

**A MINING RESEARCH CONTRACT REPORT
OCTOBER 1983**

THE EFFECTIVENESS OF ORGANIZATION AND MANAGEMENT TRAINING ON SAFETY AND PRODUCTIVITY IN METAL/NON-METAL UNDERGROUND MINING

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FOREWARD

This report was prepared by the Organizational Research Group of the University of Washington, Seattle, under a subcontract with Perceptronics, Incorporated, and USBM Contract No. J0387230. The contract was initiated under the Metal Health and Safety Program. It was administered under the technical direction of their Pittsburgh Mining and Safety Research Center with Mr. James M. Peay acting as the Technical Projects Officer. Mr. William R. Mundorf was the Contract Administrator for the Bureau of Mines. This report is a summary of work completed as part of this contract during the period from September 1, 1978 to May 30, 1982. This report was submitted by the authors on November 17, 1983.

Fred E. Fiedler was principal investigator and project director; Cecil H. Bell, Jr. was co-principal investigator and directed the subproject at the Hecla Mining Company. Martin M. Chemers directed the subproject at the Texasgulf Company Mine at Granger, Wyoming. The data analysis and interpretation was the responsibility of Dennis Patrick, P.E. who served as a consultant. Dr. J.E. Uhlaner was Program Director for the prime contract.

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EXECUTIVE SUMMARY

This report presents a demonstration project to assess the feasibility of management interventions for the purpose of increasing safety and productivity in underground metal/nonmetal mines. Two contrasting management interventions were conducted. One of the interventions consisted of highly structured leadership and supervisory skills training for mine managers and supervisors. The other intervention used team building and problem solving approaches of classical Organization Development. This is a highly trainer-intensive intervention in which work teams, consisting of bosses and their immediate subordinates identify high priority team problems, and work on their solution.

The management training program was conducted at the Texasgulf Soda Ash Operation in Granger, Wyoming, a room and pillar mine working at the 1300 foot level. The 26 hour training was given to all available managers and supervisors, and was well accepted. The intervention appeared to have been highly successful. Productivity, in tons per man hour (t/mh) was compared with the average productivity of the three other nearby trona mines in the industry. The comparison showed that the Texasgulf mine increased its productivity above that of the other trona mines, outperforming the industry average by 16% at the end of the intervention. The lost time accident rate and the MSHA reportable accident rates showed a marked decline, again outpacing the industry, and MSHA citations dropped markedly between the beginning and termination of the intervention. Finally, employee dissatisfaction with the company's safety program and supervisory attitudes toward safety showed a substantial improvement and especially so in the underground mining department.

The Organization Development intervention was conducted at Hecla Mining Company's Lucky Friday Mine, using the company's very similar Star Mine as a basis for comparison. These are hardrock deep vein silver mines employing about 250 and 380 miners, respectively. The intervention included work teams at all levels of the organization, from the president and his direct reports to teams consisting of shift bosses and their mine workers.

The changes in productivity of the Lucky Friday Mine could not be adequately assessed because of a 9 week strike in the last year of the intervention. Although silver content of the ore, as well as productivity in tons per man shift increased immediately after the strike. The injury and lost time accident rate, as well as the MSHA citation rate sharply declined in absolute terms as well as in comparison to the Star Mine's record. Management as well as employees felt that the intervention had been beneficial as well as successful.

In conclusion, the project indicates that both types of management interventions made a substantial contribution to mine safety. The evidence indicates that the management training intervention also contributed substantially to mine productivity. The Organization Development program's contribution seems to have contributed to productivity but the evidence is less clear because of a nine-week strike during the last year of the intervention. Both types of intervention can be recommended to the mining industry.

1. INTRODUCTION

1.1 Overview

This project assessed the feasibility and effectiveness of large scale management interventions, specifically, Organization Development (OD) and management training. A highly structured management training program was conducted at Texasgulf; a classical OD team building intervention was conducted at Hecla Company's Lucky Friday Mine, and with Hecla's top management. In both cases, the changes in mine safety and productivity were compared with those of very similar mines within the same industry.

This project thus has two related major purposes:

1. To demonstrate the effectiveness of organization development and standardized management training in increasing mine safety and mine productivity.
2. To compare the effectiveness of the two intervention methods in increasing mine safety and productivity, and to make appropriate recommendations on their use to the mining industry.

Although organization development (OD) and management training approaches have been successfully utilized in many organizations, most intensive training efforts in mining have focused on the development of survival skills (Akeley, Chase, Marrus, Prince, Redick, Rogne, Salberg, and Szempruch, 1976). Spearheaded by the Mine Safety and Health Administration (MSHA), the training emphasis has been principally on first aid, mine rescue and emergency equipment, and the self-rescuer (General Accounting Office, 1977).

It is clear, however, that social and organizational climate factors also materially affect accident and injury rates. As Sanders, Patterson and Peay (1967, p. 77) pointed out, "When decisions are decentralized, when management is flexible and innovative in trying new procedures and programs, and when morale is high, disabling injuries decrease." Similar conclusions can be drawn from research on the effect of work stress on mine accident and injury rates (Stefanski and Grether, 1976; Althouse and Hurrell, 1977).

Relatively little research has been devoted to the effectiveness of broadly based management interventions in the mining industry. The best known of these studies is the Rushton Coal Mine project by Trist, Susman and Brown (1977). Unfortunately, however, this study had to be abandoned prematurely as a result of a conflict with the mine's union. It therefore seemed timely, as well as important, to consider once again the potential benefits that could be derived from large scale management interventions.

The present investigation was conducted as a demonstration project to identify the potential benefits and problems of Organization Development and management training programs for reducing accidents and injuries in underground mines.

While definitive statistical inferences from a study of this nature are necessarily limited, demonstration projects can provide information about feasible and practical procedures. Within limits, a careful control group design permits appropriate comparisons of how different types of management interventions tend to affect safety and productivity of the organizations under study. In the present project, two sharply contrasting interventions were conducted in mines which were compared with other mines in which interventions did not take place.

1.2 Background of the Problem

Safety in the work place depends to a very large degree on the attitudes and behaviors of the first and second line supervisors. Safety regulations will not be obeyed unless the supervisor insists that his or her employees abide by these regulations as well as by the rules of common sense at the work site. The first line supervisors' attitudes and safety related behavior determine in large part how much attention the employees will pay to safety.

For the same reasons, it is essential that a safety program have the full support of top management. Unless management, from the top down, clearly demonstrates strong concern with safety, no amount of lectures or wall postures will make much difference. Supervisors and employees will quite justifiably see it as nothing but empty posturing.

It is, of course, an intriguing psychological question, why employees, in mines as well as other hazardous occupations, have to be convinced by management to work in a safe manner. The answer lies in part in the fatalistic attitude of miners, as well as others in dangerous occupations. Many feel that "accidents simply do not happen to me -- they only happen to other people, and you can't avoid a rockfall that has your name on it." Second, accident prevention is likely to take second place to the more immediate problems of production. The effects of accident prevention cannot be immediately seen. The effects of lower productivity have instant repercussions not only on the supervisor's standing with the boss, but also on the contract miner whose earnings depend on the tonnage of ore he extracts.

According to many practitioners, a successful intervention program requires that managers, supervisory, and the workforce at all levels "buy into" the change effort, and actively participate in the process of developing programs which will lead to change. OD consultants also have generally felt that a successful intervention program requires intensive personal

interaction between the consultant and personnel at all levels of the organization, from top management to the work group. The proper OD intervention is, then, necessarily a very intensive process, involving the entire organization, and requiring a large investment of time not only from the consultant but also from the organization's management and the work force.

It is of considerable importance to determine whether programs of this nature will be acceptable to the reputedly conservative mining industry, and whether these large scale programs are capable of effecting the desired changes in safety without reducing productivity.

No less important is the question whether a less intensive management intervention program will be correspondingly less effective. We, therefore, undertook a parallel management training intervention in the form of a trainer non-intensive management training program to provide a comparison with classical Organization Development. This approach was designed to provide a maximum contrast with OD on a number of critical characteristics:

1. OD requires intensive interaction between consultant and organization personnel at all levels of the organization, and in particular, with the organic work group consisting of boss and immediate subordinates.

The management training was designed to involve minimal contacts between consultant and individual managers and supervisors, practically none with nonsalaried employees and none with existing work groups.

2. OD interventions concentrate on the "here and now" problems of highest priority to the particular group with which the consultant is working.

The management training intervention was general. It used pre-packaged training modules that were modified by inserting mining terms and a mining background into video-taped and printed training aids.

3. In the OD intervention the consultant plays a critical role in interacting with members of the organization as individuals and as members of the group, in guiding the group meetings, and handling potentially explosive conflicts between individuals or units of the organization. This process requires someone who is well trained in applied social science and organization theory as well as in leading group discussions.

On the other hand, Management training typically does not require personnel with extensive professional training, especially in the administration of highly structured training programs. In the second year of the Texasgulf project, the management training was conducted by personnel of the mining company who had been given instruction on administering the program.

Both intervention programs were similar in certain important respects: (a) The consultants worked with management in the preparation of performance evaluation programs in order to assure that appropriate criteria of performance were available. (b) Top management was fully informed of the nature of the intervention in their organization, and instrumental in making arrangements for setting aside time of personnel for training meetings. (c) Management at all levels assisted in the interpretation of safety and productivity measures.

A further question was of interest in this project, namely, whether mine safety, as well as productivity are largely a function of the behavior and attitudes of supervisory and managerial personnel, or whether members of the nonsupervisory work force need to be directly involved. If a successful intervention can be accomplished by working only with supervisors and managers, it would suggest that interventions at the management level would be sufficient to obtain the desired improvements. If safety and productivity are controlled by the individual miner, or the natural work group, it would suggest that successful interventions must directly involve the rank-and-file and the work teams of the organization. Either of these outcomes would have important implications for administering management interventions in large organizations.

1.3 Descriptions of the Two Intervention Methods

1.3.1 Organization Development. Organization Development is a long-term program that examines and alters management practices and the dynamics of the organization for the purpose of helping the organization to solve its problems and to achieve its major goals (Figure 1-1). The specific techniques used in this project include team building, problem solving, coaching, and individual supervisory skills training. OD also often includes feedback to the manager about the status of his unit.

The major focuses of OD is the total organization and the organic work group, consisting of boss and subordinates. OD assumes that the members of a work group can solve their own problems, and that they are as expert about their own job as almost anyone else. OD brings the members of the work unit together for extended and uninterrupted blocks of time. It enables the group, with the assistance of the consultant, to focus on the specific problems which the members themselves have identified as being of highest priority (French & Bell, 1978). The classical OD approach, using team building and problem solving, was carried out at the Hecla Mining Company's Lucky Friday Mine in Wallace Idaho.

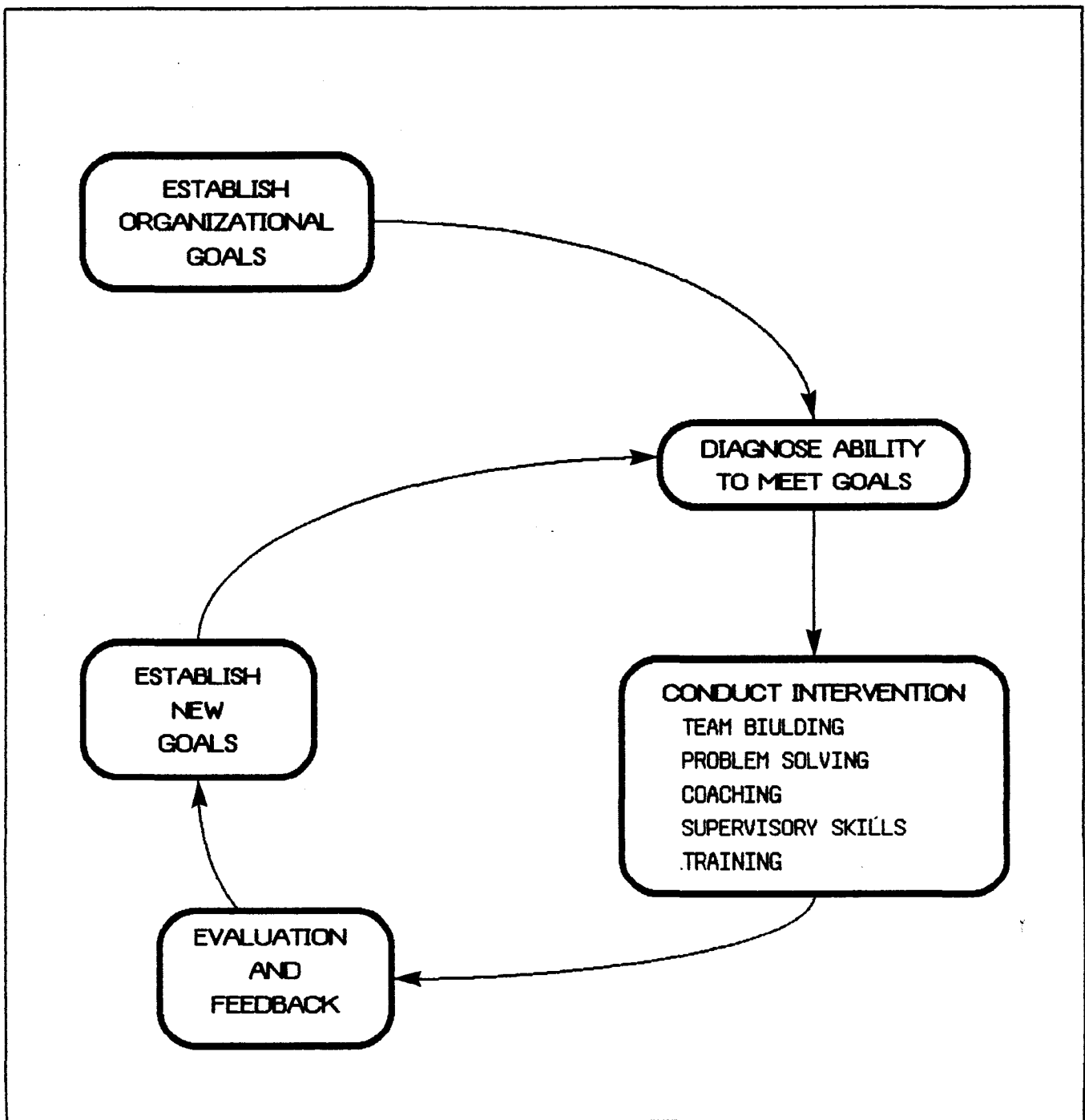


FIGURE 1.1. - The organization development process.

1.3.2 Management Training. The approach used at Texasgulf was designed to provide a maximal contrast with Organization Development. The program consisted of several highly standardized generalpurpose training modules, not specifically addressed to the particular concerns of the managers and supervisors of the Texasgulf mine. Rather, the training provided managers and mine supervisors with general leadership methods and supervisory skills. Such modifications as were made for the purpose of the training program consisted primarily of substituting examples and terms from the mining industry into programs designed for more general use.

Further, the intervention and the contacts between managers, supervisors and training consultants were kept at a minimum, and consultants did not, as a rule, interact with mine personnel at the non-supervisory level. The consultants therefore spent relatively little time at the mine and devoted approximately 80% to 90% of their time to the development of training modules, with a substantial part of the training being conducted by personnel of the Texasgulf mine. The management training project at Texasgulf was initiated 5 months before the OD project at Hecla, and is described first in this report.

2. STRUCTURED MANAGEMENT TRAINING AT TEXASGULF

2.1 Description of the Organization and the Research Site

The Texasgulf company has diversified interests in chemicals and mining. Its soda ash operation is located near Granger, in the southwest corner of Wyoming. The mine is under the management of a resident vice-president to whom the managers of the Division of Mining and of Surface Operations (primarily the ore mill) report. (See Table of Organization on Figure 2-1).

Most of the ore extraction takes place at the 1370 level, using a room and pillar method. The work areas are relatively well lit, and rockfalls, explosions, and cave-ins are relatively infrequent. On the other hand, trona mining requires heavy machinery and hydraulically operated equipment. This includes Helaminers used in ore extraction, as well as large front-end loaders and heavy ram cars which move at fairly high speeds through dimly lit tunnels and drifts. Accidents involving mining machinery and trucks, therefore, represent a constant danger.

The Granger property has about 500 employees, with half of the work force in underground operations. Most of the surface workforce is employed in administration as well as in an ore mill which processes the trona. Training was conducted for managers and supervisors of the mine and the ore mill.

The Texasgulf mine began commercial ore extraction in 1975, and had overcome most of the problems of start-up operations by the time the management training intervention started in 1979. However, in 1980 the company decided to investigate doubling the capacity of the mine and the attached mill operations. The then resident vice-president was assigned to the enlarging project, as was the personnel director and several other key executives. As a result, there were many changes of personnel at the management level within a very short time. By the end of the intervention, only 2 of 15 key managers had retained the same job they held at the beginning of the project.

2.2 Intervention Procedures

Work at the Texasgulf site was conducted by Martin M. Chemers, of the University of Utah, assisted by Joseph E. Garcia. Training modules were developed by a group which, in addition to Chemers and Garcia, also included Fred E. Fiedler, Linda Mahar, and Sarah Jobs, of the University of Washington, as well as Ted Sheil and members of the Texasgulf Training Department.

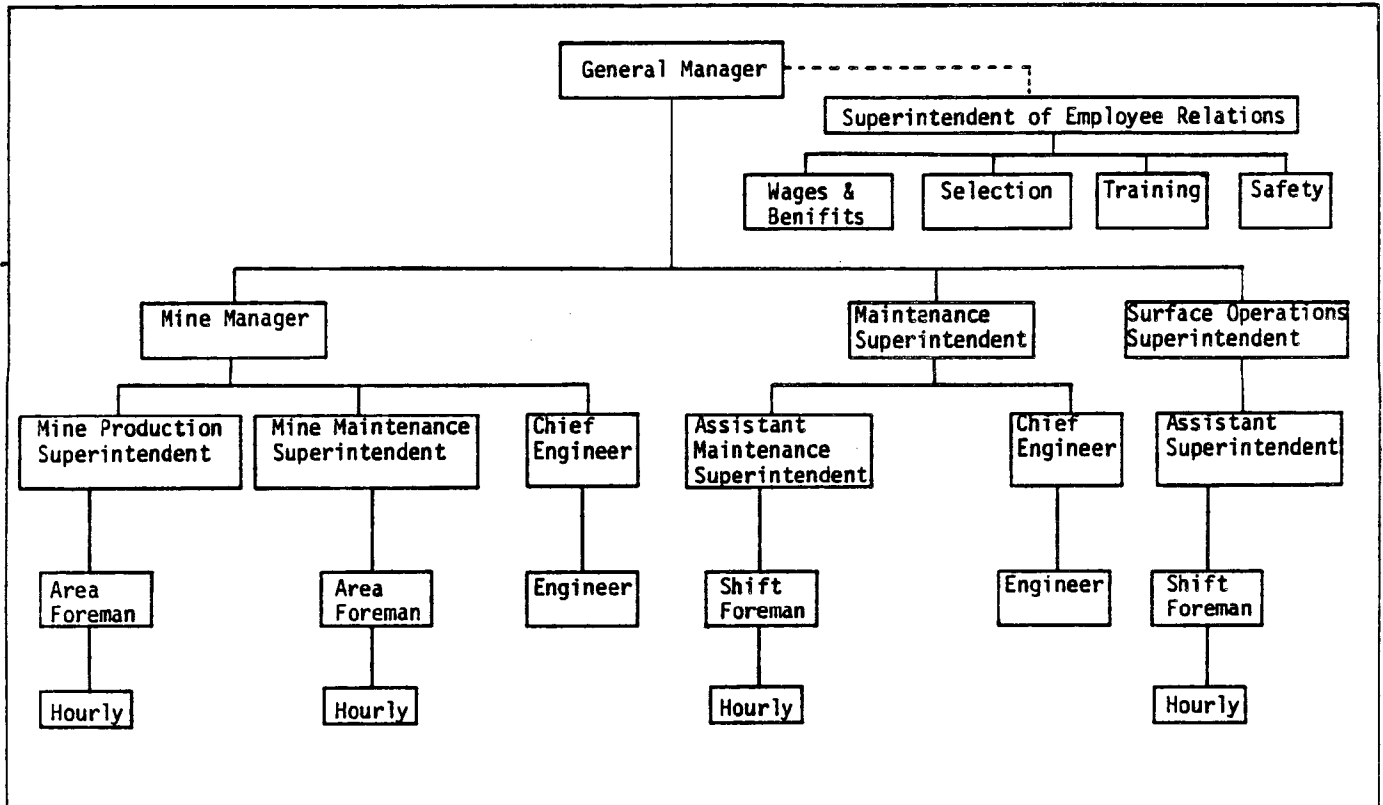


FIGURE 2.1. - Table of organization, Texasgulf Company.

The intervention began with a series of interviews to (a) familiarize the consultants with the organization, (b) identify the major goals of management and supervisors, and (c) develop critical behaviors for the purpose of constructing a performance evaluation scale for assessing the effects of the intervention.

These meetings also served to acquaint top management with the proposed training for supervisory and management personnel, and to obtain management's concurrence and cooperation for each of the training procedures. It was, of course, considered essential that mine management participate in the program and demonstrate active support for the project.

To assure that the mining company as well as the researchers understood their obligations and their rights, a memorandum of understanding was executed by the research group and the company's management. (A similar memorandum was signed with the Hecla Mining Company. Appendix A and B).

Basically, the research group agreed to provide personnel and material for training all supervisors at all levels of the organization; to train the company's own personnel to administer the training program so that the company would not be dependent upon the Organizational Research Group after termination of the project, and to furnish, at the conclusion of the training, a complete report of the project as well as one copy of all training materials.

The company, in turn, agreed to make available supervisory and management personnel for the required training time and at mutually convenient hours; and to cooperate fully with the research group in obtaining performance, safety, and other records needed for the analysis of the results of the intervention.

The non-intensive management training program was designed to require a minimum of involvement with external consultants. The training material was developed so that company personnel can use the standardized training programs without further assistance when the consultants leave, thus satisfying the contract's requirement that the training be institutionalized. The training materials were designed for easy dissemination throughout the mining industry and for implementation by the companies' own training departments.

2.3 Comparison Mines

An essential component of this project was the identification of comparable "control" mines against which any changes in productivity and safety before, during, and after the interventions could be evaluated. Our desire to work with the Texasgulf mine was in part motivated by the fact that it is no more than about 10 miles distant from three other trona mines. These, operated by FMC, Stauffer, Allied Chemical, and Texasgulf,

constituted at that time almost the entire U.S. trona mining industry. These four mines operate in the same geological environment, use the same basic technology, draw from the same labor pool, and compete in the same economic market.

The productivity and certain safety figures for Texasgulf could, therefore, be compared with the averages for the other three trona mines, based on records published by the Bureau of Mines, MSHA, and the mining agencies of the State of Wyoming. The other three local mines thus constitute an appropriate "control group" for the Texasgulf intervention.

2.4 Nature of the Training Program

The training program itself consisted of four basic elements, described below.

2.4.1 Objective Supervisory Performance Appraisal. A performance appraisal system was designed so that managers and supervisors can become aware of their own strengths and weaknesses and those of their subordinates. Figure 2-2 shows some illustrative scale items. Note that these concentrate on supervisory behaviors -- how the supervisor acts and how he can change ineffective behaviors. This type of performance evaluation has been found effective in motivating employees to improve their behavior at work (Wexley and Yukl, 1977, p. 207).

2.4.2 Leadership Training. The intervention used the Leader Match program, developed by Fiedler, Chemers, and Mahar (1976). This program is based on the generally accepted view in the leadership area that the performance of a leader or manager depends both on personality and on the specific situation in which the individual operates. The method further assumes that it is generally much easier to change critical components of the leadership situation than one's personality or deeply ingrained habits of interpersonal interactions with subordinates.

The Leader Match approach, therefore, teaches the manager and supervisor how to adapt his leadership situation to his own leadership style. This approach has been used by the U.S. Civil Service Commission and the Military services, as well as by many organizations in the private sector. Validation of this method is described by Fiedler and Mahar, (1979).

Leader Match teaches the individual to diagnose his own leadership style as well as diagnosing the leadership situation. The leader is given detailed instruction on various methods for modifying the situation to match his particular management approach and personality. The instruction is provided by a trainer who uses a detailed manual, aided by videotaped illustrations and slides or transparencies. (The videotape and the instructor manual are shown in Appendix C and D.)

| | | | | |
|----------------|----------|-------------|--------------|-----------------|
| 1 | 2 | 3 | 4 | 5 |
| 0-19% | 20-39% | 40-59% | 60-79% | 80-100% |
| (Almost Never) | (Seldom) | (Sometimes) | (Frequently) | (Almost Always) |

IV. Safety

1. Follows MSHA regulations and company safety rules, for example, use of hotsticks, lock-outs, tie off of high work, blocking, hanging cable.

Almost Never 1 2 3 4 5 Almost Always

2. Makes sure that work pace is consistent with safety.

Almost Never 1 2 3 4 5 Almost Always

3. Immediately corrects hazardous work conditions, for example, sounds back, checks cable, checks footing, checks equipment, ect.

Almost Never 1 2 3 4 5 Almost Always

4. Continually emphasizes safety to crew.

Almost Never 1 2 3 4 5 Almost Always

5. Will not sent a subordinate into hazardous conditions.

Almost Never 1 2 3 4 5 Almost Always

6. Makes sure his subordinates are assigned to jobs they can handle.

Almost Never 1 2 3 4 5 Almost Always

7. Gives praise for safe work behavior and reprimands unsafe behavior.

Almost Never 1 2 3 4 5 Almost Always

FIGURE 2.2. - Sample items from performance appraisal.

2.4.3 Supervisory Skills Training. This training method uses videotaped vignettes in actual and staged settings which teach the supervisor how to deal with specific problems with employees. Table 2-1 shows the list of supervisory skills vignettes which have been developed for the mining industry.

The training is conducted in groups of 10-15 supervisors, who view a series of short episodes depicting an interaction between an effective supervisory or manager and his subordinates. The trainees are told that they are to observe these interactions, and then discuss how the individual who played the supervisor's role dealt effectively with the problem. In particular, the trainees are instructed to identify the "learning points" on each of the vignettes they see. A learning point is the particular behavior or supervisory action which must be incorporated in handling a particular problem.

For example, in dealing with an angry or aggrieved employee, it is essential that supervisors carefully listen to the employee (Learning Point 1), that they "reflect back" to the employee the point that he or she wishes to make to assure that they understand the employee's problem (Learning Point 2) and that the supervisor and the employee work out an appropriate action plan to eliminate the grievance, if this is called for (Learning Point 3). Finally, the supervisor must set up a procedure to assure that the agreed plan has, in fact, been carried out (Learning Point 4).

After viewing and discussing the videotapes, different methods of handling similar problems are discussed, and the videotape is shown once more, with Learning Points displayed on the screen at appropriate times. The supervisors then role play some episodes which they have encountered, and are instructed to attempt dealing with an employee in the manner proposed by the training program. (Appendix E presents the videotapes and the instructor manual for supervisory skills training).

2.4.4 Institutionalization. Finally, we needed to assure that the training is actually used and remains a permanent part of the organization. For this purpose, key personnel in the Texasgulf training department learned to administer the training methods.

The previous training director, as well as the present training director, administered the training programs not only at the Granger property but also in other parts of their own organization, and to training directors of other mining companies in Wyoming and neighboring states.

Figure 2-3 shows a timeline indicating when the various phases of the intervention took place. It will be noted that training was suspended between July of 1980 and January of 1981, the period during which the Texasgulf mine was searching for a new training director.

TABLE 2-1. - Supervisory skills training modules.

| MODULE TITLE | DESCRIPTION | OBJECTIVE |
|----------------------------------|--|---|
| Reinforcing Safe Behavior | Supervisor asks employee to perform a task that is risky. Emphasizes safety and reinforces employees use of safe procedures. | To give trainee the skills to enhance and maintain safe behaviors in subordinates. |
| Correcting an Employee | Foreman talks to worker about procedures for loading and unloading parts so that all parts are properly put away. | To give trainee skills for improving performance in a way that reduces defensiveness and the possibility of conflict. |
| Orienting a New Employee | Foreman introduces new man to shop. Explains procedures, facilities and job description. Emphasizes safety. | Teaches trainees skills for establishing open communications with new employees to promote safe, effective performance as quickly as possible. |
| Overcoming Resistance to Change | Supervisor asks employee for suggestions on how to overcome a difficult and technical problem. | This module illustrates a straightforward way of changing attitudes and alleviating fears when faced with the necessity of change. |
| Handling an Irate Employee | Employee complains to supervisor because he feels that he needs help to do his job. | Gives the trainee skills in ways to turn destructive anger into constructive, cooperative efforts. |
| Improving Employee Attendance | Supervisor must deal with an employee who is consistently absent from work. | Trainee learns communications skills to enforce standards and policies in a positive, fair manner. |
| Focusing Attention on Safety | Supervisor talks with his crew about an accident and they develop ways to handle the problem. | Demonstrates how an effective supervisor can communicate safety standards by making his crew aware of current problems, and through group discussion. |
| Creating a Cooperative Work Team | A supervisor works to build his crew into a team. | Trainee learns communication skills for praising employees for safe, cooperative work and how to encourage continued cooperative group behavior. |

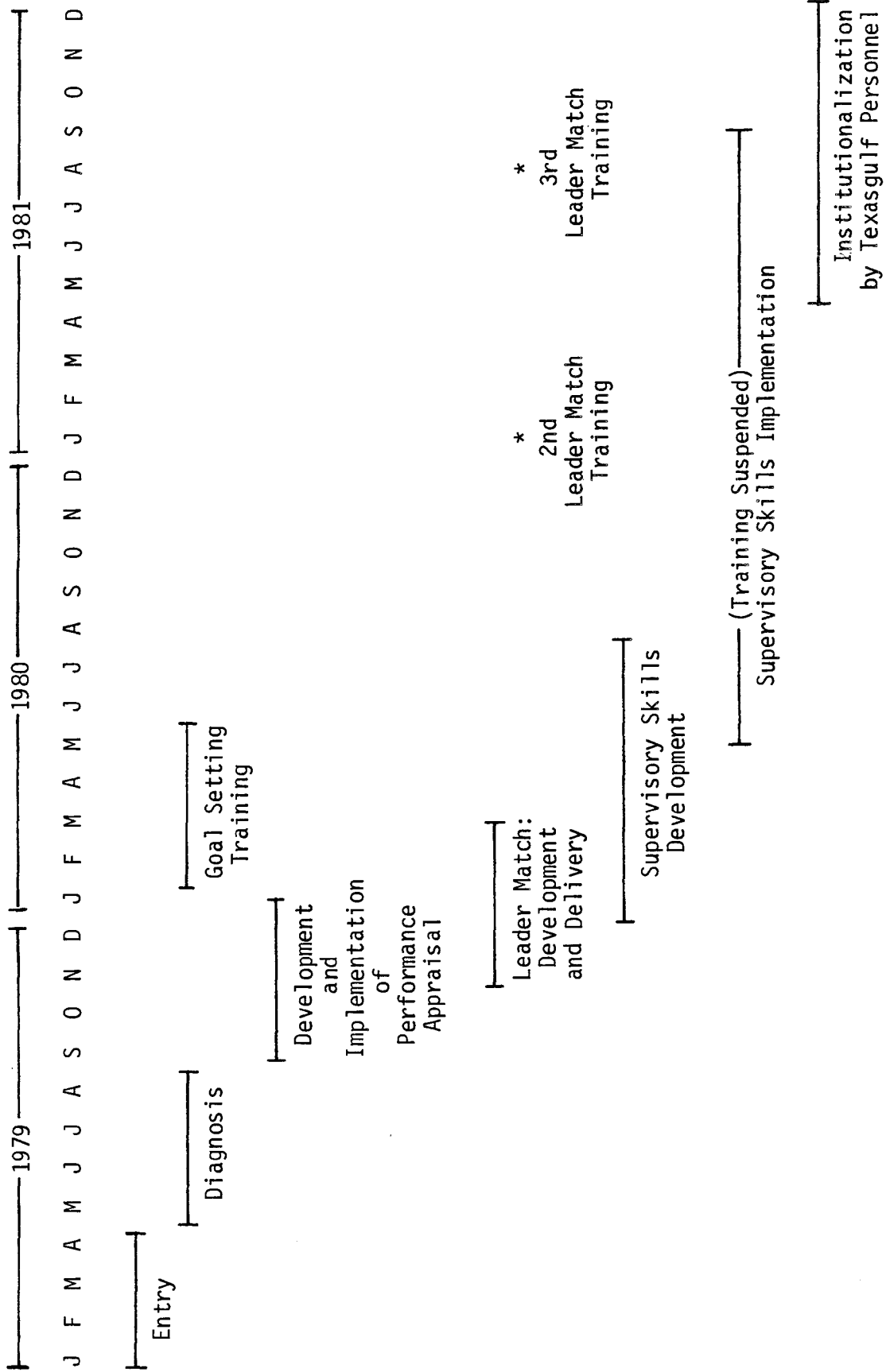


Figure 2.3. - Timeline of management development at the Texasgulf trona mine, Greenriver, Wyoming.

2.5 Results of the Management Intervention

The data for evaluating the effectiveness of the Texasgulf intervention came from (a) company and state records of tonnage output and tonnage per manhour; (b) company and government records of injuries and time-lost or reportable accidents; (c) citations for safety violations given by the Mine Safety and Health Administration (MSHA) office; (d) performance evaluations made by higher level managers of first line supervisors; and (e) employee responses to a company-wide morale and job satisfaction survey administered by an independent management consulting firm shortly prior, and again a few months after the intervention, i.e., in 1978 and in May of 1981. In addition, we collected safety and productivity data from federal and state mine agencies for the other three mines in the trona industry. In order to protect the interests of the cooperating companies, confidential production data were standardized or transformed to percentages.

2.5.1 Productivity. The best single measure of productivity in the trona industry is the tonnage of ore per manhour (t/mh). This measure reflects the efficiency of the mining operation and is relatively independent of market fluctuations which are not within the control of management.

The most obvious measure of mine output, i.e., gross tonnage, is particularly vulnerable to consumer demand since trona absorbs humidity and cannot be stored for an extended period of time. Ore production must, therefore, be closely adjusted to prevailing market conditions, and the gross tonnage output figures are not suited for the analysis of organizational performance. The demand for trona fluctuated quite markedly in the years 1979-1982. Its main use is in the production of glass, and the demand for trona decreased by 16% with the precipitous decline of the construction and automobile industries during that time.

The most important performance measure in the trona industry, as already mentioned, is tons per manhour. On that measure, Texasgulf increased its productivity from 1.74 in 1979 to 1.97 t/mh in 1980, an improvement of 13%, while the industry average remained unchanged. With the retrenchment of the trona industry, and the various mine companies' desire to retain skilled personnel, the industry t/mh average decreased by 11.6% between 1979 and 1981. However, the Texasgulf mine's productivity decreased only 8.9% during that same period. The Texasgulf mine thus outperformed the industry average by 13.2% during that difficult time (see Table 2-2).

Texasgulf also increased its total tonnage production in 1980, while at the same time, reducing its manpower requirements from 1,041,348 hours in 1979 to 1,027,100 manhours. Among the other three mines, one reported a slightly reduced tonnage output (-5.5%), one remained unchanged (0%), and the third mine slightly increased output (+.05%), but at the cost of markedly increased manhours (+16%) and reduced productivity (-13%).

TABLE 2.2. - Comparison of productivity, manhour, and production data between mine receiving management development training and industry average.

| | Texasgulf trona mine | Trona Industry | difference |
|----------------------------|----------------------|----------------|-------------|
| 1978 Productivity | 1.727 Ton/M.H. | 1.621 Ton/M.H. | +0.106 T/MH |
| 1979 Productivity | 1.737 Ton/M.H. | 1.621 Ton/M.H. | +0.116 T/MH |
| ΔProduction | +32.2% | +10.1% | +22.1% |
| ΔMan Hours | +31.4% | +10.1% | +21.3% |
| ΔProductivity | + 0.6% | 0.0% | + 0.6% |
| 1980 Productivity | 1.967 Ton/M.H. | 1.627 Ton/M.H. | +0.340 T/MH |
| ΔProduction | +11.7% | -0.9% | +12.6% |
| ΔMan Hours | - 1.4% | -1.3% | - 0.1% |
| ΔProductivity | +13.2% | +0.3% | +12.9% |
| 1981 Productivity | 1.595 Ton/M.H. | 1.433 Ton/M.H. | +0.162 T/MH |
| ΔProduction | -16.6% | -8.9% | -7.7% |
| ΔMan Hours | + 2.8% | +3.3% | -0.5% |
| ΔProductivity | -18.9% | -11.9% | +7.0% |
| ΔPRODUCTIVITY 1978-1981 | +1.7% | -2.9% | +4.5% |

Average productivity for the trona industry increased only marginally in 1980 and decreased by 11.9% in 1981. However, in 1979, prior to the first year of the intervention, the Texasgulf mine showed an increase of 0.6%. The following year Texasgulf mine showed increased productivity of 13.2% when compared to the previous year and 12.9% when compared to the industry. Though economic conditions resulted in a decrease in productivity at Texasgulf of 18.3% from the previous year Texasgulf still outpaced the industry by 11.3% in 1981. On average the Texasgulf Mine increased productivity by 1.7% during the period of the intervention whereas the industry as a whole decreased productivity by 2.9% during the same period. The resultant difference of 4.5% indicates that the Texasgulf mine showed substantial improvement in productivity during the period of the intervention (Table 2-2 and Figure 2-4).

2.5.2 Accidents. Being relatively new, Texasgulf had the usual problems in the area of safety, however, there is evidence of improvement during the time of the intervention. As Figure 2-5 shows, by 1981, the accident rate, as measured by all lost time accidents above and below ground, had dropped by over 48% of the 1978 level. It is noteworthy that this decrease in accidents occurred despite the marked rise in productivity mentioned above (Figure 2-6). The severity of the accidents, a measure of mandays lost to man hours available, fell by 50% in 1979 but then rose steadily to the 1981 level. This supports the miner's lore that it may be possible to control incidents (the frequency of accidents), but not the nature of the injury an accident will cause (Figure 2-7).

2.5.3 MSHA Citations. Figure 2-8 shows a dramatic decrease in MSHA citations between the years 1978 and 1981, i.e., from 100% to about 10%. This "improvement" cannot be taken at face value. It reflects the aggressive enforcement of the newly enacted mine safety legislation in 1978, and the subsequent adjustment of the company to the new safety requirements. However, interviews with MSHA inspectors also revealed that real improvements had taken place at the Texasgulf Mine, and that the low citation rate in 1980 and 1981 reflected their satisfaction with Texasgulf's efforts to develop a safer working environment.

2.5.4 Ratings of Supervisor Performance. Before and after the interventions, supervisors were rated by their immediate superiors on four different aspects of their performance. These were ability to handle (a) administrative, (b) interpersonal, (c) technical, and (d) safety related facets of their job. The data were standardized to adjust for differences in the ratings of various superiors, and new standards of performance which might have been adopted in the course of the three year period in which the intervention took place. The safety ratings, while not dramatically increased, did indicate that the supervisors' ability to handle safety problems had improved to a statistically significant degree (p=1/4.01; Table 2-3).

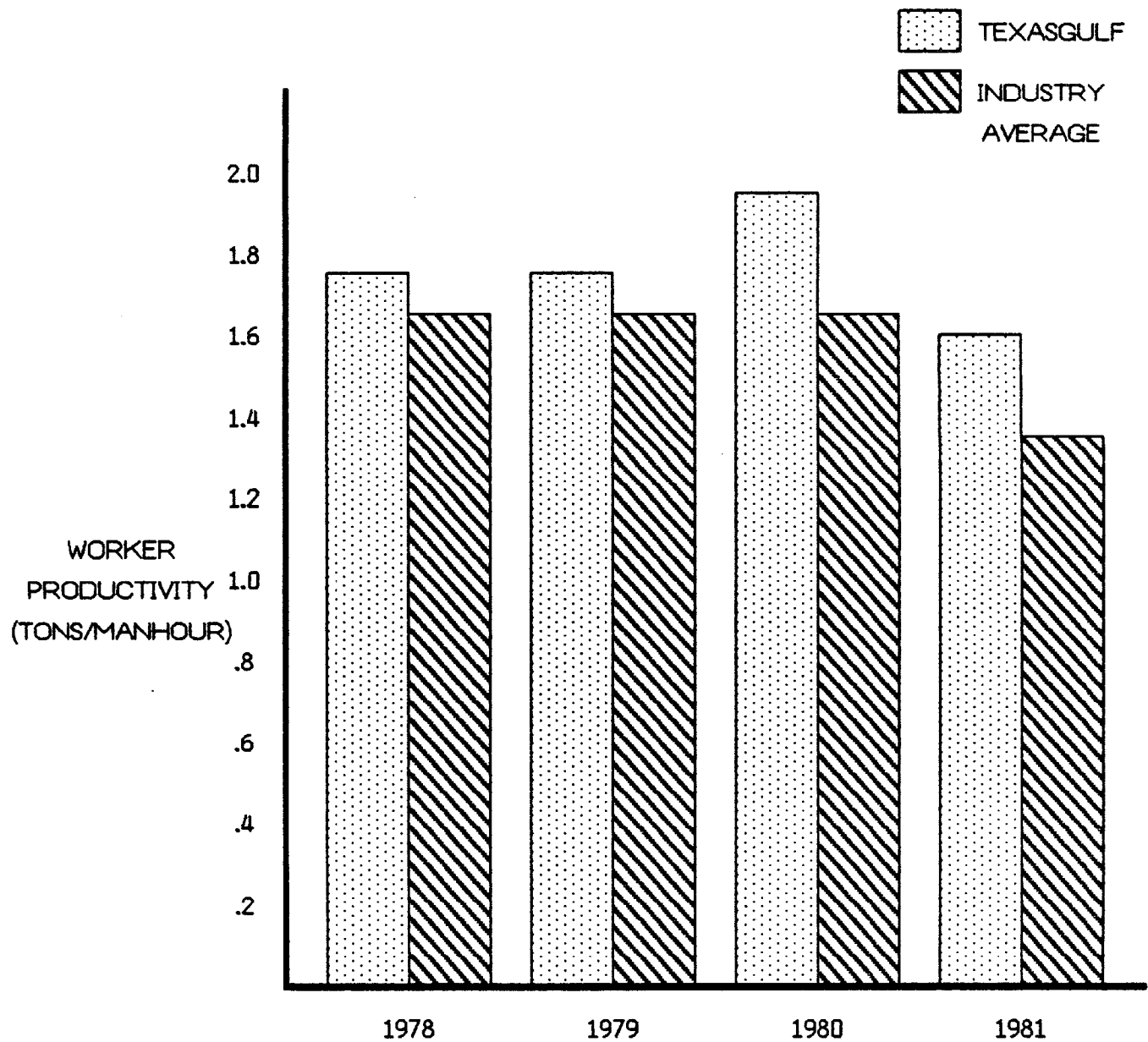


FIGURE 2.4. - Comparison of worker productivity between Texasgulf and trona industry average 1978-1981.

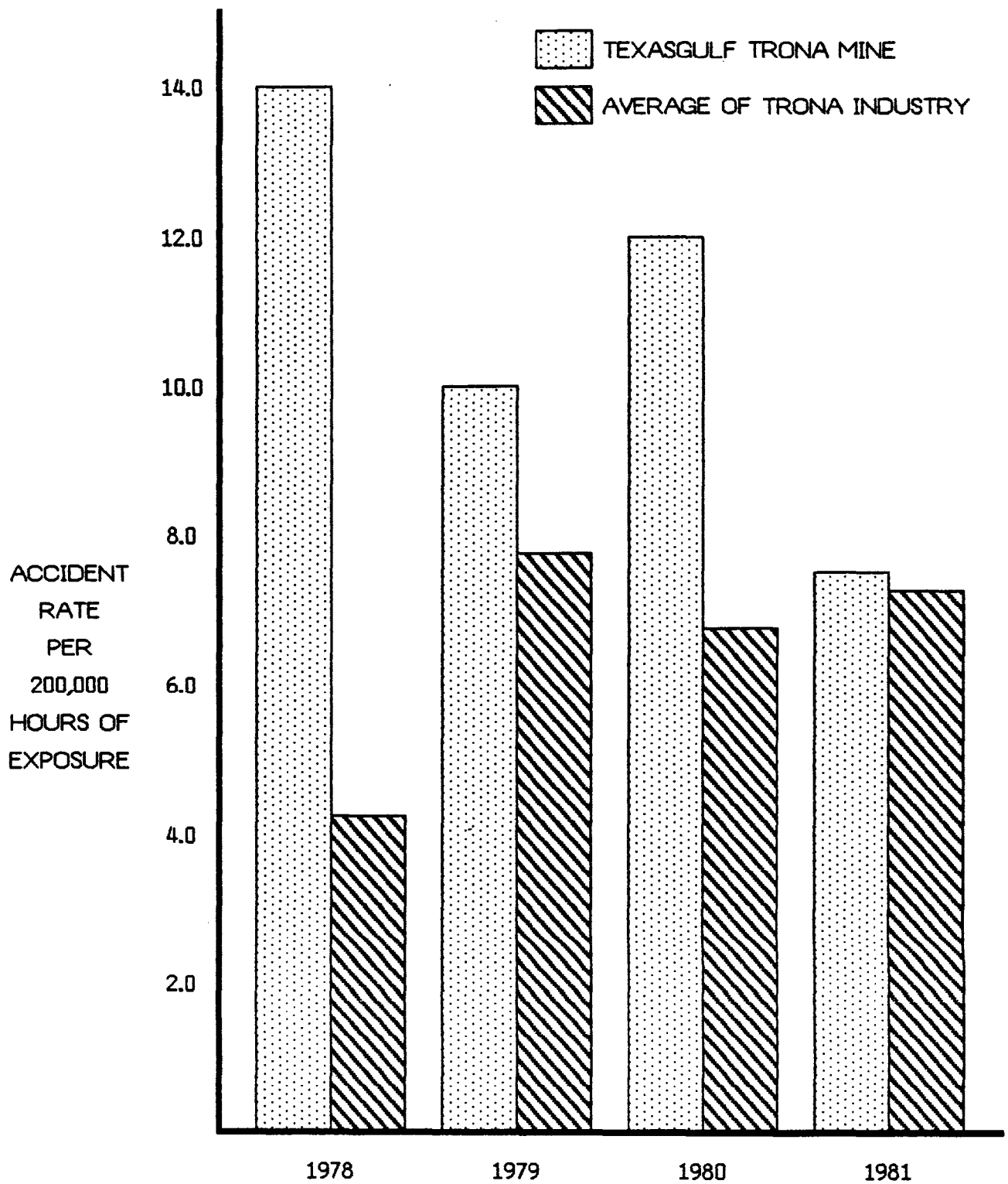


FIGURE 2.5. - Accident rates for the trona industry as reported by the Mine Safety and Health Administration.

