 68. How much of an opportunity to be creative is there now, as compared with when you first came to work in the O. A.? CHECK ONE:

5% (1) There is much less opportunity to be creative now

5% (2) Somewhat less

GM=2.91 21% (3) About the same

6% (4) Somewhat more

3% (5) There is much more opportunity to be creative now

12:52 69. How hard are most people trying to do their best now, as compared with when you first came to work in the O. A.? CHECK ONE:

2% (1) Most people are trying much less hard to do their best now

9% (2) Somewhat less hard

GM=2.98 19% (3) About the same

9% (4) Somewhat harder

2% (5) Most people are trying much harder to do their best now

THE MICHIGAN STUDY

12:53 70. Have you seen any of the data (findings) from the first questionnaire; for example, tables, charts, viewgraphs, etc., showing average scores on the questionnaire items? CHECK ONE:

21% (1) No, I haven't seen any data from the first questionnaire

GM=4.09

3% (3) I'm not sure; I don't remember

74% (5) Yes, I have seen data from the first questionnaire

12:54 71. Did the data have any meaning for you; did you understand them? CHECK ONE:

2% (1) No. I didn't understand the data at all

6% (2) Not really. I understood them only a little bit

GM=3.54

32% (3) The data had some meaning for me

23% (4) The data had a good deal of meaning for me

14% (5) Yes. I understood the data enough so they had a great deal of meaning for me.

____ (9) I didn't see any data

12:55 72. Did the data from your division show that, compared with others in the Office of Administration, your division was in general: CHECK ONE:

13% (1) Well below average

15% (2) Slightly below average

GM=2.84

22% (3) About average

12% (4) Slightly above average

9% (5) Well above average

____ (9) I didn't see any data

12:56 73. Among the people you work with at your level, how much discussion and talk about the data has there been? CHECK ONE:

14% (1) There hasn't been any discussion at all at my level

34% (2) Some discussion, but not much

GM=2.77

21% (3) A fair amount

15% (4) A considerable amount

13% (5) There has been a great deal of discussion of the data

12:57 74. To what extent have the people you work with used the data as a basis for improving things? CHECK ONE:

20% (1) People I work with haven't really used the data at all

18% (2) To a small extent

GM=2.32

13% (3) To a fair extent

11% (4) To a considerable extent

2% (5) People I work with have used the data to a great extent

_____(9) I don't know

12:58 75. How valid do you feel the data were; that is, did they present a true picture of the way things really are? CHECK ONE:

4% (1) I feel the data were not valid at all

11% (2) Not too valid

GM=3.25

30% (3) Fairly valid

24% (4) Quite valid

6% (5) I feel the data were very valid

_____(9) I didn't see any data

12:59 76. To what extent has the Michigan Study had harmful, as well as helpful effects? CHECK ONE:

28% (1) The Michigan Study hasn't had any harmful effects at all

12% (2) The harmful effects have been very slight

GM=1.94 8% (3) There have been harmful effects, but on the whole the net effect has been positive

4% (4) The harmful effects have just about cancelled out the helpful ones

3% (5) The harmful effects have been greater than the positive effects

____ (9) The Michigan Study hasn't really had any effects at all, one way or the other

12:60 77. All in all, to what extent has the Michigan Study had any effect in your division? CHECK ONE:

28% (1) The Michigan Study has had virtually no effect in my division

17% (2) A very slight effect

GM=2.50 19% (3) Some effect

10% (4) Moderate effect

10% (5) The Michigan Study has had a rather considerable effect in my division

NASA 1014
Time 2
May 1967

SECOND QUESTIONNAIRE FOLLOW-ON

The Michigan Study is interested in measuring what specific changes have occurred in various divisions in the last two years or so. On the following pages are questions about changes in a few particular areas. We would like to know how much change (if any) there has been in these areas. Where there has been change, we would then like to know to what extent the Michigan Study and other possible sources of change were responsible for making things different.

Since we are attempting to measure what has happened over a period of time, FILL OUT THIS FORM ONLY IF YOU HAVE HAD AT LEAST TWO YEARS OF SERVICE IN YOUR PRESENT DIVISION.

As usual, no one in NASA will see these forms after they have been filled out. Your answers as an individual are confidential. Thank you for your cooperation.

Paul Mott and Tony Butterfield
Institute for Social Research
The University of Michigan

P.S. Ignore the numbers in front of the questions. They help get the information onto IBM cards.

ALL DIVISIONS

13:21 In the last two years, to what extent have the objectives toward which you aim your work become more clear? CHECK ONE:

_____(1) Work objectives have actually become less clear
_____(2) No change. Work objectives are about as clear as they were two years ago
_____(4) Work objectives are somewhat clearer now
_____(5) Work objectives are much clearer now

A. IF YOU CHECKED EITHER (1) or (2) ABOVE: Please write in the space below the reason causing objectives to become less clear or to remain about as clear as they were two years ago. THEN SKIP TO QUESTION 28 at the top of page 4.

B. IF YOU CHECKED EITHER (4) or (5) ABOVE: We would like to know how much difference you feel each of the following made in making work objectives more clear.

13:22 To what extent do you think the Michigan Study contributed to making objectives more clear? CHECK ONE:

_____(1) The Michigan Study made a great difference in making objectives more clear
_____(2) Considerable difference
_____(3) Some difference
_____(4) It made no difference
_____(5) The Michigan Study actually made objectives become less clear

_____(9) I don't know

(CONTINUED ON NEXT PAGE)

13:40 In the last two years or so, to what extent has there been a decrease in the amount of sarcasm or punitive behavior on the part of the division director? CHECK ONE:

_____(1) There is actually more sarcasm or punitive behavior from the division director now
_____(2) No change. It's about the same as it was two years ago

_____(4) It has decreased somewhat
_____(5) His sarcasm or punitive behavior has decreased a great deal

A. If you checked alternatives (1) or (2) above, please feel free to write in comments here. Then skip to the question at the top of the next page. COMMENTS:

B. If you checked alternatives (4) or (5), we would like to know how much difference you feel each of the following made in decreasing the amount of sarcasm from the division director. CHECK ONE BOX IN EACH LINE:

		Great difference (1)	Considerable (2)	Some (3)	No difference (4)	Actually hurt (5)	I don't know (9)
13:41	The Michigan Study	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
13:42	Turnover of front office personnel	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
13:43	Turnover of division personnel	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
13:44	Factors outside Office of Administration	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

PLEASE FEEL FREE TO WRITE IN COMMENTS HERE REGARDING SARCASM ON THE PART OF THE DIVISION DIRECTOR:

13:63 As compared with two years ago, to what extent is the division better organized now to perform its mission? CHECK ONE:

_____(1) The division is actually less well organized now
_____(2) No change

_____(4) Somewhat better now
_____(5) The division is much better organized now

A. If you checked alternatives (1) or (2) above, please feel free to write in comments here. Then skip to the question at the top of the next page. COMMENTS:

B. If you checked alternatives (4) or (5), we would like to know how much difference you feel each of the following made in getting better organization of the division. CHECK ONE BOX IN EACH LINE:

		Great difference (1)	Considerable (2)	Some (3)	No difference (4)	Actually hurt (5)	I don't know (9)
13:64	The Michigan Study	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
13:65	Turnover of front office personnel	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
13:66	Turnover of division personnel	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
13:67	Factors outside Office of Administration	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

PLEASE FEEL FREE TO WRITE IN COMMENTS HERE REGARDING THE WAY THE DIVISION IS ORGANIZED:

Since the changes that people have seen may depend on "where they sit" in the organization, we'll need a few items of information about your own situation. Please answer the questions below before turning in your completed questionnaire.

13:11-12 My . . . Division and Branch _____ (write in)

13:13-14 GS level: _____ (write in)

13:15 NASA Classification Code (CHECK ONE):

_____(6) Professional
_____(5) Secretarial-Clerical
_____(4) Other

13:16 Official rank:
(CHECK ONE)

_____(1) Non-supervisor
_____(2) Section head
_____(3) Branch chief or manager
_____(4) Asst. or dep. div. director
_____(5) Division director

Thank you for your cooperation.

Please feel free to write in additional comments about other changes (or lack of changes) here.

TABLE NOTATIONS

The data are presented one question to a page. Underneath the title of each table are the IBM card and column numbers identifying that question. These numbers appear opposite the question in the questionnaires. For example, "Quantity of Production" was number 01:28 on the first questionnaire, and 11:28 on the second.

Time 1 designates data from the first questionnaire administered in October, 1965. Time 1 data appears in this typescript.