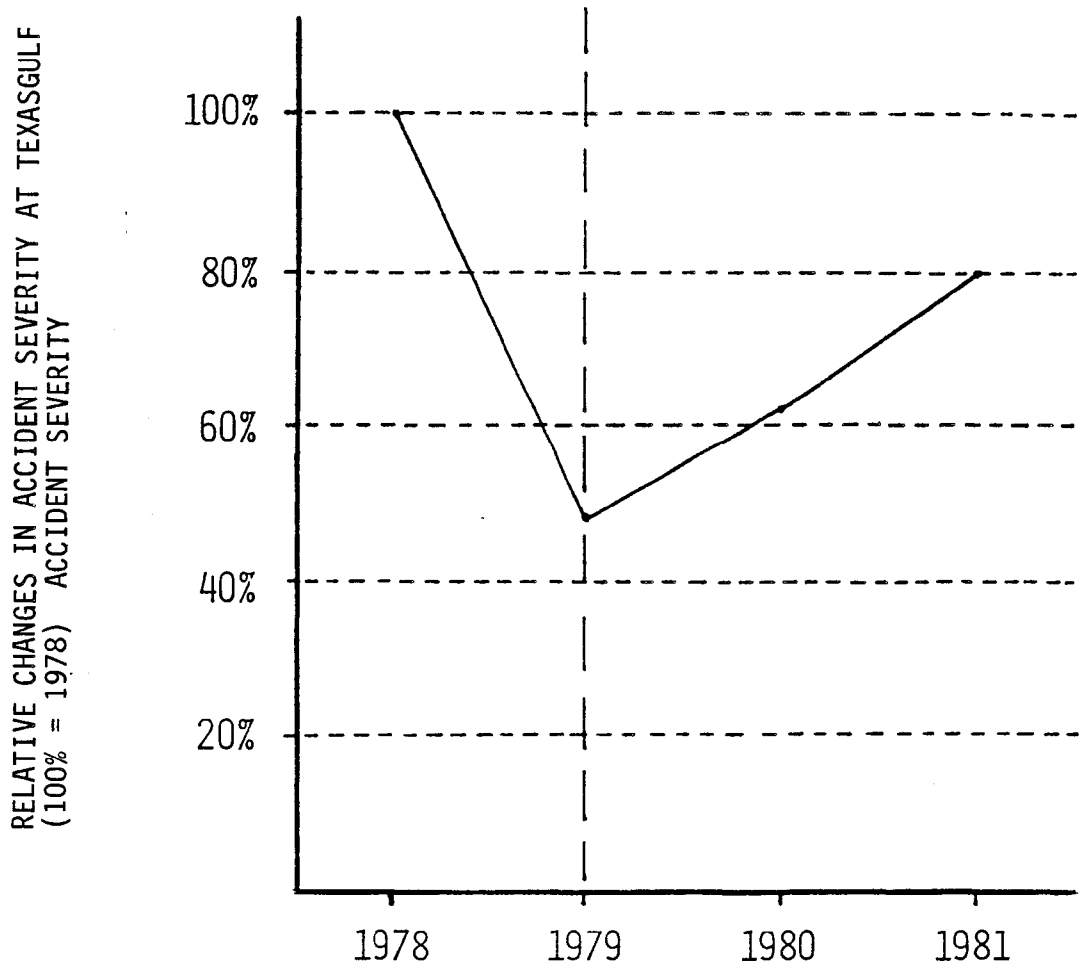


FIGURE 2.6. - Relative changes in accident severity at Texasgulf trona mine during the period of management development.

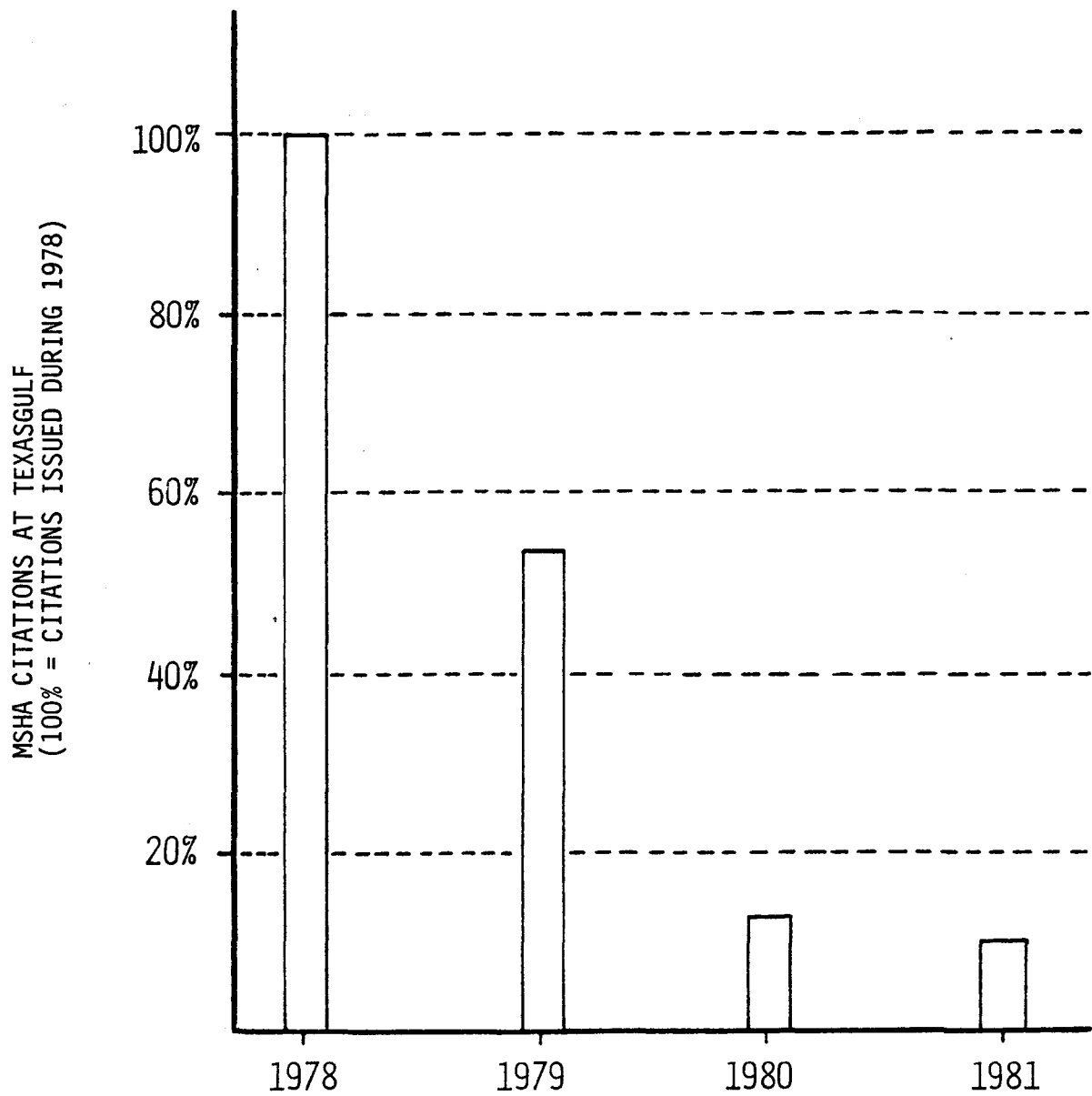


FIGURE 2.7. - Comparison of Mine Safety and Health Administration citation issue rates using 1978 baseline data.

TABLE 2.3. - Managers' ratings of mine supervisors' performance in administrative, interpersonal, technical and safety areas.

| YEAR | Administrative Performance | | | Interpersonal Relations | | | Technical Skills | | | Safety Awareness | | |
|------|----------------------------|------|------|-------------------------|------|------|------------------|------|------|------------------|------|------|
| | Mean | S.D. | Rank | Mean | S.D. | Rank | Mean | S.D. | Rank | Mean | S.D. | Rank |
| 1979 | 4.19 | 0.51 | 2 | 4.07 | 0.61 | 4 | 4.23 | 0.52 | 1 | 4.15 | 0.59 | 3 |
| 1981 | 4.10 | 0.65 | 2 | 4.06 | 0.68 | 3 | 3.97 | 0.82 | 4 | 4.22 | 0.57 | 1* |

*p<.01

The supervisors, themselves, attributed their improved performance to the management training program. In a questionnaire administered at the end of the intervention, 98% of the respondents expressed their satisfaction with the program and their desire to participate in additional programs of this type; 98% of the respondents also stated that the program had assisted them to deal more effectively with their safety problems and concerns.

2.5.5 Employee Ratings of the Texasgulf Safety Program. The Texasgulf Company commissioned an independent management consulting firm (Science Research Associates, Inc.) to conduct a company-wide job satisfaction and attitude survey in 1979, prior to the beginning of the intervention, and again in May of 1981, four months after the intervention had ended. Of particular interest in this survey are the data relating to employee satisfaction and dissatisfaction with the mine's safety efforts.

The comparison of the ratings of dissatisfaction prior and again shortly after the intervention show an overall decrease of 13% in employee dissatisfaction with the company's safety effort. Dissatisfaction increased only among administrative personnel and warehouse workers who were not the focus of the management training program. Dissatisfaction decreased most dramatically, by 23% among the underground mine personnel, and 19% among mill personnel, who work in the most dangerous areas of the organization (Table 2-4).

The impressive level of satisfaction with the safety program along with the supervisors' ratings indicates that the supervisors saw the program as responsible for the improvement in the company's safety record, an opinion shared by top management, and reflected by the rise in productivity and safety performance.

In addition, informal comments from supervisors and managers showed that they felt the training had had a beneficial impact on productivity and safety. This was the case not only of higher management, but also of the area bosses and the foremen at the operating level. The men used the vocabulary of the training programs, speaking to each other of their leadership styles, and the task structure and position power, which constitute critical elements in Leader Match training.

The behavior modeling was particularly well received and was seen as the type of hands-on training which would be of immediate use. Here again, the managers and their foremen felt that the experience had been well worth the time it took away from production.

TABLE 2.5. - Proportion of personnel expressing dissatisfaction with safety efforts at the Texasgulf mine.

| Work Group | 1978 | 1981 | Improvement |
|-----------------------------|------|------|-------------|
| Mill production workers | 49% | 30% | 19% |
| Surface maintenance workers | 44% | 35% | 9% |
| Mine production workers | 42% | 18% | +24% |
| Mine maintenance workers | 27% | 17% | +10% |
| Warehouse workers | 12% | 13% | - 1% |
| Administration | 17% | 24% | - 7% |
| Supervisory personnel | 19% | 8% | +11% |
| Total Workforce | 34% | 21% | +13% |

3. ORGANIZATION DEVELOPMENT AT HECLA MINING COMPANY

Hecla Mining Company is one of the largest silver producers in the United States and operates a number of mines in the Coeur d'Alene area of Northeastern Idaho as well as several smaller mines in other Western states. The company was established in 1891 and enjoys a reputation in the industry as a quality firm, particularly noted for its expertise in deep vein, hardrock mining.

The two mines of interest to this project are the Star Mine and the Lucky Friday Mine, both within a few miles of Wallace, Idaho. The Star Mine extends to the 8100 foot level and employs about 360 nonunion miners. The Lucky Friday works primarily at the 4000 to 4600 foot levels, and employs about 270 miners represented by the United Steelworkers of America. The safety record of the Hecla mines was considered to be poor, and especially so at the Lucky Friday Mine.

In 1979, just prior to the intervention, Hecla had divested itself of an ill-fated copper mining venture in Arizona, and a new management team was installed in May of that year. The OD intervention began shortly after that time. Figure 3-1 shows the 1979 table of organization. The management structure remained basically unchanged during the entire period of this study and morale and optimism were high among management as well as among nonsalaried employees.

Two important factors must be noted. The silver bullion market went through a period of unprecedented fluctuations, moving from a low of about \$6.00 in 1979 to a high of \$48.00 in 1980. However, the price of silver fell dramatically in 1981, causing Hecla's stock to drop from \$55 to \$12 during that year. Second, the Lucky Friday Mine experienced a nine week work stoppage during March and April of 1981, making it difficult to assess the effects of the intervention.

An agreement to undertake the intervention was reached with the Hecla Mining Company in July of 1979 (Appendix B), and diagnostic interviews were conducted between August and December of that year. An action plan of the OD intervention was submitted to management in February of 1980, and implemented in the period March 1980-May of 1982, involving a total of 56 visits to the company.

This plan was the basis for the decision to focus on three major areas: (a) the establishment of a team building/problem solving process, beginning with top management and working downward through the entire organization; (b) extensive scrutiny of safety activities at Hecla with a view to increasing their effectiveness; and (c) the development of a performance evaluation to measure the achievement of desired performance, including safety, of salaried personnel.

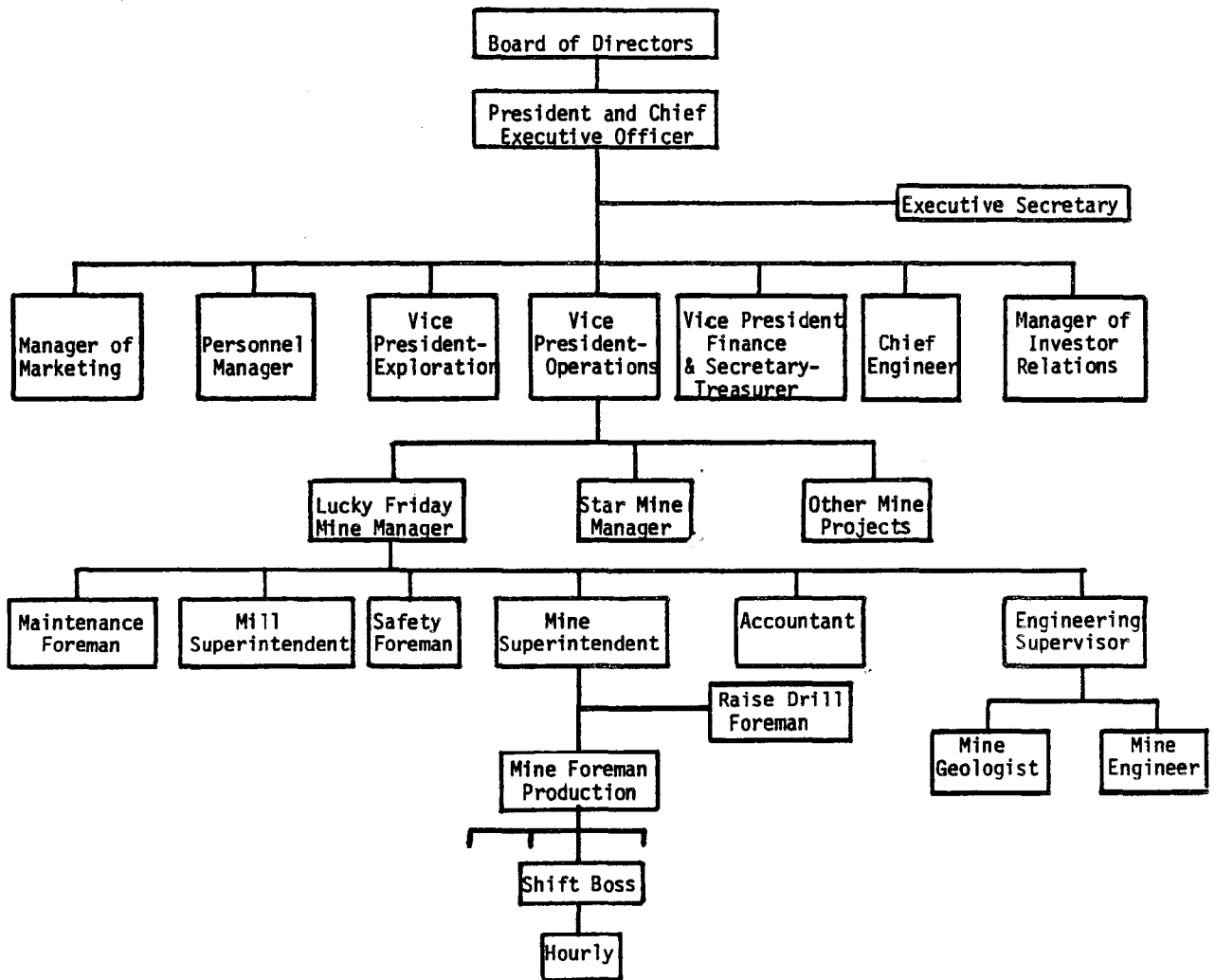


FIGURE 3-1. - Table of organization for 1979.

3.1 Design of the Organization Development Intervention Study

One major advantage of working with the Hecla Company was its operation of two very similar mines. These are located within a short distance of each other, in the same general geological environment, drawing on the same labor pool, and operating under the same corporate rules and policies.

It is essential, as part of the OD intervention, to conduct team building/problem solving sessions with management teams at the corporate level. However, the main focus of the intervention in this study was on the safety and productivity of the Lucky Friday Mine in which the intervention took place, and its comparison with the Star Mine, in which no OD intervention was conducted.

3.2 Principles of Team Building/Problem Solving

The classic or team building/problem solving approach introduced at Hecla was governed by several principles:

1. Start team building/problem solving at the top of the organization and work through all levels.
2. Focus attention on intact work teams consisting of superiors and subordinates.
3. Focus on "getting the job done," that is, finding better ways to accomplish the team's mission by solving major problems and seizing opportunities.
4. Be data based, that is, discover problems, opportunities, and solutions through fact-finding and diagnostic procedures.
5. Be interaction oriented, i.e., develop and implement action plans to cause desired changes. Follow up, and evaluate actions to ensure a general team building/problem solving framework, but use additional OD techniques as they are appropriate.

This approach assumes that work teams are the basic building blocks of organizations. If teams perform well, the organization performs well. The technique of team building involves a series of meetings in which high priority issues facing the team are systematically examined and resolved. These meetings usually are conducted with the aid of a consultant who acts as a facilitator.

As conducted at Hecla, team building is a process of systematically identifying and working on top priority problems and opportunities facing the work team comprised of boss and subordinates. Relevant issues and problems that concern either the way the work is accomplished or how the team functions surface and are systematically addressed. Problems are defined and clarified, alternative solutions are evaluated, preferred

solutions are implemented, and the effects of actions are monitored for desired results. Team building has two expected outcomes: the team's mission is better accomplished, and working relationships among team members are improved.

In practice the problem solving and team building activities amplify each other's impact. They are effectively combined in extended meetings which may last from 2 to 6 hours, where work teams examine their problems and develop action plans for their solutions. As they set work group goals, their communications are strengthened, group roles are clarified, and impediments to organizational effectiveness are eliminated. This dual intervention has worked well as Hecla.

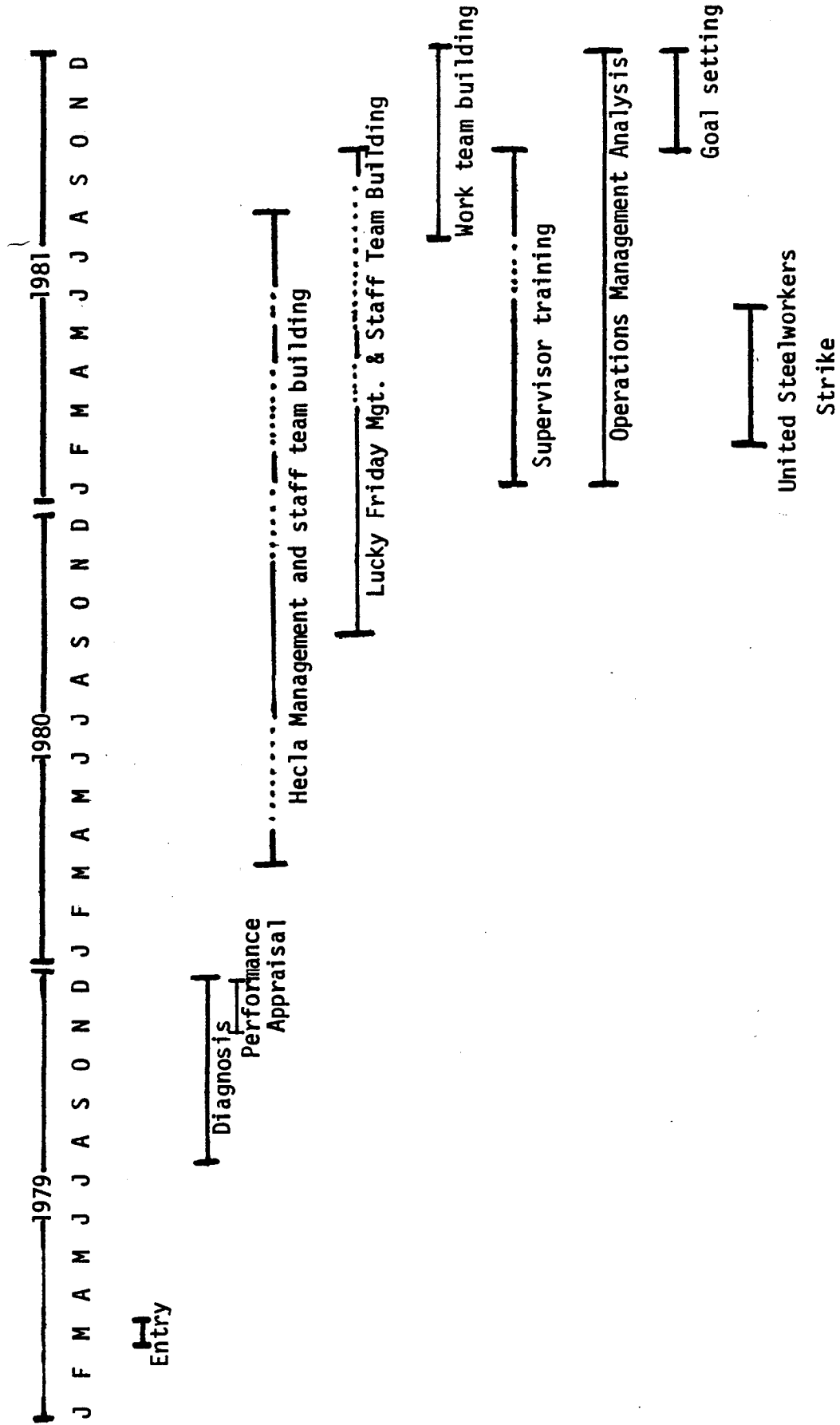
3.3 Overview of the Hecla Study

Although team building was the principal intervention technique at Hecla, other activities were initiated as well. The first step in the process, as in the nonintensive intervention, consisted of a familiarization and diagnostic phase to determine the major problems perceived by personnel at the various levels of the organization. This orientation and diagnostic phase occurred from August to December of 1979. It resulted in the decision to conduct team building meetings, to design and implement a new performance appraisal system, to focus on safety issues, and to develop and implement a first-line supervisor training program.

A timeline of the various components of the program is shown in Figure 3-2. It can be seen that the performance appraisal system was the first project to be undertaken. Next came team building meetings, beginning with the president and his team in June 1980, and progressing through the organizational hierarchy. Activities at the Lucky Friday Mine were begun in late 1980, and intensively pursued during 1981 and the first part of 1982. These Activities are described in detail below.

3.3.1 Performance Appraisal System. The development of a reliable and acceptable performance evaluation system became the first accomplishment of the project. This was essential for several reasons. First, supervisors and managers needed feedback on the way in which their own superiors viewed their effectiveness in dealing with production and safety problems. Second, an appropriate performance system focuses attention on the areas of performance seen by management as important. Thus, including safety as one of the prominent areas on which supervisors and managers would be judged will have an almost immediate effect on the emphasis lower level managers place on safety-related issues. Third, the project, itself, required criterion data which would reflect changes in performance in safety related areas.

FIGURE 3-2. - Timeline of Organization Development (OD) intervention at the Lucky Friday Silver and Lead Mine, Mullen, Idaho.



The performance appraisal forms were completed in April of 1980 in cooperation with management and employee groups. Three separate evaluation forms were developed--one for managers, one for professional/technical employees, and one for clerical personnel. These appraisal forms were based on a "key traits and behaviors" format. Once the system had been approved, training seminars were held for supervisors who would be using it. Now, after more than two years in use, the system has needed only minor adjustments and has been well received by users at every level.

3.4 Team Building/Problem Solving Meetings

As indicated earlier, these meetings, begun in June of 1980, constituted the primary method of management intervention at the Hecla Company. Five day-long team-building meetings with the president and staff led to a formal statement of company philosophy and goals; a discussion, clarification, and agreement on corporate strategy related to safety and productivity; and statements of each department's goals, functions, responsibilities, and authority. The meetings also clarified mutual expectations between the president and his staff. A commitment was made to hold periodic team-building meetings at the top management level.

Seven-hour meetings were held with the vice-president of operations and his staff which resulted in a restructuring of responsibility and accountability for mine safety and the development of an overall strategy for reducing injuries at the mines. Included in this team were the mine managers of the Lucky Friday and Star Mines.

Team-building meetings were held with the top management team at the Lucky Friday Mine, as well as with the operations team which includes the shift bosses. These dealt more intensively with issues of organizational coordination, communication and cooperation. For example, support units were not delivering the needed services; some individuals and work units were not meeting others' expectations of what they should be accomplishing. Major outcomes of these meetings included the following:

1. Implementation of several new safety incentive programs.
2. A commitment to involve shift bosses more in operational problem solving and decision making.
3. A commitment to improve grade control, geological and engineering services at the mine, and to control the absenteeism problem.

These meetings involved the mine manager, mine superintendent, mine foremen, shift bosses, and auxiliary support supervisors. Outcomes of these meetings were better mission accomplishment, improved methods of getting the job done, and detailed strategies for reducing mine accidents and injuries. Some meetings addressed, for example, sand spills and ineffective maintenance, others pay scale inequities.

The shift bosses who attended expressed the belief that the meetings represented a commitment on the part of top management to help them improve their management skills. These groups also requested periodic follow-up meetings.

During the last phase of the project, team-building meetings were held with shift bosses and their work crews. Four shift boss-crew teams met at six different times, with follow-up meetings scheduled for two months later. The meetings addressed four main questions.

1. What's getting in our way of our doing the job in the way we think it ought to be done?
2. What are we doing that helps us get the job done?
3. How can we get the job done more safely?
4. How can we make this a better place to work?

Prior to meeting with the crews, the consultant team met with the union leadership to give them detailed information about the project and its procedures, and solicited their support. The union leaders fully supported the program and its meetings with the crews and suggested ways to improve the crew meetings. Monthly meetings were planned to maintain on-going liaison with the union leadership, enabling the union representative to monitor progress.

3.5 Safety Activities

The Organization Development project activities at Hecla included a review and critique of Hecla's 40-hour safety training course. It also dealt with the analysis of organizational safety functions in team-building meetings. These resulted in specific barriers to achieving the desired safety goals.

1. A reassignment was made of responsibility for the safety engineering component and the safety inspection and enforcement component. Safety engineering remained with the personnel department while the inspection component became the responsibility of mine managers.
2. The mine safetyman position was upgraded from shift boss to foreman rank to provide stronger authority for ensuring safe practices from miners, bosses, mine foremen and from mine superintendents.
3. A commitment was made to give safety training to each new supervisor.
4. A commitment was made to develop a year-long schedule of safety incentive programs at the Lucky Friday Mine.

5. Lucky Friday operations managers agreed to monitor publicly each shift boss' accident record and tonnage production record.

One new safety incentive program provided a "\$10,000 pot of silver" for distribution to miners for six weeks during which time each reportable accident deducted money from the total. At the end of that time workers who had not had accidents divided the pot, receiving about \$25 per man. A second project awarded prizes to members of each crew which completed 20,000 manhours without accidents.

3.5.1 Supervisory Skills Training. This aspect of training was given a high priority from the outset. The most critical areas for training were considered to be in company policies, in record-keeping practices, standard production methods, and supervisory and leadership skills. Part of this instruction was handled by a commercially-produced management training package. Other needed skills were taught by Hecla staff members.

To summarize the trainer-intensive OD intervention, the team-building/problem solving meetings have proven very effective at Hecla. Boss-subordinate teams already function well in most cases throughout the company. The added ingredients were (a) an outside facilitator, (b) collecting data through interviews on strengths and problem areas, and (c) scheduling longer special meetings to work on chronic problems and concerns. Most participants of these meetings believed that they were worthwhile. This feeling was strongly shared by top management which proposed to establish organization development training for selected members of the company who would then serve as internal OD consultants.

3.6 Results of the Intervention at the Lucky Friday Mine

3.6.1 Productivity. Assessing the effects of a global intervention always demands caution. In the case of the OD intervention, we must consider the possible effects of a nine-week strike at the Lucky Friday Mine in March, April, and May of 1981. We must also consider how the wildly fluctuating silver market might have affected production. The high price of silver in 1980 might have led to lax production controls; the low price of silver probably enhanced productivity in 1981 as managers and employees alike tried to make financially precarious mining operations more profitable. In fact, many mines were closed in the first half of 1982 because of the financial losses incurred by the low metal prices. These and other incidental events make unequivocal interpretations difficult.

The Hecla study was primarily concerned with two measures of productivity. These are quantity of production as measured by tons of ore per manshift, and quality of performance as measured by grade of silver and lead (Table 3-1).

TABLE 3-1. - Productivity, production and quality of production for the Lucky Friday Mine 1979-1981 and January - February 1982.

| YEAR | PRODUCTIVITY | QUALITY OF PRODUCT |
|--|---|--|
| 1979 | 9.82 ton/m.h. | (baseline) |
| 1980 %change since 1979 | 9.90 ton/m.h. production +9.3% productivity +0.8% | Silver Assay +0.9% Lead Assay +12.1% |
| 1981 ¹ %change since 1979 | 9.31 ton/m.h. production 0.0% productivity -5.2% | Silver Assay -6.0% Lead Assay -23.0% |
| January 1982 %change since 1979 | 9.80 ton/m.h. production -0.3% productivity -0.2% | Silver Assay + 7.3% Lead Assay -28.1% |
| February 1982 %change since 1979 | 10.4 ton/m.h. production +9.6% productivity +5.9% | Silver Assay +4.3% Lead Assay -14.6% |

¹adjusted for United Steelworkers Strike

Figure 3-3 shows that productivity of all employees at the Lucky Friday in tons per manshift had been declining since 1977. This trend appears to have continued through 1981. However, these annual productivity figures may not accurately reflect what is going on in the mine.

Figure 3-4 shows quarterly productivity figures at the Lucky Friday. It can be seen that quarterly production fluctuates as much as 21% from one quarter to the next. The causes of these fluctuations are not readily understood, but it is of interest to note that quarterly production was higher after the strike although it did not exceed the pre-intervention levels. Moreover, there has been a steady improvement in productivity beginning with the third quarter of 1981 and continuing through the second quarter of 1982, when the study was terminated. This trend may be interpreted as an indication that the declining productivity has bottomed out and was on the increase. It is too early at this time to draw definitive conclusions about this data (Figures 3-3 & 3-4).

As can be seen in Figure 3-5, productivity improved for those employed underground. Until the time of the OD intervention and the strike of 1981, the productivity levels of underground workers at the Lucky Friday fluctuated without a seeming pattern. From the third quarter of 1981 on, the individual output of the underground workers steadily increased at the rate of 1% to 7% per quarter and for the months of January and February 1982.

Figure 3-5 also shows the productivity of the Star Mine underground workers. These productivity figures again show marked changes. Productivity level at the Star Mine in the 1980 to 1981 period rose by 20%. This may be related to the strike at the Lucky Friday, or to increased production pressure by management, but any interpretations are highly speculative. The productivity figures for underground workers at the Lucky Friday did not rise to the same level as at the Star Mine, but did show steady improvement after the strike period.

3.6.2 Ore Grade. Another criterion of potential importance is the quality of the ore brought to the surface. With greater care in their extraction procedures, miners can remove more productive ore body and less waste rock. This results in a higher average mineral weight per ton of rock. The averages for silver and lead produced at Lucky Friday mine are shown in Figure 3-6.

The data show a decline in lead and silver grade, starting in the second quarter of 1980 which continued to the strike in 1981. Both lead and silver grade improved since production resumed after the strike. The management of Hecla believes that miners have considerable influence over the content of the extractions at their mine, and mineral content of the ore might thus reflect the results of the intervention.

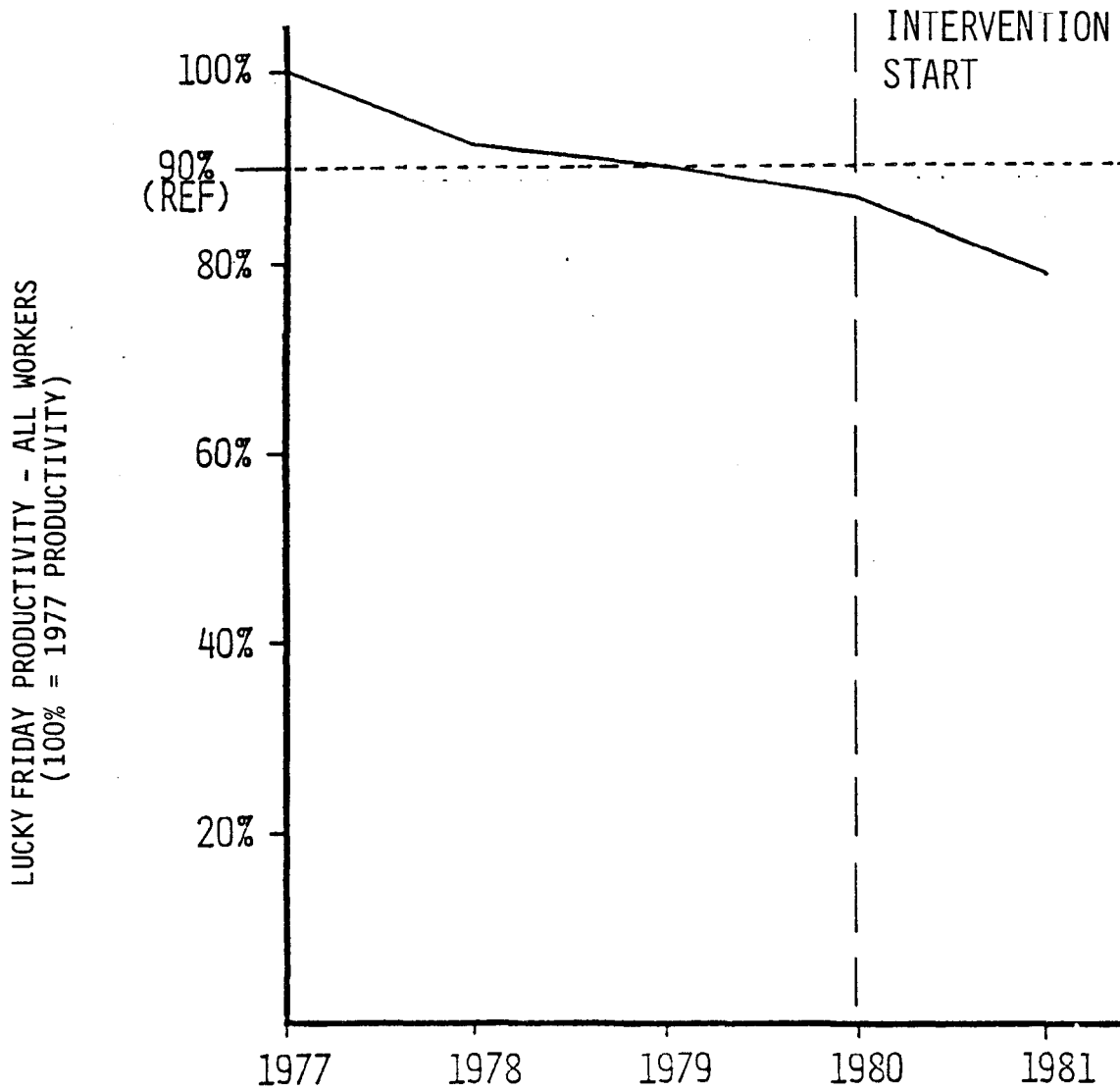


FIGURE 3-3. - Lucky Friday Mine productivity rate 1977 - 1981.

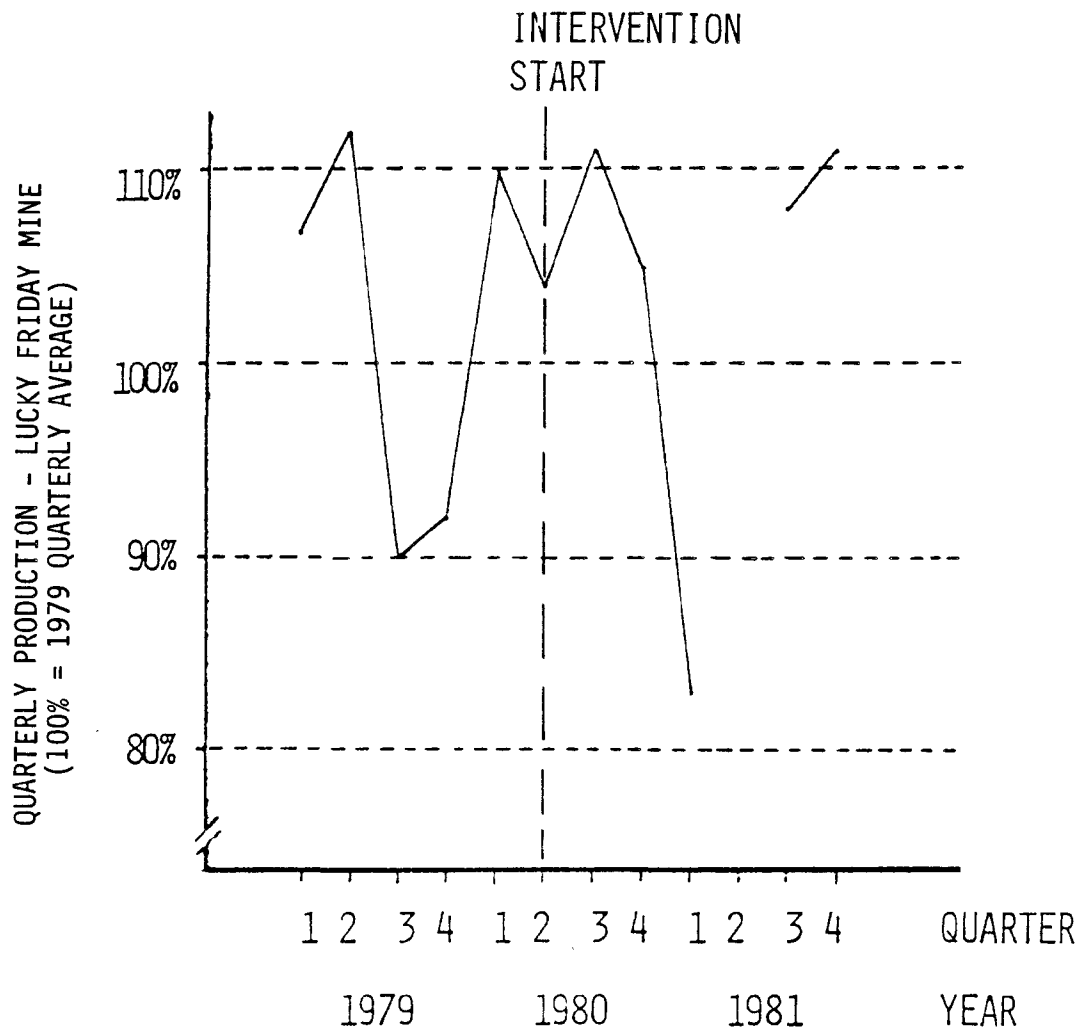


FIGURE 3-4. - Quarterly production rate at the Lucky Friday Mine 1979-1981.

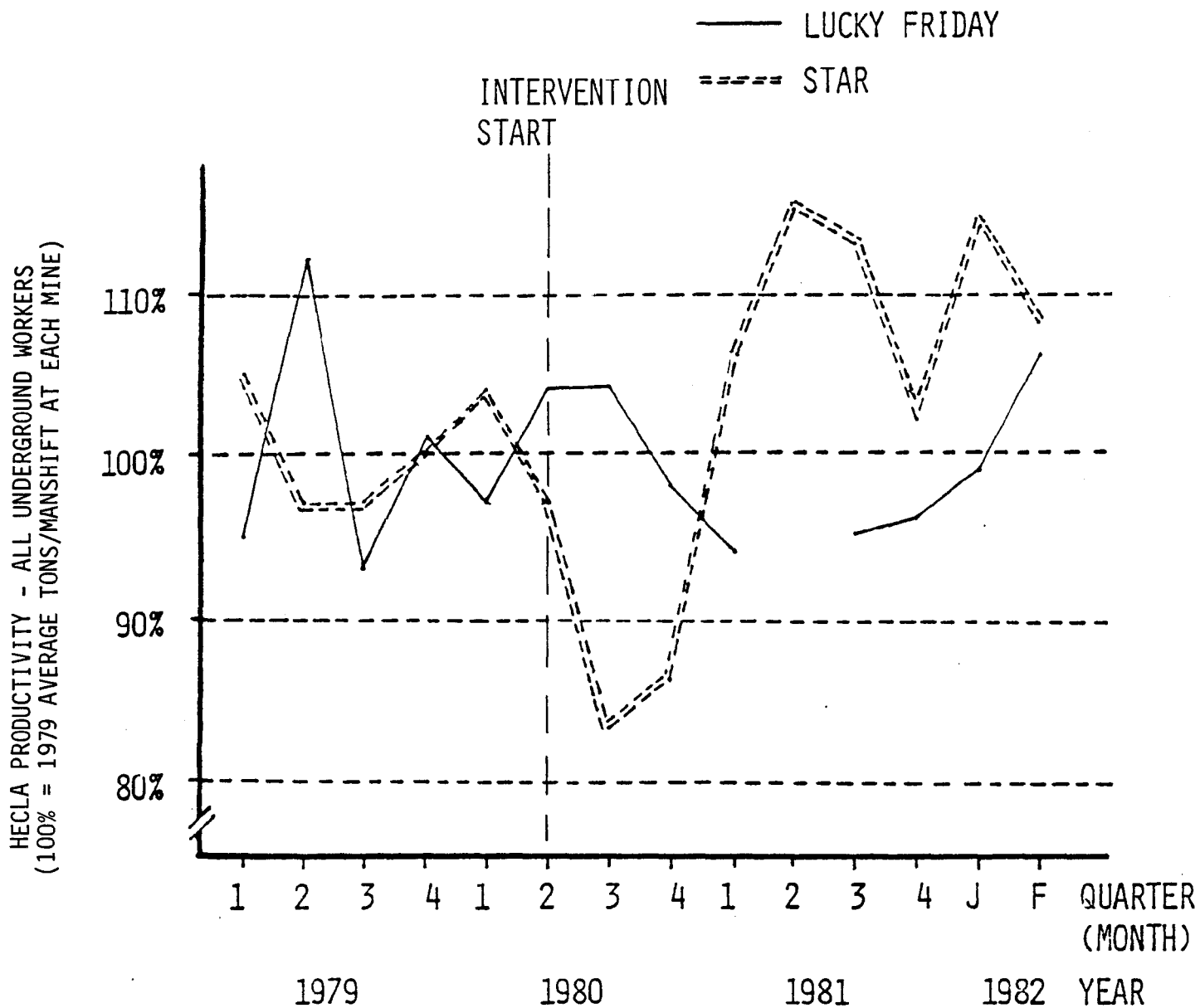


FIGURE 3-5. - Productivity rates for the Hecla Mining Company from 1979-1981.