Time 2 designates data from the second questionnaire administered in March, 1967. Time 2 data appears in this typescript.

∇ locates the Grand Mean Time 1

Δ locates the Grand Mean *Time 2*

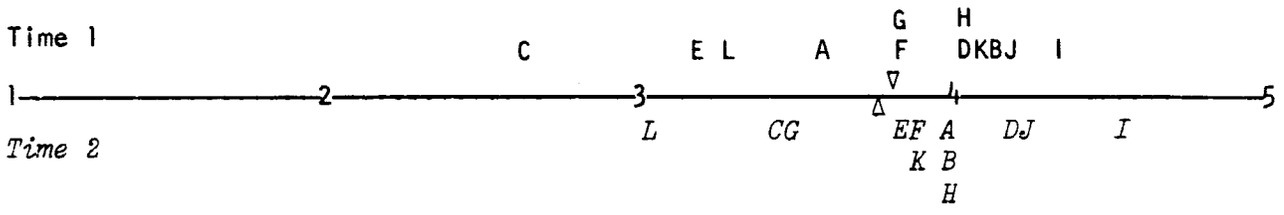
Rho designates the "rank order correlation coefficient." This is a statistic that measures the degree of relationship between two orders of variables. The higher the rho, the stronger the relationship. A rho of .50 is considered "significant," in that it could have occurred by chance--if there were really no relationship between the two variables--only ten times out of a hundred.

E - 1

QUANTITY OF PRODUCTION

(01:28 & 11:25)

Thinking now of the various things produced by the people you know <u>in your division</u>, how much are they producing?



Very low | Neither high nor low | Very high

This is a Factor I effectiveness item.

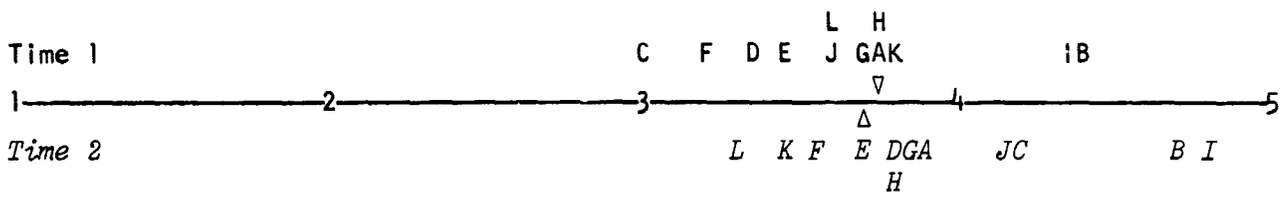
	Division Mean	
A	3.62	*4.00*
B	4.13	*4.00*
C	2.66	*3.45*
D	4.04	*4.22*
E	3.19	*3.86*
F	3.88	*3.91*
G	3.86	*3.47*
H	4.03	*3.99*
I	4.33	*4.54*
J	4.20	*4.25*
K	4.11	*3.90*
L	3.30	*3.03*

E - 5

ACCEPT CHANGE

(01:37 & 11:29)

When changes are made in the routines or equipment, how quickly do the people in your division accept and adjust to these changes?



Very slowly Farily rapidly Immediately

This is a Factor I effectiveness item.

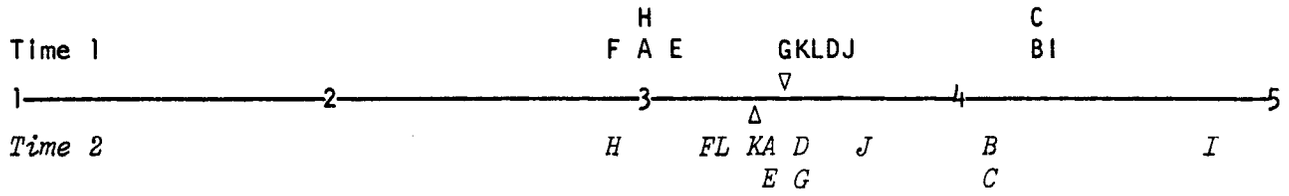
	Division Mean	
A	3.75	*3.88*
B	4.37	*4.67*
C	3.00	*4.18*
D	3.33	*3.82*
E	3.37	*3.67*
F	3.18	*3.55*
G	3.67	*3.84*
H	3.74	*3.77*
I	4.33	*4.77*
J	3.62	*4.15*
K	3.82	*3.46*
L	3.60	*3.31*

C - 1

EXCHANGE HELPFUL INFORMATION

(01:21 & 11:21)

To what extent do the people within your division exchange helpful information and ideas?