ASSAY VALUES - LUCKY FRIDAY MINE
 (100% = QUARTERLY AVERAGE OZ/TON FOR EACH MINERAL IN 1979)

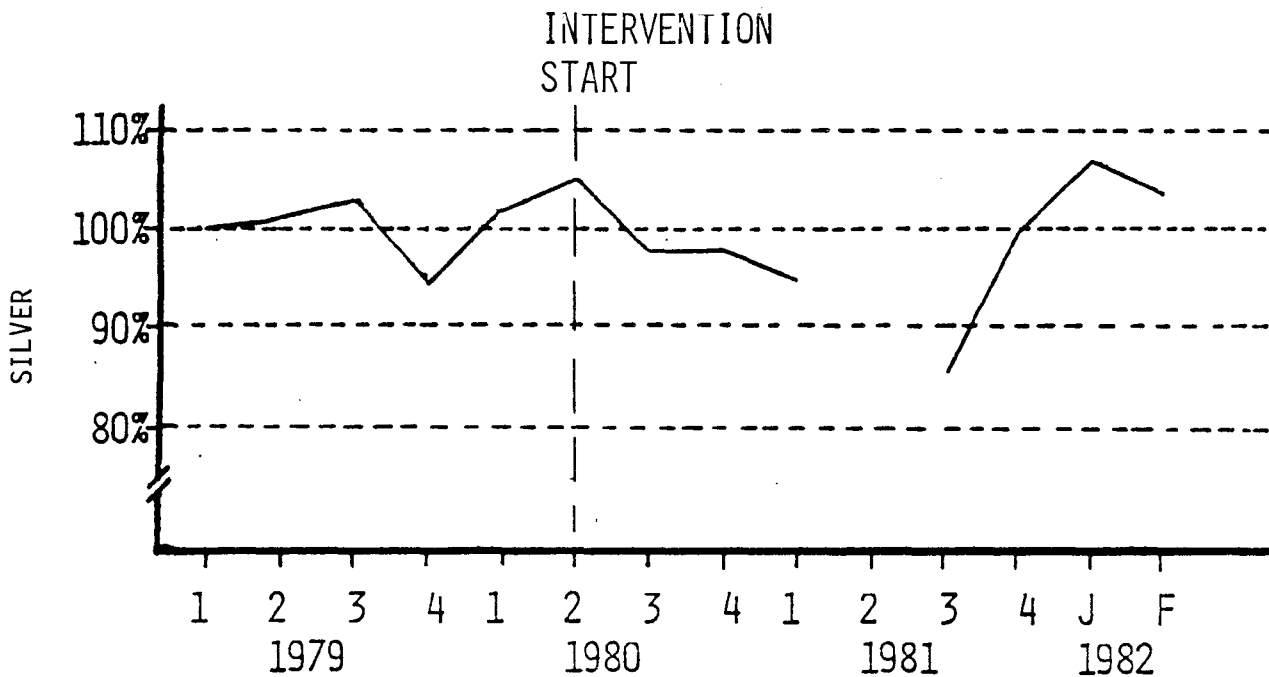
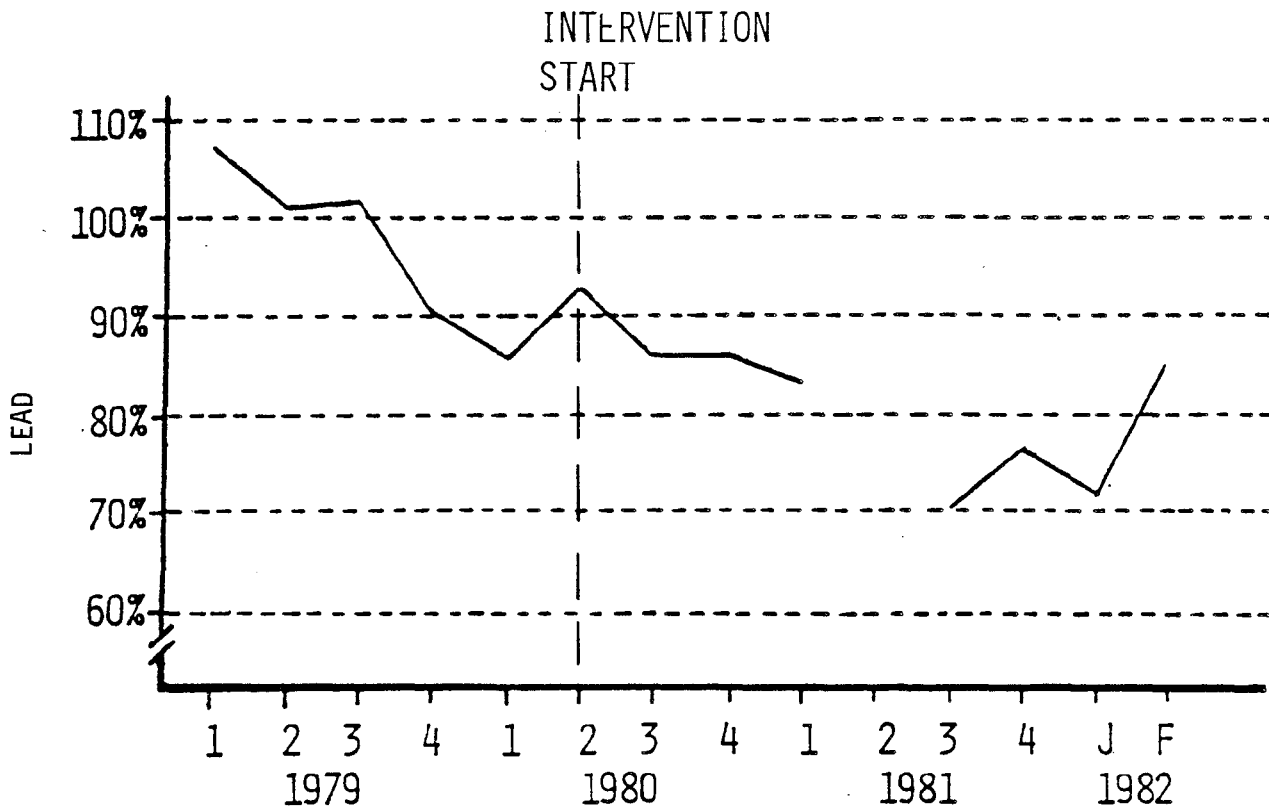


FIGURE 3-6. - Quality of ore produced by the Lucky Friday Mine in terms of 1979 assay value.

The silver concentration showed a marked improvement. However, this increase could be caused by many factors, including an intensified effort by the workers, an increasingly rich ore body, or changes in the method of operation at the mine, such as the grade control program instituted after the strike. Lead concentrations decreased steadily since 1979, but in the first part of 1982 they increased substantially (Table 3-1).

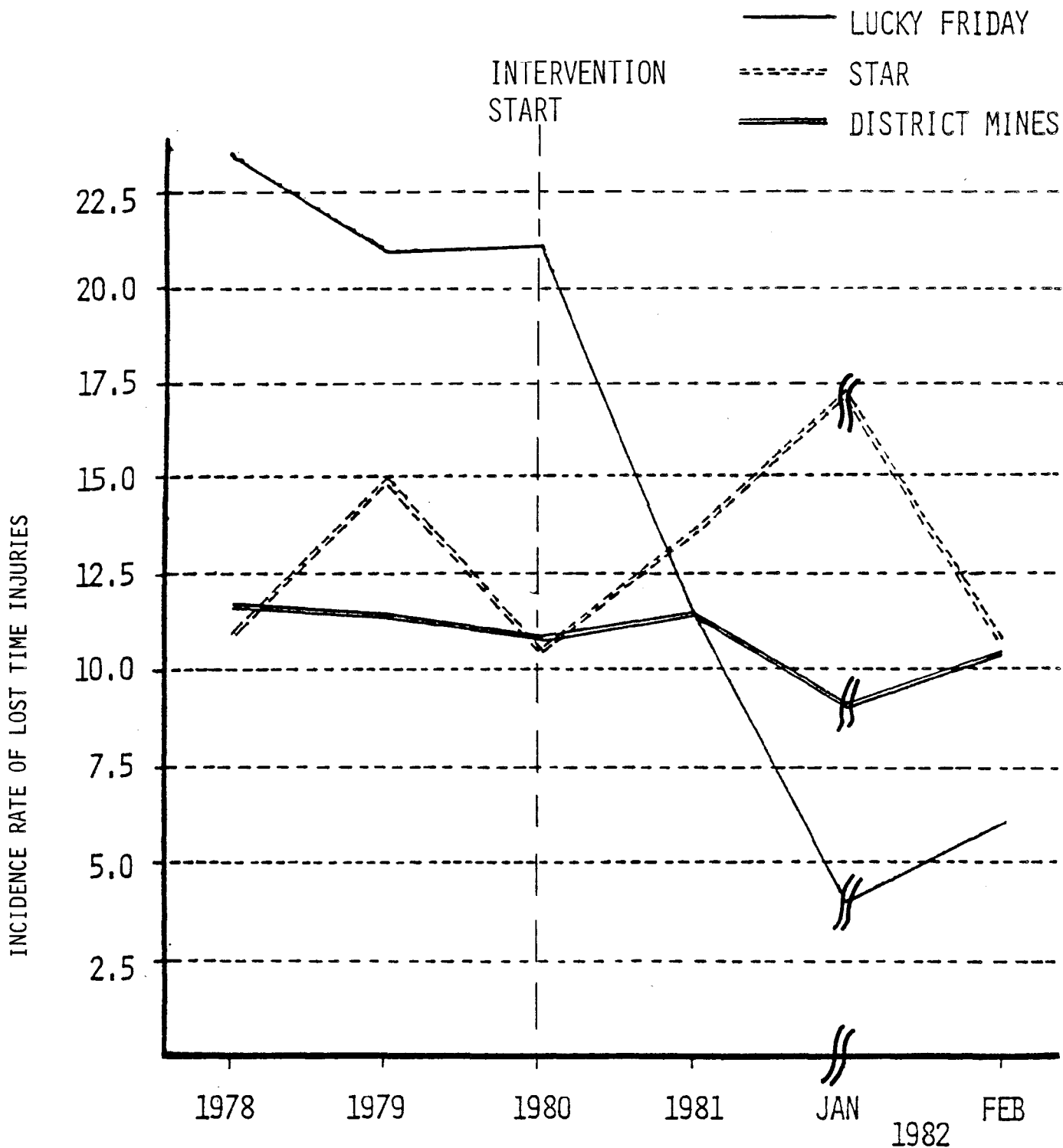
3.6.3 Accidents. In recent years Idaho mines have had an accident rate considerably higher than the national average, and the Lucky Friday mine had for many years one of the worst records in the state. This trend was clearly reversed during the period of the intervention. Figure 3-7 compares Lucky Friday's rate with that of the Star mine and several other nearby mines in the district operated by Asarco, Bunker Hill, Hecla, and Sunshine (Table 3-2).

As can be seen, the incidence rate of lost time injuries was reduced by 46% in that year, decreasing from 21.1 injuries per 200,000 manhours of exposure in 1980 to 11.4 injuries per 200,000 manhours in 1981. In 1982 that rate was reduced even further (to 4.0 for the month of January). The improvement in lost time injuries from 1980 to 1981 was the equivalent of 540 man-shifts at the Lucky Friday. During this same time, the accident rate of neither the Star mine nor that of other district mines changed appreciably, although they showed some signs of decreasing early in 1982. These results strongly suggest that the OD intervention had a significant effect on safety at the Lucky Friday mine. The efforts to reduce accidents thus appear to have been quite successful.

Although the 1979 accident rate left much room for improvement, the dramatic reduction in accidents in the space of just one year is unlikely to occur without a strong, effective program. It is still too early to say whether these figures presage a continuing trend, but the data for 1981 and the early figures for 1982 clearly indicate a change in the desired direction.

3.6.4 MSHA Records. The mine safety programs were very strongly affected by the 1972 Sunshine Mine disaster in which 91 miners lost their lives. Government and local safety officials immediately increased the enforcement of safety directives and monitoring procedures for all mines in Idaho. In addition, stricter safety laws in 1978 empowered MSHA officials to levy fines for safety violations.

Since mine regulations had become very strict in 1972, the new law of 1978 did not produce the sudden surge in citations evident in the Texasgulf area in 1978. The number of citations issued at Lucky Friday and the surrounding mines is, therefore, a good indication of the safety conditions at those mines.



$$* \text{ INCIDENCE RATE } = \frac{\text{INJURIES} \times 200,000}{\text{MANHOURS OF EXPOSURE}}$$

FIGURE 3-7. - Incidence rates of lost time accidents for the Lucky Star Mine and other mines of the Coeur d' Alene mining district.

TABLE 3-2. - Incidence rate* of lost time accidents for the Lucky Friday Mine, Star Mine and other mines of the Coeur d' Alene mining district.

| YEAR | LUCKY FRIDAY MINE | STAR MINE | DISTRICT MINES |
|---------------|-------------------|-----------|----------------|
| 1978 | 23.5 | 11.1 | 11.8 |
| 1979 | 21.0 | 15.2 | 11.6 |
| 1980 | 21.1 | 15.2 | 11.6 |
| 1981 | 11.4 | 14.0 | 11.6 |
| January 1982 | 4.0 | 17.4 | 9.3 |
| February 1982 | 6.1 | 11.0 | 10.5 |

* $\frac{\text{Lost time injuries} \times 200,000}{\text{Manhours of Exposure}}$

Figure 3-8 compares the number of safety citations issued to the Star and Lucky Friday mines since 1978. This figure again shows a complete reversal in the number of citations given to the Lucky Friday and Star mines by 1981. These results partly reflect the fact that the 9-week strike in that year shut down all activity at Lucky Friday, and the mine was not open for inspection. (The Star mine received a record number of citations during that time--more than the Lucky Friday mine had received in 1978.)

MSHA officials responsible for the Idaho district indicated that Figure 3-8 accurately reflects the relative safety conditions at these two mines. On a monthly basis, and excluding the two months at the Lucky Friday when that mine was on strike, the Star and the Lucky Friday mines received 1.67 and .6 citations per month respectively. Star Mine's citation rate was more than twice as high as that at the Lucky Friday. MSHA officials expressed the belief that the personnel at the Lucky Friday mine were making exceptional progress toward improving their safety record.

3.6.5 Absenteeism. A record of the non-vacation absenteeism for the Lucky Friday and the Star mines for 1980 and 1981 is shown in Figure 3-9. Non-vacation absenteeism, reported as the number of shifts absent, at the Lucky Friday mine was significantly reduced during the second half of 1981. In some months (not including the strike) it was reduced by over 40%. After the 2nd quarter of 1981 the rate dropped far below the 1980 rate and remained there. In the second half of 1981, the absenteeism rate, not including vacation time, was 6.8%. The absenteeism rate at the Star mine remained basically unchanged for the last six months of 1981 (9.3%), and unchanged from the previous year's rate.

The absenteeism rate for the period immediately following the strike at the Lucky Friday mine is probably unrepresentative, reflecting the workers' desire to make up for the time and wages they had lost during the strike. To what extent this factor or the OD program were responsible for the lower absenteeism rate cannot be determined.

3.6.6 Summary of Results of the Interventions. The results of the OD project at the Lucky Friday mine are not complete as yet. It may be several months before the full effect of the intervention program can be measured. The data strongly suggest, however, that the intervention program at the Lucky Friday mine brought about substantial improvement in the mine's safety practices, and a possible turnaround in declining productivity.

The results at both mines demonstrated that productivity is not adversely affected by an intensive effort to improve safety. At Texasgulf the overall productivity increased along with safety, and at the Lucky Friday at least the underground personnel simultaneously improved in both productivity and safety. It is still too early to tell whether these conditions can be sustained at the Lucky Friday mine but the available figures show that the intervention efforts produced results of benefit to mine management as well as to the workers.

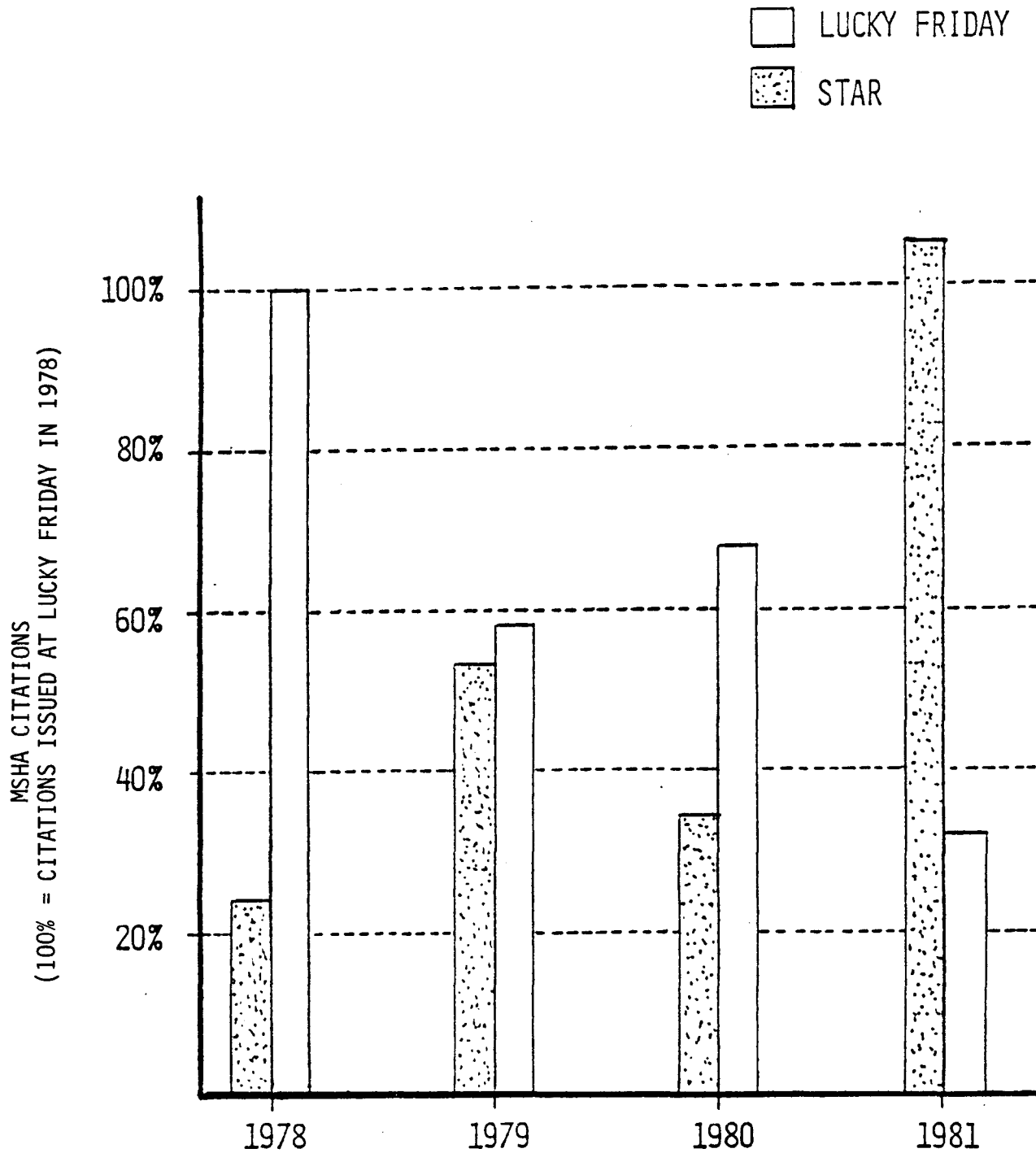


FIGURE 3-8. - Comparison of Mine Safety and Health Administration Citation issues rates between the Lucky Friday and Star Mine from 1978-1981.

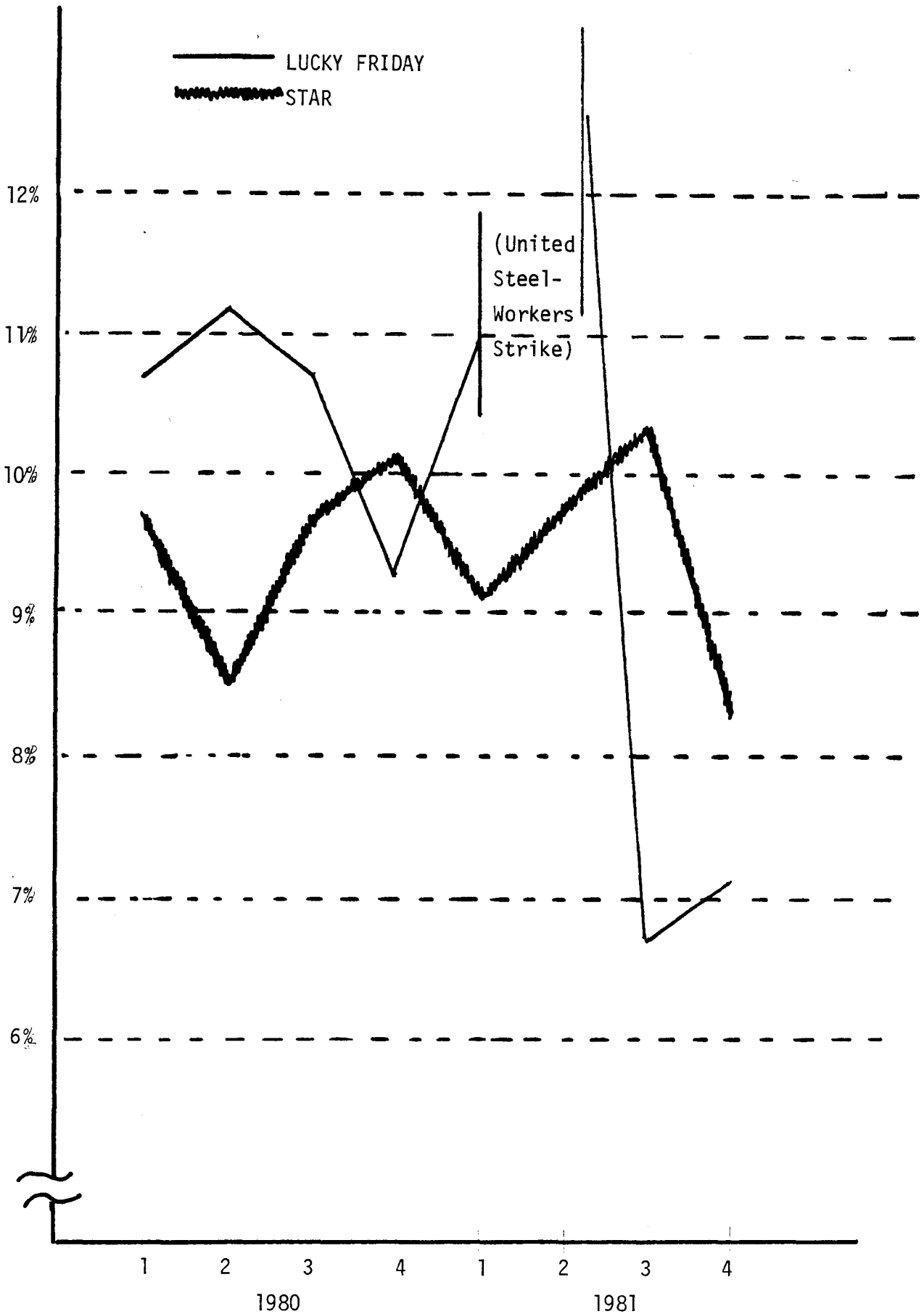


FIGURE 3-9. - Comparison of non-vacation absenteeism for the Lucky Friday and Star Mines during 1980 and 1981.

4. DISCUSSION

This report presented the rationale, methodology, and results of a demonstration project which examined the effects of management training and organization development interventions on mine safety and productivity. This final section of the report considers:

1. The feasibility of using different types of management interventions in the mining industry.
2. A comparison of the two approaches, their costs and benefits, for increasing mine safety and productivity.
3. Recommendations for the mining industry on installing an OD or management development program.

4.1 Feasibility of Organization Development and Management Training in the Mining Industry

Although this was a critical question at the inception of the project, it is now clear that management and organization development programs in the mining industry are not only feasible, but likely to be very effective. The initial reception of the OD and management development approaches was guarded, but probably no more so than could be expected in other industries. Initial concerns that the programs would interfere with mining operations were quickly dispelled. As mentioned earlier, we soon were asked to consult on various other management problems, and these requests far outstripped the available time. In sum, organization and management development approaches appear to be practical and appropriate methods for the mining industry.

4.2 Comparison of Management Training and Organization Development

A unique feature of this particular project was the concurrent administration of the two very different management intervention methods. This inevitably calls forth an evaluation of their comparative advantages and disadvantages, and their relative costs and benefits. It is almost unavoidable that any comparison of this kind will call into question the care with which the study was done, and the impartiality of the interpretation. For this reason, we should like to recapitulate some of the rather unusual precautions we have taken to keep the study as free as possible of effects which might introduce bias:

1. The mines were assigned to the two treatment conditions, management training or OD, purely on the basis of economy and distance to the home base of the consultant teams: Wallace, Idaho is closer to Seattle; Granger, Wyoming is closer to Salt Lake City.

2. Each intervention was directed and conducted by a nationally recognized expert in his own area. Chemers, who directed the Tg project is Professor and Chairman of the Department of Psychology of the University of Utah. He is the author of numerous papers and the co-author of the Leader Match training program. He has also directed numerous workshops using Leader Match training. Bell, who is Associate Professor of Management and Organization at the University of Washington, is nationally recognized for his contributions to Organization Development, and a co-author of several standard texts on OD, as well as a fully trained and highly experienced OD practitioner.
3. The two management interventions were conducted independently of one another and were, in fact, on separate internal budgets, assuring each study director control over personnel and resources. While the management training and the organization development teams were appraised of each other's problems and progress, neither interfered, or intruded in the work of the other. Personnel involved in one type of intervention did not participate in the other intervention.
4. Responsibility for data analyses and interpretation of the results was assigned to a professional engineer with underground mining experience (D. Patrick), whose consultant services were retained during the last six months of the project. The consultant had no part in the original design or conduct of the study.
5. Most importantly, each mine in which the intervention took place could be compared with one or more highly comparable mines, i.e., mines in an identical geological, economic, and social environment, competing for the same labor pool and the same market.

With these design features in mind, what can we say about the results of this study? Insofar as we can ascertain from the objective production and safety data, and from management and employee reactions, both interventions were highly successful. The data certainly do not justify a conclusion that one method was markedly superior to the other. The mine in which management training took place seems to have made greater improvements in tons/manhour productivity than did the mine with the OD intervention. However, it must be recalled that the strike in the Hecla Mine makes it very difficult to assess the effects of the intervention on productivity. Management's evaluation of the intervention's effect on productivity was very positive. A direct comparison between the two interventions is, of course, not possible in view of the differences in technology, in economic and social environment, and labor market which distinguish the trona and

silver mining operations. The following discussion is, therefore, based more on our experience and intimate knowledge of these organizations than on data from production and safety records.

What did the interventions contribute? Obviously, both of the companies wanted to achieve a better safety and productivity record. In both companies the managers were sophisticated in management theory and method. The principles underlying our training and intervention methods were generally known to top managers from courses and seminars they had attended in the past. An outside consultant seemed to be required, however, to give impetus and direction to bring about the changes both companies desired. The consultant was needed to provide a conceptual framework for understanding the dynamics of the organizational processes which are involved in change, and specific, and often simple, hand-on procedures for implementing actions in the interpersonal relations area.

An example of assisting a manager to understand the organizational dynamics might involve a comparison of his own perception of his organizational role with that of his superiors and subordinates. Or, the consultant may have to point out to the manager that a reward might consist of anything the subordinate likes, from a new wastebasket or lunch with the boss, to a day off during hunting season. A hands-on procedure might require no more than showing the supervisor exactly how to give specific and detailed instructions to a subordinate, or how to restructure a task.

4.3 Generalizability of the Results.

Data generated by a demonstration project obviously cannot meet the standards of a laboratory study or a field experiment. In the final analysis, no matter how large a mine might be, an organization constitutes no more than one independent case. The results of such studies need to be interpreted with caution. On the other hand, we do not have to get more than one man to the moon to demonstrate that it can be done.

All of our data, based on mine production records and safety reports, show that safety improved in both of the mines in which our interventions took place, both in absolute terms and in relation to the control mines, while that of a control mine or the industry average decreased. Productivity increased in the Texasgulf Mine, where the management training took place, but changes in productivity could not be interpreted clearly in the Lucky Friday Mine because of the 9-week strike during the last year of the intervention. The part played by the intervention can be inferred by the Texasgulf survey, showing that employees were considerably less dissatisfied with working conditions and the company's safety program. The interview data obtained at the Hecla mine also indicate that the OD intervention was seen as having accomplished its goals. While not conclusive by itself, the accumulate evidence strongly suggests the interventions had been successful.

The question is whether similar interventions will have like effects in other mining companies. One is tempted to say, if it worked under the adverse conditions presented at Hecla and Texasgulf, the interventions are likely to work anywhere. As will be recalled, both companies operated in a highly turbulent economic environment, and the Texasgulf Company and the Soda Ash mine also faced considerable organizational challenges.

Hecla had just sustained significant financial reverses with the abandonment of its copper mining operations in Arizona, and its new corporate management team had just been installed when we began the intervention. Shortly thereafter, the world experienced an unprecedented bull market in silver, followed by an equally dramatic crash of the silver market which had major implications for the operation of all silver mines.

The Texasgulf Mine faced equally severe problems. The mine was relatively new, and the proposed expansion severely strained its management resources. The initially strong demand for trona declined precipitously with the collapse of the housing and automobile markets. In addition, the tragic company plane accident, causing the death of many of its senior executives, and the acquisition of Texasgulf by ELF Acquitaine, brought about major personnel changes in its management ranks, and caused uncertainty throughout the time the study was in progress.

Neither the Hecla nor the Texasgulf mines provided the tranquil environment especially conducive to a management intervention. Nor can it be said that any increases in their productivity or safety, in comparison to other mines in the industry, were the natural consequence of a benign economic climate. As already mentioned, the management of both mines considered the management interventions at least in part responsible for the improved safety attitudes, accident record, and productivity at their mines.

4.4 Comparative Costs and Benefits of the Two Methods

Although it is difficult to estimate the financial benefits of the interventions with any degree of accuracy, it is possible to estimate the costs of the separate programs if a company wished to use them.

The OD intervention at the Lucky Friday Mine was, of course, considerably more time consuming and costly than was the management intervention at Texasgulf. This is inherent in the approach and was built into the project. Of the total amount funded for the contract, 50% (about \$200,000) was allotted to the OD intervention; approximately 25% (\$100,000) was allotted to the management development program at the Tg mine, with most of the funds used for the preparation of video-taped training modules and training manuals. The remaining 25% were for processing, analysis and interpretation of the data, and administrative support.

The cost figures for the Hecla Study reflect the very intensive interaction with company personnel which the OD methods require. This means, of course, that the individual managers, supervisors, and miners may have received greater personal benefit from the OD intervention than the much less intensive management training program. The Hecla Company also may have received various intangible benefits from the collaboration of the consultant with work teams in solving safety and production problems. This is reflected in the Company's plan to train in-house consultants for continued OD intervention.

The less intense management intervention at Texasgulf called for comparatively little consultant time or time of company personnel. The program required no more than three training days for the mine managers and supervisors who attended all training sessions. Individual consultations and counseling were deliberately kept at a minimum, in keeping with the overall design of this project. Under normal conditions, however, a training consultant would expect to devote some time for individual contacts of this nature, although considerably less so than in an OD intervention. The management training program was thus far less costly and apparently no less effective than the more intensive OD approach.

4.5 Institutionalization

One major concern of this project was the ease with which the OD and the management training programs could be "institutionalized" by the organization in which the intervention took place, and transferred to other mines in the industry.

Both programs were well accepted, and both companies have taken steps to continue and expand them at their own expense. The institutionalization of these programs is, therefore, well under way. It is obviously too early to predict the eventual outcome of Hecla Company's plan to train Hecla personnel as internal OD consultants. An internal consultant system of this type has been successfully developed by Uhlner and his associates for the U.S. Army. There is, therefore, good reason to believe that a similar program could be successful in the Hecla organization. It seems less likely that other mining companies will start out with an in-house consultant training program, but this may well change if the Hecla program turns out to be cost-effective. Since the OD process is so dependent on the personality and sensitivity of the individual consultant, the success of programs of this nature will obviously rest in large part on the ability of the industry to train or retain competent OD consultants.

As already mentioned, the management development program at Texasgulf is relatively easy to institutionalize and transfer to other mining companies. The training materials are in the form of manuals and videotaped training modules, and the company's training department has administered various components of the intervention program after conclusion of the project.

The video-tapes, manuals, and other training material can be transferred at minimal expense to other mining companies. The management training package, including the initial training for the company's instructors, would probably not exceed \$4,000-\$8,000, and personnel for administration of these programs need not be professionally trained.

4.6 Recommendations to the Industry

Both approaches, structured management training and organization development, successfully improved mine safety and productivity, and both can be recommended to the mining industry. An optimal strategy may well call for combining elements of the two approaches.

It seems likely that the individual, hand-tailored OD method is more cost effective and productive at the top echelons of an organization, and at the beginning of a large intervention program. Structured management training has been successfully used for executive development at the top management levels, but it may serve particularly well for improving the performance of middle and lower management, and in companies which are progressing in a generally satisfactory manner. OD may be more acceptable to some companies, structured management training may be more acceptable to others. OD may deal more effectively with some types of problems, management training with others.

Our present data do not permit us to specify the exact conditions, or the types of organizations which would benefit most from a particular approach. The structured management training program probably would have benefitted from organization development phases of the project, and at various later occasions when severe management crises arose. The OD project at the Lucky Friday Mine may have profited from structured supervisory training to supplement the team building and problem solving procedures. The specific circumstances under which these two approaches can optimally supplement one another, and the cost effectiveness of the two intervention methods needs to be determined in future research.

One important question is, how long the effects of OD and management training are likely to last. The evidence on this point is still very scarce. Some practitioners (e.g., Blake and Mouton, 1982) have claimed long-range effects for Management Grid training, citing selected instances from companies in which they conducted their interventions. Similar claims have been made for classical OD, again without the benefit of adequately controlled studies. Moderate long-term effects of Leader Match training have been demonstrated in highly controlled studies using random assignment of managers to Leader Match and alternate training conditions. Those trained with Leader Match received significantly higher performance ratings from their superiors as long as 12 to 18 months after training. While this

may not be long in the life of an organization, there are very few controlled studies which provide evidence of any effects of training beyond the training period.

Various leadership theorists see management training as the best method for improving organizational performance. Various Organization Development theorists have held that the best or only approach to increasing organizational performance is by improving the team interaction of the integral working group. Our data indicate that improvement of organizational performance and safety can be achieved equally well by training individual managers and supervisors as by intensive consultations with integral work teams at the various levels of the organization.

In general, it would be difficult to advise an organization to choose one method over the other without a more intimate knowledge of their problems and their specific goals and objectives. As indicated before, most organizations should find the non-intensive management training approach quite satisfactory. For organizations willing to make the commitment of time and energy, the more intensive OD approach is an alternative which deserves serious consideration.

Considering the data which we have obtained in our studies, the choice of one approach over another depends on the nature of the problem, concerns with cost, and the preference for mounting an in-house training program or obtaining a well qualified OD consultant. In the absence of specific problems, and since both approaches appear to be successful, the preferences of one over the other approach might well be left to personal predilection.

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APPENDIX A
MEMORANDUM OF UNDERSTANDING (TEXASGULF)

MEMORANDUM OF UNDERSTANDING

Between the management of the Texasgulf Chemical Company (Tg), Wyoming Soda Ash Operations, and the Organizational Research Group (ORG), of the University of Washington, represented by Professor Fred E. Fiedler and Cecil H. Bell.

It is hereby agreed that the Texasgulf Chemical Company's Wyoming Soda Ash Operation's Training Department, and the Organizational Research Group will jointly conduct a series of studies on the effects of appropriate management development and training methods to increase the effectiveness and safety of mine operations. The research program is funded by the U.S. Bureau of Mines under a contract with Perceptronics, Inc., of Woodland Hills, California and a subcontract to Organizational Research at the University of Washington, Seattle. Copies of the grant and contract shall be furnished to Texasgulf.

Organizational Research will provide training and approved management interventions at no-cost to Texasgulf for the purpose of assisting mine supervisors and managers in such areas as leadership, team building and training to improve mine safety. Organizational Research will collect appropriate data to document changes in mine productivity and safety as a result of these interventions. Such data as Tg and ORG deem appropriate will be furnished by mine management in coded or disguised form to assure confidentiality of proprietary information and ORG further agrees to keep confidential any proprietary information which should come to the notice of any of its team members. Studies conducted by ORG using mine personnel will include informed consent from those individuals who participate, as required by the University of Washington regulations.

It is further agreed that a complete report of the study shall be published but that the company shall have the right to review and approve the report prior to its publication and release in order to assure that the confidentiality of the Tg data is preserved and that the report does not include information which wrongfully damages the company's image.

The management of the Texasgulf Wyoming Soda Ash Operation agrees to furnish the Organizational Research Group access to personnel at times mutually satisfactory. Training of personnel, and data collection, shall be at the expense of Organizational Research. The time for training, interviewing, or contacting mine personnel is to be made available by Tg at no-cost to Organizational Research.

It is further understood that the program is scheduled to run for approximately three years from inception to completion of the final report. During that time, ORG personnel will be available for consulting services incidental or related to the work on this project. The Tg Training Department, in turn, will keep ORG informed of any other training programs or management interventions it may contract or carry on during that period of time. Organizational development and training programs implemented from the corporate level will be accepted and integrated with the ORG group effort. Mutual discussions will take place prior to such implementation to insure mutual acceptability.

Texasgulf Chemicals Training Department personnel shall monitor the program and reserve the right of cancellation upon 30 days notice should irresolvable problems occur.

A complete report, as well as, any use of programs developed by ORG in conjunction with Corporate will be provided and used at the discretion of the Corporate Training and Organizational Development Department.

For Organizational Research:

Fred E. Piedler *Cecil H. Bell*
Fred E. Piedler Cecil H. Bell (Sm)
Co-Investigators

Feb 7 1979 *2/7/79*
Date Date

For Texasgulf Chemicals Co.:

TA Spoo
TRAINING COORDINATOR

2 FEB, 1979
Date

APPENDIX B
MEMORANDUM OF UNDERSTANDING (HECLA)

APPENDIX B

MEMORANDUM OF UNDERSTANDING

Between the management of the Hecla Mining Company (Hecla), Star-Morning Unit and Lucky Friday Operations, and the Organizational Research Group (ORG), of the University of Washington, represented by Professor Fred E. Fiedler and Cecil H. Bell.

It is hereby agreed that Hecla Mining Company's Training Department, and the Organizational Research Group will jointly conduct a series of studies on the effects of appropriate management development and training methods to increase the effectiveness and safety of mine operations. The research program is funded by the U.S. Bureau of Mines under a contract with Perceptronics, Inc., of Woodland Hills, California and a subcontract to Organizational Research at the University of Washington, Seattle. Copies of the grant and contract shall be furnished to Hecla.

Organizational Research will provide training and approved management interventions at no cost to Hecla for the purpose of assisting mine supervisors and managers in such areas as leadership, team building and training to improve mine safety. Organizational Research will collect appropriate data to document changes in mine productivity and safety as a result of these interventions. Such data as Hecla and ORG deem appropriate will be furnished by mine management in coded or disguised form to assure confidentiality of proprietary information and ORG further agrees to keep confidential any proprietary information which should come to the notice of any of its team members. Studies conducted by ORG using mine personnel will include informed consent from those individuals who participate, as required by the University of Washington regulations.

It is further agreed that a complete report of the study shall be published but that Hecla shall have the right to review and approve the report prior to its publication and release in order to assure that the confidentiality of the Hecla data is preserved and that the report does not include information which wrongfully damages the company's image.

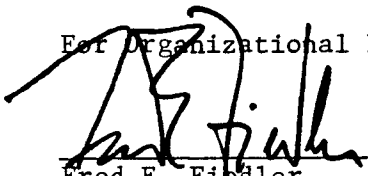
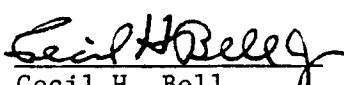
The management of Hecla agrees to furnish the Organizational Research Group access to personnel at times mutually satisfactory. Training of personnel, and data collection, shall be at the expense of Organizational Research. The time for training, interviewing, or contacting mine personnel is to be made available by Hecla at no cost to Organizational Research.

It is further understood that the program is scheduled to run for approximately three years from inception to completion of the final report. During that time, ORG personnel will be available for consulting services incidental or related to the work on this project. The Hecla Training Department, in turn, will keep ORG informed of any other training programs or management interventions it may contract or carry on during that period of time. Organizational development and training programs implemented from the corporate level will be accepted and integrated with the ORG group effort. Mutual discussions will take place prior to such implementation to insure mutual acceptability.

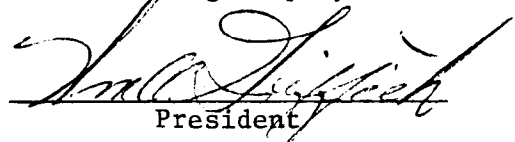
Hecla Mining Company Training Department personnel shall monitor the program and reserve the right of cancellation upon 30 days notice should irresolvable problems occur.

A complete report, as well as any use of programs developed by ORG in conjunction with Hecla, will be provided and used at the discretion of the Hecla Training and its Organizational Development Department.

For Organizational Research:


Fred E. Fiedler

Cecil H. Bell
Co-Investigators

For Hecla Mining Company:

By 
President

July 16, 1979
Date

July 12, 1979
Date

July 10, 1979
Date

APPENDIX D
INSTRUCTOR TRAINING MANUAL (LEADER MATCH)

INSTRUCTOR'S MANUAL

LEADER MATCH TRAINING
FOR
MINE MANAGERS AND SUPERVISORS

Linda Mahar and Fred Fiedler
Organizational Research
University of Washington

1981

Developed under contract number PS-01-78-122-1073 (Fred E. Fiedler,
Principal Investigator; James M. Peay, Scientific Monitor).

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INTRODUCTION

Leadership, more than any other single factor, determines the success or failure of any organization. This is particularly true of mining companies which must perform under a wide variety of conditions ranging from the operation of supply depots and surface processing facilities to underground work under difficult and sometimes stressful conditions. These organizations depend in large part on the leadership skills of their personnel.

The Leader Match training program is designed to help managers, supervisors, and foremen to become more effective leaders. It is based on the widely accepted idea that most people are effective in some leadership situations and ineffective in others. Most people cannot expect to be outstanding in all jobs and in all situations. Effective leadership then requires that individuals learn to recognize their own leadership skills and the particular leadership situations in which they are most likely to succeed. In addition, they must learn how to change those situations in which they are less likely to perform well so that they can be effective leaders. Leader Match provides a method for teaching individuals how to do so.

The instructor manual has been prepared to enable you to teach the Leader Match program to mining managers and supervisors. In addition to this manual, there are various audio-visual aids. If you follow the step-by-step procedures outlines below, you should be able to teach this method successfully.

How to Conduct Leader Match Training

The training program has been divided into three modules, each requiring two to three hours of instruction. Module I teaches the trainees how to identify their leadership style. Module II teaches the individual how to analyze situational factors in the work environment. Module III discusses job engineering, a technique for changing the situation to make it compatible with the leader's style.

| | |
|-------------------|---|
| Time: | Three, two to three hour sessions |
| Resources Needed: | Overhead projector |
| | Videotape cassette recorder (3/4" tape) |
| | Color monitor |

Materials Provided: Three, 12-16 minute color videotapes
Transparencies for overhead projector
The book, "Improving Leadership Effectiveness: The Leader Match Concept" (Fiedler, Chemers & Mahar, 1976, John Wiley & Sons)

Organization of Manual

This manual is divided into three sections to correspond with the three video modules. Each module begins with a theoretical discussion of the concepts to be taught, to give you a fairly detailed understanding of the program. It includes references to the scientific literature for those who want to know more about the background and research that went into the development of the program. This is followed by the teaching guide which is a step-by-step plan for conducting the class. Each module ends with a section on the most frequently asked questions with the appropriate answers and a quiz.

The teaching guide is the most important part of this manual. It is supplemented by overhead transparencies and videotape material. To use the teaching guide, you should place the transparency on the projector and read it aloud to the class. Key points which augment the information on the transparencies are shown in italics in your manual. This information is based on our experience in teaching Leader Match and should serve as a guide for your own lecture.

The manual concludes with a chapter briefly describing the validation studies showing that the program works to improve performance. You will also find a bibliography which corresponds to the references cited in the text.

Videotapes. Three videotapes are provided to supplement the training:

- Module I: Identifying Leadership Style
(Length: 13 minutes)
- Module II: Analyzing Your Work Situation
(Length: 16 minutes)
- Module III: Job Engineering
(Length: 12 minutes)

At the end of each videotape there are three vignettes or probes. A vignette is a short scene presenting a leadership problem. These are to be used at the end of the class session as a final exam. You will notice when

viewing the tapes that the music fades in near the end of each module. This is followed by approximately 30 seconds of black, which is followed by the vignettes. Each of the vignettes is also separated by 10 seconds of black, allowing you time to start and stop the tape.

The tapes visually illustrate the concepts you will be teaching in each module. They were designed to stimulate the interest of the students and make them more receptive to in-depth discussion of the program. We recommend that you show the tapes at the beginning of each session, followed by instruction and class discussion.

The student response to the vignettes will tell you how well they understand the concepts. There is also a short quiz to tell you whether the class is prepared to go on to the next module. If necessary, the tapes may be repeated at the end of the class for additional clarification.

The tapes can also provide a good review and summary. For example, they could be circulated to students for an extension or outreach program for a refresher or as a training aid.

Transparencies. Numbered transparencies are provided for each module. These serve as lecture notes for conducting the class discussion. The teaching guide describes when to use the transparencies. The key discussion points to be presented with each transparency are shown in italics in this book.

As mentioned above, each module concludes with a quiz to enable you to obtain feedback on whether the trainees are keeping up with the program. The quiz is also on a transparency with a matching answer sheet in the book on which the students should answer the quiz. It is recommended that the students participate in scoring the quiz. They should be asked to state the correct answer for each question and to give their reasons for the answer. This will enable you to tell whether the students really understand the concepts. It is important that the student be able to do more than just repeat the appropriate answer. Research has shown that students who merely memorize and recite are likely to forget the information once the course is completed. On the other hand, students who can demonstrate that they understand the rationale behind their answer are more likely to remember the material and be able to use it in future leadership jobs.

The Leader Match Book. Your book, "Improving Leadership Effectiveness: The Leader Match Concept," includes the scales used in Leader Match training, answer sheets for the quizzes and final exam, and a brief summary of the major concepts covered in the class. Some of the scales in the book should be completed at the beginning of the class as part of your introduction to the course (this will be discussed in more detail later). The remainder of the materials will provide the student with easy reference to the principles of the training program.

Scales. The Leader Match book contains a number of scales the trainee will fill out to understand the Leader Match concepts. The Least Preferred Coworker (LPC) Scale indicates the individual's leadership style and should be administered before any discussion of what the scale measures.

The next three scales in the book are used to analyze situational factors in the work environment. These are the Leader-Member Relations Scale, the Task Structure Scale (parts I and II), and the Position Power Scale. The purpose and use of these scales will be discussed in detail in Module II.

It is important to understand that the scales are learning devices--tools to help the students learn something about their work situation. The scales are included as teaching aids, but it is hoped that the students will learn the concepts behind these scales and will make accurate diagnoses of their leadership situations in the future without the use of these materials.

Teaching Guide. The format for the step-by-step teaching guide for each module is as follows:

- (1) General comments you can paraphrase for your opening remarks.
- (2) Transparencies listed by number and followed by suggested discussion points shown in italics. Each transparency should be read aloud to the group (this takes care of any slow readers or people with language difficulties). The key points on the transparency should be elaborated with detailed remarks taken from the theoretical discussion provided at the beginning of each chapter.
- (3) A question/answer section at the end of the step-by-step instructions.

It is important that you thoroughly understand the Leader Match concept so that you can elaborate on the information provided on each transparency and can field the numerous questions you can expect from the class. Our experience indicates that the most difficult concept to get across is an understanding of leadership style. This is the section where you can expect the most questions. Problems arise from interpreting the results of scale scores and from explaining how this type of scale works in predicting leadership performance. Both of these issues are discussed in detail in Module I of this book.

Teaching Style. Everyone has his/her own teaching style which has been developed through experience. However, the best results for this training program seem to come from a participative approach to instruction rather than a lecture. We have found that the training works best in a small

group situation, that is, with 15-20 students using a workshop format. Give the students every opportunity to ask questions, and try to stimulate group discussion by asking leading questions. Never just accept the answer to a question, but throw the ball back to the student by asking "why" they selected a particular answer. Ask the other students if they agree or disagree with a particular response, and follow this up again with a request for "why."

Try to use personal examples. Use yourself and your leadership situation as instructor to illustrate the concepts. Try to draw the students out, and get them to describe how they see themselves and how the concepts relate to them personally. Use political figures, former presidents, historical military leaders, or persons in the individual's organization as examples. In other words, try to make the examples personal rather than textbook characters.

Introduction to Students

The first step in Leader Match training is to hand out the book "Improving Leadership Effectiveness" to all students, and instruct them to write their names and roster numbers on the front. The books should be collected at the end of each session and returned at the beginning of the next class.

The first set of transparencies are for your introduction. With the first transparency you would emphasize the following:

TRANSPARENCY II:

"The training is divided into three sessions, each two to three hours long. As you can see, today you will first learn to identify your leadership style. In the second session we will discuss how to analyze your leadership situation--your work environment. In the third session you will learn how to change your situation to match your leadership style, using a technique called 'job engineering.'

Before proceeding with the course, the students should complete the scales in the front of the Leader Match book. On the following pages are examples of the instructions and the Least Preferred Coworker (LPC) Scale. This scale will identify the students' leadership styles. Read the instructions out loud to the class, and give them an opportunity to ask questions. The scale should be filled out and scored by the student. The student should also transfer the numbers marked into the column on the right and add them up. The total on the scale indicates the student's score. Be sure to have the students check their addition.

TITLE OF COURSE: LEADER MATCH
LEADERSHIP TRAINING FOR MINE MANAGERS
AND SUPERVISORS

PURPOSE: TO IMPROVE YOUR LEADERSHIP PERFORMANCE

ADAPTED FROM: IMPROVING LEADERSHIP EFFECTIVENESS: THE
LEADER MATCH CONCEPT,
(FRED E. FIEDLER, MARTIN M. CHEMERS, AND
LINDA MAHAR, 1976, JOHN WILEY & SONS)

ADAPTED BY: LINDA MAHAR
UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON
APRIL, 1981

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FRED FIEDLER, PRINCIPAL INVESTIGATOR)

T-II

LEADER MATCH TRAINING

MODULE 1: IDENTIFYING YOUR LEADERSHIP STYLE

MODULE 2: ANALYZING YOUR WORK ENVIRONMENT

- A. YOU AND YOUR GROUP
- B. JOB STRUCTURE
- C. POSITION POWER

MODULE 3: JOB ENGINEERING

- A. MATCHING LEADERSHIP STYLE TO THE SITUATION
- B. CHANGING THE SITUATION FOR EFFECTIVE PERFORMANCE
- C. DOES THIS METHOD REALLY WORK?

LEAST PREFERRED COWORKER (LPC) SCALE INSTRUCTIONS:

Over the course of your life you have probably worked in many groups with other people, on your job, in community or church groups, athletic teams, school programs, etc. Some of your coworkers may have been very easy to work with in getting the job done, while others were difficult to work with.

Think of the one person with whom you can work LEAST well, your least preferred coworker (LPC). He or she may be someone you work with now or someone you knew in the past. It does not have to be the person you have liked least well, but should be the person with whom you have had the most difficulty in getting a job done. You do not need to give the person's name. Keeping this person in mind, you should describe him or her on the LPC Scale which follows.

The scale consists of pairs of words which are opposite in meaning, such as Neat and Untidy. Between each pair of words are eight blanks so that the scale looks like this: (Example on following page.)

Next, the students should complete the situational favorableness scales. Have them complete the scales describing their situation the last day they served as a leader before attending the class. Remember, some students may not have been in a leadership position recently. It may be necessary, therefore, that they select a less recent leadership job. Page in the Leader Match book asks the students to describe their relationship with group members, pages evaluate the structure of their jobs (task structure, parts I & II), and page analyzes position power. Each scale should be scored by having the student obtain a total. Have the students close their books. You are now ready to begin Module I.

IMPORTANT: All scales should be completed at the beginning of the class before beginning any discussion of the Leader Match concept. If the students are aware of what the scales measure, it can influence their scale scores. This would not provide an accurate indication of their leadership style or the situational variables.

EXAMPLE

In describing the person with whom you least like to work, if you ordinarily think of him or her as being quite neat, you would put an "X" in the space marked 7, like this:

| | | | | | | | | | | | | | | | | | |
|-------|-------|---|-------|---|-------|---|----------|---|----------|---|--------|---|--------|---|--------|---|--------|
| Neat: | _____ | : | X | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | Untidy |
| | 8 | | 7 | | 6 | | 5 | | 4 | | 3 | | 2 | | 1 | | |
| | Very | | Quite | | Some- | | Slightly | | Slightly | | Some- | | Quite | | Very | | |
| | Neat | | Neat | | what | | Neat | | Untidy | | what | | Untidy | | Untidy | | |
| | | | | | Neat | | | | | | Untidy | | | | | | |

If you ordinarily think of this person as being only slightly neat, you would put your "X" in space 5:

| | | | | | | | | | | | | | | | | | |
|-------|-------|---|-------|---|-------|---|----------|---|----------|---|--------|---|--------|---|--------|---|--------|
| Neat: | _____ | : | _____ | : | _____ | : | X | : | _____ | : | _____ | : | _____ | : | _____ | : | Untidy |
| | 8 | | 7 | | 6 | | 5 | | 4 | | 3 | | 2 | | 1 | | |
| | Very | | Quite | | Some- | | Slightly | | Slightly | | Some- | | Quite | | Very | | |
| | Neat | | Neat | | what | | Neat | | Untidy | | what | | Untidy | | Untidy | | |
| | | | | | Neat | | | | | | Untidy | | | | | | |

If you would think of this person as being very untidy (or not neat), you would put your "X" in space 1:

| | | | | | | | | | | | | | | | | | |
|-------|-------|---|-------|---|-------|---|----------|---|----------|---|--------|---|--------|---|--------|---|--------|
| Neat: | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | X | : | _____ | : | Untidy |
| | 8 | | 7 | | 6 | | 5 | | 4 | | 3 | | 2 | | 1 | | |
| | Very | | Quite | | Some- | | Slightly | | Slightly | | Some- | | Quite | | Very | | |
| | Neat | | Neat | | what | | Neat | | Untidy | | what | | Untidy | | Untidy | | |
| | | | | | Neat | | | | | | Untidy | | | | | | |

Look at the words at both ends of the line before you mark your "X." Remember, there are no right or wrong answers. Work rapidly; your first answer is likely to be the best. Do not omit any items, and mark each item only once.

NOW GO TO THE "LPC SCALE" AND DESCRIBE THE PERSON WITH WHOM YOU CAN

WORK LEAST WELL

LPC SCALE

Scoring

| | | | |
|---------------|---|---------------|-------|
| Pleasant | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Unpleasant | _____ |
| | 8 7 6 5 4 3 2 1 | | |
| Friendly | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Unfriendly | _____ |
| | 8 7 6 5 4 3 2 1 | | |
| Rejecting | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Accepting | _____ |
| | 1 2 3 4 5 6 7 8 | | |
| Tense | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Relaxed | _____ |
| | 1 2 3 4 5 6 7 8 | | |
| Distant | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Close | _____ |
| | 1 2 3 4 5 6 7 8 | | |
| Cold | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Warm | _____ |
| | 1 2 3 4 5 6 7 8 | | |
| Supportive | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Hostile | _____ |
| | 8 7 6 5 4 3 2 1 | | |
| Boring | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Interesting | _____ |
| | 1 2 3 4 5 6 7 8 | | |
| Quarrelsome | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Harmonious | _____ |
| | 1 2 3 4 5 6 7 8 | | |
| Gloomy | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Cheerful | _____ |
| | 1 2 3 4 5 6 7 8 | | |
| Open | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Guarded | _____ |
| | 8 7 6 5 4 3 2 1 | | |
| Backbiting | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Loyal | _____ |
| | 1 2 3 4 5 6 7 8 | | |
| Untrustworthy | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Trustworthy | _____ |
| | 1 2 3 4 5 6 7 8 | | |
| Considerate | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Inconsiderate | _____ |
| | 8 7 6 5 4 3 2 1 | | |
| Nasty | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Nice | _____ |
| | 1 2 3 4 5 6 7 8 | | |
| Agreeable | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Disagreeable | _____ |
| | 8 7 6 5 4 3 2 1 | | |
| Insincere | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Sincere | _____ |
| | 1 2 3 4 5 6 7 8 | | |
| Kind | : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : | Unkind | _____ |
| | 8 7 6 5 4 3 2 1 | | |

MODULE I

IDENTIFYING LEADERSHIP STYLE

MODULE I

IDENTIFYING LEADERSHIP STYLE

The Leader Match training program is based on the Contingency Model of Leadership Effectiveness (Fiedler, 1964, 1967, 1978). This theory states that effective leadership is dependent on the appropriate match between the individual's leadership style and various factors in the work situation. To improve performance, it is necessary for the trainees to understand their leadership style, learn to analyze situational factors, and match up the two. Job engineering is a technique which allows leaders to change aspects of their situation to make it match their leadership style.

LEADERSHIP STYLE

This module focuses on identifying leadership style. To identify their leadership style, ask the students to complete the LPC Scale. This is the first scale the students complete in their book. It identifies two major leadership styles: (1) task-motivated leaders, and (2) relationship-motivated leaders.

Individuals who score 63 or below are likely to be task-motivated, while those who score 73 or above are likely to be relationship-motivated. Individuals who score between 64 and 72 are more difficult to classify and cannot rely on their scale scores. They will need to decide for themselves on the basis of the descriptions of the two leadership styles. (Depending on the edition, the book you use may not list the correct scores).

The LPC Scale is 60 to 70 percent accurate in classifying an individual's leadership style. The interpretation of the scale has been discussed in numerous articles published in the psychological literature (see Rice, 1978a,b). This score does not change very much over time. Changes in an individual's style are most likely to be the result of a major career change or of maturity brought on by years of experience in a particular job. In general, the LPC Scale provides a useful tool for identifying leadership style.

Whether trainees agree with the interpretation of the LPC Scale is not as important as the fact that they give some thought to the type of leader they are. One of the important ways in which this training program helps is by causing individuals to analyze themselves. A better understanding of one's own characteristics as a leader is the first step toward improving leadership effectiveness.

There are a number of reasons why a trainee may not agree with his LPC score as indicated by the scale. One of the most common complaints is from persons who are classified as Low LPC but they feel that they are relationship-motivated. What usually happens is that the Low LPC leader is

in a leadership situation which has high situational control. Under these circumstances, the leader BEHAVES in a considerate, easy-going manner. Hence, the leader interprets his behavior as typical of High LPC leaders. This is not the case. If you have a leader who strongly disagrees with his LPC score, tell him to please wait until you get to the point where you can discuss BEHAVIORS of High and Low PC leaders under different conditions.

It is important for you, the instructor, as well as for the trainees to understand that the LPC score indicates a leader's underlying feelings about being a leader. Some leaders feel better and more productive if they are able to establish good interpersonal relations while others feel better and more productive if they can accomplish tasks. These underlying (even unconscious) feelings determine how a leader behaves in different situations. Therefore, looking only at behavior at this point will not give the trainees a true reading on their leadership style. So now, let's see what it means to be relationship- or task-motivated.

DESCRIPTION OF RELATIONSHIP-MOTIVATED LEADERS (Score of 73 and above)

Although these leaders are concerned with doing a good job, their primary goal is to have good interpersonal relations with others. They gain self-esteem primarily when other people relate to them and evaluate them favorably. Relationship-motivated leaders are, therefore, likely to give special consideration to the feelings of group members and are concerned about how the group feels about them. They seek out other people, especially when they need help or when they are in an anxiety-arousing situation. Relationship-motivated leaders are very conscious of maintaining good group morale. They are able to see different viewpoints and tend to deal effectively with complex problems which require creative and resourceful thinking.

In the work group, relationship-motivated leaders emphasize the participation of subordinates. They encourage ideas from the group, they are tolerant of complexity, and they are sensitive to the needs and feelings of subordinates.

When the relationship-motivated leaders run into trouble, it often involves a failure to control the group members because of a desire to avoid the use of punishment or criticism, which might lead to conflict or loss of good relations. They are quick to head off group disagreements and try to make everyone feel comfortable.

In situations that are stressful, tough or uncertain, this behavior frequently becomes exaggerated, often so much so that relationship-motivated leaders do not perform well. They can become so involved in discussing and consulting with subordinates and seeking group support that they fail to pay sufficient attention to the job at hand. Contact with others during anxiety-arousing situations means a lot to them, and they become very reluctant to discipline subordinates under these conditions.

In situations that are easier and controlled, relationship-motivated leaders no longer tend to worry about relations with the group. Because things are going well, they now tend to be more concerned with how they appear to the boss and to others outside the immediate work group. They want to make a good impression and may plow ahead with the task, at times unmindful of the feelings of subordinates. They still want approval, but now that the group is under control, the approval of the boss or outsiders becomes more important. In other words, they get esteem from the boss by behaving in a manner which will please the boss, that is, by structuring the work situation and by telling people what to do. Furthermore, when the situation is under control, relationship-motivated leaders sometimes become bored or distracted because they are no longer challenged and may appear disinterested in group members.

In moderate situations, that is, situations of complexity and some uncertainty, the relationship-motivated leaders are at their best. They are concerned with people and able to deal with them effectively. Their sensitivity allows them to cope with difficult subordinates and group conflict, and their creative ability and imagination are challenged by tasks which call on them and the group to innovate.

Summary of Relationship-Motivated Leaders

Relationship-motivated leaders (score of 73 or above) tend to accomplish the task through good relations with the group. They use their personality to motivate the group. They create a supportive atmosphere that encourages a free flow of ideas. In situations which are complex and where creativity is useful, these leaders are likely to perform very well.

DESCRIPTION OF TASK-MOTIVATED LEADERS (Score of 63 and below)

Task-motivated leaders need to get things done. They gain self-esteem from tangible, measurable proof of performance. They have a strong desire to accomplish successfully any task to which they are committed, even if there are no apparent rewards. Their sense of personal worth is affected by evidence of accomplishment. They try to develop clear guidelines and procedures which allow orderly performance. They dislike disruption in their task performance, either from subordinates or superiors.

In situations that are stressful, tough, or uncertain, task-motivated leaders feel most comfortable when working from clear guidelines and standard operating procedures. When no guidelines exist for a job, they will find a substitute or develop them. They are no-nonsense people who are apt to take charge early. They tend to get right to business, arrange available materials and are impatient to get on with the job. They are concerned with task success even at the expense of good relations with subordinates. In this situation they quickly assign tasks, provide

schedules and monitor productivity, and perform very well. Task-motivated leaders are generally not too interested in problems regarding people, and they are often not very aware of interpersonal conflict. In extremely stressful situations they provide the stability and order to get the team moving or keep it on target.

In situations in which they feel in control, they tend to be more considerate and pleasant. Under these conditions they are able to relax and assume an easy-going, hands-off policy, content to let the group handle the job. In these very clearcut and positive leadership situations, task-motivated leaders tend to be pleasant and well-liked by subordinates and are seen as good people to work for. As long as everything goes smoothly, they perform extremely well.

In moderate situations, that is, situations of some complexity or uncertainty, task-motivated leaders are frequently tense, anxious and out of their element. Because they are not in control of the situation, they feel a need to create some order to their surroundings. The most common way a task-motivated leader does this is to organize the situation and complete tasks. In doing this, they become engrossed in the task and pay little or no attention to relations within the group. They are likely to be insensitive to the needs of subordinates and do not head off imminent conflicts within the group. In these complex situations, they may try to develop an orderly strategy before they have all the facts, or they may try to push coworkers and subordinates too hard, reducing their motivation and morale. In the moderate situation, performance is usually poorer.

The task-motivated leaders differ from relationship-motivated leaders by performing well under conditions that are very stressful and uncertain, or in situations that are very relaxed. Relationship-motivated leaders, on the other hand, perform best in the moderate situations which require interpersonal skills, tact, and creativity.

Note that task-motivated leaders are as well-liked as the relationship-motivated leaders, even though they place task accomplishment above interpersonal relations. Many task-motivated leaders get along extremely well with their subordinates, especially in the low stress, relaxed situations.

Summary of Task-Motivated Leaders

The task-motivated leaders (score of 63 or below) are strongly motivated to accomplish successfully any task to which they are committed. They do this through clear and standardized work procedures and a no-nonsense attitude about getting down to work. Although they want to get the job done in any event, they will care about the opinions and feelings of subordinates as long as everything is under control. But under stress and anxiety-producing conditions, they will tend to neglect group feelings in an effort

to get on with the job. For task-motivated leaders there is no conflict between the esteem they get from subordinates and acceptance and esteem they get from the boss. They use the group to do the job, and when they feel that they have the situation under control, they try to manage the group with courtesy and kindness. Business before pleasure, but business with pleasure if possible.

SOCIO-INDEPENDENT LEADERS (Scores between 64 and 72)

There is, of course, also a group of individuals who fall into the middle on the LPC Scale. This group consists of roughly 20 percent, who seem to differ from both the relationship- and the task-motivated persons. We know much less about the characteristics of the people who fall into this category than we know about those who are either high or low on the LPC Scale.

In general, people in this group are less affected by what others think of them, they are less concerned about their environment, and there is evidence that these individuals tend to perform better than either the high or low LPC persons in many leadership situations.

Motivation, Leadership Style, and Behavior

We have described two primary leadership styles, their primary motivations to lead, and their behaviors in different situations. It is critically important that a clear distinction between motivation and behavior is made in order to understand the Leader Match concept.

We describe individuals as being either task-motivated or relationship-motivated and then describe how the two types of leaders behave. There is an important difference.

Motivation is that internal set of goals and needs that causes us to behave in certain ways. In other words, relationship-motivated leaders have an internal need to relate to other people. This is what motivates them to do their job. They are more satisfied with themselves and their work environment when they can be involved with other people. Task-motivated leaders, on the other hand, have as their internal goal a need to accomplish. These individuals are more satisfied with themselves and their work environment when they can see things actually getting done. Task-motivated leaders like to make lists and check off their accomplishments at the end of the day. Relationship-motivated leaders like to be involved with people.

Although motivated by certain goals and needs, both types of leaders can exhibit similar behaviors. In some situations, for example, the task-motivated leader can behave in a very person-oriented manner, and in other situations concentrate totally on the task. The internal motivation

doesn't change--only the behavior differs. The same can be said for relationship-motivated leaders. In some situations they can be very organized and task-conscious, while in others they focus entirely on interpersonal relationships. Again, the motivation to perform hasn't changed, but the behavior has. Behavior changes with the situation, but the basic motivation stays constant. If you are motivated to become rich, you might work hard, or play the horses, or write a song--these are different behaviors to achieve the same goal.

Think about what motivates you to do your job. Is it the need you have for things to be orderly, efficient, and done on schedule? Or do you have a need to be involved with people and feel you've had a good day at work only when you have satisfied this need for relationships? What motivates the individual to do the job is reflected in his or her style of leadership. It is important for you to be clear on this difference between motivation and behavior so that you will be able to explain it to the class.

Motivational Hierarchy

Suppose someone in the class says, "It's really important for me to get the job done, but I also care about the welfare of my subordinates." That can very well be true. We all have primary motivations which are the most important to us in achieving satisfaction with our work, but we also have secondary goals.

Maslow, one of the most important theorists, states that we all have certain primary or basic needs for such things as food and shelter, and we have secondary needs for love and security, etc. When the primary needs are met, the individual turns to fulfilling the secondary ones. This is also true in the work situations. If your primary motivation or need in the work environment is for getting the job done, your secondary concern would be for the welfare of subordinates. Or, if your primary need is to have good relationships with those who work with you, the secondary need is to get the job done by using that relationship.

If you look back at the description of the two leadership styles, you can see this quite clearly. In a stressful situation in which the leader doesn't have a lot of control over what's going on, he or she will usually focus on the primary motivation. That is, the task-motivated leader will seek to get the job done at all costs, while the relationship-motivated leader devotes more time to securing relations within the group because that is the primary need.

On the other hand, if the situation is nonstressful, and things are under control--in other words, the primary need is being met--leaders will seek to satisfy their secondary needs. The task-motivated leader will then take time to be considerate toward group members, while the relationship-motivated leader will show more concern for the task. Why is this? A

situation will not be stressful if the leader's primary needs are already satisfied. Otherwise, they would be feeling considerable tension and stress.

As you can see, the situation plays a big part in determining how an individual will behave, as well as how satisfied he or she will be with the job. Finally, the interaction between the individual's style and the situation has a major impact on performance. All of these factors will be discussed in considerable detail in Module II.

Thus far we have sought to give an overview of Module I on identifying your leadership style. By now you should have a good understanding of this concept. On the following pages is the teaching guide which provides step-by-step instructions for Module I. Remember, the material enclosed in quotations should be used to elaborate and explain the information on the transparencies. For your convenience, a copy of each transparency is included in the book.

TEACHING GUIDE FOR MODULE I: IDENTIFYING LEADERSHIP STYLE

INTRODUCTORY REMARKS:

This training program stresses the interaction between the individual's personality or leadership style and the work situation. It is unique in saying that it is easier to change certain important aspects of your leadership situation than it is to change your personality or typical leader behavior. The method has been developed over the past 10 years by Fiedler and Mahar at the University of Washington and Chemers at the University of Utah. It has been tested in a number of military and civilian settings and shown to be effective in improving leadership performance.

TRANSPARENCY 1-1 (Read it aloud):

"Leadership style is your typical way of managing and supervising people. It is a part of your personality you bring with you to the job.

"Situational control involves those aspects of the work environment which impact on your ability to do your job. Most important are your relations with group members, the structure of your job assignments, and the power and authority provided by the organization to help you supervise others. And you will perform better in some situations than in others.

"If you think about it for a minute, this makes sense. We cannot all be successful in every situation. For example, General Patton was a brilliant military commander but would probably have made a poor president of the local PTA. Francis Ford Coppola is an exciting and successful movie director but may well have been awful as a tank commander. On the other hand, most people can be good leaders if they are placed in situations that match their leadership style, or if they learn to change certain aspects of the situation so that they can perform more effectively. That is the idea underlying Leader Match training.

"How do you know your leadership style? The Least Preferred Coworker Scale you completed at the beginning of the class can help you better understand yourself as a leader."

TRANSPARENCY 1-2:

"This scale helps to identify two main types of leaders, those we call task-motivated and those we call relationship-motivated. Turn to the Least Preferred Coworker Scale on page 7 of your book. If you scored 73 or above, you are likely to be relationship-motivated, and if you scored 63 or below, you are likely to be task-motivated. If you scored between 64 and

YOUR EFFECTIVENESS AS A LEADER DEPENDS ON TWO THINGS:

1. YOUR LEADERSHIP STYLE
2. YOUR SITUATIONAL FAVORABLENESS

YOU WILL ALMOST CERTAINLY PERFORM BETTER IN SOME SITUATIONS THAN IN OTHERS.

T 1-2

THERE ARE TWO LEADERSHIP STYLES AS
MEASURED BY THE LEADER MATCH SCALE:

- * TASK-MOTIVATED LEADERS

- * RELATIONSHIP-MOTIVATED LEADERS

72, the scale cannot help you as well to identify your leadership style; you may fall into a middle group of leaders and will have to look at the descriptions of the two types of leaders and decide for yourself if one or the other most closely resembles your approach to leadership.

TRANSPARENCY 1-3: (Read it aloud)

"These are some things we know about task-motivated leaders":

TRANSPARENCY 1-4: (Read it aloud)

"Let's look at a videotape which illustrates these two types of leaders and how they behave in different situations."

Videotape - Module 1: You are now ready to show the videotape for Module I. Remember to stop the tape when the music fades up and out at the end. Do not rewind. You will then have the tape in position to show the practice vignettes at the end of class.

Please note that the task and relationship-motivated leaders portrayed in Module I are stereotypes or extreme examples of the two leadership styles. For example, the task-motivated leader comes across as very hard-line and could be viewed as the "bad guy." This is not the impression we mean to give. Although you will run across some stereotypical examples of the two leadership styles, the range of behaviors exhibited by task-motivated leaders is considerable. The same can be said for the relationship-motivated leader, who is portrayed on the screen as extremely considerate. There are many instances when relationship-motivated leaders can behave in a very unlovable fashion. The characters illustrated in the videotapes were stereotyped to make a point. At the conclusion of this tape, we recommend that you conduct some class discussion to make sure the students understand that it is no more desirable to be task- than relationship-motivated. In fact, both types of leaders are generally well-respected by subordinates. Relationship-motivated leaders are respected because they are concerned for the welfare of the group and task-motivated leaders because they enable the group to accomplish the goal.

After the videotape is shown, give the students time to ask questions about what they have seen. Then you should proceed with the following discussion of leadership style.

TRANSPARENCY 1-5:

"There are some similarities between the two leadership styles. Obviously both can be successful leaders or they wouldn't retain their jobs very long. But they will not be successful in all situations. Rather, some leaders will do better in situations in which they have a lot of control, while other leaders will do better in situations in which they have less

T 1-3

TASK-MOTIVATED LEADERS

(SCORE OF 63 OR BELOW)

- * HAVE A PRIMARY NEED TO GET THE JOB DONE
- * ARE MORE SATISFIED WITH THEIR WORK WHEN THEY FEEL THEY ARE GETTING A LOT ACCOMPLISHED
- * GET THE JOB DONE BY ORGANIZING THE WORK AND ASSIGNING TASKS
- * ARE EAGER AND IMPATIENT TO "GET DOWN TO WORK"
- * ARE LESS CONCERNED WITH GROUP SUPPORT OR GROUP RELATIONSHIPS

T 1-4

RELATIONSHIP-MOTIVATED LEADERS

(SCORE OF 73 AND ABOVE)

- * HAVE A PRIMARY NEED FOR GOOD RELATIONSHIPS WITH GROUP
- * ARE MORE SATISFIED WITH THEIR WORK WHEN THEY HAVE THE SUPPORT OF THEIR GROUP
- * GET THE JOB DONE BY USING THEIR RELATIONSHIP WITH THE GROUP TO MOTIVATE THEIR SUBORDINATES
- * WORK BEST WHEN THEY ARE INVOLVED WITH PEOPLE
- * SEEK TO AVOID CONFLICT AND TENSION IN THE GROUP
- * SENSITIVE TO THE FEELINGS AND NEEDS OF THEIR SUBORDINATES

SIMILARITIES OF TWO LEADERSHIP STYLES:

- * BOTH CAN BE EFFECTIVE MINE MANAGERS DEPENDING ON THE SITUATION
- * BOTH ARE RESPECTED BY SUBORDINATES:
 1. RELATIONSHIP-MOTIVATED LEADERS BECAUSE THEY ARE CONCERNED ABOUT GROUP MEMBERS FEELINGS.
 2. TASK-MOTIVATED LEADERS BECAUSE THEY ENABLE THE GROUP TO GET THE WORK DONE QUICKLY AND EFFICIENTLY.
- * BOTH BEHAVE DIFFERENTLY IN DIFFERENT SITUATIONS

control. Although the two types of leaders approach their job differently and are motivated by different needs and goals, all leaders are generally concerned with doing a good job. And both types of leaders behave differently in different situations."

TRANSPARENCY 1-6:

"When leaders are in stressful situations, they seek to satisfy that primary goal or need which motivates them to be a leader. Thus the relationship-motivated leader will focus on group relations, and the task-motivated leader will concentrate on the task.

"Don't be misled, however, since task- and relationship-motivated leaders are also concerned about other aspects of leadership. In some situations, task-motivated leaders will show strong concern for the welfare of their subordinates, and in some situations relationship-motivated leaders will be highly involved in task-oriented behaviors."

TRANSPARENCY 1-7:

"When we talk about your leadership style or what motivates you to be a leader we are talking about a personality variable, the way you generally feel toward your job. We all have something that is of greater importance for us--for task-motivated leaders this is to organize things and get the task done as quickly and efficiently as possible. Task-motivated leaders are usually very organized, develop work plans and proceed in an orderly fashion. Task-motivated leaders usually make a list of their activities to be done each day. They feel most satisfied at the end of the day when they can check off all they have accomplished. In a meeting the task-motivated leader will often take charge, ask questions, get things moving. The task-motivated leader is a real achiever.

"For relationship-motivated leaders this primary motivation is to develop rapport with group members. They used their personality to get the group to accomplish the job. These leaders can usually be seen spending some time visiting each day with group members. They give a lot of pats on the back and encourage group members to keep up the good work. And they feel most satisfied at the end of the day if they were able to make someone feel good.

"But each leader also has a secondary goal or motivation. Once the task-motivation leader's primary goal of getting the job done is met, the leader focuses on a secondary goal, which is concern for the welfare of subordinates. And if the relationship-motivated leader's primary need for good group atmosphere is met, the leader turns to the secondary goal of getting the task organized.

HOW DO THE TWO TYPES OF LEADERS BEHAVE
IN SITUATIONS THAT ARE STRESSFUL AND UNCERTAIN?

- * RELATIONSHIP-MOTIVATED LEADERS WILL SEEK THE SUPPORT OF THE GROUP.
 - A. THEY WILL TALK AND RELATE MORE WITH GROUP MEMBERS.
 - B. THEY LET UP ON DISCIPLINE.

- * TASK-MOTIVATED LEADERS WILL CONCENTRATE ON THE JOB.
 - A. THEY WILL ORGANIZE THE WORK AND MAKE ASSIGNMENTS.
 - B. THEY WILL PUSH THE GROUP TO GET THE JOB DONE.
 - C. THEY WILL USE MORE DISCIPLINE.

WHEN DO TASK-MOTIVATED LEADERS SHOW
CONCERN FOR GROUP RELATIONS?

- * IN SITUATIONS WHERE THEY KNOW THE JOB IS GETTING DONE.
- * IN SITUATIONS WHERE THEY FEEL THEY HAVE A LOT OF CONTROL OVER THEIR LEADERSHIP JOB.
- * THEN THEY CAN RELAX AND BE FRIENDLY:
"BUSINESS BEFORE PLEASURE,"
BUT BUSINESS WITH PLEASURE WHEN POSSIBLE.

WHEN DO RELATIONSHIP-MOTIVATED LEADERS BEHAVE
IN A TASK ORIENTED MANNER?

- * IN SITUATIONS WHERE THEY KNOW THEY HAVE THE SUPPORT AND BACKING OF THEIR GROUP.
- * IN SITUATIONS WHERE THEY FEEL THEY HAVE A LOT OF CONTROL OVER THEIR LEADERSHIP JOB.
- * THEN THEY CAN CONCENTRATE ON ORGANIZING TASKS, AND STRUCTURING THEIR JOB.

"The important thing to stress is that the two types of leaders are concerned with both of the major functions of leadership, although they place different emphasis on the two. And what causes the leader's behavior to change is what is happening in the situation. If the leader is under stress, or doesn't have assurance that the job will get done, then the task-motivated leader falls back on task behaviors in order to get the mission accomplished. An in the same situation, the relationship-motivated leader concentrates on trying to improve group morale in order to get the job done. In some situations the relationship-motivated leader's concern for good interpersonal relations can be detrimental to performance."

Class Discussion

At this point, you have presented the basic principles which govern leadership style, and you should encourage the class to discuss these points. Throw the class open to questions, and try to get the students to provide their own answers. What follows are some of the most frequently asked questions and the most appropriate answers.

Question: How does the scale work? I don't see how asking me to describe my least preferred coworker can tell you something about my leadership style.

Answer: The LPC Scale is a personality test. It tells you about your emotional reaction to someone with whom you can't work. If I were to ask you, for example, to describe your most preferred coworker, you would all describe that person in positive terms. When I ask about the least preferred coworker, I get a much wider range of reactions.

For the task-motivated leader, getting the job done is extremely important. A coworker who prevents the leader from accomplishing that goal is absolutely no good in any other respect; that individual is seen in a bad light. Even if that person is, in fact, intelligent or friendly, he or she is seen as stupid and unfriendly because the task-motivated person feels strongly about the job.

The relationship-motivated leader, on the other hand, reacts completely differently. These leaders can separate their feelings about a coworker on the job from their feelings about that individual as a person. This leader may think, "Although I don't want to work with you on the job, you still have some positive qualities. I think you are friendly and pleasant, and I wouldn't mind seeing you in a social situation." This type of leader can see the least preferred coworker in a more positive light in terms of that individual's personality.

Question: How accurate is the LPC Scale? My score shows that I'm task-motivated, but I've always thought of myself as being a very person-oriented individual.

Answer: The LPC Scale is accurate about 60-75% of the time. For most people it clearly identifies their leadership style. For a small percentage of the population the scale may not accurately characterize their personality. But that's OK. What is really important is not that you agree with the scale, but that you find out for yourself what kind of leader you are. Think about how you behave under stress--where you put your primary effort: Do you direct your attention to task behaviors, or do you turn to the group for support? When things are going well, and you have time to relax, what interests you in the situation? Thinking about how you behave can help you understand your leadership style.

A word of caution. Before you decide that this scale doesn't classify you into the category you think you belong in, consider this: It is often impossible for people to see themselves clearly. We all want to think of ourselves in a positive light. We like to think of ourselves as considerate and concerned for people and as very efficient on the job. But if we talk to people who know us, our friends, our spouse, our coworkers, we may find that our behavior as seen by others is considerably different than the way we see ourselves.

It's like the first time you hear yourself on a tape recorder. Most people think they don't really sound like that. But if you ask people who know you, they will tell you that it's exactly how you sound. So before you reject the results of the LPC Scale, consider that it may in fact have correctly identified your leadership style, particularly as others see you.

Question: I scored in the middle between 64 and 72; how do I know what kind of leader I am?

Answer: There are two possibilities. You may be one of the few people who truly are a mixture of the two types and place equal emphasis on the two aspects of leadership. But we also know that there are a number of people who fall into the middle category who differ from those with low and with high LPC scores. This middle group tends to be more independent of others, less influenced by what others think and feel about them, less influenced by situational factors, and these people also tend to perform better in most situations. We are still learning about the middle LPC group and, therefore, cannot tell you as much as we would like at this time.

It is more likely that you have one of the two leadership styles and that the person you selected as your least preferred coworker may have not been someone you felt strongly about one way or the other. And, of course, one or two points either way on the scale makes little difference. For people who fall into this middle category, we recommend that you examine your own behavior in different situations and look at the descriptions of the two leadership styles. Then decide for yourself what kind of leader you are.

Question: If I plan a career in the mining industry, isn't it better to be task-motivated because of the strong emphasis on production?

Answer: No, not in today's work climate. What we are finding is that both types of leaders can be effective in the industry. Besides, a person can't just decide to be task- or relationship-motivated. Leadership style is part of your personality that you've been developing all of your life, and you can't change it just because you think another type of leadership is more appropriate. You can change some of your behaviors, but you can't change what motivates you to be a leader.

Question: If I were a general foreman who is task-motivated, would I want my crew foremen to all have the same leadership style as I have?

Answer: Not at all. In fact, it is often more productive to have some of each. For example, if two leaders share responsibility for the same group as in the case of a mine superintendent/assistant superintendent, having one leader of each type means that all the bases are covered. One leader can then be task-motivated and the other relationship-motivated. Each leader would fill a different need in the organization. Unfortunately, we can't all choose with whom we work, so it doesn't always come out that way.

It is also not necessarily true that you want all your group members to have the same style. Also, this leads to lower job satisfaction. Trying to accomplish a task with a group of relationship-motivated leaders might cause some frustration because they might spend all their time talking with each other, and a group made up of task-motivated leaders tend to be very competitive with nobody tending to the atmosphere of the group. A mixture of styles probably provides the most productive groups.

Question: How does this approach to leadership differ from what we have been taught in previous training programs? What's the difference between authoritarian/democratic styles of leadership and relationship-motivated/task-motivated leaders?

Answer: When you talk about authoritarian or democratic leadership, you mean the way a person behaves in a given situation. You know from your own experience that you are not autocratic all the time or democratic all the time. There will be situations which require that you make decisions without asking your group, and there will be times when a person who tends to be authoritarian will consult with his subordinate leaders, if he knows what's good for him. The same people may be authoritarian at one time and democratic at another. But the leadership style which is measured by asking you to describe your least preferred coworker indicates your basic feelings about a person who prevents you from getting the job done. Your response to this scale is an indication of your work goals and values. These goals and values don't change from one time to another.

We want you to learn more about yourself in terms of your needs, goals, and motivations, not just whether you behave in a democratic fashion. We want you to learn about your strong points and to build on these and to learn how to change situations so that you can be more effective. Leader Match training teaches you how to manage your leadership situations so that you can be most successful. We teach you to translate the theory and principles into action.

Benefits of Knowing Leadership Style

Identifying leadership style goes beyond just knowledge of the self. There are many additional benefits to understanding what motivates people to do their job and how they behave in different situations. For example, it is possible to identify the leadership style of someone else without the use of the LCP Scale.

Why would you want to know someone else's leadership style? Consider your boss. Suppose you determine that your boss is task-motivated and most of the time is fairly easy to get along with because he or she has a lot of control. But one day your boss comes in and puts up a new organization chart, gives everyone a new job assignment, is very tense and unfriendly and perhaps even pushy. You can think to yourself that the task-motivated boss must be under some kind of stress because he is focusing on his primary motivation to get the job done and showing very little consideration for the group. Rather than getting upset by the boss's behavior, you can decide that this is a unique situation and that you could perhaps do

something to help ease the stress on the boss. And you can be aware that this is a temporary situation, and that the boss will again be a nice person to work for when he gets everything under control.

Understanding the leadership style of your boss or others in the chain of command helps you cope with the changes you see in their behavior. This will lower your stress level and perhaps enable you to keep your unit functioning in the current crisis.

Knowledge of your subordinate leaders' styles can be even more beneficial to you because you can provide them with the type of guidance they need. For example, if you have a task-motivated leader who likes things organized, you can provide clear guidelines and directions. If you have a relationship-motivated leader who likes to work with people, you can use that leader to deal with some of the more difficult subordinates in your unit.

Finally, knowing the leadership style of others, and having others know your style, provides an additional communication tool. If people in the chain of command in your unit can discuss leadership style with one another, it provides a common language. For example, if you jokingly say to a foreman, "You're being awfully task-motivated today, are you under stress?" the foreman will get your message and be able to back off on his behavior.

Ask the group to try these examples, and see if they can identify someone else's leadership style.

EXAMPLE 1

We had this one maintenance foreman who could get any job done in little wasted time. If we had to make any repairs somewhere, we were on the truck to our destination before you could blink. He was a foreman the old man wouldn't hesitate to ask anything of. He was a strict boss, too.

What is the leader's style, and why?

(Answer: Task-motivated leader)

EXAMPLE 2

Our crews were waiting for a cable to be checked. One foreman took the initiative to give some safety training to his crew instead of just having everyone sitting around and sleeping. He felt it was a waste of time to sit there and that we'd do better on the job with the additional preparation. As a result, everyone became involved in the subject, and most people learned something.

What was the leader's style, and why?

(Answer: Task-motivated leader)

EXAMPLE 3

After 4:30 my foreman used to stay every day and rap with the guys just to see where they stood. Their complaints and opinions were very important to him, and we all knew it. One afternoon, three of us were sitting with this foreman, and he told us about a conversation he had had with a miner who had worked for him when he was a crew lead man. The miner had thanked him for being such a good boss and personal friend. The foreman really treasured the memory of that conversation. He told his crew "when the people who work for you tell you that you are doing a good job, then you know you are a good leader."

What was the leader's style, and why?

(Answer: Relationship-motivated leader)

Additional Class Discussion

At this point it is helpful to bring the concepts into the classroom on a personal level. You might consider asking the group to identify your leadership style. You might have them discuss the style of President Carter (whom we judge to be task-motivated, based on the way he organized his campaign and his strategy of staying in the White House withdrawn from the people). President Nixon is another example, and we judge him to also be task-motivated because of the distance he kept between himself and the general population. Nixon did all his business through intermediaries. On the other hand, Lyndon Johnson was probably relationship-motivated. He was a real hand-shaking, people-oriented leader. He also did a lot for human rights. Or you might discuss someone in the company whom everyone would know. For example, the chief instructor of the company, the mine manager, the safety inspector--or you might get them to discuss their ideas about the leadership style of their boss.

You might also see if there are any personal tendencies that characterize task- and relationship-motivated leaders. For example, task motivated people we know tend to like labor-saving devices to an extreme. Whether the device belongs in the workshop, workplace, or in the home, they like to collect them. Relationship-motivated leaders do not share this fascination. However, a relationship-motivated leader is more likely to arrange weekend get-togethers with friends or to keep track of social events. You might find other differences too.

If you feel that the group has done pretty well with identifying leadership style, you are ready to try the vignettes on the videotape for Module I. Show the first vignette and stop the tape. Ask the group to discuss the leader's style and why they think it is one or the other.

Answer for Vignette 1: Relationship-motivated. Although the leader initially comes on strong, when he sees there is a problem, the leader immediately offers to help. A task-motivated leader in the same situation would be more likely to say, "If you guys don't get this done by 3 O'clock, you're in hot water"--in other words, the task-motivated leader might threaten or coerce the group into accomplishing the task. (You may get some people who will disagree with the preferred answer, but what is really important is that the group is challenged to consider all aspects of what they see in the vignette.)

Answer for Vignette 2: Task-motivated. Here you need to lead the group to say why the behavior of the crew leader changed. The reason is, of course, that the task-motivated leader was initially in a situation where he had a lot of control. In situations of high control, Low-LPC leaders are relaxed and easy to get along with. When this leader gets a new boss, there is a period of adjustment in which the Low LPC leader will perceive less control. The foreman didn't know at first what the boss's expectations would be. Thus he was overly concerned with getting tasks accomplished. The subordinates perceive that the boss is coming down hard on them. It is expected that when a good relationship is established with the new boss, that situational control will again be high and the task-motivated leader will become considerate again.

Answer for Vignette 3: Relationship-motivated. The reason for the behavior change here was that the leader got a new job. This was a case where the relationship-motivated leader had been too long on the job, had too much control over the situation and was bored (remember the discussion in the introduction). The leader was concentrating on task behaviors just to provide something to do. But when the leader was transferred to a new job, there was considerable stress and uncertainty and a new group which was unknown. Thus, the leader reverted to his primary motivation to develop good relationships with subordinates. Typical behavior for the relationship-motivated leader--unwilling to give reprimands and being everyone's friend.

Now rewind the tape for Module I.

QUIZ AND SUMMARY

The final stage of Module is to determine how well the students have understood the rather complicated concept of leadership style. Use the quiz on Transparency 1-8. Have the students fill out the answer sheet in their workbook. Then score the quiz in class. Ask the students why they selected each answer. If everyone seems to have done well, you are ready to summarize and end the first class.