Not at all — Fair extent — Great extent

The more people in a division exchange helpful information and ideas the more effective is the division (rho with Factor I, .92). This is a very strong relationship.

	Division Mean	
A	3.00	*3.38*
B	4.25	*4.11*
C	4.25	*4.09*
D	3.61	*3.52*
E	3.07	*3.41*
F	2.88	*3.20*
G	3.43	*3.50*
H	3.00	*2.88*
I	4.29	*4.77*
J	3.64	*3.71*
K	3.47	*3.35*
L	3.56	*3.24*

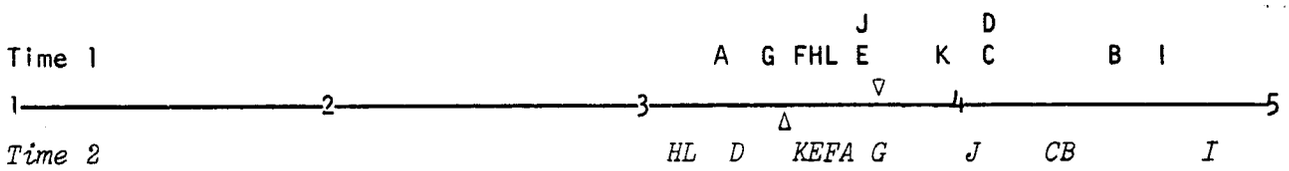
NASA 1014
Time 2

C - 6

AVOID CREATING PROBLEMS

(01:43 & 11:35)

To what extent do the people you work with in your division make an effort to avoid creating problems or interference with each other's duties and responsibilities?



Very small extent

Fair extent

Very great extent

The more people try to avoid interfering with each other, the more effective is the division (rho with Factor 1, .76).

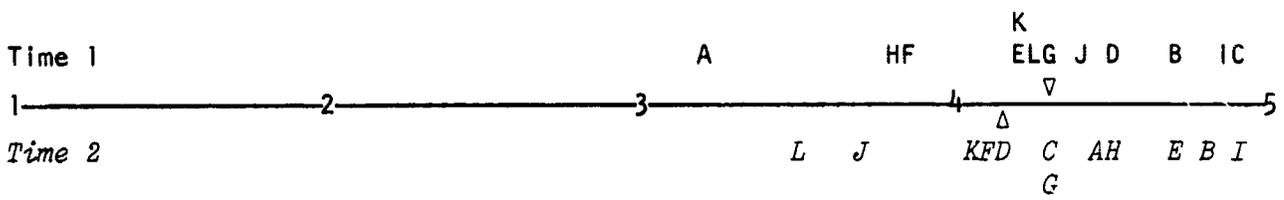
	Division Mean	
A	3.25	*3.63*
B	4.50	*4.33*
C	4.08	*4.27*
D	4.12	*3.32*
E	3.67	*3.53*
F	3.49	*3.60*
G	3.39	*3.74*
H	3.54	*3.10*
I	4.63	*4.77*
J	3.72	*4.05*
K	3.94	*3.49*
L	3.62	*3.16*

S - 1

HANDLE TECHNICAL SIDE OF JOB

(04:22 & 11:41)

How well does your supervisor handle the technical side of his job--for example, general expertness, knowledge of job, technical skills needed, etc.?



Not at all well — Fairly well — Extremely well

The more the division director handles the technical side of his job well, the more effective is the division (rho with Factor I, .55).

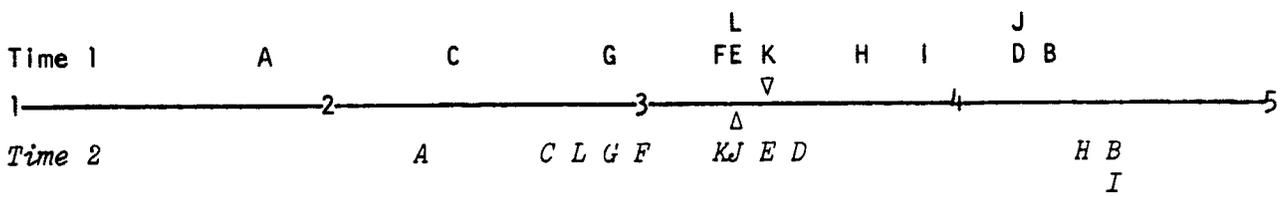
	Division Mean	
A	3.20	*4.43*
B	4.71	*4.88*
C	4.90	*4.30*
D	4.50	*4.13*
E	4.17	*4.70*
F	3.86	*4.11*
G	4.29	*4.32*
H	3.77	*4.50*
I	4.83	*4.92*
J	4.40	*3.67*
K	4.21	*4.04*
L	4.23	*3.50*

S - 2

HUMAN RELATIONS SKILLS

(04:28 &11:49)

How well does your supervisor handle the human relations side of his job--for example, getting people to work well together, getting individuals to do the best they can, giving recognition for good work done, letting people know where they stand, etc.?



Not at all well | Fairly well | Extremely well

The more the division director handles the human relations side of his job well, the more effective is the division (rho with Factor !, .50).

	Division Mean	
A	1.80	*2.29*
B	4.29	*4.50*
C	2.40	*2.70*
D	4.17	*3.50*
E	3.17	*3.40*
F	3.14	*3.00*
G	2.89	*2.90*
H	3.69	*4.38*
I	3.92	*4.50*
J	4.20	*3.31*
K	3.42	*3.26*
L	3.31	*2.81*

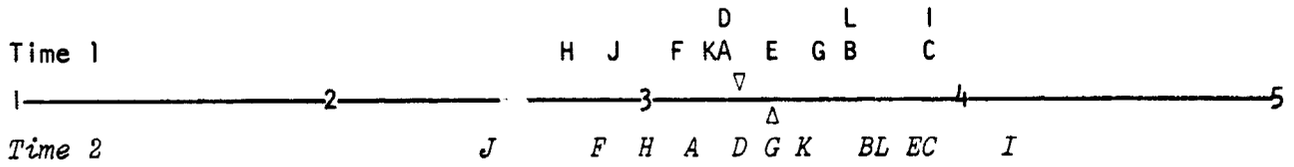
NASA 1014
Time 2

MS - 4

SATISFIED WITH AMOUNT OF PAY

(05:45 & 12:33)

How satisfied are you with the amount of pay your job provides you?



Very dissatisfied — Neither satisfied nor dissatisfied — Completely satisfied

Satisfaction with pay is not significantly related to division effectiveness (rho with Factor 1, .31).

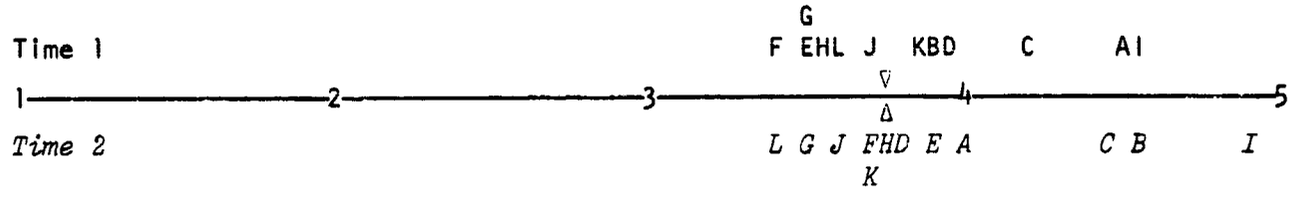
	Division Mean	
A	3.25	*3.13*
B	3.63	*3.67*
C	3.92	*3.91*
D	3.24	*3.29*
E	3.42	*3.84*
F	3.09	*2.83*
G	3.54	*3.38*
H	2.74	*2.97*
I	3.88	*4.15*
J	2.92	*2.52*
K	3.19	*3.49*
L	3.63	*3.75*

MS - 9

SATISFIED WITH NASA

(05:58 & 12:41)

Thinking about working for the government in Washington and all the various department and agencies (Labor, DOD, Agriculture, etc.), how satisfied are you to be working in NASA?



Very dissatisfied — Neither satisfied nor dissatisfied — Very satisfied

The more satisfied people are to be working in NASA, the more effective is the division (rho with Factor 1, .71).