MODULE 1 QUIZ

TRUE FALSE

- _____ _____ 1. TASK-MOTIVATED LEADERS ARE GENERALLY LESS WELL LIKED AND RESPECTED BY THEIR FOLLOWERS THAN ARE RELATIONSHIP-MOTIVATED LEADERS.
- _____ _____ 2. RELATIONSHIP-MOTIVATED LEADERS ARE PRIMARILY MOTIVATED BY THEIR NEED FOR SUPPORT FROM THE GROUP.
- _____ _____ 3. TASK-MOTIVATED LEADERS ARE MOST COMFORTABLE IN SITUATIONS WHERE THE JOB IS CLEAR AND ORDERLY.
- _____ _____ 4. RELATIONSHIP-MOTIVATED LEADERS GENERALLY TRY TO AVOID CONFLICTS WITH THE GROUP.
- _____ _____ 5. IN STRESSFUL SITUATIONS, RELATIONSHIP-MOTIVATED LEADERS ARE MORE CRITICAL AND DIRECTIVE THAN TASK-MOTIVATED LEADERS.
- _____ _____ 6. WHEN THE JOB IS GETTING DONE AND EVERYTHING IS UNDER CONTROL, TASK-MOTIVATED LEADERS ARE LIKELY TO ACT NERVOUS AND UNFRIENDLY.

Answers to Quiz

1. False. Task-motivated leaders are generally as well-liked as relationship-motivated leaders. They enable the group to get the job done and to be successful. They also can be very relaxed and friendly as long as they have control over the situation, and are sure the work will be done.
2. True. Relationship-motivated leaders are primarily motivated by a concern for people. They like working in a setting in which everyone pulls together--teamwork.
3. True. Task-motivated leaders like things to be well organized because this insures that their need for task accomplishment will be met. They can be certain the job will get done.
4. True. Because of their concern for the feelings and needs of others, relationship-motivated leaders try to keep the peace and avoid conflict in the group.
5. False. In a stressful situation, relationship-motivated leaders would let up on discipline and seek to relate more with group members.
6. False. When the job is getting done and things are under control, the task-motivated leader can relax and be friendly to subordinates.

TRANSPARENCY 1-9: (Read Aloud)

"Be sure to point out the difference between points 3 and 4. In number 3, the leader is attending to the secondary motivation for group relations, and in point 4, because of stress, the leader is focusing on the primary motivator to get the job done."

TRANSPARENCY 1-10: (Read Aloud)

"Again, points 3 and 4 reflect the change in behavior as a result of the situation. In point 3 the leader has a lot of control and is bored, so turns his or her attention to task behaviors, and in point 4 under stress the leader is concentrating on developing relationships with the group--the primary motivation."

END OF MODULE 1

SUMMARY OF TASK-MOTIVATED LEADERS

- * GENERALLY, VERY CONCERNED WITH GETTING THE JOB DONE AS QUICKLY AND ORDERLY AS POSSIBLE.
- * WORK BEST WHEN THINGS ARE ORGANIZED, AND THEY ARE ASSURED THE JOB IS GETTING FINISHED.
- * IN SITUATIONS WHERE THEY HAVE A LOT OF CONTROL AND THE JOB IS GOING WELL, THEY CAN RELAX AND BE CONCERNED WITH GROUP RELATIONS (SECONDARY GOAL).
- * IN STRESSFUL SITUATIONS, THEY BECOME VERY DIRECTIVE AND PUNITIVE, PUSHING THE GROUP TO GET ON WITH THE JOB.

SUMMARY OF RELATIONSHIP-MOTIVATED LEADERS

- * GENERALLY, NEED THE SUPPORT OF THE GROUP TO GET THE JOB DONE.
- * WORK BEST WHEN THEY FEEL THEY ARE LIKED BY THE GROUP.
- * SEEK TO AVOID CONFLICT IN THE GROUP.
- * IN SITUATIONS WHERE THEY HAVE GROUP SUPPORT AND A LOT OF CONTROL OVER THEIR JOB, THEY BECOME BORED AND TURN THEIR ATTENTION TO TASK BEHAVIORS. (SECONDARY GOAL)
- * IN STRESSFUL SITUATIONS, THEY SEEK GROUP SUPPORT AND CAN BECOME SO INVOLVED WITH RELATIONSHIPS THAT THEY PERFORM LESS EFFECTIVELY ON THE JOB.

MODULE II

ANALYZING YOUR WORK SITUATION: SITUATIONAL CONTROL

ANALYZING YOUR WORK SITUATION: SITUATIONAL CONTROL

As you will recall from Module I, this training program is based on the concept that effective leadership depends on the appropriate match between the individual's leadership style and the work situation. Situational control is the term used to describe the leader's control over the work environment. An in-depth understanding of the situation will enable the leader to pinpoint specific problem areas and to develop a work plan for improving overall performance.

What do we mean by situational control? We are really asking, "how favorable is the situation in which the leader operates? How much control does he or she have over the working environment?" Another way of looking at situational control would be in terms of certainty. "How certain is the leader that the decisions and actions taken will have the desired outcome?" In some situations, it is possible to be very sure that the work will get done in the specified manner, while in other situations there may be uncertainty.

How do we analyze situational control? To make it simple, we will speak about the work environment in terms of three categories:

High Control Situations

Moderate Control Situations

Low Control Situations

Do not be misled by the term "low control situation." A low control situation does not mean the leader will be unsuccessful in accomplishing the task. Rather, low situational control means that the leader has less certainty and more stress. Some leaders perform very well in this type of situation because they see it as challenging and interesting. Likewise, a "high control situation" does not necessarily mean that the leader will have an easy time of it and be successful. There are some people who become bored and ineffective in these situations because things are too easy so that they are no longer challenged. People with different leadership styles react differently in various situations. As we said in the beginning, leaders cannot expect to be successful in all situations.

On the other hand, leaders can learn in which situation they are likely to perform well and those in which they are likely to perform poorly. This can go a long way toward improving their overall effectiveness as a leader. Our motto is: "If you learn to avoid situations in which you are likely to fail, you are bound to be a success."² We realize that a company usually does not let managers choose only the situations in which they are likely to do well. Therefore, managers must learn how to change critical aspects

of their leadership situations in order to become more effective performers. This turns out to be much easier than one might think. Changing situations will be discussed in detail in Module III.

What constitutes a "high," "moderate," or "low" control situation? How do you know which situation you are in? Our research has shown that there are three components of a situation which have the most impact on your ability to control the outcome (Fiedler, 1967; Beach and Beach, 1978). Listed in order of importance, these are:

1. Leader-member relations.
2. Task structure.
3. Position power.

Leader-member relations refers to the support leaders get from the members of their group--their subordinates. Task structure is defined as the goals and procedures which are known to the leader on how to do the job. Position power is the authority given by the organization to direct the work of the group and to discipline and reward subordinates when required. These are listed in order of importance, with leader-member relations twice as important as task structure, which is again roughly twice as important as position power.

Why would power be the least important of these three, and leader-member relations the most important? Think about it a minute. What good does it do the leaders to have a lot of rank, and authority on the job, if they don't know how to do the task, or if they have a group that's out to get them? In other words, if the group supports the leader and works well together as a team, the leader has considerably more control over the situation and doesn't have to depend on power or punishment to get the job done. Thus, the leader's relations with group members contributes most to his ability to get the mission accomplished.

How do these three factors combine to create high, moderate, and low control situations? Consider that a high control situation is one in which the leader has good leader-member relations, a clearly-defined task (high task structure), and high position power. An example might be a liked and respected area foreman supervising a group of miners in sinking a shaft. The situation gives high control because the foreman is liked and supported by the group, has a very structured task, and his rank gives him high position power.

A low control situation would be just the opposite. An example might be an acting leadman leading a group discussion on how to improve safety procedures with a group of new miners. As an acting leadman, the individual would have moderate-to-low power, trying to improve safety procedures would be an unstructured task, and leader-member relations would probably be poor because the leadman wouldn't yet know the new miners.

Moderate control situations have mixed characteristics. The leader might have a good relationship with the group but an unclear task and low power, or a structured task and high power but poor leader-member relations.

To understand these three factors better, look at them one more time.

LEADER-MEMBER RELATIONS

As we have said before, we will look at your job in terms of how much situational control and influence you have over your situation. Control obviously will be greater if leaders have the support and trust of group members than if the group rejects them or gives them only half-hearted support. Leaders who do not have to question the dependability and loyalty of their group are in a very strong position. They don't have to worry as much about official power or other organizational supports, and they don't have to rely on authority to reward and punish because the group members are eager to follow anyway. We call this personal aspect of control and influence leader-member relations.

Leader-member relations are the most important single component of situational control. If leaders have good relations with their groups, then they have less need of position power or task structure in order to get the job done. The leadership situation is, therefore, likely to be either high or moderate in control.

It is sometimes rather difficult to tell just how much support and backing a group is likely to give its leader. Most of us have a tendency to do some wishful thinking in this area. We like to believe that our relations with others are better than they actually are.

There are two things to be aware of when thinking about leader-member relations. First is the support the group gives the leader, and second is the relationship of the group members to each other. There are various clues which leaders can use to tell the extent to which their subordinates accept them as the boss. For example, the leader might ask these questions:

Do my group members try to keep me out of trouble?

Do they warn me about potential problems?

Are my group members careful about how they do their jobs?

Can I depend on them to do a job without my leaning over their shoulder?

If these questions can be answered "yes," the leader probably has the support of the group.

Also important is the relationship of the group members to each other. Leaders might ask themselves these kinds of questions:

Is there conflict within the group?

Do group members compete with each other?

Do I spend much of my time just keeping the peace?

Do my group members have trouble working together as a team?

If the answer to these questions is "no," then the leader has a group which can be relied on.

If the group is supportive of the leader and works well together as a unit, the leader would have good leader-member relations. If the group members are hostile both to the leader and to each other, then the situation would be classified as poor in leader-member relations.

Some other factors may affect the leader's relations with the group. Groups tend to be more difficult to handle if there are differences in the members' backgrounds, as, for example, in religion, language and race. Also, with the increase of women in mining, groups consisting of men and women can sometimes have special problems in learning how to get along. The leader may be seen as favoring one clique over another, or favoring the women over the men, or vice versa. These types of problems can contribute to lower leader-member relations.

Another factor to consider is the group's history. Some groups traditionally have good relations with their leaders, while others traditionally fight their leaders. In some cases if the previous leader was liked and admired, it may be difficult for a new leader to step into this person's shoes. But also, in some cases, if the previous leader was disliked and mistrusted, it may be more difficult for the new leader to develop rapport with the group.

Finally, it is important to consider the leader's relationship with the boss. If the boss supports the leader, the group members are more likely to hold the leader in esteem and have confidence in his or her ability to get the job done.

As mentioned before, we have developed scales for helping the leader to analyze the work situation. The Leader-Member Relations (LMR) Scale which follows will help the leader to assess the relationship with group members and between the members of the group. Because leader-member relations are

LEADER-MEMBER RELATIONS SCALE

Circle the number which best represents your response to each item.

| | Strongly Agree | Agree | Neither Agree Nor Disagree | Disagree | Strongly Disagree |
|---|-------------------|-------|----------------------------------|----------|----------------------|
| 1. The people I supervise have trouble getting along with each other. | 1 | 2 | 3 | 4 | 5 |
| 2. My subordinates are reliable and trustworthy. | 5 | 4 | 3 | 2 | 1 |
| 3. There seems to be a friendly atmosphere among the people I supervise. | 5 | 4 | 3 | 2 | 1 |
| 4. My subordinates always cooperate with me in getting the job done. | 5 | 4 | 3 | 2 | 1 |
| 5. There is friction between my subordinates and myself | 1 | 2 | 3 | 4 | 5 |
| 6. My subordinates give me a good deal of help and support in getting the job done. | 5 | 4 | 3 | 2 | 1 |
| 7. The people I supervise work well together in getting the job done. | 5 | 4 | 3 | 2 | 1 |
| 8. I have good relations with the people I supervise. | 5 | 4 | 2 | 2 | 1 |

TOTAL SCORE _____

the most important factor in measuring situational control, the total points possible on the scale are 40, or twice as much as the Task Structure Scale, and four times as much as the Position Power Scale, which will follow later.

Scoring the Leader-Member Relations Scale is easy. The individual just adds up the numbers that are circled. The total should be between 8 and 40. A score of 30 or above would indicate good leader-member relations, while a score of below 25 would reflect a poor relationship with group members.

Remember to stress that leader-member relations are the most important single factor in affecting situational control. If the leader has good group relations, the situation generally will be either high or moderate in control.

TASK STRUCTURE

Generally, leaders don't think of the job itself as influencing their control over the leadership situation. However, this is indeed the case. Consider, for example, the foreman in charge of a construction crew. He may say to the group, "I guess they want us to build a storage shed someplace around here, so let's see what we can do."

In effect, he is telling the crew that he doesn't know exactly what to do and invites them to have their say, or to argue about the nature of the shed and where it might be built. The same foreman will get no arguments from the crew if he has a blueprint in his hand which tells him exactly what kind of a storage shed is wanted and where and how it is to be built.

Even more importantly, the job "to build a shed..." may later be criticized by the foreman's boss for being built the wrong way or in the wrong spot. There is no such uncertainty when the blueprint specifies the location and method of building.

Being told exactly what to do and how to do it relieves the leader of the responsibility for making these decisions. It tells the group that the leader knows exactly what to do and that the leader has the backing of the boss and the organization. And having clearly-defined goals and procedures gives the leader greater control over whether the job is done "right."

The method of "doing things by the numbers" may not always be most efficient, but it is the equivalent of the blueprint, as is the standard operating procedure (SOP). In these instances the leader knows the job will get done right if the rules are followed.

It is quite a different situation in jobs where the nature of the task simply does not allow a step-by-step procedure, and where the outcome may not be known until well after the task is completed, or in some cases many years later.

Consider the job of a public relations officer. He or she gets paid for being creative and for supervising creative people. If this person is asked to design a mine safety campaign, the staff members will probably be called together to brainstorm the problem. Each member of the staff may have some good ideas and some ideas which may bomb out. There is no way to tell for sure which will succeed and which will fail--and the outcome may not be known for months or years after the job is completed.

Likewise, the leader of a company research team has a very unstructured task. It is extremely difficult to predict the line of research which will turn out to be a blind alley, and the approach which will lead to a successful outcome. Every wrong turn carries a high cost in time and money. There are few rules to guide the researcher, there are few "best" procedures, and the risk of failure is high. As a result, it will be hard for the leader to convince his team members that he is right and they are wrong. In addition, the members of the staff constantly have to use their own judgments, and the leader cannot supervise and control the team's creativity. The leader of a highly unstructured task can exercise only nominal control over the work group and the way the task is performed.

There are, of course, innumerable ways to describe and classify tasks. One of the most important, as far as the leader is concerned, is the degree to which the task is "structured;" that is, the degree to which it is clear exactly what is to be done, and how it is to be done.

How structured the task is can be determined by answering the following four general questions:

1. Is the goal or outcome of the task clearly stated or known? To what degree are the tasks or duties which typically make up the job clearly known to the people performing it (for example, repair this truck engine so that it runs again, get this building painted white, etc.)?
2. Is there only one way to accomplish the task? If the problems encountered in the job can be solved only one or two ways, the task is more structured than if a wide variety of procedures are possible. For example, if a clerk is told to fill out a form according to the instructions, there is only one way to proceed. However, a manager whose job calls for developing a new training policy has any number of ways to do it. Therefore, this job is low in task structure.

3. Is there only one correct answer or solution for the completed task? If there is only one "correct solution" for a task, it is more highly structured than if many solutions are possible. Some tasks, like roof bolting, may have only one correct outcome. Others have many: for example, developing a sales strategy or designing a safety display.
4. Is it easy to check whether the job was done right? We have to consider the degree to which is possible to determine the "correctness" of the leader's performance of the job. If he or she builds a structure, we can check the dimensions of the building against the specifications on the blueprint. If the task is to assemble a machine, we can determine how well it performs. If the leader estimates the number of people who live in a district, the estimate can be checked against the latest census data. These kinds of jobs are highly structured.

In some jobs, however, it is very difficult to know whether the outcome was good or bad, whether the leader's group performed well or poorly. Thus, the management staff may agree that a cut in training time will be good for morale, "other things being equal," but it may never be possible to establish if they were right.

It is important for leaders to be able to check on progress as the work goes forward. Are there milestones and checkpoints along the way? Can the leaders see whether they are making right or wrong decisions? In some jobs this is possible. The foreman in charge of the motor pool can check the service manuals to see whether various requirements are met, a maintenance supervisor can conduct various tests and go over check lists at important points in the process.

Other jobs, however, do not allow this. Consider, for example, the leader whose unit is preparing a training film. There is no way to tell whether the trainees will benefit from the film until the film is already made. Think about the chief mining engineer who will not know the success of his production strategy until it may be too late to change it. Again, these are less structured tasks.

The Task Structure Scale which follows has been designed to reflect these four aspects of task structure. Part I consists of ten questions with response choices of "Usually," "Sometimes," or "Seldom," and each choice is assigned a value ranging from 0 to 2. Part II of the scale will be discussed later.

Most of the questions are fairly straightforward and concern the four factors discussed above. A couple questions, however, may cause some difficulty. Question 2, for example, asks, "Is there a person available to

advise and give a description of the finished product or service, or how the job should be done?" This can be anybody from the boss to a senior subordinate or even the person who had the job before. The important point is not who the person is or the position in the chain of command, but whether there is someone who can give fairly detailed instruction.

Question 8 may be somewhat confusing by asking, "Is there a generally agreed understanding about the standards the particular product or service has to meet to be considered acceptable?" The standard for repairing an engine is whether it will run correctly after the repair work is done. The standard for training new employees in how to clean and care for a piece of machinery is clearly specified.

On the other hand, planning a program to improve company relations in the community is rather open-ended, and there is a great deal of leeway even where particular standards for the program are spelled out. In other words, is it clear when the task has been acceptably accomplished, or might reasonable people arrive at a quite different judgment or conclusion as to whether the job was done right?

Some students may have trouble with Question 9, which is similar to the above. It asks, "Is the evaluation of this task generally made on some numerical basis?" When the task has been completed, can it be rated by different people with good agreement on a fairly standardized basis? For example, productivity measured in tons per man hour, or an engine inspection check list, both involve standardized systems for evaluating the task. Rating morale of a crew as excellent or poor is not standardized.

Task structure is probably the most difficult score of the three components of situational control. The overall job of most first-level supervisors is seen as quite structured, while the job of the mine manager might be seen as quite unstructured. In theory, task structure refers to the individual's total job. In practice, however, this technique is useful to the leader only if it is brought down to a day-to-day level.

When the student learns to analyze task structure, it should be taught on the basis of specific tasks or jobs which are assigned through the day or week. For example, in the morning the crew leader may be assigned the task of running a safety drill. This would be a very structured task. In the afternoon, the same crew leader may be asked if he and his crew can figure out a way of getting a truck out of the muck--a much less structured task. In other words, task structure changes as the job assignments change, and to make this useful for the trainee, the student should be taught to analyze task structure as frequently as possible.

TRAINING AND EXPERIENCE

Two other variables impact on the individual's situational control and specifically on task structure. These are training and experience.

Effects of Leadership Experience on Task Structure. When we speak of a mine manager with adequate leadership experience, we mean that he has been a leader for enough time to learn how to cope with the various problems which usually confront people in that position. Experience is on-the-job training, and it usually goes along with some coaching by others who are involved with the leader.

A new leader is likely to get some hints from the boss and may get some help also from the person who was in the job before, and from others in similar positions. The leader usually also gets some guidance from the people supervised. They may say that "we always did it this way before" or "you'll find that this way works better."

The highly experienced manager will have been faced time and time again with similar problems. The work sheets didn't get filled in today, two of the seven people in your section are sick again. Sam and Margaret got into a fight over who made the mistake on the last assignment, and Walt, the new utility man, is giving you a lot of lip every time you try to tell him something.

Gradually, over time, leaders will learn how to handle these problems. They will no longer get flustered because they've been through all this before. They will know that Walt needs to be ignored, while a discussion with Sam and Margaret is in order to straighten out their problem. Gradually, leaders also find that their relations with group members become better, that the group has learned to adjust to the leader's idiosyncracies and vice versa.

What all this really means is that the leader has gotten to know the job, and the outcome is more predictable. The job seems more structured, more clear, requiring fewer new solutions since there are fewer new problems which arise; and the situation has stabilized. In other words, experience has made the task more structured, more predictable, less anxiety arousing, and consequently it gives more control in the sense in which the term is used in this program.

Effects of Training on Task Structure. Leadership training and experience are closely related. Training is the compressed experience of others which is presented to the trainee in an easily digested form. Its main purpose is to make it unnecessary for the trainees to figure everything out on their own. Leaders should learn what others have done, what has worked out and what has not worked. By teaching the leader what has worked for others and providing practice in handling various situations, we are in effect

making the job more structured. There is less doubt about how to perform the task. More ways are suggested for telling whether things are proceeding right or what is to be done to fix them. Most training will make the individual more competent in the job, and thus training provides more structure.

Before we continue, we want to consider one further problem which is important for understanding the effects of leadership training and experience. Some tasks and jobs can be greatly improved by training or by experience. Others do not benefit from doing the job again and again, or from getting specific instructions on how to do the job. No matter how much we might train an individual to become an inventor, being inventive is an ability or knack which cannot be learned. Likewise, you cannot really teach a person how to be a brilliant labor negotiator, although you can teach the fundamentals.

Other types of tasks can be readily taught. It is relatively easy to teach an individual how to hand cable in a drift, or how to direct an assembly operation. Generally speaking, the more structured the task, the more easily it can be taught, and the more easily we can train a leader to direct it. The less structured the task, the more judgment is required, or the more it depends upon the leader's creativity or ability to encourage creativity in others. Unstructured tasks, therefore, are harder to teach, and leaders will be less likely to benefit from training in these tasks.

Training, basically, is a method for making tasks more structured. You provide rules and routines which the person otherwise might not know, and you develop methods which will assist the leader in doing the job without having the responsibility of creating them.

Measuring the Effects of Training and Experience. Since training and experience affect task structure, we must adjust the task structure score to reflect this factor. The task structure ratings on Part I of the scale are based on the assumption that the leader has enough experience and/or training to recognize and make use of the structure in the task. For leaders without sufficient training and experience, points are subtracted from the task structure score. Part II provides two additional scales to measure the amount of training and experience.

Since experience seems to be a more powerful influence on task structure, it is assigned more points. However, the rating of training and experience calls upon leaders to use some judgment. If leaders do not know or cannot guess the amount of training and experience, they should mark it as "moderate."

As we said before, jobs which are extremely unstructured are less affected by experience and training. Therefore, a job which scores below 6 on Part I of the Task Structure Scale, requires no adjustment for experience in training.

Note that we are talking here about relevant training and experience. For example, if a mine foreman works in a rock mine, army training in the use of explosives would be relevant. Training in typing would not be relevant. The same goes for experience. Experience which is related to the present job, even if indirectly, should be counted.

There is no way to say in advance, for every leadership position, which training and/or experience is important and which is not. Leaders must use their knowledge of each unique situation in making these ratings. Most leaders know enough about their own jobs and the jobs of their subordinates to do this.

You might find the following guidelines helpful. If a leader is considered an old hand on a job so that others come to this person for help and advice, the individual has had a high degree of experience or training. If this person must often ask others for help and advice, he or she is relatively inexperienced or untrained.

Look over the task structure scale, and become familiar with its use. Pay particular attention to Part II, the effects of training and experience on task structure for which points are deducted from the total score. The scale scoring is as follows: a score of 14-20 would indicate a highly structured task, a score between 7 and 13 would indicate a moderately structured task, and a score below 6 would be very unstructured.

POSITION POWER

It may come as a surprise to many people that power is the least important of the three variables in analyzing situational control. Generally, people feel "If I have enough power, I can make anyone do what I want." But that is really not the case. What good is a lot of power if the leader doesn't know what to do or how to do it (low task structure)? And, if the leader's group doesn't provide support (poor leader-member relations), a lot of power isn't going to help much. Although power is important to the leader's success, it is not as important as the other two factors.

One obvious way a person gets power is by being appointed to a position of leadership. This gives the leader certain rights, duties and obligations, including the use of rewards and discipline which help to enforce orders or directives. This is the most visible of all means for "giving" a person power. Let's take a closer look at the power people are given because of their position in the management.

Leadership positions vary, of course, in how much power they confer on the occupants. Some leaders can assign jobs or transfer subordinates from one job to another, from one section to another, and from one city to another. Some organizations allow the leader to give certain punishments. These may

TASK STRUCTURE RATING SCALE — PART I

Consider the last job assignment you were given as a leader before coming to this course. Describe the task on the following scale (Part I and Part II). Circle the number which best describes how you see your job.

| | Usually True | Sometimes True | Seldom True |
|---|-----------------|-------------------|----------------|
| IS THE GOAL CLEARLY STATED OR KNOWN? | | | |
| 1. Is there a blueprint, picture, model or detailed description available for this job? | 2 | 1 | 0 |
| 2. Is there a person available to advise and give a description of the finished product, service, or how the job should be done? | 2 | 1 | 0 |
| IS THERE ONLY ONE WAY TO ACCOMPLISH THE TASK? | | | |
| 3. Is there a step-by-step procedure or a standard operating procedure which indicates in detail the process which is to be followed? | 2 | 1 | 0 |
| 4. Is there a specific way to subdivide the task into separate parts or steps? | 2 | 1 | 0 |
| 5. Are there some ways which are clearly recognized as better than others for performing the task? | 2 | 1 | 0 |
| IS THERE ONLY ONE CORRECT ANSWER TO SOLUTION? | | | |
| 6. Is it obvious when the task is finished and the correct solution has been found? | 2 | 1 | 0 |
| 7. Is there a book, manual, or job description which indicates the best solution or the best outcome for the task? | 2 | 1 | 0 |
| IS IT EASY TO CHECK WHETHER THE JOB WAS DONE RIGHT? | | | |
| 8. Is there a generally agreed understanding about the standards the job has to meet to be considered acceptable? | 2 | 1 | 0 |
| 9. Is the evaluation of this task generally made on some numerical basis? | 2 | 1 | 0 |
| 10. Can the leader and the group find out how well the task has been accomplished in enough time to improve future performance? | 2 | 1 | 0 |

SUBTOTAL _____

TASK STRUCTURE RATING SCALE — PART II
TRAINING AND EXPERIENCE ADJUSTMENT

****NOTE: DO NOT ADJUST JOBS WITH TASK STRUCTURE SCORE OF 6 OR BELOW.**

- a. Compared to others in this or similar positions, how much training has the leader had?

| | | | |
|-----------------------|-------------------------|----------------------------------|-----------------------------|
| <u>3</u> | <u>2</u> | <u>1</u> | <u>0</u> |
| No training at all | Very little training | A moderate amount of training | A great deal of training |

- b. Compared to others in this or similar positions, how much experience has the leader had?

| | | | |
|-------------------------|---------------------------|------------------------------------|-------------------------------|
| <u>6</u> | <u>4</u> | <u>2</u> | <u>0</u> |
| No experience at all | Very little experience | A moderate amount of experience | A great deal of experience |

Add lines a and b of the training and experience adjustment, then subtract this from the subtotal on Part I.

Subtotal from Part I

Subtract Training and Experience Adjustment

TOTAL TASK STRUCTURE SCORE

range from official and unofficial reprimands, to fine, or even physical punishment (as, for example, doing twenty push-ups or extra work). The leader's official power to reward may include giving extra time off, or giving a subordinate more pleasant job assignments. The leader may also have the right to reprimand a subordinate or hand out the more unpleasant tasks.

On the other extreme are the leadership positions in which the leader has practically no official power to punish or reward. The chairperson of a committee can only try to persuade the members or to praise them when they do a good job.

Between these two extremes of "total power" to hire and fire, and virtually "no power" as in the committee chairmanship, is a wide range of authority. Most supervisors have the implicit right to praise or give subordinates a "chewing out," to "lean on people," or to "pat them on the back." Many positions permit the leader to assign tasks and to decide who will work with whom.

In most mining companies, managers and foremen have very clearly defined position power. But it's really not as simple as that. Although the authority of a mine supervisor, for example, is fairly well spelled out, many other factors affect that individual's ability to use his power.

First, it is very important to remember that power and authority are not just "given" to the leader. No leader has absolute authority. All authority and power derive from the willingness of subordinates to accept the leader's right to lead. Leadership is really an implied contract. Subordinates do what they are asked because in return they obtain certain satisfactions and rewards. When leaders behave in an arbitrary fashion, they are likely to lose the support of the group because they are not holding up their end of the contract. In mining, it goes beyond that to the point where the subordinates' lives may depend on the orderly operation of their group. Problems most frequently occur when subordinates consider the rules to be unfair. The group morale tends to break down and performance suffers.

Second in importance is the support and backing the leader receives from the boss. The foreman whose boss stands behind him and follows through on his recommendations will have considerably higher position power than a foreman whose boss disregards his feelings and opinions. This is particularly true, because this kind of information quickly filters down through the grapevine and subordinates can see that their leader is not held in very high regard by the senior members of the organization.

Also important is the leader's job knowledge. If the leader knows the jobs of the group members, the leader would have more power because he or she wouldn't be dependent on the subordinate. For example, if the mine manager has only one geologist, or if the office manager has only one computer programmer, the leader can't lean too heavily on these individuals because of their specialized knowledge and abilities. On the other hand, if the manager knows how to do the job and can do it if necessary, he has more power because he will not have to rely on the individuals with special skills.

Job knowledge also ties in with the final important point related to position power, that is, whether the leader is responsible for evaluating performance. If it is the leader's job to evaluate performance, the individual will have significantly higher position power than if it is not part of the job.

The Position Power Scale shown on the next page was designed to incorporate these aspects of power. The scale consists of five questions with a total possible score of 10. A score on this scale of 4 or less would indicate low position power, a score between 5 and 7 would indicate moderate power, while a score of 8 or above would indicate high position power.

COMPUTING SITUATION CONTROL

We discussed at the beginning of the Module that situational control can be classified as high, moderate, and low. This classification is based on the three variables: leader-member relations, task structure, and position power.

To translate the scores into situational control classifications involves summing the totals for each scale. This is accomplished using the scale on the following page.

Once trainees understand the three variables and the three classifications, they can easily place their job into one of the categories. The chart below shows roughly how this is accomplished:

| | <u>High Control</u> | <u>Moderate Control</u> | <u>Low Control</u> |
|-------------------------|---------------------|-------------------------|--------------------|
| Leader-member Relations | | | |
| Task Structure | | | |
| Position Power | | | |

POSITION POWER RATING SCALE

Circle the number which best represents your answer.

1. Can the leader directly or by recommendation administer rewards and punishments to his subordinates?

2
can act directly or
can recommend with
high effectiveness

1
can recommend but
with mixed results

0
NO

2. Can the leader directly or by recommendation affect the promotion, demotion, hiring or firing of his subordinates?

2
can act directly or
can recommend with
high effectiveness

1
can recommend but
with mixed results

0
NO

3. Does the leader have the knowledge necessary to assign tasks to subordinates and instruct them in task completion?

2
YES

1
sometimes or in
some aspects

0
NO

4. Is it the leader's job to evaluate the performance of his subordinates?

2
YES

1
sometimes or in
some aspects

0
NO

5. Has the leader been given some official title of authority by the organization (e.g., foreman, department head, platoon leader)?

2
YES

0
NO

TOTAL _____

SITUATIONAL CONTROL SCALE

Enter the total scores for Leader-Member Relations, Task Structure, and the Position Power in the spaces below. Add the three scores together and look up the total on the scale below to find your overall situational control.

- 1. Leader-Member Relations Total _____
 - 2. Task Structure Total _____
 - 3. Position Power Total. _____
- GRAND TOTAL _____

| | | | |
|-------------------------------|--------------|------------------|-------------|
| TOTAL SCORE | 51-70 | 31-50 | 10-30 |
| AMOUNT OF SITUATIONAL CONTROL | High Control | Moderate Control | Low Control |

As mentioned earlier, the Situational Control Scales provide a useful training device. However, trainees should be encouraged not to rely on the scales in their everyday use of Leader Match training. Stress that it is important to become familiar enough with the three factors and classifications so that the situation can be analyzed in a couple of minutes. This is not difficult. It only takes a little practice to become competent in analyzing situational control.

On the following pages is the Teaching guide for Module II. Remember to read the transparency aloud, and use the italicized material to supplement your lecture on situational control.

TEACHING GUIDE FOR MODULE II: ANALYZING YOUR WORK SITUATION

TRANSPARENCY 2-1:

As we said in the beginning, effective leadership depends on two things: the individual's leadership style and situational control. What is situational control, and how do we measure it?

TRANSPARENCY 2-2:

"Situational control is your influence as a leader when it comes to getting the job done. How much control do you have over your leadership situation? Can you be sure that the decisions you make as a leader will have the desired outcome? How much control do you have over whether your orders will be correctly followed to accomplish the task?

"Another way of looking at it is how easy or hard is it to be a leader in the situation? How stressful and challenging is the job to be done? Can you be sure that your actions will result in getting the work done correctly?

"If you know what to do and how to do it, if your group members are helpful and careful about how they do their job, you can be relatively certain that your mission will be accomplished.

"In other words, how much control do you have over the situation in which you have to function as a leader? We call this Situational Control."

TRANSPARENCY 2-3:

"To analyze your work situation, break it down into three categories of situational control. In a high control situation you have a lot of influence as the leader and can be fairly certain the job will be done right. Low control situations give you less certainty of success and are, therefore, more challenging since you have less influence. And moderate control situations fall somewhere in between.

"A word of caution is in order about the term situational control. It is important that you understand that the term 'low control' does not necessarily mean a bad situation. In fact, some people thrive on situations in which there is considerable stress and uncertainty. They like risky problems. If there's not a crisis every day, they may create one. It is also important to realize that 'high control' doesn't mean that you will always be successful. Some leaders get bored or careless in these situations because they are no longer challenged. In other words, don't think of the terms high and low as meaning good or bad, rather think about them in terms of the amount of control the leader has in the particular situation, the certainty the leader has over whether the directives he gives will have the desired outcome.

T 2-1

YOUR EFFECTIVENESS AS A LEADER DEPENDS ON TWO THINGS:

1. YOUR LEADERSHIP STYLE
2. SITUATIONAL CONTROL

WHAT IS SITUATIONAL CONTROL?

- * SITUATIONAL CONTROL IS THE AMOUNT OF CONTROL AND INFLUENCE YOU HAVE AS A LEADER WHEN IT COMES TO GETTING THE JOB DONE.
 - A. HOW HIGH IS SITUATIONAL CONTROL IN WHICH THE LEADER MUST PERFORM?
 - B. HOW SURE ARE YOU THAT WHAT YOU DO AS THE LEADER WILL RESULT IN GETTING THE JOB DONE RIGHT?
 - C. CAN YOU BE CERTAIN THAT THE DECISIONS YOU MAKE AS A LEADER WILL HAVE THE DESIRED OUTCOME?

- * WHEN YOUR TASK IS CLEAR AND YOUR FOLLOWERS ARE HELPFUL, WHEN YOU KNOW WHAT TO DO AND HOW TO DO IT, YOU CAN BE RELATIVELY CERTAIN THAT YOUR MISSION WILL BE FINISHED.

LEADERSHIP SITUATIONS CAN BE CLASSIFIED AS:

- * **HIGH CONTROL** - A SITUATION IN WHICH YOU HAVE A LOT OF CONTROL AND CAN BE CERTAIN THE JOB WILL BE DONE RIGHT.

- * **MODERATE CONTROL** - A SITUATION IN WHICH IT IS SOMEWHAT HARDER TO BE THE LEADER SINCE YOU DON'T HAVE CONTROL OVER ALL PARTS OF YOUR JOB. YOU MAY BE LESS SURE THAT THE JOB WILL BE DONE RIGHT.

- * **LOW CONTROL** - A SITUATION IN WHICH IT IS OFTEN DIFFICULT AND FOR SOME PEOPLE MORE CHALLENGING TO BE A LEADER BECAUSE YOU HAVE VERY LITTLE CONTROL OVER WHETHER THE JOB WILL BE DONE RIGHT.

"How do you know whether your situation is high, moderate, or low in control?"

TRANSPARENCY 2-4:

"Three factors measure situational control. These are listed in order of their importance. The most important is leader-member relations. That is, the degree to which you can count on your group members to do their part.

"Second in importance is task structure, the degree to which it is clear what the job is and how to do it. Third and less important is position power, the degree to which you can reward and discipline subordinates.

"Why would your power and authority be the least important of the three? (See if the group has an answer; if not, continue.) Because it won't do you any good to have all the power in the world if you don't know what to do or how to do it. And if your group members don't like you, they can always figure out a way to mess you up regardless of how much power you have. For example, they can just move at a more slower pace, or fail to warn you of a potential problem.

"Therefore, your relationship with the group is the most important, task structure is second in importance, and position power is third."

TRANSPARENCY 2-5:

"How do these three variables determine situational control? (Read the transparency out loud to the group.) Let's look at a videotape which illustrates these three variables."

Videotape - Module II. You are now ready to show the videotape for Module II. Remember that there are three practice vignettes at the end of the tape. These should be used as a final exam at the end of this session to determine if the group is ready to proceed to Module III. As the music increases, you should be aware that this is the conclusion of the instructional part of Module II. Do not rewind the tape.

After the tape, give the students an opportunity to ask questions and discuss what they have seen. It is important to go over the three variables in some detail and let the students apply them to their own leadership situation. This is described below.

Ask the class what the most important variable is in analyzing situational control. Hopefully, someone will give you the correct answer: leader-member relations. Ask if anyone remembers from the videotape what the two factors are that you consider when analyzing leader-member relations.

THERE ARE THREE VARIABLES WHICH WE USE
TO MEASURE SITUATIONAL CONTROL:

(LISTED IN ORDER OF IMPORTANCE)

- * * * LEADER-MEMBER RELATIONS - THE DEGREE TO WHICH YOU CAN
COUNT ON YOUR GROUP TO DO
THEIR PART.
- * * TASK STRUCTURE - THE DEGREE TO WHICH IT IS CLEAR TO YOU
WHAT THE JOB IS AND HOW TO DO IT.
- * POSITION POWER - THE DEGREE TO WHICH YOU HAVE THE AUTHORITY
TO REWARD AND DISCIPLINE SUBORDINATES.

HOW DO THESE VARIABLES DETERMINE SITUATIONAL CONTROL?

HIGH CONTROL SITUATIONS ARE THOSE IN WHICH (A) YOU CAN DEPEND ON THE GROUP TO DO THEIR JOB, (B) YOU KNOW EXACTLY WHAT TO DO AND HOW TO DO IT, AND (C) YOU HAVE THE BACKING OF THE ORGANIZATION TO PUNISH AND REWARD GROUP MEMBERS.

MODERATE CONTROL SITUATIONS ARE THOSE IN WHICH (A) YOU CAN DEPEND ON THE GROUP, BUT YOU DON'T KNOW EXACTLY WHAT TO DO OR HOW TO DO IT, AND YOU HAVE NO SUPPORT FROM YOUR BOSS IN REWARDING OR PUNISHING SUBORDINATES.

OR

A SITUATION IN WHICH YOUR GROUP DOESN'T LIKE YOU AND WON'T COOPERATE, BUT (B) YOU KNOW EXACTLY WHAT TO DO AND HOW TO DO IT, AND (C) YOU HAVE THE BACKING OF THE ORGANIZATION.

LOW CONTROL SITUATIONS ARE THOSE IN WHICH YOU HAVE A DIFFICULT GROUP, IT'S NOT CLEAR EXACTLY WHAT YOUR TASK IS OR HOW TO DO IT, AND YOU HAVE NO SUPPORT FROM YOUR BOSS TO REWARD OR PUNISH.

TRANSPARENCY 2-6:

"Leader-member relations is the most important variable in measuring situational control. If you have good leader-member relations, you will have considerably more control over your situation than if you have poor leader-member relations. In fact, if you have a good relationship with your group, you are likely to be in either a moderate or high control situation.

"There are two factors to consider when thinking about leader-member relations. These are whether your group is supportive of you and whether the group members get along well with each other."

TRANSPARENCY 2-7:

"There are some clues for evaluating your relationship with your group. Ask yourself the following questions (read from the transparency).

"Be aware that we all tend to overrate our leader-member relations. We all like to think of ourselves in a positive light. Try to avoid the tendency to overestimate your leader-member relations. Be honest with yourself--you can't improve unless you can look at the relationship with your subordinates realistically."

Give the group the opportunity to analyze leader-member relations on some practice exercises. Although most of these are fairly obvious, they should give you a starting point for group discussion. Read the example out loud:

EXAMPLE #1:

You are the foreman at the repair shop. If you don't watch your men all the time, they are all goofing off, and nobody is working. Once you get them started, if you turn your back, they start fooling around again and loafing on the job. What is your estimate of leader-member relations?

ANSWER: Poor leader-member relations.

Ask the class why the foreman has poor leader-member relations. The class should point out that the group doesn't support the leader. There is no information provided as to how the group members get along with one another.

EXAMPLE #2:

You have two crews to prepare the site for installing a new hoist. Just after you get to the site, you are called back the general foreman. You tell the men roughly what the job is and then rush off.

* LEADER-MEMBER RELATIONS IS THE MOST IMPORTANT VARIABLE
IN LEARNING ABOUT YOUR SITUATIONAL CONTROL.

THERE ARE TWO FACTORS TO CONSIDER:

1. YOUR RELATIONSHIP WITH GROUP MEMBERS.
2. THE GROUP MEMBERS RELATIONSHIP WITH EACH OTHER

CLUES FOR UNDERSTANDING YOUR LEADER-MEMBER RELATIONS

1. YOUR RELATIONSHIP WITH GROUP MEMBERS:

- * ARE THE GROUP MEMBERS CAREFUL ABOUT HOW THEY DO THEIR JOBS?
- * DO YOUR GROUP MEMBERS SEEM FRIENDLY AND EAGER TO PLEASE YOU?
- * DO YOUR GROUP MEMBERS WARN YOU OF POTENTIAL TROUBLE?
- * CAN YOU DEPEND ON THEM TO DO A JOB WITHOUT YOUR LEANING OVER THEIR SHOULDERS?
- * DO THEY FEEL THEY CAN TALK TO YOU WHEN THEY HAVE A PROBLEM?

2. THE GROUP MEMBERS RELATIONSHIP WITH EACH OTHER:

- * IS THERE CONFLICT WITHIN THE GROUP?
- * DO GROUP MEMBERS COMPETE WITH EACH OTHER?
- * IS THERE HOSTILITY AND TENSION AMONG THE GROUP MEMBERS?
- * DO YOU SPEND MUCH OF YOUR TIME KEEPING THE PEACE?
- * DO GROUP MEMBERS PULL TOGETHER AS A TEAM IN DOING THE JOB?
- * DO THE GROUP MEMBERS TEASE EACH OTHER AND KID AROUND A LOT?
- * DO THE GROUP MEMBERS HANG OUT TOGETHER?

When you return, the hose and cables are correctly located, and the first crew is helping the other finish up their job. What is your estimate of leader-member relations?

ANSWER: Good leader-member relations.

Ask the class why leader-member relations are good. The group should point to two factors: (1) the group supports the leader without direct supervision, and (2) the group works well together as can be seen by the first team helping the second complete the task.

EXAMPLE #3:

You are the maintenance foreman on your shift. Just before you were to take the mechanics down to the shop for maintenance work, you had to see the mine manager. You put Smith, one of your lead men, in charge to take the men down. When you got there 15 minutes later, all the crews were working on their vehicles and had completed part of the required maintenance. While you were checking on how the work is going, two mechanics, Cranston and Frankel, come up and suggest a way to make one of the tasks more efficient. What is your estimate of leader-member relations?

ANSWER: Good leader-member relations.

Again, lead a discussion of why. These exercises are very important because the more the students practice analyzing the situation, the more likely they are to remember the two factors for evaluating leader-member relations. Here the group works well without direct supervision by the leader and offer helpful suggestions on how to get the job done. This shows that the group strongly supports the leader.

EXAMPLE #4:

You are the area foreman preparing the site for blasting. You make the job assignments and then go away to check with the general foreman about when the new miners will arrive. When you return, Adams and Newman are asleep. Johnson complained about a backache and was sent in. Anderson and Dawson are arguing. Only Baily and Reynolds are working. What is your estimate of leader-member relations?

ANSWER: Poor leader-member relations.

Here the trainees should point to the lack of support the group gives to the leader and the tension between group members.

Ask the class to think about the relationship they have with their own subordinates. Have them open their workbooks and look at the leader-member relations scale they completed at the beginning of Module I. Discuss their scale scores as follows:

"If you scored 30 or above, you have good leader-member relations with your subordinates. If you scored between 25 and 30, you might consider your leader-member relations as moderate--in other words, not too good, but not too poor either. If you scored below 25, you have poor leader-member relations.

"If you have poor leader-member relations, it may be necessary for you to work on improving the situation. This will be discussed in considerable detail in the next class. Remember leader-member relations is the most important variable.

"What is the second variable in analyzing situational control?"

(Hopefully, someone will give you the correct answer.)

TRANSPARENCY 2-8:

"Although task structure is not as important to situational control as leader-member relations, it is more difficult to measure. There are four things to consider when analyzing task structure.

"First, is the goal clearly stated or known to you? Do you know what is expected of you and your group? For example, if I tell you to take your crew and work on cleaning the area, is this goal clearly stated? Not very. What if I tell you to take your crew to the parking lot north of Building 15? Two people will check on the parking signs so they are in place and readable, and two people will wash the mud off the end of the building. Is that a clearly defined task? Of course, there is a big difference between the two.

"The second point to consider is whether there is only one way to accomplish the task. Suppose you are taking your crews through safety training. Is there more than one approved way to bolt a roof? No, there is only one approved way to accomplish this task. Suppose you are on a mine evacuation exercise. Is there more than one way to accomplish this task? Yes, this is a less structured assignment.

"Going along with point two is number three. Is there only one correct answer or solution for the task? There is only one way to disassemble and assemble a drilling machine. There are several ways you could lay out a new mine.