	Division Mean	
A	4.50	*4.00*
B	3.88	*4.56*
C	4.17	*4.45*
D	3.96	*3.82*
E	3.50	*3.90*
F	3.42	*3.68*
G	3.50	*3.52*
H	3.54	*3.76*
I	4.56	*4.92*
J	3.69	*3.57*
K	3.87	*3.68*
L	3.59	*3.39*

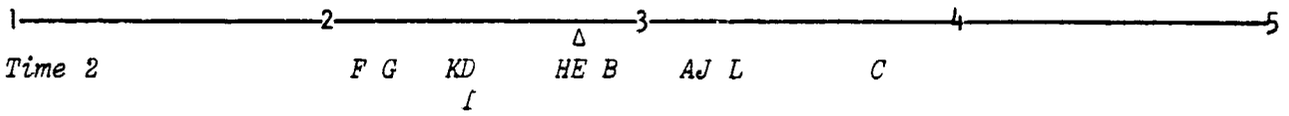
NASA 1014
Time 2

U - 6

DISCUSSION OF DATA AT YOUR LEVEL

(12:56)

Among the people you work with at your level, how much discussion and talk about the data has there been?



None at all — A fair amount — A great deal

This item is not significantly related to division effectiveness (rho with Factor I, .27).

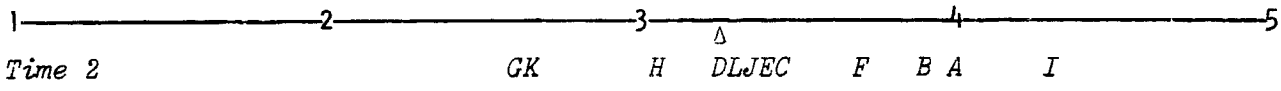
	Division Mean
A	*3.13*
B	*2.89*
C	*3.73*
D	*2.46*
E	*2.79*
F	*2.09*
G	*2.21*
H	*2.74*
I	*2.46*
J	*3.19*
K	*2.38*
L	*3.29*

U - 7

FEEL DATA VALID

(12:58)

How valid do you feel the data were; that is, did they present a true picture of the way things really are?



Not valid at all — Fairly valid — Very valid

The more that people perceived the data as valid, the more effective is the division (rho with Factor I, .50).

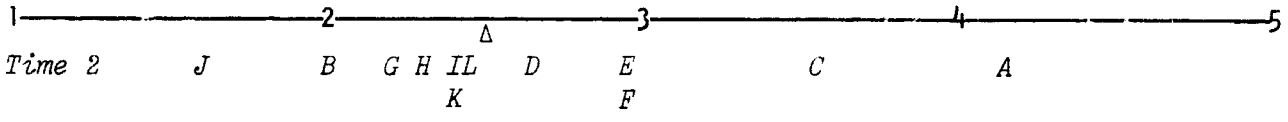
Division	Mean
A	4.00
B	3.88
C	3.45
D	3.25
E	3.38
F	3.67
G	2.60
H	3.05
I	4.27
J	3.33
K	2.63
L	3.29

U - 3

EFFECTS OF MICHIGAN STUDY

(12:60)

All in all, to what extent has the Michigan Study had any effect in your division?



Virtually no effect — Some effect — Considerable effect

This item is not related to Time 2 Factor I effectiveness. (rho = -.27) It is, however, related to Time 1 Factor I. The lower the division effectiveness at Time 1, the more the Michigan Study had an effect in the division (rho with Time 1 Factor I, -.67).

	Division Mean
A	4.14
B	2.00
C	3.55
D	2.65
E	2.93
F	2.93
G	2.20
H	2.27
I	2.38
J	1.61
K	2.40
L	2.46

CHANGES IN ORGANIZATIONAL ITEMS

Below are the organizational items (i.e., those items dealing primarily with characteristics of the division as a whole) which were identical on the Time 1 (October 1965) and Time 2 (March 1967) questionnaires. The two columns of figures present mean scores for the division at Time 1 and Time 2. (In most cases these are identical to data you already have. They are repeated here for your convenience.) The last column on the right identifies which changes are statistically significant with a plus or a minus, depending on whether the change from Time 1 to Time 2 was up or down. A statistically significant change is defined as one that could have occurred by chance alone only five times (or less) in a hundred.

This form prepared for Division _____.