TASK STRUCTURE IS SECOND IN IMPORTANCE
IN MEASURING SITUATIONAL CONTROL

FOUR THINGS TO CONSIDER:

1. IS THE GOAL CLEARLY STATED OR KNOWN TO YOU?
2. IS THERE ONLY ONE WAY TO ACCOMPLISH THE TASK?
3. IS THERE ONLY ONE CORRECT ANSWER OR SOLUTION FOR THE TASK?
4. HOW EASY IS IT TO CHECK WHETHER THE JOB WAS DONE RIGHT?

"Finally, how easy is it to check whether the job was done right? How much feedback do you get? Do you find out about your performance in enough time to make necessary improvements? You know immediately if the crew members are assembling the jack leg drill wrong because it won't go together or it won't work. Suppose you are teaching a course on explosives--in that instance you might not know until much later, or never, how well you did the job. For example, in teaching Leader Match training, I may never know if you learned anything you could use in your future leadership jobs. This task is lower in structure.

"All these things are important to task structure. If you have a clearly stated goal, only one way to proceed, and you get immediate feedback, the task is likely to be highly structured. If you get vague directions for a job which could be accomplished any number of ways, and no one is available to tell you whether you are doing it right, you would have an unstructured task.

"Consider the examples we saw in the videotape. In the case the foreman was told to 'develop ideas to improve safety.' Was this a clear goal? No, only a general statement. There was no information as to the kind of ideas, when they should be ready, or how the ideas should be developed. The foreman could have proceeded in a number of different ways and come up with a number of different tasks. And there would be no immediate feedback. They wouldn't know until after the event whether it had been successful.

"On the other hand, the task of checking equipment inventories according to specific guidelines was a very clearly defined task, with only one way to proceed. Immediate feedback could be provided by the safety engineer."

At this point, rather than giving various examples of tasks in mining which the class could analyze, we recommend that you have the class suggest some typical tasks they have been assigned at different times and analyze them according to these four points. (It is necessary that they remember all four points so that they can clearly differentiate between structured and unstructured tasks.)

After you feel the students have a clear understanding of task structure, you are ready to move on. You should emphasize the fact that structure will change frequently. A foreman and crew may be given a highly structured task in the morning such as cleaning a drift, and an unstructured task in the afternoon.

As you may recall from the theoretical discussion, there are two other factors which affect task structure. These should be discussed at this time. First, see if the class can remember what they are from the videotape, then return to the transparencies.

TRANSPARENCY 2-9:

"Two other factors affect task structure. These are training and experience. Experience is really 'on the job' training and is 'the experience of others' taught in a classroom. Thus, both factors have a similar effect on task structure.

"If you have had training and experience, a task will be more structured than if you had never heard of it before. For example, a task like cleaning a pump is fairly structured. But if it's your first time out, it may seem somewhat unstructured to you. After you've gotten a little experience or some training from someone else, it will become structured. Or consider the example of blast site preparation. If you've been given this assignment before, it is a highly structured task because of your experience. But the first time you're sent out to do blast site preparation you may not know where to begin or exactly what to do. Remember, if you do not have training or experience, a task will seem less structured to you."

Have the students turn to the Task Structure Rating Scale, Part I and II, in their book. Discuss the questions on the scale and how points were subtracted for lack of experience and/or training. Interpret their scale scores as follows:

"If you scored 14 or above, you consider the task you rated as highly structured. If you scored between 7 and 13, you consider that task to be moderate, and if you scored 6 or below, you saw the task as unstructured. Remember that task structure changes as your assignments change.

"What is the third variable in evaluating situational control?"

(See if someone in the class remembers; then, continue on.)

TRANSPARENCY 2-10:

"Position power is the third variable we consider when analyzing situational control. There are several things to think about in relation to the amount of power you really have. Although all of you have some authority by virtue of your position in your organization, there are many things that affect your use of that power and authority.

"As you saw in the videotape, one important factor which affects your position power is your relationship with the boss. If your boss is supportive and backs you up, you have considerably more power than if you boss doesn't act on your recommendations or leaves you to flounder.

TWO OTHER FACTORS ARE IMPORTANT TO TASK STRUCTURE:

1. How MUCH TRAINING HAVE YOU HAD?
2. How MUCH EXPERIENCE HAVE YOU HAD?

EXPERIENCE IS ACTUALLY "ON-THE-JOB" TRAINING.

TRAINING IS "THE EXPERIENCE OF OTHERS" TAUGHT IN CLASS.

EXPERIENCE AND TRAINING INCREASE THE STRUCTURE OF THE TASK. EVEN A STRUCTURED TASK CAN BECOME LOW IN STRUCTURE WITHOUT EXPERIENCE AND/OR TRAINING IN HOW TO DO THE JOB.

POSITION POWER IS THE THIRD VARIABLE
IN MEASURING SITUATIONAL CONTROL

FACTS ABOUT POSITION POWER:

- * POWER IS INFLUENCED BY THE SUPPORT AND BACKING OF YOUR BOSS.
- * POWER IS INCREASED BY YOUR KNOWLEDGE OF WHAT THE VARIOUS GROUP MEMBERS HAVE TO DO---KNOWLEDGE OF THEIR JOBS.
- * POWER INVOLVES A CONTRACT BETWEEN YOUR EXPECTATIONS OF WHAT YOUR SUBORDINATES ARE TO DO AND THEIR EXPECTATIONS OF CERTAIN REWARDS AND SATISFACTIONS.
- * POWER IS HIGHER IF IT IS YOUR JOB TO CONDUCT PERFORMANCE EVALUATIONS.
- * POWER INCLUDES THE ABILITY TO HIRE/FIRE, REWARD AND DISCIPLINE SUBORDINATES.

"Your job knowledge is also important in giving you Position power. If you know how to do a job, you have more power over the individual in that position than if you have to depend on that individual to get the job done. For example, if you have only one person who can repair a milling machine, you can't afford to lean too heavily on that person, and you can't do a good performance evaluation unless you know how the job should be done.

"Is it your job to evaluate performance? If you make a formal performance appraisal, you have more power than if you can merely give someone a pat on the back. All leadership positions allow at least for some 'chewing out' or verbal reprimands and praise. And in some positions, you must make a formal evaluation of performance. Also remember, anything a person likes is a potential reward; anything a person dislikes is a potential punishment."

Ask for questions relating to position power. Then, give the group some practice exercises, and see how they would rate the individual's position power. Read the examples to the class.

EXAMPLE #1:

You have just been hired as a ventilation engineer and this is your first mine job. Before this you worked in a surface plant. The mine superintendent and mine managers know you don't know much about the job, so they make you come to them every time you want to do something. They rarely listen to your recommendations about changing things or back you up in conflicts with production foremen. How much power does the ventilation engineer have?

ANSWER: Low position power.

Lead a discussion on why the group thinks this is low position power. The obvious reason is that the boss doesn't support the engineer.

EXAMPLE #2:

You are a ventilation engineer in charge of a small section, and you've worked in that job all your career. You've been in the same mine for eight years. You just got a new boss who accepts your recommendations on almost everything. How much position power do you have?

ANSWER: High position power.

Again, lead a discussion on why this person has a lot of power. Two key points should be brought out: (1) the new boss listens to and supports the ventilation engineer, and (2) after eight years in the same mine, the engineer has considerable job knowledge.

EXAMPLE #3:

You are chairing a safety committee. Your group members are your fellow shift foremen. How much position power do you have as the leader of this group?

ANSWER: Low position power.

During the discussion, you should stress the following:

"This brings up one other point not previously discussed about position power. In a temporary leadership situation, where group members are your peers, the leader usually has much more limited power and authority. And if the leadership is temporary and rotates, the leader can't come down too hard on the group, because someone else will be the leader on another occasion. In this case the leader has to be careful in how position power is applied."

Have the students turn to the Position Power Scale in their book. Discuss the items on the scale and how they relate to the important points for measuring power, i.e., ability to reward and punish/hire and fire, job knowledge, and performance evaluation. Interpret their scale scores as follows:

"If you scored from 8 to 10 on the Position Power Scale, you see yourself as having high position power. If your score was between 5 and 7, you have moderate position power, and if you score was 4 or below, your position power is quite low. Remember, position power is the least important of the three variables in analyzing situational control.

"Now that we have discussed the three variables in some detail, let's put them together to determine whether your situational control was high, moderate, or low. We will be using the situation you described on the scales in the book that you completed during the first class.

"Turn to the Leader-Member Relations, Task Structure, and Position Power Scales in your book. Following the Position Power Scale is a page labeled 'Computing Situational Control'. To complete this scale, enter the scores you received on the Leader-Member Relations, Task Structure (Part II), and Position Power Scales in the appropriate places, and add up the total. Find that total on the chart at the bottom of the page to determine whether you evaluated that situation as high, moderate, or low in control.

"These scales have been developed to help you learn how to measure the three variables. However, we realize that it is not practical for you to spend the rest of your management career carrying around a book full of scales. After you have become familiar with the three variables which

determine your situational control, you will be able to estimate situational control without the use of the scales, although you can always go back to them to double-check your estimate, should you desire."

TRANSPARENCY 2-11:

"This is how the three variables are combined to analyze situational control. As you can see, a high control situation is one in which leader-member relations are good, task structure is high, and position power is high. An example would be a well-liked and trusted shift foreman leading a crew through a safety demonstration.

"The opposite extreme is the low control situation where leader-member relations are poor, task structure is low, and position power is low. An example would be a disliked acting foreman directing a group in trying out a new procedure for the first time.

"And moderate situations are those which fall somewhere in between. In other words a situation with good leader-member relations but an unstructured task and low position power, or else poor leader-member relations but a structured task and high position power."

CLASS DISCUSSION

At this point, you have presented the three components of situational control. Give the students one more opportunity to ask questions so that you can be sure they understand Module II. Some of the most frequently asked questions and their answers are shown below:

Question: What do you do if you see your job as moderate in terms of leader-member relations, task structure, and position power?

Answer: As you probably noticed on the chart, we gave you no rule about classifying a situation in which you scored moderate on all three variables. In this case, the situational control is likely to be moderate. A more difficult problem in interpreting moderate scores is in instances where you have high leader-member relations, high task structure, and moderate position power. In this case, you should consider the situational control as high. Position power is not as important as the two other variables, and the fact that it was a little low would not be enough to pull the situation down significantly. The same could be said for a situation in which leader-member relations were low, task structure low, and power moderate. This would be a low control situation because a modest amount of power would probably not move a situation into a moderate zone. The chart only gives you some overall guidance on how to classify jobs. In some cases you will have to use your judgment, particularly in the case of moderate scores on some of the variables.

SITUATIONAL CONTROL

| | | <u>CONTROL</u> | | |
|----------------------------|------|----------------|------|------|
| | HIGH | MODERATE | | LOW |
| LEADER-MEMBER RELATIONS | GOOD | GOOD | POOR | POOR |
| TASK STRUCTURE | HIGH | LOW | HIGH | LOW |
| POSITION POWER | HIGH | LOW | HIGH | LOW |

Question: Do relationship-motivated leaders always have good leader-member relations because they are so skilled at working with others?

Answer: No, particularly when the leader's situational control is very high. Under these conditions, these leaders may not even try to establish rapport with the group. Relationship-motivated leaders don't always have harmonious groups nor do task-motivated leaders always structure every job.

Question: Are these scales really necessary; can't we analyze situational control without spending the time to fill out a lot of paperwork?

Answer: Definitely. The scales are only useful to help you learn the technique of analyzing situational control. Once you can competently analyze situational control without them, you should stop using them. They might come in handy, however, if you move to a new job and want to double-check your evaluation of the particular situation.

If you feel the group has a good understanding of situational control, let them try the three vignettes at the end of Module II. Show the first vignette, and stop the tape. Ask the class to identify whether the situational control was high, moderate, or low, and why.

Answer for Vignette 1: This was a high control situation. Leader-member relations were good, as was indicated by the fact that unit morale was high. Task structure was high because the job assignment of installing new hydraulic pumps was clearly spelled out, and there was a troubleshooting manual available to guide the work. Position power was high because the foreman was backed by his area boss.

Answer for Vignette 2: This was a low control situation. In this instance structure was low because of unclear expectations and the informality of the group assigned to investigate safety problems. Relationships would be poor. There were several miners with differing levels of experience and who were known to be difficult to get along with. Also, power is usually low in this type of short term group assignment. The area boss warned the foreman not to "push people around," which reduced the individual's ability to use any power in the situation.

Answer for Vignette 3: This was a moderate control situation. Leader-member relations should be good since the leader will be working with his own work team. The task was unstructured since there were no clear guidelines on how to proceed, and the only goal was to demonstrate the importance of morale and safety. The details of the demonstration were unspecified. And power would be low because we are dealing with a short term committee assignment. The leader couldn't reward or punish someone

for not coming up with a good idea. Job knowledge or performance evaluation were not required for this leadership assignment. This is likely to be a moderate control situation.

Rewind the tape for Module II.

QUIZ AND SUMMARY

The final step of Module II is to determine how well the students have understood the concept of situational control. Use the quiz on Transparency 2-12. Show it on the screen, and have the students fill out the answer sheet in their book. Score the quiz in class by asking the students to take turns telling you what answer they selected and why. If everyone seems to have done well, you are ready to summarize and end the class.

Answers to Quiz

1. Position Power.
2. Task Structure.
3. High.
4. Leader-Member Relations.
5. Moderate.
6. (b) Leader-Member Relations is the most important, Task Structure second, and Position Power third.
7. Low Control.

Conclude this class with a summary of the three variables that are important for analyzing situational control and how they fit into the various categories.

TRANSPARENCY 2-13:

"In the first class, Module I, we identified two leadership styles: Task-Motivated and Relationship-Motivated Leaders. In this module we classified jobs into three categories of situational control: High, Moderate, and Low Control. This classification was based on three key variables listed in order of their importance: Leader-Member Relations, Task Structure, and Position Power.

SUMMARY OF LEADER MATCH

TWO LEADERSHIP STYLES AS MEASURED BY THE LPC SCALE:

1. TASK-MOTIVATED - PRIMARILY MOTIVATED TO GET THE JOB DONE QUICKLY AND EFFICIENTLY.
2. RELATIONSHIP-MOTIVATED - PRIMARILY MOTIVATED BY THE NEED FOR GOOD RELATIONSHIPS WITH GROUP MEMBERS.

THREE VARIABLES DETERMINE YOUR SITUATIONAL CONTROL:

(IN ORDER OF IMPORTANCE)

1. LEADER-MEMBER RELATIONS - THE DEGREE TO WHICH YOU CAN DEPEND ON YOUR GROUP TO DO THEIR PART.
2. TASK STRUCTURE - THE DEGREE TO WHICH YOU KNOW WHAT TO DO AND HOW TO DO IT.
3. POSITION POWER - THE DEGREE TO WHICH YOU CAN REWARD AND DISCIPLINE SUBORDINATES TO INSURE THE SUCCESSFUL COMPLETION OF THE JOB.

"In the next class we will discuss how situational control is matched to leadership style for effective performance, and how you can change situations using a technique called Job Engineering."

END OF MODULE II

MODULE III

JOB ENGINEERING

JOB ENGINEERING

In Module I, we discussed leadership style and how to classify individuals into two major categories: task-motivated and relationship-motivated. In Module II, we analyzed the work environment and classified situations into those that are high, moderate, and low in control on the basis of leader-member relations, task structure, and position power. However, understanding these concepts is only part of the picture. Really to improve leadership effectiveness, you must learn how to engineer jobs to match your leadership style.

Leader Match teaches how to apply these concepts in the day-to-day working world. This program stresses that leadership is a complex and dynamic process which requires awareness and understanding of the individual, the situation, and how to change that situation to make it work for the leader.

Leaders often tend to think that their job is static, unchangeable, and that they are stuck with the way it is. That's not the case. For example, although the basic requirements for a foreman are similar across all units, how the individual foreman approaches the situation and works within the system can vary significantly. Leaders can have an impact on their situation and on how much control they have over getting the job done. And that is the real contribution of Leader Match training--learning to engineer the job.

An important point which should be stressed again is that most people cannot be successful in all situations. Some leaders will be outstanding under certain conditions and ineffective under other conditions. Leaders must learn to accept the fact that they may be ineffective in some situations. Worrying about failures leads to ulcers, and it doesn't improve performance. What improves performance is knowledge of yourself as a leader; your strengths and weaknesses, how to build on your assets, and how to cope with your deficiencies. Second is knowledge of the situation and how to make it work for you.

Matching Leadership Style to Situational Control

As we have said a number of times before, some leadership styles will be more effective in certain kinds of situations than others. Effective performance comes from matching the leader with the right situation or changing situations to match leadership style.

Over 25 years of study have gone into the development of the Leader Match program, which is based on Fiedler's Contingency Model (Fiedler, 1967; 1978). Many studies have been conducted which demonstrate the accuracy of these predictions (Chemers & Skrzypek, 1972). This research has shown that:

TASK-MOTIVATED LEADERS PERFORM BEST IN HIGH CONTROL
AND LOW CONTROL SITUATIONS
AND
RELATIONSHIP-MOTIVATED LEADERS PERFORM BEST IN
MODERATE CONTROL SITUATIONS

A brief review of the three categories of situational control is given below:

1. High Control. These are situations in which you have the support of your group as well as a task which is highly structured so that you know exactly what to do and how to do it. In addition, you have a high degree of position power which enables you to back your authority with appropriate rewards and discipline. In other words, you have a great deal of control and you can, therefore, feel reasonably secure and certain that (a) your directions will be followed, and (b) your decisions will have the intended outcomes.

THIS IS THE RIGHT SITUATION FOR YOU IF YOU ARE TASK-MOTIVATED.

2. Moderate Control. These situations generally present mixed problems. You are supported by the group, but task structure is low and authority is weak. Or in the other case, your task is structured and clearcut, and your position allows you strong power, but the group members are not giving you adequate support. You, therefore, have to be diplomatic and tactful, concerned with how the group members feel, and you have to get their cooperation.

THIS IS THE RIGHT SITUATION FOR YOU IF YOU ARE RELATIONSHIP-MOTIVATED

3. Low Control. You may find these situations "difficult," or you may find them more "challenging" and interesting. You may at times feel frustrated and bothered by these situations. The task is likely to be unstructured, and you may not completely understand what you are supposed to do or what is expected. You will have little or no power over the people whom you supervise, and you will feel that they do not support you, that they do not like you, and that the whole situation is uncertain and arouses anxiety. It may also be true that the group is under stress and that you are working under tight deadlines.

THIS IS THE RIGHT SITUATION FOR YOU IF YOU ARE TASK-MOTIVATED

In describing the three kinds of situations, we have spoken of good or poor leader-member relations, high or low task structure, and high or low position power, since this made the discussion simpler. In fact, however, each of these variables has gradations from very poor to very good. Hence, your situational control might still be high even if your leader-member relations are only moderately good, provided that the task is very highly

structured and position power is very high. Likewise, a person might have very good leader-member relations and moderate task structure and low position power and still have a high control situation. Some judgment is required on the part of the leader when dealing with moderate scores on these three variables.

Look at the match between leadership style and situational control shown on Figure 3-1 to understand why performance varies across situations. On the bottom of the graph are the three classifications of situational control, and on the side is leadership performance. As you can see, the task-motivated leader (the dotted line) is the better performer in the high and low control situations, while the relationship-motivated leader (the solid line) is the better performer in the moderate control situations.

Note that we are talking here about relative performance. The task-motivated leader will perform better than the relationship-motivated leader in the high and low control situation, but this doesn't mean the relationship-motivated leader is going to fail completely. The relationship-motivated leader may not do as well but, obviously, if the leader didn't get the job done in some manner, he wouldn't be a leader for very long. In other words, in some situations you can expect to be successful or even outstanding, but in others you may only just get by. If you are appropriately matched with your situation, the chances are that your performance will be good. This has the added benefit of increasing your job satisfaction as well as satisfying the organization's demands.

It is also important for leaders to understand why performance is going to differ across various situations. Consider a low control situation; why would you expect the task-motivated leader to be a better performer than the relationship-motivated leader? Look at the characteristics of a low control situation:

| | |
|-------------------------|------|
| Leader-Member Relations | Poor |
| Task Structure | Low |
| Position Power | Low |

Is the task-motivated leader going to be bothered at this point about poor leader-member relations? No, at the moment the primary concern of this leader is to get the job done. Is this leader going to have a problem with low task structure? No, because task-motivated leaders are very effective organizers; and if there isn't any structure, they will create some in order to guarantee that the job gets done. And if position power is low, the task-motivated leader is likely just to push on with the job. Sometimes task-motivated leaders bluff their way through, but they aren't going to be too much effected by low power. Their main concern is to get that mission accomplished, and that's where they direct their energies.

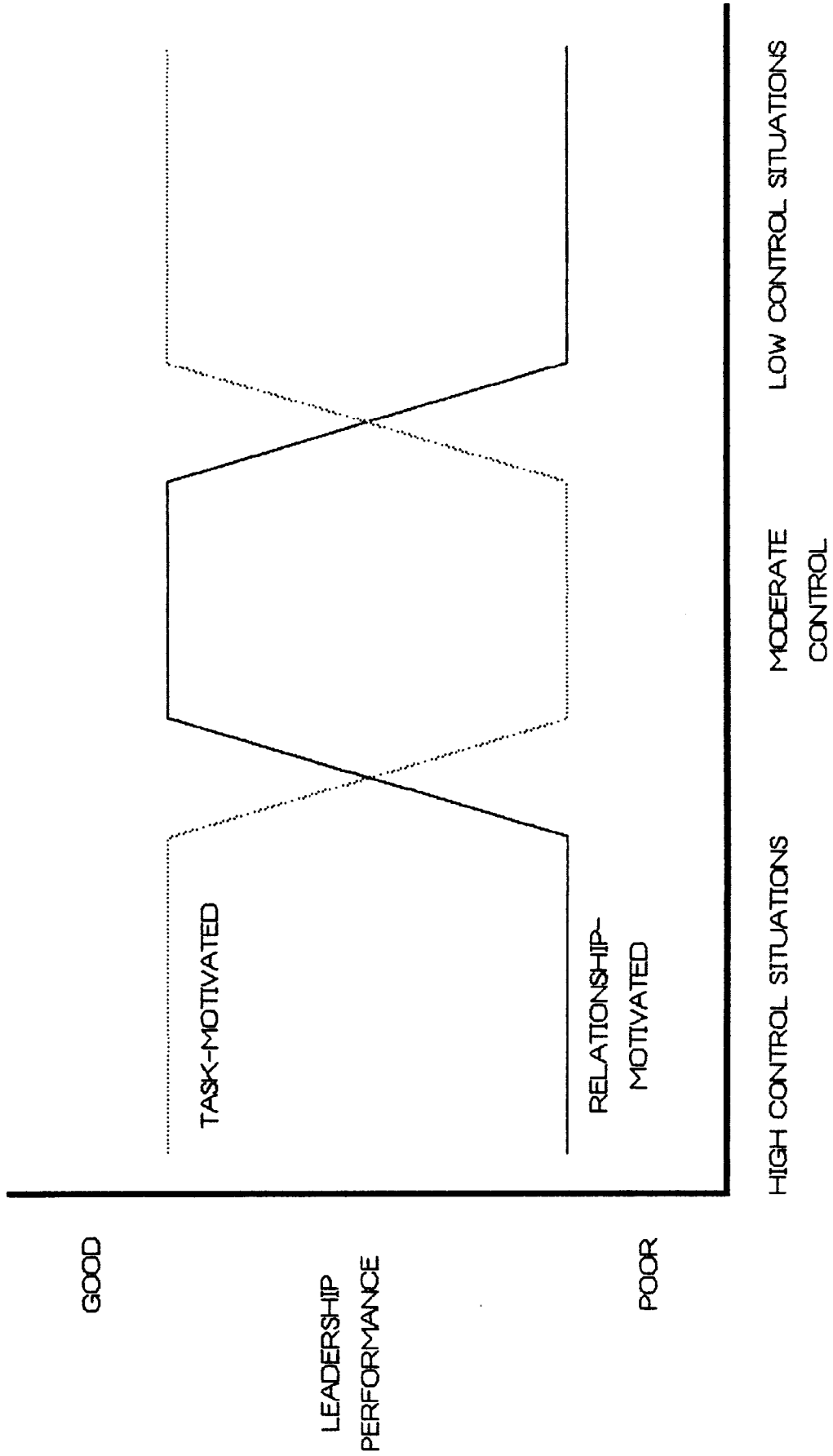


FIGURE 3-1.- Performance of Task- and Relationship-Motivated Leaders in High, Moderate, and Low Control Situations.

In the same situation, however, the relationship-motivated leader doesn't fare as well. Under a stressful situation like this, the relationship-motivated leader is going to focus on his/her primary need for group support. This leader is likely to spend so much time trying to solve the leader-member relations problem that the job doesn't get done as efficiently as it should be. Thus, the relationship-motivated leader will perform less well than the task-motivated leader in a low control situation.

In high control situations, the task-motivated leaders are still the better performers, but for a different reason. Look at the characteristics of a high control situation:

| | |
|-------------------------|------|
| Leader-Member Relations | Good |
| Task Structure | High |
| Position Power | High |

This is the best possible situation for the task-motivated leader. Because the situation gives high control, the task-motivated leader can be assured that the primary need to get the job done is being met, and the leader can, therefore, turn to the secondary need for relating to group members. The task is structured, power is high, relationships are good; "I can spend some time getting to know my people better and relax a little."

Why wouldn't this be a good situation for the relationship-motivated leader? Because there is no challenge. The relationship-motivated leader gets the most satisfaction from relating to people and only secondly from working on problems which call for creative solutions. If leader-member relations are good, there is no challenge on that dimension; and if the task is structured, there is no opportunity for creative problem-solving. Therefore, the relationship-motivated leader gets bored, no longer stimulated, and less attentive to the job. In these situations, relationship-motivated leaders may be due for a transfer or rotation so that they can be put back into a stimulating environment which challenges their creative abilities and interpersonal skills.

Now consider the moderate control situation, where the performance is reversed and the relationship-motivated leader performs better than the task-motivated leader. Look at the characteristics of a moderate control situation:

| | | |
|-------------------------|---------|------|
| Leader-Member Relations | Poor | Good |
| Task Structure | High or | Low |
| Position Power | High | Low |

If the problem is with leader-member relations, the task-motivated leaders are in trouble, because they are not very good at handling the sticky interpersonal problems which require tact and sensitivity. But for the relationship-motivated leader, it's ideal. This leader can focus on those

things he or she does best--developing rapport with subordinates and working on group relationships. Or if the situation is moderate because of good leader-member relations but an unstructured task, the relationship-motivated leader is still going to be more effective, because now the leader can focus on problems requiring creativity and decision-making.

It is important that the students understand not only which type of leader performs best in which situation, but also why. This provides some insight into the leadership process and provides a good starting point for improving performance.

In summary, effective performance comes from the appropriate match between leadership style and situational control. Task-motivated leader perform best in high and low control situations, and relationship-motivated leaders perform best in moderate control situations. But what does the leader do if the situation doesn't match his or her style?

Job Engineering

Leaders basically have two choices open to them. If their leadership style doesn't match their situation, they can either change themselves or their job. Since leadership style is a personality variable and reflects a deeply ingrained motivation, it is very difficult to change. That is not to say that you can't change some surface behaviors, but it is really difficult to change one's personality and to adopt a totally different leadership style overnight. Millions of dollars are spent each year in industry to teach managers to be different kinds of leaders. Managers are sent to retreats and training programs to make them more sensitive and person-oriented leaders or to sessions that teach them to be more autocratic and authoritarian. But to date there is little evidence in the psychological literature that these attempts to change personality are very successful. People undergo years of therapy but may never substantially change their personality. The manager can learn the techniques in the classroom or laboratory setting, but research indicates that these techniques don't transfer easily into the job environment.

We can, however, teach people to change various aspects of their situation, and to cope with what's happening in their job. How can a leader change the situation? By modifying the three key variables of leader-member relations, task structure, or position power. This is called "job engineering." It means changing the situation to make it match the individual's leadership style. That is why this training program is called "Leader Match."

It is sometimes hard to get this idea across. People always want to think about changing themselves and their behavior. And sometimes, changing the situation will involve changing some behaviors, but not leadership style or

what motivates the leader to do the job. It is also hard, at first, for people to see just how they can change their situation--but it is really not all that difficult.

For example, to improve leader-member relations or group morale, the leader might spend some extra time visiting with group members and getting to know them. Something as simple as smiling more often or calling people by name can have a big impact on relationships with group members. Although these suggestions only involve using some common sense, new leaders especially have little idea about how to proceed. Your task then is to take many of the commonly practiced procedures for building rapport with a crew, and put them into an easily digestible format for the trainees.

Take methods to change task structure, as an example. An experienced leader would know that he can easily increase task structure. The leader can develop a work plan, get more guidance from the boss, or read a manual. But new leaders may not necessarily know how to do all these things, or they may not think of them. You are really teaching activities and behaviors that good leaders should know, and you are showing the students all the different resources that are available to them. There is really nothing complicated about job engineering. Basically it is learning to change the situation so that the leader can perform more effectively.

Leader Match training gives the leader a start in solving a particular problem. Suppose, for example, that the foreman knows that his and the group's performance is poor but doesn't know what to do about it. Analyzing the situation in terms of leader-member relations, task structure, and position power can help him define the problem. Once he has identified the problem, he can then use job engineering to find the appropriate solution. It is important for the students to be aware of the flexibility of their jobs and how they can change things to improve their performance.

In the teaching guide for this module, a number of ways to change situations are presented in a checklist format. Your task is to interpret these for the students and to have them check those methods which are available for changing their particular situation. These modifications to the situation stem directly from the three variables of leader-member relations, task structure, and position power. The goal of job engineering is to move the situation from one zone to another. For example, if the leader is task-motivated in a moderate control situation, the goal would be to move that situation into the high control zone so performance is improved.

In addition to working with the three variables to change situational control, there are also other management tools available which have the same effect. For example, one way of decreasing a leader's control over

the situation might be to rotate him or her to another job within the organization. Or a leader might ask for a transfer to another unit as a means of changing situational control.

From a managerial perspective, Leader Match provides some insight into the selection and placement of leaders. What type of leader should you place in a particular situation for effective performance? From the individual's standpoint, his training can help him decide whether to accept a job, i.e., does it match his leadership style? Let's examine some of these options to matching leadership style and situational control.

Selection and Placement of Leaders

Up to this point we have dealt with the more basic issues of leadership. We have talked about identifying the leader's style and how it affects performance under various conditions. We have also spelled out methods which allow the leader to diagnose the situation, or the situations of subordinate leaders. Most important, we have talked about ways in which you can match leadership style and situational control in order to obtain effective performance. Now, we will talk about the nitty-gritty of management, especially where leaders have responsibility for others in leadership positions. Specifically, we will discuss how to select and place leaders by proper reassignment and rotation.

Before going further, however, it must be stressed that we are talking only about leaders who are technically qualified to perform their functions. Nobody should head a brain surgery team until they have had surgical training. In the discussions which follow we are talking about leaders, or candidates for leadership positions, who already have the basic skills and knowledge their job requires.

The well-worn phrase has it that we must put round pegs into round holes and square pegs into square holes. This is good advice provided we are dealing with pegs and pegboards which do not change. Organizations do change, however, and so does the relationship of the leaders to the positions to which they are assigned.

We have spoken of situational control as if it were merely the property of the situation, that the situation provides the leader with control and influence to the extent to which (a) the leader has a good relationship with subordinates, (b) the task is structured, and (c) the position provides power to discipline and reward.

However, situational control is likely to change over time. First of all, a leader typically does not step into a group which immediately provides ardent support. Support usually has to be earned, and this requires some time. Second, and perhaps more important, even the most structured task has to be learned, either by experience or by training.

The process occurs, of course, with nearly every new job a leader undertakes. It takes a while to learn the ropes. No matter how exact the instructions might be, there are innumerable problems which require us to improvise and innovate, or to find out from others how our predecessors have handled these problems. This means you gain control and influence as you gain experience and as we mentioned before, you gain the confidence and trust of your group members.

Clearly, then, the leaders have less control when they begin a new job than after they have been at work for some time. As a rule of thumb, we generally assume that a job which gives high control for the experienced leader will give only moderate control for the inexperienced new leader. We assume that the task which gives moderate control to the leader who has been on the job for some time will give low control to the new leader.

How the same situation appears to the experienced leader and the new leader is shown below:

| | | | |
|----------------------------|----------|----------|----------------------|
| <u>Experienced Leader:</u> | High | Moderate | Low |
| <u>New Leader:</u> | Moderate | Low | <u>Extremely Low</u> |

Let us go back to a point we emphasized throughout this program. Task-motivated leaders perform best in high and low control situations, and relationship-motivated leaders perform best in moderate control situations.

What does this mean for selection? The answer depends, of course, on whether you need someone who will perform well immediately or whether you need someone who will perform well in the long run. It will also depend on how long the "long run" might be. Does it take only a few weeks or months to become an old experienced hand on the job--as is true of various simple leadership jobs with highly structured tasks? Or, is this a highly complex and difficult task in which it might take several years to become truly experienced?

Take, for example, the situation which is high in control for the experienced leader and moderate in control for the new leader. Should you select the task-motivated leader who will eventually perform well in this situation when control becomes high, or should you select the relationship-motivated leader who will perform best now while inexperienced and new, and the situational control is, therefore, only moderate?

If you select a relationship-motivated leader, the individual will perform well at first, because relationship-motivated people perform best in moderate control situations. However, as the leader gains in experience, the situation will move into the high control zone, and the relationship-motivated leader's performance will decrease.

If you select a task-motivated leader, the individual will perform rather poorly at first, because task-motivated people do not perform at their best in moderate control situations. However, experience and control increase over time, and the task motivated leader will improve and eventually overtake the relationship-motivated counterpart.

The same holds true if you initially classify the job as moderate control for the leader. Until the leader has gained in experience, the situation will be low in control. Therefore, the selection problem again must involve the decision of whether to go with the task-motivated leader for immediate results while the situation gives low control, or for the relationship-motivated leader who will start out poorly but improve over time when the situation becomes moderate in control.

Selection, then, is a more difficult problem than you may have thought. At the risk of being repetitious, look at this problem graphically in Figure 3-2 on the following page. This figure illustrates a high control situation for the experienced leader and is, therefore, only moderate in control for the new leader who has just been assigned to the job. This is shown on the bottom of the graph.

The top of the graph indicates effective performance, and the bottom half of the graph denotes poor or ineffective performance. The arrows show that the relationship-motivated NEW leader will start off with good performance while the situation gives only moderate control, but will gradually decrease in performance after he has become experienced and fully knowledgeable of the job requirements and the situation gives high control. The task-motivated leader who is NEW will start off poorly while the situation is still one of moderate control, but will become more effective as he learns the job and the situational control becomes high.

Figure 3-3 shows the same basic relationship, but here the situational control is classified as moderate for a fully-trained and experienced leader and low for a new leader. Now the task-motivated leader will be more effective at the beginning of the job while it gives low control, and the relationship-motivated leader will get better over time as the situational control becomes moderate.

These predictions, however, are based on the assumption that the organizational environment will remain fairly constant. A change in the leader's job or in the organization itself may result in slowing down or reversing the new leader's progress, and the leader may not achieve the predicted change in performance.

What does this mean to the individual who is a leader of leaders? If the leadership functions call for the selection and placement of subordinate leaders, a number of options are available. Knowing the personality of

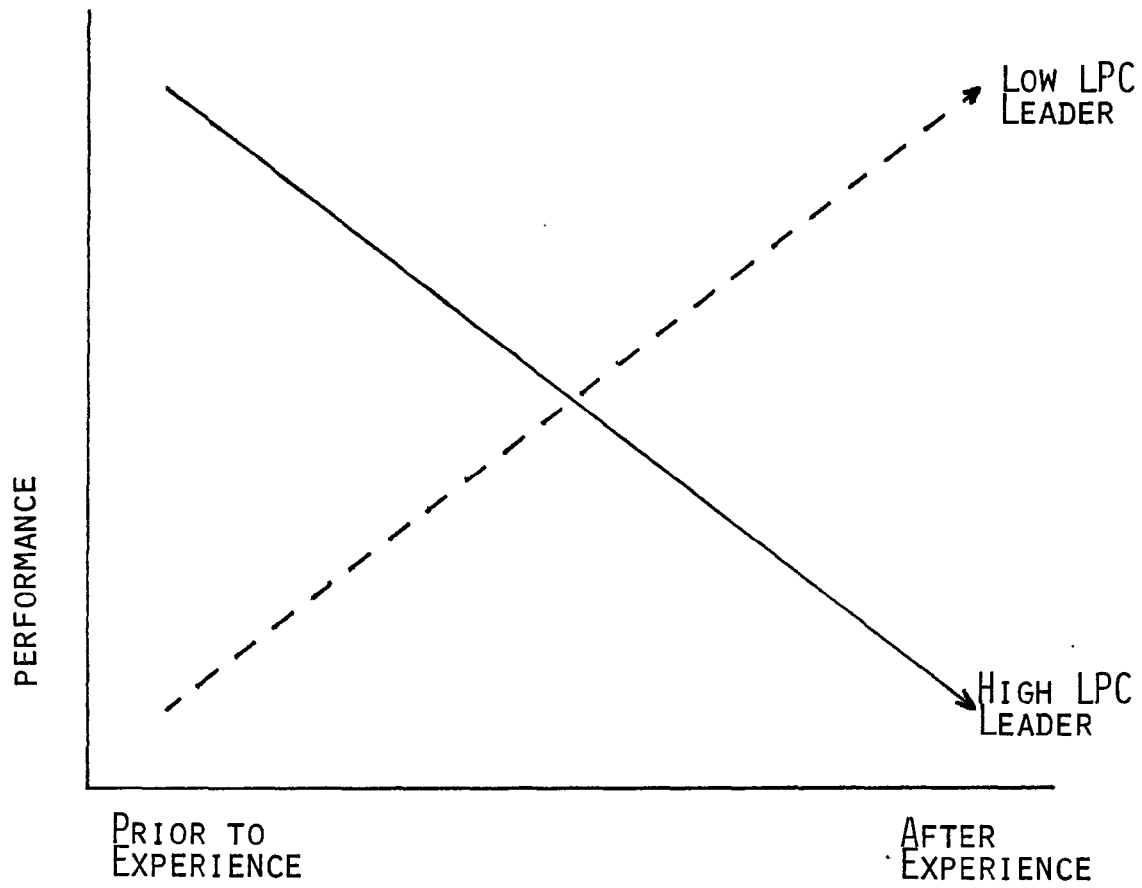


FIGURE 3.2. - The effect of acquired experience for newly selected leaders in jobs having moderate situational control.

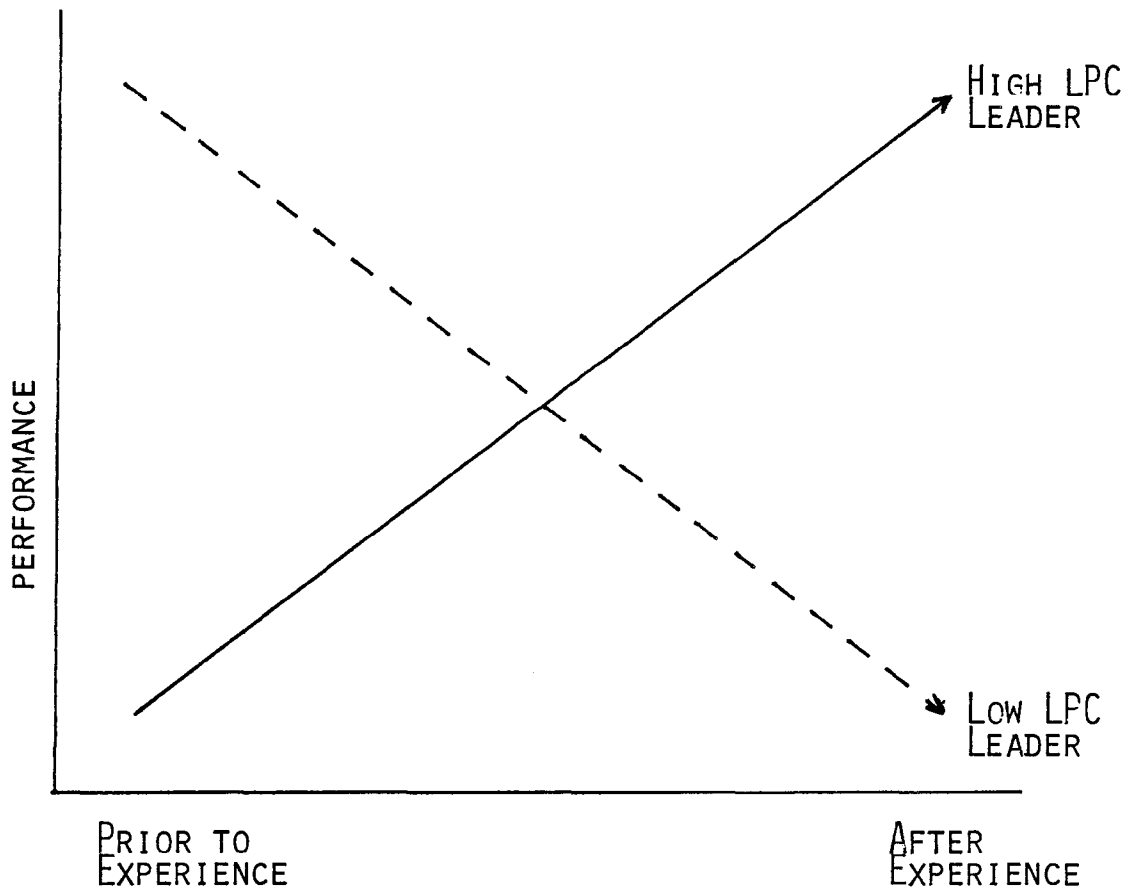


FIGURE 3.3. - The effect of acquired experience for newly selected leaders in jobs having low situational control.

subordinate leaders and the situational control of the job, you can now select and place leaders who will excel at the beginning, or the type of leader who will gradually mature into a great performer over time.

It is the leader's responsibility, as boss, to see that the subordinate leader is either placed in a position where performance will be good or will allow enough time to reach a point where he or she can be effective. In this latter case, job engineering could be used to help the subordinate leader increase effectiveness by changing situational control.

Let us consider the options in selecting leaders for maximum performance.

1. First, analyze the job situation and determine the amount of situational control for a leader who is highly experienced and knows the job. Then decide whether you need good leadership performance immediately or whether you need good performance in the more distant future and can afford to wait for the individual to develop the necessary skills and experience.
2. If you need immediate, short-run results, you would select the leader who is appropriately matched to the situation. You should be aware that these leaders may not perform well if left too long on the same job and get too much control over the situation. This may be a matter of months or of several years, depending on the job's complexity.
3. If you opt for long-range performance, you would select a leader who is not appropriately matched to the situational control at the outset. In this case, it is your responsibility to do everything you can to increase the situational control to bring the leader up to the level which matches his leadership style. The sooner this is accomplished, the sooner the leader will reach a level of effective performance.

Let's look at this approach from the level of the shift boss. The shift boss may have to fill a particular job assignment and has two foreman to select from. If the situation is one which includes a very structured task and immediate results are required, the shift boss would give this duty to a task-motivated crew leader who would be expected to perform well. Suppose you are a manager, and you have a couple of new recruits who seem difficult to handle. You might want to select a relationship-motivated crew leader who would be assigned to supervise these individuals, since you would expect the relationship-motivated leader to be better able to handle a problem requiring a lot of interpersonal skills.

Thus, Leader Match provides a good basis for determining job assignments for the long and short run and for placing group members with leaders who can appropriately deal with their particular problems. Consider another possible application of matching situational control to leadership style.

What does this mean to individuals who are candidates for a leadership position? You are usually given only limited options: You have been selected for a leadership position or a promotion to a higher leadership job, and you have to accept it or reject the offer. These jobs usually require you to take special training or to commit yourself to relocating. If you decline, you may have to wait a long time for another chance. On the other hand, if you accept, you may have some elbow room in changing the leadership situation--job engineering. Tell your trainees, "Below are some options which are open to you":

1. You may determine that the situational control exactly matches your leadership style. In this case, of course, you will want to accept the new job with enthusiasm. However, you should be aware that you may become less effective as you gain in experience, since the situational control will increase over time. When this occurs, you will need to do some job engineering to keep yourself in a challenging and productive situation.

2. You may decide that the situational control is a mismatch for your personality. Rather than risk failure you may decide to decline, if that option is open to you, and to explain to your boss why this is not likely to be a job in which you will do your best.

3. You decide that you are mismatched, but you can make some changes in the situation so that the job will suit you. This may require a discussion with your boss, or you may have to do it on your own. You should explore whether you could obtain training or coaching from someone in a similar position. Or you may have to approach the job in a similar position. Or you may have to approach the job in a particular way. For example:

- a. You may arrange the job so that you can create considerable distance between yourself and your subordinates, e.g., by being rather formal in your relations with them and by not socializing a lot.
- b. You may actively seek support from your boss, or you may decide not to lean too heavily on him for help.
- c. You may appoint an assistant and delegate some of your responsibilities to this person.
- d. You may request to have one or two immediate subordinates transferred with you to provide good group support.

Your best strategy is, however, to seek those jobs which best suit you. Knowing the type of person you are and the type of situation in which you tend to perform best, campaign actively for the sort of leadership positions which fit you, and try to avoid those which do not. Volunteer

for assignments you know you can do well. Whenever possible, let your boss know how he can best match you and your situation to enable you to perform at your best.

4. If you accept a position which is classified as high in control, and you are relationship-motivated, you may perform quite well initially, as long as the situation is only moderate (that is, as long as you are inexperienced). This calls for a strategy of prolonging the time the situational control will remain moderate. you may wish to do one or more of the following:

- a. Depend on your subordinates; use participative management.
- b. Volunteer yourself and your group for the more complex and unstructured tasks as time goes on, in order to keep the situational control from becoming very high.
- c. Don't let yourself get too cozy and comfortable with your subordinates.
- d. Volunteer to take new group members, where possible.

5. If you accept a position which is classified as high in control, and you are a task-motivated leader, the chances are that you may perform rather poorly at first, since the situation will give only moderate control while you are still learning the ropes. This would call for a strategy which will more rapidly make the situational control higher for you. For example:

- a. Obtain whatever training is available, either formally or from coworkers, previous individuals in your position, or people in similar positions. Don't forget to work out a plan to utilize your boss's knowledge of your job.
- b. Structure your job as much as possible, and ask your boss for guidance.
- c. Try to get as much support from your group as possible to improve your realtions with them, thereby increasing your situational control.

The decision whether to look only for jobs which fit you or whether to take all jobs which you are offered, and trying to handle them as well as you can, presents certain problems which you must consider carefully. There is no simple or best answer.

If you take only those jobs which fit you exactly, you may deprive yourself of a chance to grow in your leadership experience and to learn how to cope with problems which are not exactly your cup of tea. You may also feel that a leader is shirking his responsibility if he doesn't take on every job, whether or not he is particularly suited for it.

These are complex issues. You might certainly want to try some jobs even though they may be tough, in order to see whether you can measure up. There is nothing wrong with this approach as long as you know what you are doing. You will certainly benefit if you watch aspects of the situation which enable you to perform well and those which cause you problems. Learn from every experience, and keep records of your performance.

The second argument, whether it is a moral responsibility of the leader to tackle every problem which comes along, is a matter of personal conscience. Is it cowardice to duck when you are asked to do a job you know you can't handle, or is it an act of conscience to refuse responsibilities for which you are not suited by skills or by personality? Unless you try new jobs, you will not realize your full potential. If you fail, your career and perhaps the lives of others may be in jeopardy. A general practitioner surely should not undertake open-heart surgery under ordinary circumstances just because he would feel badly to duck the challenge. Likewise, a mine manager who volunteers for a difficult job, even though he might perform poorly, is not doing himself, his organization, or his crew a particular service. There are not simple answers for these problems, and every leader will have to strike a balance in light of all he knows about himself and about the leadership situation he faces. Whatever he decides to do, it is important that the leader have enough information to make an informed choice. Examining a job in terms of situational control provides more information to aid in this decision process.

Rotation and Transfer

Moving from one job to another is an accepted part of life in the mining industry. If moves are made as particular jobs need to be filled, and if they benefit the organization, they are usually called transfers or promotions. When these moves are part of a systematic policy which calls for periodic reassignment to broaden the leader's experience and perspective, they are considered part of a rotation program.

Whatever the reasons for moving, few leaders in the mining industry remain in the same position for more than a few years. Until recently, almost nothing was known about the impact of rotation and transfer on the effectiveness of an individual or on his or her unit. The general assumption has always been that it must be good for the organization since it develops leaders with broader background; whether it is good for every leader is another question.

Let us consider the effects of transfer and rotation in light of the Leader Match program. What are the possible results of changing jobs, and of such related experiences as high turnover of one's superiors or subordinates?

Rotation has generally been seen as beneficial, but "organizational turbulence" (turnover among subordinates, changes in job requirement or mission, changes in authority, and so forth) has been viewed as disruptive and leading to poorer performance. Upon closer inspection, though, you can see that the effect on the leader's day-to-day interaction with superiors, subordinates, and peers should be identical whether rotation, transfer, promotion, or "turbulence" has occurred. In each case, the leader must learn to adjust to changes in his or her situation.

It is important to remember, however, that an experienced mine manager will be more used to organizational change than someone who only recently came into mining. If a leader has gone through innumerable changes in assignment, and has worked with a wide variety of bosses and subordinates, the individual will have learned how to handle these new situations better than a new leader. This person will, therefore, enter the situation under more favorable conditions.

What are the specific elements which change? A change in superiors requires the leader to learn what the new boss's standards and expectations are, and what idiosyncracies on the part of the new boss have to be taken into consideration in order to get along. Whatever the outcome may be, there will be a period of time, varying in length, when the leader will need to live with a certain amount of anxiety and insecurity until he or she knows how to manage the new boss.

In like manner, there will be a certain amount of time before the leader can trust new subordinates. Do they really know what they are doing? Can they be relied upon to do the job right? If the leader gets into trouble, will they support him? Who, in this group, are the key people with whom the leader has to deal if he wants to change attitudes or improve morale?

And if it is the leader who changes jobs, it usually takes some time to learn the ropes. He must ask such questions as, what do I have to know about the work itself? How is it done here, how do you troubleshoot, how do you get things fixed, who are the experts in the organization on whom I have to depend, and to whom should I turn for help? What is this new job about? Whom do I see if I run into trouble with other units, with higher management levels, with others at my level of the organization?

These are all important questions whether or not the move was made for the purposes of rotation or promotion, voluntarily or involuntarily, or whether change came from "organizational turbulence." Practically all these effects lower the control of the leadership situation. The major exception is a move by the leader from a low control situation to a new job which

involves more control, from being the disliked supervisor of an unstructured staff division to a well-liked line manager with a structured task.

Since most rotations and transfers change the leader's situational control, it is obvious they will improve the performance of some leaders but decrease the performance of others. This has been shown by research conducted in the military services using actual leaders in different situations.

As we have already seen, staying on the same job too long lowers the performance of some people. They become stale, bored with the job, no longer interested and challenged by the problems they have to tackle, and no longer as motivated as they were at first. Others, however, will like the continuity and see constant improvement and repetition of tasks as a challenge of a different sort. Different people obviously have different strengths and weaknesses as leaders.

Consider, for example, your best troubleshooter. If you leave that individual at the same unit or trouble spot so long that there are no more challenges, the leader is likely to become bored and disinterested. There is no more action or stimulation, and the individual will now either stir up trouble--which you don't need--or will pay less attention to the job and become correspondingly less effective.

Others, the "late bloomers," simply need more time to become maximally effective. They take pride in learning the job inside out. And some leaders are cut out for the routine administration of departments or units and do this superbly. But these same people frequently are less able to handle conflict and difficulties. Obviously, therefore, rotation and transfer should take into consideration the individual's leadership style as well as situational control if effectiveness and unit performance are important.

What is the best time to rotate or to transfer leaders from one job to another? When do they reach the "burnout" point? In principle, the best time comes when the relationship-motivated leader, by virtue of experience and training, is no longer working in a moderate control situation, or the task-motivated leader is no longer working in a high or relatively low control situation. Accurate diagnosis is essential here. It is important to maintain a careful record of leader performance. When the performance of a leader begins to slip, even though he or she did an excellent job earlier on, then it is time to consider whether the job has become too routine or too structured and has become no longer challenging enough to meet the leader's needs. Then you must decide whether to restructure the job as we discussed earlier, or to rotate or transfer.

What does this mean on a practical day-to-day level? It may mean that a change of managers from one unit to another is required or desirable under some conditions. It may mean that the manager of administrative services needs to be rotated to a more challenging situation, say to the operations division. Or the individual might need a more routine job assignment, such as a move to purchasing. Rotating and transferring leaders within and across units is an effective way to practice job engineering, because it changes the leader's situational control.

Thus, job engineering includes small steps and larger organizational changes. In teaching the concept of job engineering, you will need to show the students the flexibility they have within their own job, the available resources for influencing the situational control of subordinates, and the broader range of changes which can be brought on by the proper selection, placement, transfer and rotation of personnel.

On the following pages you will find the Teaching Guide for Module III. Remember, the comments enclosed in quotations are used to indicate supplemental material to what appears on the transparencies.

TEACHING GUIDE FOR MODULE III: JOB ENGINEERING

INTRODUCTORY REMARKS

This training program is based on the appropriate match between the individual's leadership style and the situation. Before we begin this module, let's review what we have learned thus far.

"The least Preferred Coworker (LPC) Scale helped to identify two types of leaders. What do we call someone who scored low on the LPC Scale?" (Ask the class to describe the task-motivated leader using some of the following questions.) "How does this leader behave in a situation which is stressful? How does this leader behave in a situation in which his control is high? What is this type of leader's primary motivation, and what would be the secondary goal or motivation?" (After review of task-motivated leaders, ask the group to describe relationship-motivated leaders using the same questions.)

"What do we know about our work environment? Can anyone tell me the name we use to classify jobs?" (Answer: Situational Control.)

"What do we mean by situational control?" (Answer: Situational Control is the amount of influence and certainty we have over how the job is accomplished.)

"How do we classify situations?" (Answer: High Control, Moderate Control, and Low Control.)

"What is the most important variable to determine situational control?" (Answer: Leader-Member Relations.)

"What are two factors to consider when evaluating leader-member relations?" (Answer: What is the relationship of the group to the leader--do they support the leader in doing the job? What is the relationship of the group members to each other?)

"What is the second variable of importance in analyzing situational control?" (Answer: Task Structure.)

"What are the four factors which should be considered when analyzing task structure?" (You probably will find that the group does not remember all four. Be prepared to fill in as necessary. Answer: Is the goal clearly stated or known? Is there only one way to do the task? Is there only one correct solution to the problem? Is it easy to check whether the job was done right? You might want to elaborate each point with an example of a structured vs. unstructured task to reinforce the group.)

"What is the last of the three variables which measure situational control?" (Answer: Position Power.)

"What factors are important in understanding how much power we really have?" (Answer: Ability to hire/fire or discipline/reward; Boss support--does the boss support my recommendations and back up my power structure? Job knowledge--do I know my subordinates' jobs well enough to do them myself, or is my power reduced because I am dependent on their expert knowledge and ability? Is it my job to evaluate performance?)

TRANSPARENCY 3-1:

"Combined, these three variables determine whether a situation give high control, moderate control, or low control. As you can see, high control situations are those in which leader-member relations are good, task structure is high, and power is high. Low control situations are those in which leader-member relations are poor, task structure is low, and power is low. Moderate control situations are those which fall in the middle."

(If you feel that the group understands these basic concepts, you are ready to begin Module III. It is extremely important that the trainees can analyze situational control and identify leadership style, since these two factors are the key to Leader Match training. As a further check, you can use the two examples below to see if the group can correctly identify the situational control.)

EXAMPLE 1:

You've been a mine foreman for three years and a miner all your working life. You have an inexperienced mine manager. The mine manager has been depending on you for assistance. The subordinates in your shift come to you for advice on personal as well as job-related matters. Your shift was rated best in productivity and safety. Your primary job for today is to lay out and inventory all your tools and equipment.

What is this foreman's situational control, and why? (ANSWER: High Control. Leader-member relations are good, as can be seen by the fact that the subordinates come to the foreman for advice and assistance. Also, the group must support their leader, since his shift was rated as best. Task structure is high, since laying out and inventorying equipment is a very standardized procedure. Power is likely to be high, because the inexperienced manager is leaning on the foreman for assistance. Also, the foreman has considerable experience and job knowledge which increases his power base.)

T 3-1

SITUATIONAL CONTROL

| | <u>CONTROL</u> | | |
|----------------------------|----------------|----------|------|
| | HIGH | MODERATE | LOW |
| LEADER-MEMBER RELATIONS | GOOD | GOOD | POOR |
| TASK STRUCTURE | HIGH | LOW | HIGH |
| POSITION POWER | HIGH | LOW | HIGH |

Diagram description: The table shows three rows of variables. The 'MODERATE' column is further divided into two sub-columns by a central 'OR' with curly braces. The first sub-column contains 'GOOD' (aligned with Leader-Member Relations) and 'LOW' (aligned with Task Structure and Position Power). The second sub-column contains 'POOR' (aligned with Leader-Member Relations) and 'HIGH' (aligned with Task Structure and Position Power).

EXAMPLE 2:

The mine superintendent has assigned all general foremen to a committee to make recommendations for changing the safety training and improving employee morale. The superintendent hasn't specified what kinds of changes he'd like to see or given any guidance on the morale program.

Although you are the newest of the general foremen, you have been given the job of getting the recommendations together and presenting them to management. You suspect this assignment has been given to you as a test, since you are the newest in the group.

After the first meeting, you realize that it is going to be a difficult job. None of the other general foremen can agree on any ideas or recommendations. They aren't too happy over your getting this assignment either.

What is the foreman's situational control, and why?

(ANSWER: Low Control. Leader-member relations are not too good, since the other foremen are unhappy about who got this assignment. There also seems to be some conflict between the members of the committee, since no one agrees on anything. The task structure is low--first, because the goal is not clearly defined, there are a number of ways to proceed, no correct solution, and no immediate feedback; second, the structure is further decreased by the foreman's lack of experience. He is after all, the newest in the group. power is very low in this type of situation. A short-term committee assignment like this, when the leader is the junior member of the foremen group, is going to really lower position power. We would not expect the superintendent to be very supportive either, since it is likely that he is testing the new man. All in all, this is a low control situation.)

"We said at the beginning of this program that effective performance is based on the appropriate match between leadership style and situational control. We also said that you cannot expect to be successful in all situations. You will certainly do better on some occasions than on others."

TRANSPARENCY 3-2:

"Effective performance is the result of matching the leader's style to the situation. Task-motivated leaders perform best in high and low control situations. Relationship-motivated leaders perform best in moderate control situations. This prediction of performance for the two styles of leadership is based on over 25 years of research. If you are task-motivated, you can expect to do better in either the very high or low

LEADER MATCH

YOU WILL PERFORM BETTER IN SOME SITUATIONS THAN IN OTHERS:

- * RELATIONSHIP-MOTIVATED LEADERS PERFORM BEST IN
MODERATE CONTROL SITUATIONS

- * TASK-MOTIVATED LEADERS PERFORM BEST IN HIGH AND
LOW CONTROL SITUATIONS

control situations; and if you are relationship-motivated, you will do best in moderate control situations which present a challenge but are not chaotic."

TRANSPARENCY 3-3:

"Let's look at this problem graphically. As you can see, situational control is shown across the bottom of the graph, and performance is shown on the vertical axis. We are talking here about relative performance. That is, in relation to the task-motivated leader, the relationship-motivated leader can expect to perform less well in high and low control situations. And in moderate control situations the task-motivated leader. We expect both types of leaders to be performing at least at a minimal level, or they wouldn't be leaders very long. In other words, in some situations you can expect to be outstanding, and in others you may only just get by."

(At this point you should lead some discussion on why the difference in performance across situational control for each type of leader. Pattern this discussion after the suggestions given in the theoretical section of Module III. Break the situation down into its components, and discuss how each leader type would deal with that variable under those conditions.)

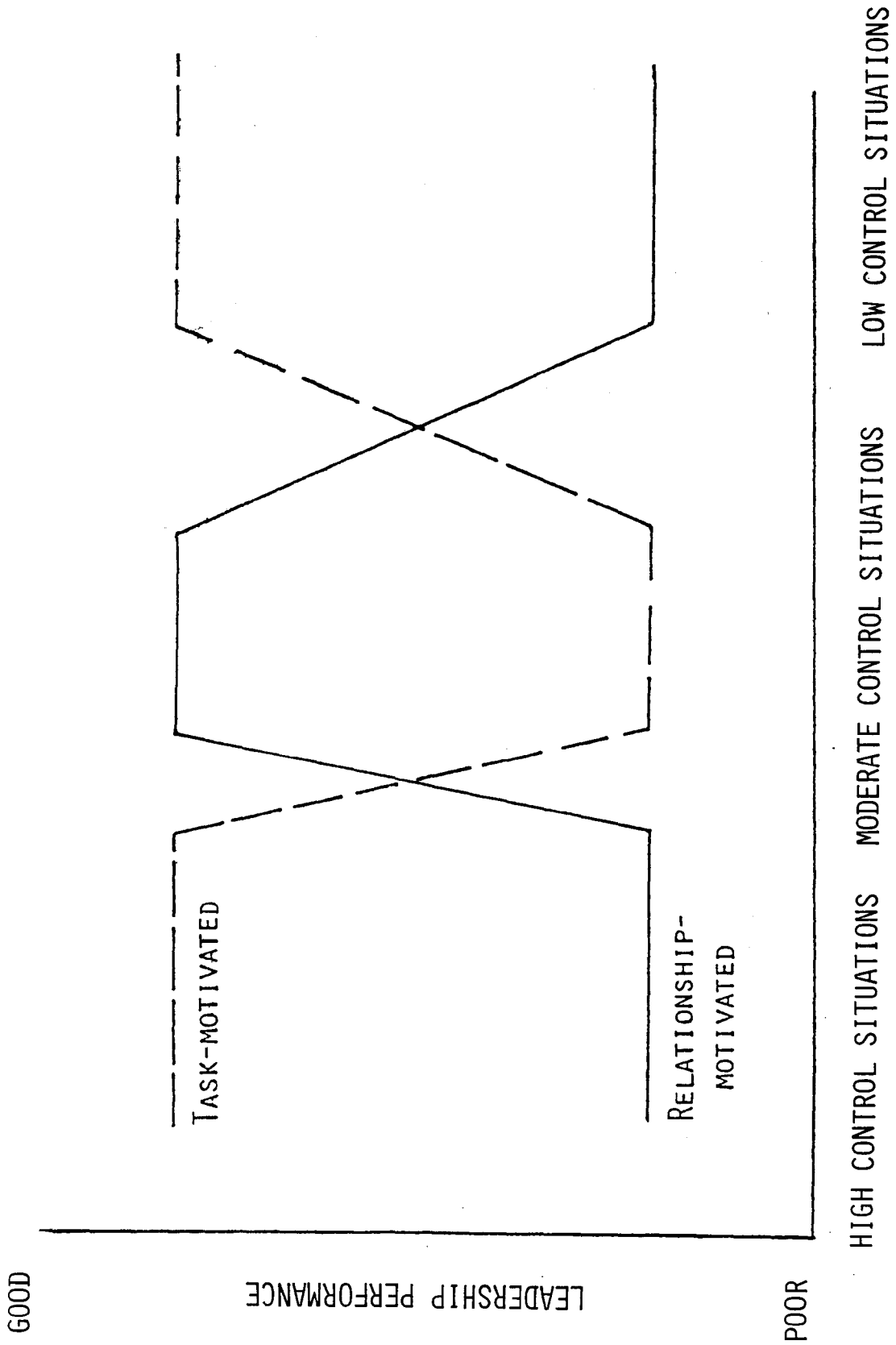
We've spent considerable time discussing what is the appropriate match between leadership style and situational control. But what can you do if you are in a situation that does not appropriately match your leadership style?" (Usually, someone in the group will respond, "Change your leadership style." If not, lead the following discussion to cover why changing leadership style is not the way to go.)

"What is leadership style? It is a personality variable--it is an internal motivation or goal which influences your attitudes towards leadership of your subordinates. How easy is it to change your personality? How many of you have ever tried to be a different person? It's not easy, is it? In fact, millions of dollars are spent on trying to teach people to be different kinds of leaders. Many people go through years of therapy trying to change their personality, but what we find is that few people can change themselves. If we can't change our leadership style or motivation, what other choice do we have?" (Someone should be able to answer, "Change the situation.")

"How do we change the situation? By using job engineering."

TRANSPARENCY 3-4:

"Job engineering is the technique used for changing the leadership situation. If you are task-motivated, your goal is to be in high or low control situations. If you are relationship-motivated, your goal is to be



JOB ENGINEERING IS THE TERM USED TO DESCRIBE
THE TECHNIQUE FOR CHANGING YOUR SITUATION.

YOUR GOAL SHOULD BE:

- * IF YOU ARE TASK MOTIVATED, YOU WANT TO KEEP YOUR SITUATIONA
CONTROL HIGH OR LOW

- * IF YOU ARE RELATIONSHIP MOTIVATED, YOU WANT TO KEEP YOUR
SITUATIONAL CONTROL MODERATE

in moderate control situations where you can expect to perform well. In other words, engineer or change your situation to make it work for you.

"How can you change situational control?"

TRANSPARENCY 3-5:

"By changing one of the three principal components--leader-member relations, task structure, or position power. You would want to increase or decrease these three depending on your leadership style.

"Let's look at a videotape on job engineering."

Videotape for Module III. The last videotape covers two points in the training. First, it examines the match and describes how the two types of leaders behave in the different situations. Second, the two leaders discuss some simple ways of engineering jobs. It is expected that this tape will provide a good starting point for conducting an in-depth discussion of ways to change situational control.

There are no vignettes at the end of this videotape. At the conclusion of the credits, rewind the tape. Keep in mind that all three tapes could be shown at the conclusion of your course as a review.

TRANSPARENCY 3-6:

"This is a checklist showing many of the ways you can increase or decrease leader-member relations. Let's talk about some of these and how we might use them in our own leadership situations."

(Go through the items listed on this transparency, and elaborate each one. First, see if the group can suggest how an item could be implemented and/or give an example of how this could be done. There are two points that might cause some controversy.

People tend to be somewhat suspicious of a suggestion that you decrease leader-member relations. So much emphasis is put on morale problems that it is somewhat threatening to suggest this change. However, you should point out that sometimes you can develop too close of an association with subordinates which can get in the way of doing the job, and/or the group may depend on their relationship with the leader to get by. For example, we know of a situation in which a maintenance supervisor got in the habit of lunch and cards with his subordinates to pass the time. Eventually the supervisor got a poor evaluation because down time on the machine had increased substantially. The supervisor realized that his relationship with the group was the primary cause. The group members weren't doing their jobs as well because they were banking on their relationship with the

T 3-5

HOW DO YOU CHANGE YOUR SITUATIONAL CONTROL ?

INCREASE OR DECREASE:

1. LEADER-MEMBER RELATIONS
2. TASK STRUCTURE
3. POSITION POWER

JOB ENGINEERING: INCREASE LEADER-MEMBER RELATIONS

1. SPEND MORE INFORMAL TIME WITH SUBORDINATES.
2. ORGANIZE SOME OFF WORK GROUP ACTIVITIES WHICH INCLUDE YOURSELF AND YOUR SUBORDINATES.
3. INCREASE YOUR AVAILABILITY TO SUBORDINATES.
4. LISTEN TO YOUR SUBORDINATES' PROBLEMS.
5. SHARE INFORMATION "FROM ABOVE" WITH YOUR SUBORDINATES TO MAKE THEM FEEL PART OF THE TEAM.
6. OBTAIN REWARDS FOR SUBORDINATES.
7. CHANGE THE MEMBERSHIP OF YOUR GROUP.

JOB ENGINEERING: DECREASE LEADER-MEMBER RELATIONS

1. SPEND LESS INFORMAL TIME WITH YOUR SUBORDINATES.
2. SEE YOUR SUBORDINATES BY APPOINTMENT ONLY.
3. KEEP YOUR CONTACTS WITH SUBORDINATES STRICTLY BUSINESSLIKE.
4. AVOID BECOMING INVOLVED IN THEIR PERSONAL PROBLEMS.
5. CHANGE THE MEMBERSHIP OF YOUR GROUP.

supervisor. To correct the situation, it was necessary for the boss to pull back and put some distance between himself and the group. Thus, the only way the group could get back on the track was to work harder.

The other item which can be threatening or confusing is the suggestion that you change the make-up of the group. Suggesting that a leader get rid of a troublesome subordinate is often met with concern. We look at it like the sports world. If a player isn't doing well on one team, sometimes he or she needs to be transferred to a new coach or leader who will enable that player to do better. If leader-member relations are poor because of one member in the group the leader can't handle, it might be beneficial to transfer that individual to another leader who might be able to increase that person's productivity. For instance, if you are task-motivated and know you don't handle personal conflict too well, it would be to your advantage to transfer a troublesome subordinate to a relationship-motivated leader who would be challenged by the problem. From a managerial standpoint, the mine manager might reassign a foreman to a different shift boss if he has someone who could more effectively deal with that individual's special needs. Note too that for some, the suggestion to change the membership of your group which appears both on "Increasing Leader-Member Relations" and on "Decreasing Leader-Member Relations" may appear confusing. Spell out for them that changing membership of the group to increase leader-member relations means that you add members who are supportive of the leader and/or transfer out members who are disruptive. To decrease leader-member relations by changing the composition of the group, transfer in a disruptive member.

TRANSPARENCY 3-7:

"Increasing task structure mainly involves clarifying the goal of the task and identifying the best steps for accomplishing the job." (Go over the items one at a time and discuss them with the group. Elaborate or give examples of what is meant by some of the items.)

TRANSPARENCY 3-8:

"Changing position power is another option available to affect situational control. These are some ways you can increase or decrease position power." (Go over the checklist and discuss some of the items.)

"Why would a leader want to give up some authority or power in a particular situation? Let's consider an example. Let's suppose that you, as a relationship-motivated leader, find it difficult to reprimand a subordinate. You can do it, but you don't do it very well because you are very sensitive to that individual's feelings. You might want to share that authority with a task-motivated leader who could handle the disciplinary problems better. In some units, you will even see these functions deliberately divided between two leaders. A task-motivated leader and a relationship-motivated leader split the job, with each taking responsibility for those functions he does best.

JOB ENGINEERING: TASK STRUCTURE

TO INCREASE TASK STRUCTURE:

1. ASK FOR MORE DETAILED INSTRUCTIONS AND WRITE THEM DOWN FOR LATER REFERENCE.
2. SEEK OTHERS WHO HAVE EXPERIENCE IN DOING THE TASK TO GIVE YOU POINTERS.
3. LOOK FOR MORE INFORMATION IN FIELD MANUALS AND BOOKS.
4. OUTLINE THE TASK AND BREAK IT DOWN INTO SMALLER STEPS.
5. SEEK FORMAL TRAININGS.
6. TELL YOUR BOSS YOU CAN DO A BETTER JOB IF HE'LL GIVE YOU MORE STRUCTURED ASSIGNMENTS.
7. KEEP RECORDS OF PARTICULAR TASKS SO YOU CAN REFER TO THEM THE NEXT TIME THE SITUATION ARISES.

TO DECREASE TASK STRUCTURE:

1. INCLUDE YOUR GROUP MEMBERS IN THE PLANNING AND DECISION-MAKING.
2. LET YOUR BOSS KNOW YOU LIKE UNUSUAL CHALLENGING PROBLEMS AND VOLUNTEER YOUR GROUP WHEN THESE COME UP.

JOB ENGINEERING: CHANGING YOUR POSITION POWER

TO INCREASE IT:

1. BECOME AS QUICKLY AS POSSIBLE AN EXPERT ON THE JOB SO YOU WON'T HAVE TO DEPEND ON SUBORDINATES FOR DIRECTION.
2. SHOW YOUR SUBORDINATES "WHO'S BOSS" BY EXERCISING YOUR POWERS FULLY.
3. LET YOUR SUBORDINATES KNOW YOUR BOSS IS BEHIND YOU 100%.
4. ASK YOUR BOSS FOR MORE SUPPORT AND BACKING.
5. WHERE POSSIBLE, MAKE SURE INFORMATION TO YOUR GROUP GETS PASSED THROUGH YOU.
6. SET A GOOD EXAMPLE.

TO DECREASE IT:

1. DON'T FEEL YOU HAVE TO BE AN EXPERT AT EVERYTHING, GIVE MORE RESPONSIBILITY TO GROUP MEMBERS OR YOUR ASSISTANTS.
2. SHARE DECISION-MAKING POWERS WHERE POSSIBLE.
3. DON'T ALWAYS FEEL YOU HAVE TO SHOW THE GROUP WHO'S BOSS.

"You should be aware that changes you make on one situational control factor may also have an effect on another. For example, if you want to decrease situational control by lowering your position power, you might share your authority with an assistant of practice participative management techniques--allowing your subordinates to share in the decision-making. This might lower your position power, but it might increase leader-member relations because group members will feel more a part of the team. So instead of decreasing situational control, you might end up increasing it further.

"Job engineering should be done carefully and slowly. Plan the best course of action, consider the effects on other aspects of your job, and then implement. Evaluate your actions frequently so that you can make the necessary adjustments if you have not achieved the desired effect."

TRANSPARENCY 3-9:

"There are other organizational functions which are also considered job engineering techniques. These include rotation, transfer, selection, and placement of personnel." (Depending on the level of the trainees, you can discuss these in some detail using the material provided in the theoretical section, or you can just briefly mention them. Someone being trained as a firstline supervisor might not need to know very much about these options, since they are not a major part of his future responsibilities. Training managers and foremen might include a more detailed explanation.)

"Let's look at some examples of leadership problems, and practice using job engineering to increase or decrease situational control."

TRANSPARENCY 3-10:

ANSWER

Part 1: "Your leadership style is probably relationship-motivated. This is indicated by an easygoing manner and past ability to resolve conflicts. Your present problems have probably arisen out of the effects of extended job experience. You have good relations with subordinates, and your experience has increased the structure of your job. You have moved into a situation which is high in control and not compatible with your leadership style. In such high control situations, relationship-motivated leaders become bored and perform less well."

Part 2: "Having determined that you are relationship-motivated and that you are now in a high control situation, you would want to move back into a zone of moderate control, which matches your leadership style. The most effective means for achieving this would be to ask your boss to reorganize your group or to let you work with the less-motivated subordinates. You might also ask for a more difficult task to increase your job stress."

OTHER JOB ENGINEERING TECHNIQUES

1. ROTATION
2. TRANSFER
3. SELECTION
4. PLACEMENT

YOU ARE A MANAGER ASSIGNED TO PERSONNEL AND PAYROLL. YOUR BOSS IS NOT HAPPY WITH YOUR RECENT PERFORMANCE.

IN ANALYZING YOUR JOB, YOU HAVE CONSIDERABLE POWER IN ASSIGNING AND DISCIPLINING PEOPLE, YOU CAN RECOMMEND RAISES AND PROMOTIONS, AND YOUR BOSS USUALLY FOLLOWS YOUR RECOMMENDATIONS. YOU SEEM TO GET ALONG QUITE WELL WITH EVERYONE AND KNOW YOU ARE WELL LIKED. YOU ALSO REALLY KNOW YOUR JOB. THIS IS A HIGH CONTROL SITUATION.

YOU KNOW THAT YOU ARE GOOD AT RESOLVING CONFLICT, AND YOU USED TO INVOLVE YOUR GROUP IN ALL PHASES OF THE TASK. HOWEVER, YOU HAVE NOT BEEN VERY CONCERNED WITH THE WELFARE OF YOUR EMPLOYEES RECENTLY AND YOU HAVE BECOME BORED WITH THE JOB. IT'S NOT AS CHALLENGING OR EXCITING AS IT USED TO BE.

1. YOUR LEADERSHIP STYLE IS MOST LIKELY:

RELATIONSHIP-MOTIVATED

TASK-MOTIVATED

2. AS A WAY OF INCREASING YOUR INTEREST IN YOUR JOB AND IMPROVING YOUR PERFORMANCE, YOU COULD DO ONE OR MORE OR THE FOLLOWING:

A. ASK THE BOSS FOR A MORE DIFFICULT TASK TO INCREASE YOUR JOB STRESS

B. ASK TO REORGANIZE YOUR GROUP BY REDESIGNING THE DEPARTMENT AND REQUEST SOME NEW PEOPLE

C. SEEK ADVICE AND ASSISTANCE FROM INDIVIDUALS WHO HAVE HAD SIMILAR EXPERIENCES IN THE PAST

D. TELL YOUR BOSS YOU'D LIKE TO WORK WITH THE LESS-MOTIVATED, MORE TROUBLESOME EMPLOYEES.

"Getting advice on how to do your job" would make the situation even higher in control, and this might make your performance problem even worse.

TRANSPARENCY 3-11:

ANSWER

() 1 (X) 2 () 3 (X) 4 (X) 5

"All three of the above-checked choices would have the effect of lowering situational control so as to match your style more appropriately. The other choices involve improving your situational control, which is exactly opposite to the course of action necessary.

"Of the three potentially valid choices, either 4 or 5 is preferable to 2. Transfer to a new situation is probably the best way to improve your performance if you are a relationship-motivated leader. You indicated that you are quick to learn and gain control of your situation. Reassignment would place you in a new and challenging situation and does not involve any negative actions."

TRANSPARENCY 3-12:

ANSWER

"Mary Vashon is a task-motivated person. This seems likely because she was very good at organizing the office when things were stressful and confused, and she concentrated on the job at hand. After the situation improved and tended to become moderate in control, her performance went down.

"Mary Vashon needs to be in a high or low control situation, not in a moderate one. Your best action to help her might be to choose (a) that is, assign her to another office which would challenge this task-motivated individual. Alternatively, (c) or (d) would be effective, again to place this person in a low control situation.

"Getting to know her better, that is, providing more support, or just waiting and giving her more time, would make the situation remain moderate in control, unless you waited long enough--perhaps as much as six months--for the situation to become high control. Chances are that you do not have that much time for Mary Vashon to improve."

YOU ARE THE SUPERINTENDENT OF SURFACE MAINTENANCE. YOU ARE RELATIONSHIP-MOTIVATED. YOU WERE PROMOTED ONE YEAR AGO AND YOUR DEPARTMENT'S PERFORMANCE WAS VERY GOOD AT THE OUTSET. YOU ATTENDED THE USUAL TRAINING PROGRAMS AND KNOW THE JOB QUITE WELL.

IN THE LAST SIX MONTHS YOUR DEPARTMENT'S PERFORMANCE HAS FALLEN SLIGHTLY, AND THERE APPEARS TO BE A SLOW DOWNWARD TREND. YOU HAVE COMPLETED A SITUATIONAL CONTROL RATING AND DETERMINED YOUR SITUATION HAS "VERY HIGH CONTROL."

IN DECIDING ON VARIOUS COURSES OF ACTION, WHICH ONES MIGHT BE BEST?

1. STOP WORRYING. THE DOWNWARD TREND IN PERFORMANCE WILL PROBABLY REVERSE ITSELF.
2. ASK YOUR BOSS TO REASSIGN SOME OF YOUR SUBORDINATES AND REPLACE THEM WITH NEW PERSONNEL.
3. SEEK ADDITIONAL TRAINING.
4. ASK FOR A TRANSFER TO A NEW ASSIGNMENT WITH GREATER RESPONSIBILITY.
5. ASK FOR A TRANSFER TO ANOTHER STRUCTURED JOB WITH NEW SUBORDINATES, E.G., A DIFFERENT UNIT.

MARY VASHON IS A NEW OFFICE MANAGER ASSIGNED TO YOUR DEPARTMENT. AT FIRST, SHE WAS VERY GOOD AT ORGANIZING THE OFFICE AND GOT ON WELL WITH HER SUBORDINATES. WHEN STRESSED, SHE HANDLED IT BY CONCENTRATING ON THE JOB AND NOT GETTING INVOLVED IN UNPRODUCTIVE ISSUES.

NOW THAT THE OFFICE IS IN SHAPE AND SHE HAS BECOME MORE EXPERIENCED, SHE PERFORMS LESS WELL. HER RELATIONS WITH SUBORDINATES ARE OFTEN TOUCH-AND-GO, AND SHE PAYS LESS ATTENTION TO DETAILS AND SEEMS DISSATISFIED.

IN ANALYZING THE SITUATION, YOU DETERMINE THAT IT IS MODERATE IN CONTROL. SHE PERFORMED WELL AT FIRST WHEN THINGS WERE DISORGANIZED AND SHE WAS INEXPERIENCED, THAT IS, WHILE THE SITUATION WAS LOW CONTROL. NOW THAT THE UNIT IS RUNNING SMOOTHLY AND HER SUBORDINATES ARE MAKING MORE DEMANDS ON HER, SHE IS UNABLE TO FUNCTION WELL.

YOU HAVE REASON TO BELIEVE THAT MARY VASHON IS:

RELATIONSHIP-MOTIVATED

TASK-MOTIVATED

YOUR BEST ACTION TO HELP HER IMPROVE WOULD BE TO:

A. ASSIGN HER TO ANOTHER NEW OFFICE

B. GET TO KNOW HER BETTER AND WORK CLOSELY WITH HER

C. TRANSFER HER TO ANOTHER DEPARTMENT

D. GIVE HER DEPARTMENT A MORE DIFFICULT ASSIGNMENT AND PLACE HER UNDER SOME STRESS

E. WAIT A WHILE LONGER TO GIVE HER A CHANCE TO LEARN MORE

TRANSPARENCY 3-13:

ANSWER

"It is obvious from the information you have that Delong is currently mismatched. He is a relationship-motivated leader assigned to a high control situation. You, therefore, should decrease, not increase, the control of his situation. Additional training (7), giving him more structured tasks (3), letting him continue as before (1), or increasing his position power still further (5) will be counterproductive, since these options will give him still higher control.

"Your best choices would be:

(2) "Transfer to another section. This is a very good choice if you can, in fact, manage it. This is a very effective way of lowering situational control.

(4) "Give Delong a less structured task. This might be difficult under the circumstances, or it might be easy, depending on the types of functions his unit could be assigned. Some maintenance jobs require a completely new approach and considerable ingenuity, especially when money and material are scarce. You might be able to send these types of jobs to Delong's group.

(8) "Set tighter deadlines and put other types of pressure on Delong. This might be a good choice. It would require Delong to work harder and to use his ingenuity and resourcefulness to figure out how to do the job within shorter time periods. He may resent being singled out for this dubious distinction, but you may be able to convince him that it's good for him. This particular option has the advantage of permitting you to back off readily if it does not work. You can always let up if you find that the deadlines and the pressure make the job too stressful, or that Delong can't handle it. Transfer or reassignment are more permanent and irreversible solutions, which you might not want to try.

(9) "Restructure the membership of Delong's group. This is a good option if you have enough manpower to do it. Assignment of people who are technically more competent than Delong, or assignment of workers who have been known to be 'difficult', might present a new challenge. Transfer some of his more familiar and dependable subordinates, and give him several new and inexperienced people. This would also decrease his situational control.

(6) "Give Delong less position power. Considering the traditions of the industry and the type of job which Delong has, this might be difficult to accomplish. Some odification in his power is perhaps possible, although it might undermine his morale. You could, for example, assign tasks to his group as a unit rather than working through him, you could give more

YOU MANAGE PREVENTIVE MAINTENANCE OF YOUR COMPANY, ONE OF YOUR FOREMEN, JACK DELONG, HEADS THE MAINTENANCE AND REPAIR SECTION. DELONG HAS NOT BEEN PERFORMING VERY WELL. SINCE HE IS OBVIOUSLY QUALIFIED TO PERFORM THE SUPERVISORY FUNCTIONS OF HIS JOB, YOU WONDER WHETHER YOU COULD HELP HIM TO IMPROVE.

YOU FIRST LOOK AT THE TYPE OF TASK WHICH HE PERFORMS. THIS IS IN BUILDING MAINTENANCE. THERE ARE VARIOUS RULES ABOUT HOW THE WORK IS TO BE DONE. THERE ARE ALSO FAIRLY GOOD WAYS OF EVALUATING WHETHER THE WORK WAS DONE RIGHT.

YOU NEXT CONSIDER DELONG'S POSITION POWER. HE IS CLEARLY IN CHARGE, AND WHILE HE CANNOT HIRE AND FIRE ON HIS OWN, HE CAN ASSIGN PEOPLE TO VARIOUS JOBS, HE WRITES EVALUATIONS OF THEIR WORK, AND HE HAS SOME DISCIPLINARY POWERS.

YOU THEN LOOK AT HIS RELATIONS WITH SUBORDINATES; THESE TEND TO BE FAIRLY GOOD. THE GROUP SEEMS TO RESPECT HIM AND THERE ARE FEW GRIEVANCES AND COMPLAINTS.

TO DETERMINE DELONG'S LEADERSHIP STYLE, YOU ASK SOME PEOPLE WHO HAVE WORKED WITH HIM WHAT HE IS LIKE. DELONG IS QUITE GOOD AT DEALING WITH PEOPLE AND ENJOYS BEING INVOLVED WITH THE GROUP. HE ALSO SEEMS TO LET THE GROUP PARTICIPATE IN WORKING OUT A PLAN OF ACTION. YOU KNOW THAT HE PERFORMED HIS JOB QUITE WELL AT THE BEGINNING OF HIS TOUR WHEN THINGS WERE A BIT DISORGANIZED. THIS SOUNDS LIKE HE IS A RELATIONSHIP-MOTIVATED LEADER IN A HIGH CONTROL SITUATION WHICH DOESN'T MATCH HIS LEADERSHIP STYLE.

YOU NOW DECIDE TO SEE WHAT CAN BE DONE TO LOWER HIS SITUATIONAL FAVORABLENESS TO MODERATE, THEREBY HOPING HIS PERFORMANCE WILL GO UP.

YOUR THREE MOST PROMISING OPTIONS ARE:

- ___1. DO NOTHING AND GIVE DELONG MORE TIME.
- ___2. TRANSFER HIM TO ANOTHER SECTION.
- ___3. GIVE HIM A MORE STRUCTURED TASK.
- ___4. GIVE HIM A LESS STRUCTURED TASK.
- ___5. GIVE HIM MORE POSITION POWER AND BACK HIM UP WHENEVER YOU HAVE THE CHANCE.
- ___6. GIVE HIM LESS POSITION POWER.
- ___7. SEE THAT HE GETS MORE TRAINING.
- ___8. SET TIGHTER DEADLINES.
- ___9. RESTRUCTURE THE MEMBERSHIP OF HIS GROUP.

authority to his assistant, or you could leave him more on his own and not back up his recommendations so frequently. Remember, however, that changing position power might not be enough to move Delong into the moderate zone; you might also have to adjust task structure to achieve the desired result."

(If you select to discuss selection, placement, rotation, and transfer with the students, the following examples can be used.)

TRANSPARENCY 3-14:

ANSWER

You chose A: "You pick a task-motivated (low LPC person, since you think that the situation for a new leader will be very low in control.

"This is the best choice. You are correct in saying that the low LPC person will perform best in low control conditions, and for the new leader this situation will be low in control.

"The situation is generally structured, and the personnel situation is poor. While the person in charge of such a crew ordinarily will have high task structure and high position power (making the situation moderate), a new leader will find this low control situation at first very unfavorable. You may, of course, have to replace the task-motivated leader after the job has become moderate in control, that is, after the leader has learned the routines and improved the personnel situation. This may, however, take a long time depending on the complexity of the job. You can also aid in slowing down the increase in situational control by providing low support and assigning challenging, stressful, or unstructured tasks.

"Since you need somebody who will perform well right now, the task-motivated leader is your best bet."

You chose B: "You try to find a relationship-motivated person, since you think the situation is complex at the moment and will be moderate in control for a new leader.

"This is incorrect. The situational control as described would, in fact, be low for a new leader. The personnel situation is poor, task structure for an experienced person would be only moderate, and position power will be limited by the need to improve the personnel problem.

"A relationship-motivated leader will not perform well in a low control situation, although if you had time to wait until the leader gets control and gains experience, the relationship-motivated leader eventually would do a good job. However, you can't afford to wait in this situation, so the task-motivated leader would be the better choice."

YOU ARE IN CHARGE OF SUPPLY AND MATERIAL. THE WOMAN IN CHARGE OF ONE SECTION JUST HAD A SERIOUS ACCIDENT AND HAS TO BE REPLACED SINCE IT IS DOUBTFUL THAT SHE WILL BE ABLE TO RETURN TO WORK FOR QUITE SOME TIME.

THE SITUATION IN THE UNIT IS RATHER HARD TO DEFINE. IT IS A HIGHLY ROUTINE OPERATION MOST OF THE TIME, BUT THE JOB REQUIREMENTS OCCASIONALLY CHANGE DEPENDING ON THE AVAILABILITY OF MATERIALS AND THE DEMAND FOR SUPPLIES. THE MORALE AND SATISFACTION OF THIS GROUP LEAVE MUCH TO BE DESIRED, AND THERE ARE DISCIPLINARY PROBLEMS THAT CANNOT BE IGNORED. YOU NEED A PERSON WHO WILL BE ABLE TO MANAGE UNDER THESE CONDITIONS RIGHT NOW. ABOVE ALL, YOU CAN'T AFFORD TO HAVE SOMEBODY IN THE JOB WHO'LL MESS THINGS UP.

- _____A. YOU PICK A TASK-MOTIVATED (LOW LPC) PERSON SINCE YOU THINK THAT THE SITUATION FOR A NEW LEADER WILL BE VERY LOW IN CONTROL BECAUSE OF THE CHANGE IN MANAGEMENT.

- _____B. YOU TRY TO FIND A RELATIONSHIP-MOTIVATED (HIGH LPC) PERSON SINCE YOU THINK THE SITUATION IS COMPLEX AT THE MOMENT AND WILL BE MODERATE IN CONTROL FOR A NEW LEADER.

TRANSPARENCY 3-15:

ANSWER

You chose A: "Demote Renton for not performing his job well.

"This is not correct. Recall that Renton performed well before, that he is competent and trained, and that you would, therefore, be losing a valuable man. The leadership situation is moderately favorable--the leader is well-accepted by his men, but the task is unstructured; and while position power is nominally high, you might consider that the men go out in small teams by themselves, and while they are in the stopes Renton will have very little control over their actions and behavior.

"The chances are that Renton is a task-motivated leader: he performed well when the unit was first formed, and discipline decreased after everything in the unit was under control. This looks like a mismatch--a task-motivated leader in a situation which is now in moderate control."

You chose B: "Transfer Renton to the unit which currently is performing passably well, if not brilliantly, and where the men do not get along with their foreman.