		Time 1 (Oct 65)	Time 2 (Mar 67)	Change
11:21	Exchange information within division	3.03	2.88	
11:22	Satisfied with amount information	2.52	2.97	+
11:23	Explain interests before change	2.35	2.45	
11:24	Frequently interrupted	3.73	3.45	
11:25	Quantity of production	4.06	3.99	
11:26	Quality of production	4.07	3.76	-
11:27	Efficiency	3.51	3.39	
11:28	Keep up to date	3.23	3.34	
11:29	Speed accept change	3.73	3.77	
11:30	Proportion readily accept change	3.69	3.69	
11:31	Handling emergency situations	4.01	4.07	
11:32	Anticipating problems	3.26	3.09	
11:33	Comparative effectiveness	2.90	2.86	
11:34	Jobs geared together	3.04	3.33	
11:35	Avoid creating problems	3.55	3.10	-
11:36	Coordination problems well handled	3.09	3.20	
11:37	Division fulfills mission	3.34	3.52	
12:21	I*- Use of knowledge and skills	4.03	4.01	
12:22	I - Member hard-working team	3.89	3.74	
12:23	I - Competent, fair sups	4.23	4.23	
12:24	I - Freedom to carry out own ideas	3.71	3.58	
12:25	I - Clear objectives to aim work	3.90	4.07	
12:26	I - Evaluated fairly	3.99	4.23	

I* = Importance

CHANGES IN ORGANIZATIONAL ITEMS (cont.)

		Time 2 (Oct 65)	Time 2 (Mar 67)	Change
12:27	P*- Use of knowledge	2.80	2.74	
12:28	P - Member hard-working team	2.88	3.13	
12:29	P - Competent, fair sups	2.74	2.80	
12:30	P - Freedom to carry out own ideas	2.38	2.60	
12:31	P - Clear objectives to aim work	2.68	2.71	
12:32	P - Evaluated fairly	2.48	2.67	
12:33	Satisfied with amount of pay	2.75	2.97	
12:34	Achievement effort	3.79	3.43	-
12:35	Think of quitting	2.64	2.52	
12:36	Chances for promotion	2.43	2.53	
12:37	Unreasonable pressure	3.05	2.79	
12:38	Meet NASA's needs	4.51	4.47	
12:39	Met your needs	2.85	3.05	
12:40	Satisfied with present job	3.14	3.39	
12:41	Satisfied with NASA	3.55	3.76	

P* = Provision in present job

Trend Analysis: Time 2 answers are generally more favorable, but the trend is not significant.

CHANGES IN SUPERVISORY ITEMS

Below are the supervisory-subordinate relations items which were identical on the Time 1 (October 1965) and Time 2 (March 1967) questionnaires. The two columns of figures present your scores at Time 1 and Time 2. (In most cases these are identical to data you already have. They are repeated here for your convenience.) The last column on the right identifies which changes are statistically significant with a plus or a minus, depending on whether the change from Time 1 to Time 2 was up or down. A statistically significant change is defined as one which could have occurred by chance alone only five times (or less) in a hundred.

This form prepared for Division Director _____.

		Time 1 (Oct 65)	Time 2 (Mar 67)	Change
11:41	Handle technical side of job	3.77	4.50	
11:43	Go to bat	3.46	4.25	
11:44	Free to discuss	4.15	4.75	
11:45	Get your ideas	3.08	3.63	
11:48	Influence supervisor	2.92	3.50	
11:49	Handle human relations side of job	3.69	4.38	
11:50	Time lost--poor planning	2.10	1.50	
11:51	Close supervision	1.92	1.88	
11:52	Sup understands work problems	3.85	4.38	
11:55	Sup handles administrative side of job	3.67	4.25	
11:56	Sup understands big picture	4.27	4.63	
11:57	Sup represents your work group	3.17	4.25	+
11:58	Sup handles institutional leadership	3.70	4.13	
11:60	Sup belittles you	1.54	1.00	
11:61	Annoyed with supervisor	2.42	1.63	-
11:62	Confidence and trust in supervisor	3.62	4.38	
11:63	Sup confidence and trust in you	3.60	4.00	
11:64	Sup deals on group basis	2.62	2.63	
11:66	Sup authority for responsibilities	3.31	3.88	
11:68	Sup approachable	4.31	4.75	
11:70	How effective is your supervisor	3.38	4.50	+

Trend Analysis: Time 2 answers show significant improvement.

NASA 1014
Time 2

ADD-ON QUESTIONNAIRE: INCREASE IN CLARITY OF OBJECTIVES

	Divisions				
	M	N	O	P	Q
Extent objectives clearer now:	Somewhat-much	Very slightly	Somewhat	Slightly	Very slightly

When asked, "What made the difference?", those people who felt objectives were clearer answered:

Amount of difference in making objectives clearer due to:					
The Michigan Study	Some	Some	Some	Some	Some
Turnover of front office personnel	None	Made worse	Some	None	None
Changes in communication between top management	Some	None	Some-considerable	Some	None
Turnover of division personnel	Some	None	Some	None	Some
Changes in the way our division is organized	Some	Some	Considerable	Some	Some-considerable
Factors outside Office of Administration	Some	None	None	None	None

NASA 1014
Time 2

ADD-ON QUESTIONNAIRE: SUMMARY OF RESULTS

The balance of answers to the add-on change questions usually indicated that division personnel saw at least some change over the past two years, but the specific amount varied widely, depending upon the division and upon the particular area of change. Occasionally the net amount of perceived change was extremely slight--hardly worth considering as real change. Divisions N and Q on the accompanying "Increase in Clarity of Objectives" table represent such instances of minimal change. However, there were also instances of rather sizeable improvements. And, in at least one area, there were enough people in a division who felt things had actually gotten worse that the division wound up with a net negative change score (although the division director thought things were much better in that area).

Just as there were differences in the amount of perceived change, there were also differences in the extent to which respondents attributed the change to our list of possible sources of change. The Michigan Study was generally cited as making between "some" and "considerable" difference in bringing about improvement, with scores usually closer to the "some" category. Its effects were strongest in the area of changing division directors' behavior, and in improving communication and understanding in the division. Turnover of front office personnel was cited by two divisions as making for "some" difference in improvement, while two other divisions felt it did not contribute to improvement, and the fifth division twice cited front office turnover as having bad effects.

One division felt turnover of division personnel accounted for "some" difference in improvement, while the other four tended to say division turnover did not make a difference. Changes in the organization of the division usually were seen as making "some" to "no" difference, except in one division where reorganization was seen as having "some" to "considerable" effects. Except in one or two cases,

factors outside the Office of Administration tended to account for relatively little in bringing about change. Changes in the division director's behavior, however, made "some" to "considerable" difference in bringing about increased effort in the division.

Common trends. Although there were differences in the amount of change reported by different divisions, and differences in the degree to which possible sources of change were cited as causes, there were some trends that were fairly common to all five divisions which filled out the add-on questionnaire.

Typically, division directors reported more change than did other supervisory personnel, who in turn saw more change than non-supervisors. One exception to this trend was in the area of improvement in communications from above, where division directors saw less improvement than did other supervisors or non-supervisors.

Similarly, division directors tended to designate the Michigan Study as a source of change mor han did other supervisors, who in turn credited the study more than did non-supervisors. Furthermore, division directors attributed more of the change to the Michigan Study than they did to the other possible sources of change. This was also true of supervisors and non-supervisors, although the effect was not as great.

The fact that the division directors saw more change, and attributed more of it to the Michigan Study, should not be interpreted as meaning they always saw large amounts of change, or always att ibuted a great deal of it to the Michigan Study. Division directors reported between "some" and "much change" about equally often. They felt the Michigan Study made between "some" and "considerable" difference. Average scores for supervisors and non-supervisors tended to be closer to the "some" category.

Conclusion. As measured by the add-on questionnaire, amount of change perceived by division personnel tended to be rather slight, although results varied from sizeable positive change to net negative

change, depending upon the division and upon the particular area of change. When change was perceived, the Michigan Study was usually cited as making at least some difference. Other sources of change, such as division reorganization and turnover of front office or division personnel, were also cited as making a difference, again, depending upon the division and particular area of change. Division directors usually saw more change, and attributed more of it to the Michigan Study, than did other supervisors, who in turn saw more change, and felt the Michigan Study had more effect, than did non-supervisors.

In many ways the results of the analysis of change using the add-on questionnaire parallel those using comparison of answers to the Time 1 and Time 2 questionnaires. No consistent, sizeable changes were found across all divisions; rather , results varied for each division. When change did occur, it was frequently due to the Michigan Study but other factors also had an effect. Generally speaking, the effects of the study increased with increases in organizational level, so that effects were smallest for non-supervisors and lowest for division directors.