"Correct. This is a good recommendation. You probably noted that Renton is likely to be a task-motivated leader. He performed well when he had a low control situation, when the unit was new and less well organized, and when his relations with his group were still less cozy. Now that he has things going better and he and his men get along, the discipline has begun to slip.

"It is, of course, generally unwise to move someone into a low control situation. In this particular case, however, there is no way in which this situation can be made into one with high control. The task is unstructured, and the leader's control over his men while they are in the stopes, usually in pairs of two, will be less than it would be if he were with his men all the time.

"Moving Renton to another unit in which his relations with the group would be uncertain, especially in a unit which has had a history of not getting along with its foreman, seems like an ideal way of making full use of Renton's leadership skills and increasing unit performance."

You chose C: "Transfer Renton to the unit which is the best in the company at this time and which gets along well with its foreman.

"This is not likely to work. You have been told that the situation has moderate control, and you quite correctly figured out that Renton is a task-motivated individual--he performed best right at the beginning before

YOU ARE THE ENGINEER IN CHARGE OF A MINING OPERATION WHICH IS DOING EXPLORATORY WORK. MUCH OF THE WORK IS QUITE ROUTINE AND STRUCTURED. ON THE OTHER HAND, THE FOREMEN IN CHARGE OF VARIOUS CREWS DO HAVE TO USE A GOOD DEAL OF DISCRETION AND COMMON SENSE, SINCE THE STABILITY OF THE ROCK IS NOT TOO WELL KNOWN, AND THERE ARE PROBLEMS WHICH CANNOT ALWAYS BE THOUGHT OUT IN ADVANCE. IT IS ESSENTIAL, FOR EXAMPLE, TO REMAIN ALWAYS ON THE ALERT FOR ROCK BURSTS AND THE POSSIBILITY OF GAS, AND IN THESE INSTANCES, THE FOREMAN IS ON HIS OWN.

THE PROJECT MANAGER HAS BEEN ON YOUR BACK RECENTLY ABOUT THE PERFORMANCE OF ONE OF THE FOREMEN, WHOSE WORKGROUP HAS DONE RATHER POORLY. HE WANTS YOU TO DO SOMETHING, OR RECOMMEND WHAT NEEDS TO BE DONE.

YOU HAVE KNOWN JACK RENTON FOR SOME YEARS, AND YOU RECALL THAT HE IS WELL TRAINED, COMPETENT, AND PERFORMED QUITE WELL BEFORE. HE QUICKLY GOT HIS CREWS INTO SHAPE AND RAN AN EFFICIENT OPERATION. HOWEVER, THE PROJECT MANAGER IS QUITE RIGHT IN THINKING THAT THE WORK OF RENTON'S CREWS IS NOT AS GOOD AS IT OUGHT TO BE. THIS IS PUZZLING SINCE RENTON AND HIS MEN REALLY SEEM TO LIKE EACH OTHER AND GET ALONG WELL. YOU CONSIDER THE PROBLEM AND MAKE THE FOLLOWING RECOMMENDATION:

- A. DEMOTE RENTON FOR NOT PERFORMING HIS JOB WELL.
- B. TRANSFER RENTON TO THE CREW WHICH CURRENTLY IS PERFORMING PASSABLY WELL, IF NOT BRILLANTLY, AND WHERE THE MEN DO NOT GET ALONG WITH THEIR FOREMAN.
- C. TRANSFER RENTON TO THE CREW WHICH IS THE BEST IN THE MINE AT THIS TIME, AND WHICH GETS ALONG WELL WITH ITS FOREMAN.

his crew had shaken down, and before he and his men had developed such a close relationship. You probably thought, therefore, that you should move Renton into a high control situation by giving him a crew which has good relations and which is already performing well. This would go along with our previous warnings that it is generally not a good idea to make low control situations.

"In this case, however, reducing Renton's situational control seems exactly right. You know that he performed well with a crew which had just been formed and where his relations were not too good at first; and you know, of course, that the job of a foreman in the situation which we described will not be highly structured under any conditions. The situation, even with a better operating crew, is likely to give only moderate control."

(If you feel that the students understand job engineering techniques fairly well, try the following quiz).

TRANSPARENCY 3-16: (Job Engineering Quiz)

ANSWERS TO JOB ENGINEERING QUIZ

1. Decrease Control. By changing jobs frequently, a leader does not allow him/herself to build up experience. Thus, each new job will present less structured and more challenging problems to the leader.
2. Increase Control. Having the organization give you decision power over such matters increases both your actual power and your subordinate's perception of your authority.
3. Increase Control. Agreeing on goals and objectives helps to clarify job demands and provides a way to assess performance, thus increasing task structure.
4. Decrease Control. By asking subordinates to make suggestions, you are automatically telling them that they have some say in the running of the unit. The delegation of authority to subordinates lessens your control of the situation.
5. Increase Control. This is a powerful way to improve your leader-member relations. By choosing subordinates with whom you have had a good working relationship, you increase the support and loyalty of your work group.
6. Decrease Control. When you allow subordinates to work on their own, you increase their power and lower yours. You also make it possible for a greater diversity of procedures to develop as each subordinate works out his or her own methods, thereby lowering task structure. Both of these factors serve to reduce situational control and increase job challenge.

JOB ENGINEERING QUIZ

LISTED BELOW ARE ACTIONS A LEADER MIGHT TAKE TO CHANGE SITUATIONAL CONTROL. INDICATE WHETHER YOU THINK THE ACTION WOULD INCREASE OR DECREASE SITUATIONAL CONTROL.

INCREASE

DECREASE

1. FREQUENTLY VOLUNTEER FOR NEW AND DIFFERENT ASSIGNMENTS.

INCREASE

DECREASE

2. ASK YOUR SUPERIOR TO LET YOU MAKE ALL LEAVE DECISIONS FOR YOUR SUBORDINATES.

INCREASE

DECREASE

3. MEET WITH YOUR BOSS TO WORK OUT GOALS AND OBJECTIVES FOR YOUR DEPARTMENT OR UNIT.

INCREASE

DECREASE

4. ENCOURAGE YOUR SUBORDINATES TO MAKE SUGGESTIONS ON HOW TO ACCOMPLISH THE JOB.

INCREASE

DECREASE

5. GET YOUR BOSS TO AGREE TO BRING INTO YOUR UNIT SEVERAL SUBORDINATES WITH WHOM YOU HAVE WORKED WELL IN THE PAST.

INCREASE

DECREASE

6. AVOID CLOSE MONITORING OF YOUR SUBORDINATES. LET THEM WORK ON THEIR OWN FOR RELATIVELY LONG PERIODS.

INCREASE

DECREASE

7. KEEP CLOSE RECORDS ON THE EFFECT OF VARIOUS PROCEDURES AND METHODS FOR SOLVING PROBLEMS OR MAKING DECISIONS RELATED TO YOUR JOB.

INCREASE

DECREASE

8. VOLUNTEER TO ACCEPT AS SUBORDINATES, INDIVIDUALS WHO ARE TRYING TO TRANSFER OUT OF OTHER UNITS OR INDIVIDUALS NEWLY ASSIGNED TO THE ORGANIZATION.

7. Increase Control. Good records provide structure. They allow you to assess what did and did not work before and let you use this information in future situations.

8. Decrease Control. While it may not be true in every case, you will probably receive your share of hard-to-handle subordinates. This will make the managing of your work group somewhat more unpredictable and more challenging.

CLASS DISCUSSION

Question: If task-motivated leaders perform best in high and low control situations, and relationship-motivated leaders do best in only one category, moderate control, isn't it better to be task-motivated?

Answer: No. There is no particular advantage to being either task- or relationship-motivated. First of all, you can't just decide to have a particular leadership style. As we discussed in Module I, leadership style is a personality variable which has been developed over your lifetime and is not something you can easily change.

More importantly, task-motivated leaders don't have more opportunities to be effective than relationship-motivated leaders, because more jobs fall into the moderate zone. Therefore, both types of leaders have an equal number of occasions when they will be outstanding or effective leaders, and some occasions where they can expect to perform less well.

Question: How do I get my boss to give me the kind of jobs I like?

Answer: Bosses need feedback, too. Leaders are aware that they have to give feedback to subordinates so that they will know how to change their behavior and improve their performance. This is true of the boss as well. It's not always easy, but it is possible to modify your boss's behavior. If you like unstructured, challenging problems to work on, and the boss gives you just that type of assignment, find a way to let him or her know how you feel. For instance, you might say, "I think our crew really performed well on this task, because it gave us an opportunity to develop our own work plan. Anytime you have this kind of assignment to hand out, I'd be happy for my group to tackle the problem." Or, if the leader likes detailed instructions, he or she might say to the boss, "I think the reason we did well on this task was because you really spelled out what we were supposed to do. It helps when we have very clear guidelines on how to proceed. Thanks for taking the time to make your instructions clear."

Most bosses are responsive to a thank you. Of course, there are some cases where your relationship with the boss just won't allow for this, but training your boss in how to make you more effective is very helpful for him as well as for you.

Question: What do I do if I can't see any way to engineer my job in order to change situational control?

Answer: Sometimes this happens. When this occurs you really have two choices. First, you might consider whether you want to request a change in your job, a transfer. Or you may just have to accept the fact that for the time being your leadership style and situational control are mismatched, and your performance is going to be less than 100%. If you realize that these types of situations do occur but that they are only temporary, it will make the situation easier to cope with. When you find yourself mismatched, the situation eventually changes either by organizational intervention, i.e., new subordinates, a new task, or because you gain in experience and job knowledge. Thus, the poor performance and frustration you're feeling now will change as a result of your change in situational control.

There will undoubtedly be other questions which the students will bring up. Our experience has shown, however, that if you study the theoretical information provided in this manual, you should be able to handle just about any question.

SUMMARY

TRANSPARENCY 3-17:

"This is a summary of the key points covered in Leader Match training. Let's go over them one at a time and see if you have any additional questions." (Go through the items on this transparency, and elaborate on the important points we have covered in the three modules.)

You might elect to show the three videotapes as a summary or develop a role-play problem. The book contains a final exam, which you should have the students complete and score in class. A copy of this exam is in the appendix of this manual with the correct answers indicated.

There is some additional material covered in the final chapter of this book on the evidence we have for the effectiveness of Leader Match training and why it seems to improve performance. You may include some of this material in your summary if you have the time available.

SUMMARY OF LEADER MATCH

TWO LEADERSHIP STYLES AS MEASURED BY THE LPC SCALE:

1. TASK-MOTIVATED - PRIMARILY MOTIVATED TO GET THE JOB DONE QUICKLY AND EFFICIENTLY.
2. RELATIONSHIP-MOTIVATED - PRIMARILY MOTIVATED BY THE NEED FOR GOOD RELATIONSHIPS WITH GROUP MEMBERS.

THREE VARIABLES DETERMINE YOUR SITUATIONAL CONTROL:
(IN ORDER OF IMPORTANCE)

1. LEADER-MEMBER RELATIONS - THE DEGREE TO WHICH YOU CAN DEPEND ON YOUR GROUP TO DO THEIR PART.
2. TASK STRUCTURE - THE DEGREE TO WHICH YOU KNOW WHAT TO DO AND HOW TO DO IT.
3. POSITION POWER - THE DEGREE TO WHICH YOU CAN REWARD AND DISCIPLINE SUBORDINATES TO INSURE THE SUCCESSFUL COMPLETION OF THE JOB.

COMBINED THESE THREE VARIABLES DETERMINE WHETHER THE SITUATIONAL CONTROL IS:

1. HIGH
2. MODERATE
3. LOW

THE MATCH:

TASK-MOTIVATED LEADERS PERFORM BEST IN HIGH AND LOW CONTROL SITUATIONS.

RELATIONSHIP-MOTIVATED LEADERS PERFORM BEST IN MODERATE CONTROL SITUATIONS.

A Final Note to the Students.

"We have attempted in this class to teach you about yourself as a leader, to teach you about situations and how much control you have, and finally, to learn how to change situations to make them work for you through job engineering.

"A few final comments are in order. First of all, Leader Match is not a cookbook containing the answers to all your leadership problems. Nothing can replace the individual's sound judgment and decision-making. We have attempted to provide you with a method for analyzing situations and locating your problem. Second, we have tried to give you some guidelines in the job engineering section on how to go about solving those problems, especially in the areas of leader-member relations, task structure, and position power. You must experiment with these ideas and techniques in small steps until you find what works best for you.

"And a word of caution: IF IT RUNS WELL, DON'T FIX IT!! In other words, if you and your group's performance is good, don't mess with it. Leader Match and job engineering are techniques to help you when your performance is not what it should be. It's like tinkering with an engine that's running well: fiddling around with it can only make it worse.

"Leader Match training is an additional tool you have available to improve your and your unit's performance; use it wisely and discretely. Remember, if you learn to avoid situations in which you are likely to fail, you are bound to be a success."

END OF MODULE III

DOES LEADER MATCH WORK?

The underlying question for all training is, does it work? Will this program increase leadership performance? The evidence to date indicates that Leader Match training does improve leadership effectiveness.

Thus far, Leader Match has been tested in 16 different settings. In the civilian sector the training has been successfully validated with police sergeants, middle managers of a county government, public works supervisors, volunteer public health workers, and first-line supervisors of a retail sales, mail-order chain, and other organizations.

The most recent study was conducted with firefighters of the Seattle Fire Department. Supervisors were randomly assigned to three groups. One group received Leader Match training using the format described in this manual; a second group received an alternative management program of a similar length; and the third group served as a control and received no training. Performance was evaluated before training, and eight months after training ratings were made by battalion chiefs using a behaviorally-anchored rating scale. In other words, the trainees were rated on specific leadership behaviors. As you can see from Figure 4-1, the Leader Match trainees outperformed those in the other two groups. For example, duties ranging from housekeeping in the firehouse or garrison in the military to life-threatening situations fighting major fires and combat.

This program has been shown to be effective with military personnel. A number of studies have been conducted under highly controlled conditions with officers and noncommissioned officers, and these are described briefly below.

Validation Evidence

Navy Studies. Two studies have been conducted with junior officers and chief petty officers of a naval air station and a navy destroyer (Leister, Borden, & Fiedler, 1977). Half of the officers and petty officers in each study were randomly assigned to Leader Match training and half to a control condition. Individuals in control conditions did not receive any training. Performance scores were obtained from superiors prior to training and again six months later.

As you can see from Figure 4-2, the 27 individuals who received Leader Match training increased dramatically and significantly in their performance over the six months. Performance for the 29 control group members stayed approximately the same.

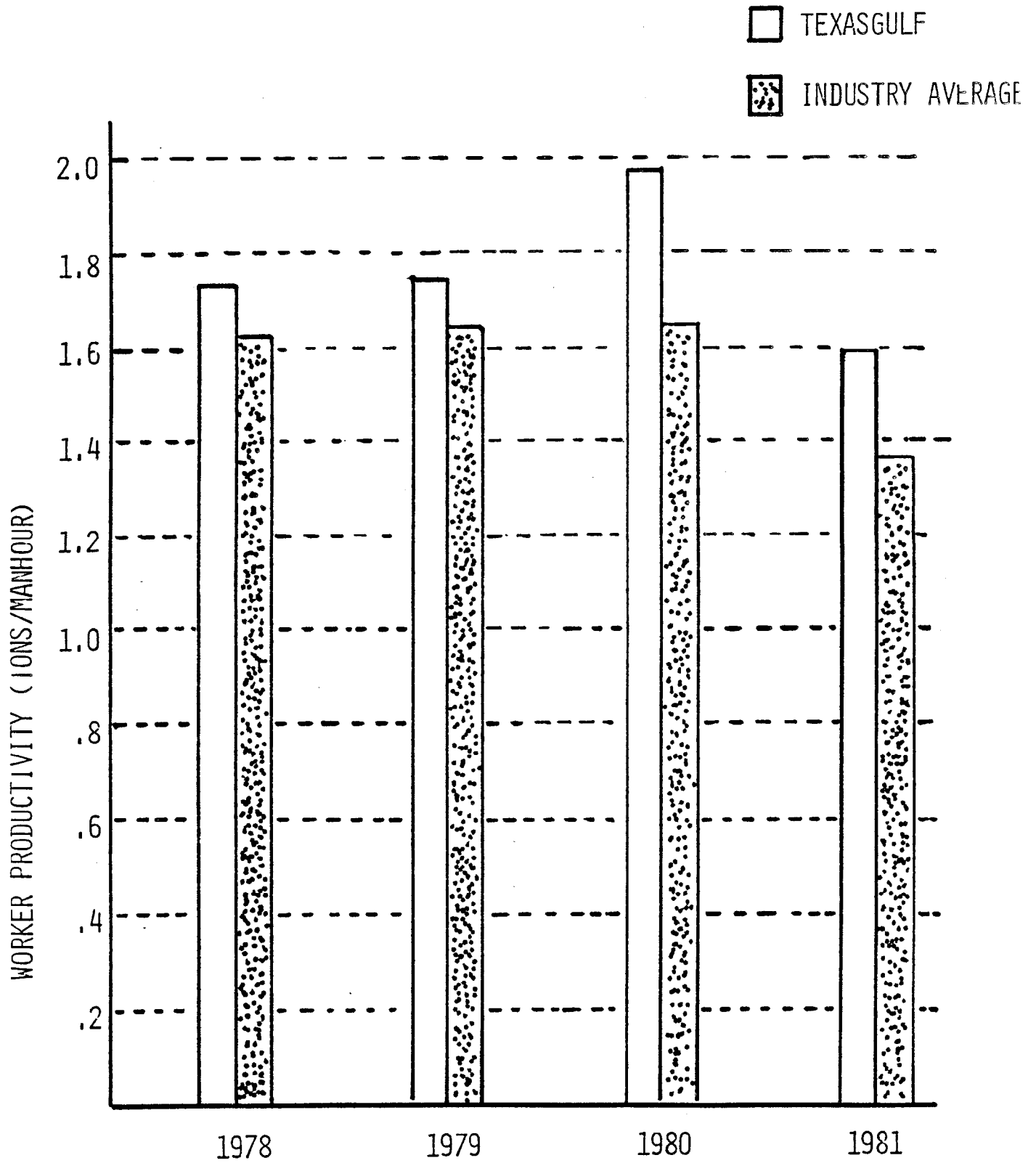


FIGURE 4-1. - Comparison of worker productivity between Texasgulf and trona industry average 1978-1981.

□ TEXASGULF TRONA MINE
▨ AVERAGE OF TRONA INDUSTRY

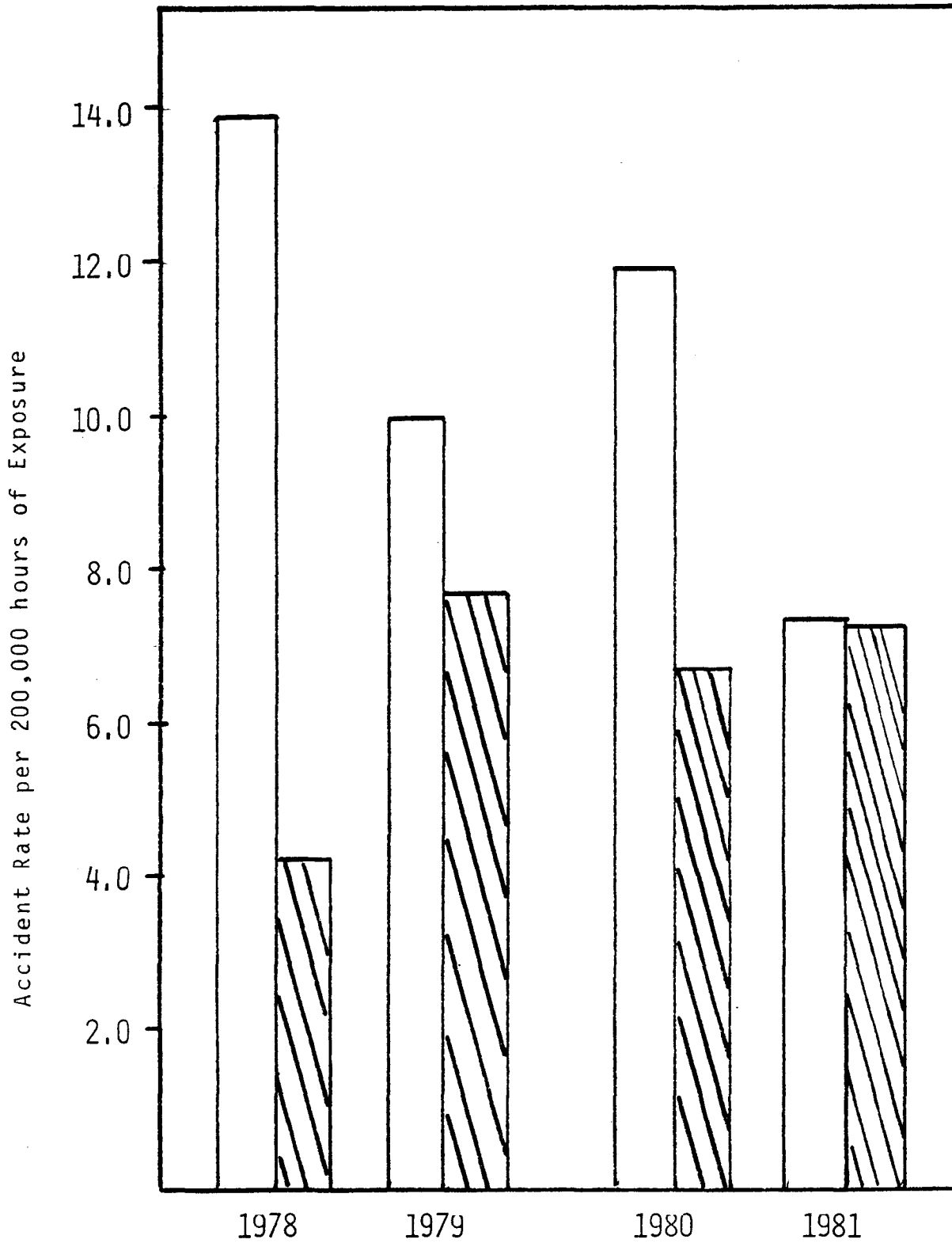


FIGURE 4.2. - Accident rates for the trona industry as reported by the Mine Safety and Health Administration.

Army Platoon Leaders. This study was conducted with 81 platoon leaders from three brigades at Fort Lewis, Washington (Fiedler, & Mahar, 1979b). The method was similar to the navy study. Half the platoon leaders received Leader Match training, while half served as a comparison group and received the training at the end of the study. Performance was evaluated before and again three months after training by the company commander and battalion commander. As you can see from Figure 4-3, the results were almost identical to those obtained in the navy study. The trained group had a significant increase in performance, while the control group stayed approximately the same.

Acting Platoon Leaders. This study was conducted with 114 West Point cadets assigned for 4 to 8 weeks of the summer as acting platoon leaders in regular military units across the country (Csoka & Bons, 1978). One-third of the cadets received Leader Match training, one-third were told that they were not told anything.

At the end of the summer assignment, each acting platoon leader was rated by his superior officer in the unit to which he was assigned. As you can see from Figure 4-4, cadets in the Leader Match trained group significantly outperformed those in the other two groups.

Cadet Platoon Leaders. This study (Csoka & Bons, 1978) involved 52 male cadets who were assigned as platoon leaders for approximately three months during the fall semester of their senior year. Twenty-five cadets read Leader Match, and a control group of 27 received the usual leadership training given to senior cadets.

The school's evaluation procedure, based on a composite of ratings by cadet superiors, cadet peers, and officers, served as the performance variable. Based on these ratings, the cadets were placed in an upper, middle, and lower third on leadership performance. The results showed that the Leader Match trained cadets were significantly more often ranked in the upper third on performance than were the control group cadets.

Cadet Squad Leaders. A third study was conducted at West Point with 128 third-year cadets who served as squad leaders for new student orientation training (Fiedler & Mahar, 1979b). Each squad leader served in one of two 4-week details during the summer. The cadets within each detail were randomly assigned with 37 and 26 cadets receiving Leader Match training and 39 and 26 cadets serving as controls.

The squad leader's performance was evaluated by their cadet platoon leaders and platoon sergeants at the end of the 4-week study. The results are shown in Figure 4-5 and indicate that again the Leader Match trained cadets outperformed those in the control group.

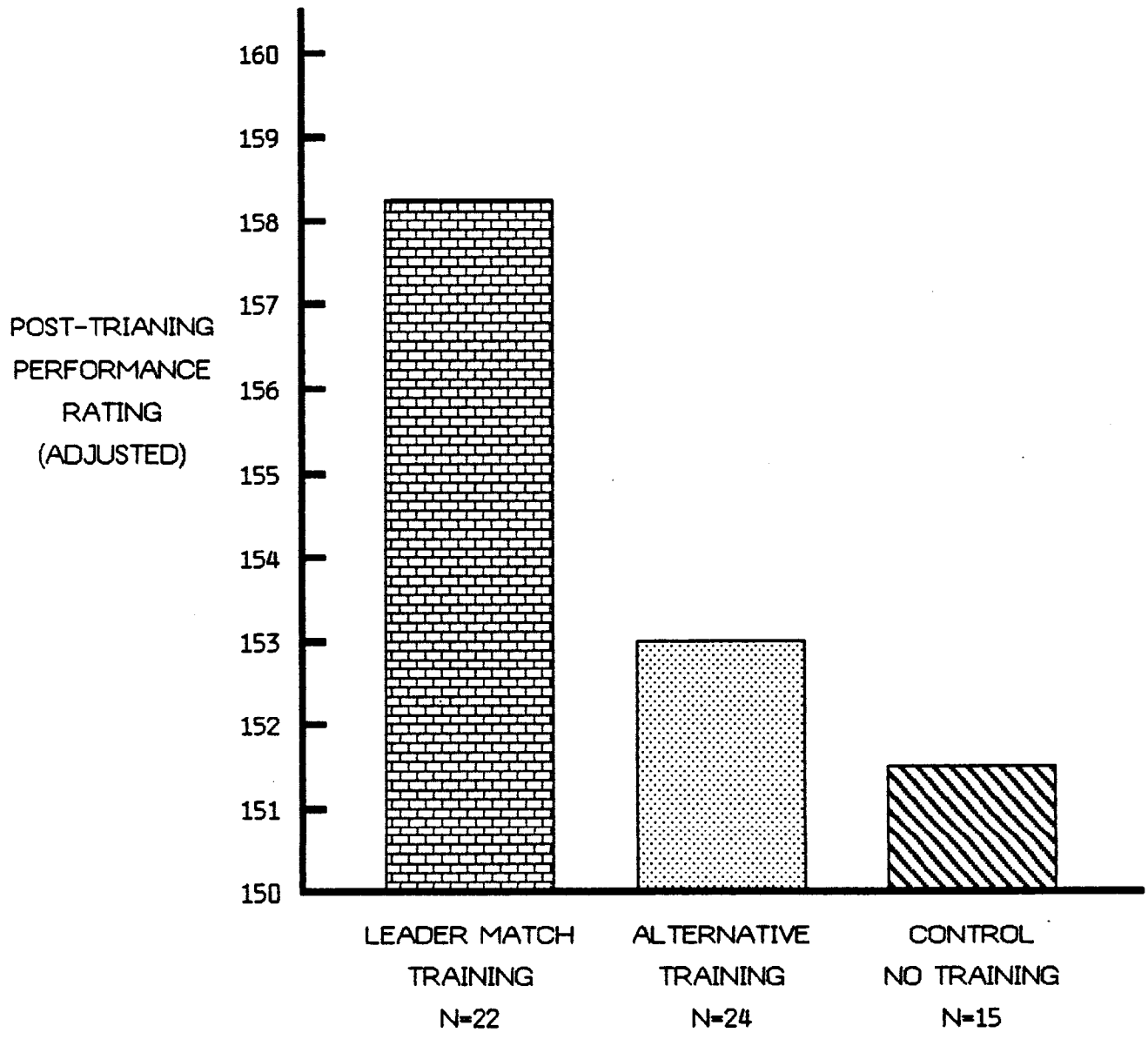


FIGURE 4-3. - Comparison of training programs' effects.

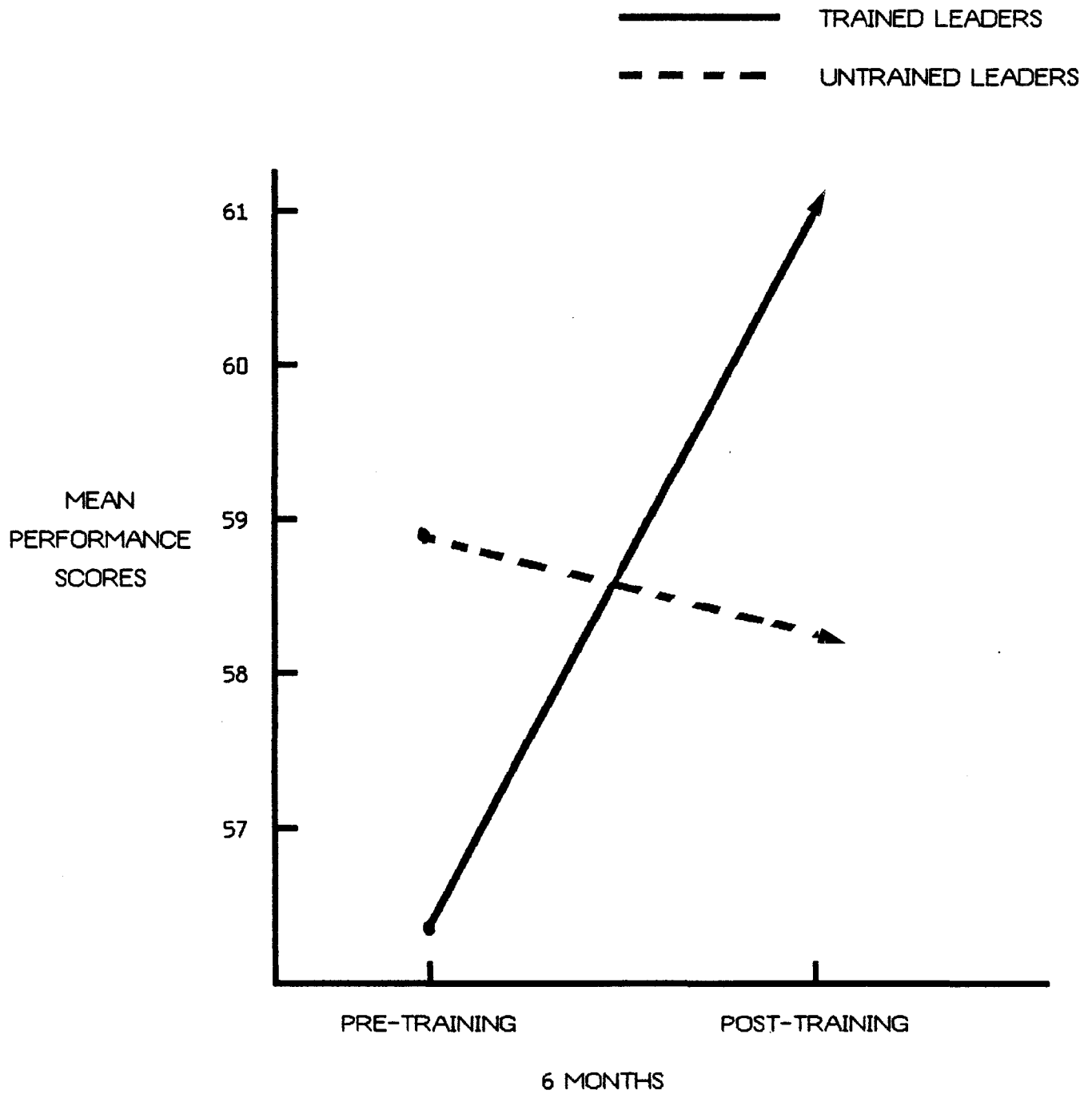


FIGURE 4-4.- Mean performance of trained and untrained Navy leaders.

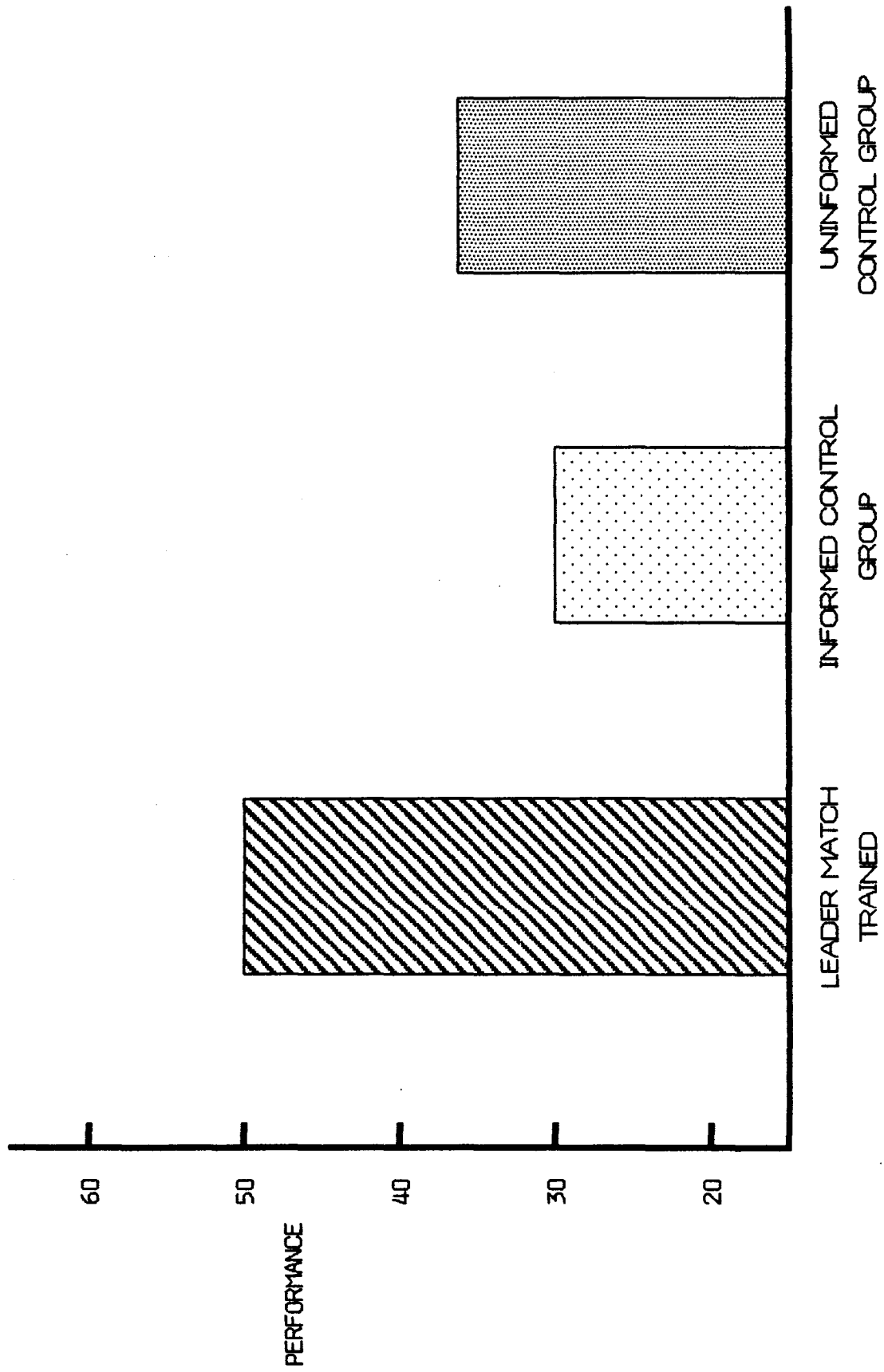


FIGURE 4-5. - Performance of acting platoon leaders under three different conditions.

ROTC Cadets. This study was conducted with ROTC cadets attending a 4-week summer advanced training camp (Fiedler & Mahar, 1979a). This is also the only study to date which includes a sample of women army leaders. From the 46 schools attending the summer camp, nine schools were randomly selected for Leader Match training and nine to serve as controls. There were 156 male and 38 female cadets in the training schools, and 176 male and 36 female cadets in the control schools.

Performance evaluations were obtained from two sources, superiors--regular army officers and noncommissioned officers--and peers. The mean performance of students in the trained schools was compared with those in the untrained schools. The results are shown in Figure 4-6. Overall performance is the evaluation made by the regular army personnel at the end of the 4-week camp. Peer 1 is a rating which asked the students to rate each other as future combat leaders (male only), and peer 2 rated all cadets on future technical and administrative skills. As you can see, the cadets receiving Leader Match outperformed the untrained cadets not only on overall evaluations, but in the peer ratings as well. Figure 4-7 presents the findings for males and females, indicating that the training was effective for both groups.

These studies indicate that Leader Match training is successful with officers, petty officers, West Point cadets, and ROTC cadets. Two studies have also been completed with noncommissioned officers, as described below.

PNCOC Students. This study included 110 enlisted men attending a 4-week primary leadership course (PNCOC) at a noncommissioned officer (NCO) academy (Mahar, Rhode & Fiedler, 1980). Three consecutive classes were chosen to participate in this project. Students in the three classes received the regular 4-week course of instruction at the NCO Academy. However, the second class received six hours of Leader Match training instead of orientation on the first day of class.

Performance was rated by the student's platoon leader and platoon sergeant in their regular units before and three months after PNCOC. As can be seen from Figure 4-8, the results are almost identical to those obtained in the navy study and with army platoon leaders. Trained PNCOC students had a significant increase in their performance, while the untrained PNCOC students stayed about the same.

Squad Leaders. The final study was conducted with squad leaders in two battalions at Fort Lewis, Washington. Eighteen squad leaders were assigned to Leader Match training and 19 to the control group. The training was given using a format similar to that described in this instructor manual.

Performance was rated by the company first-sergeant before and again after training. During the intervening period, the two battalions were sent overseas for special field maneuvers. Figure 4-9 indicates that the Leader

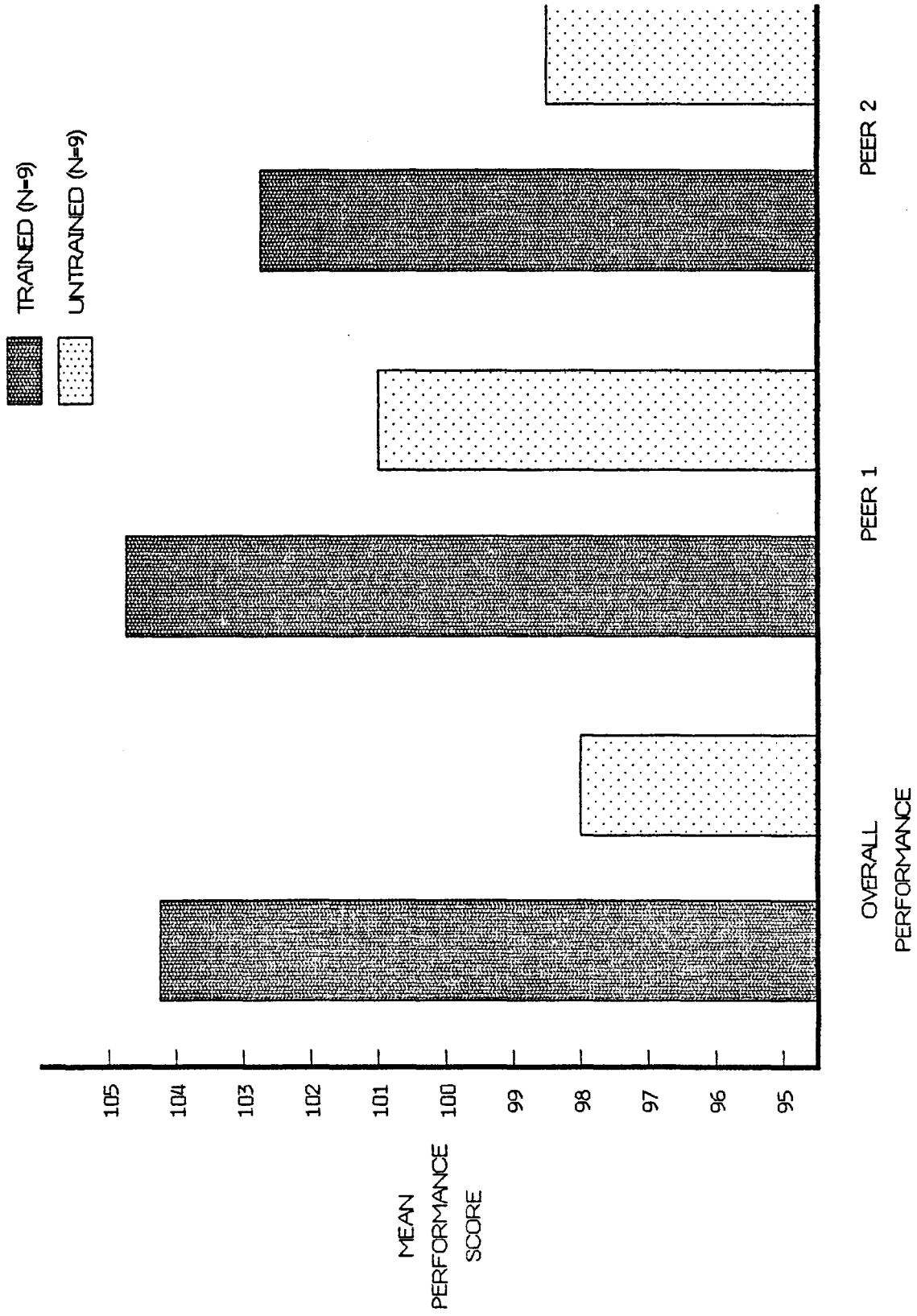


FIGURE 4-6. - Performance of trained and untrained universities

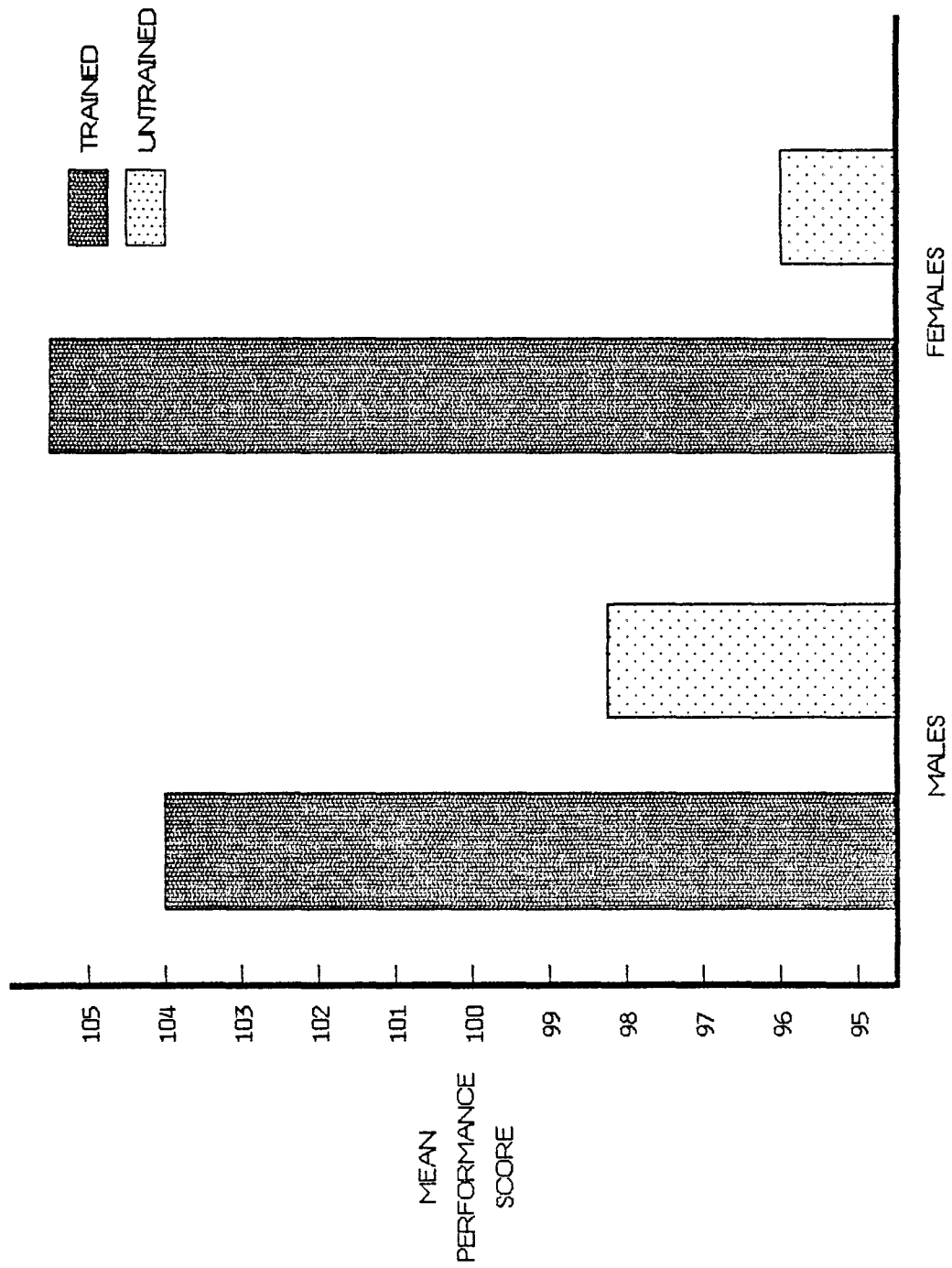


FIGURE 4-7.- Comparison of males and females on overall performance.

Match trained squad leaders had a significant increase in performance. This decrease in performance was likely to be the result of the extreme stress felt by the squad leaders on overseas duty, and perhaps those without Leader Match training were less able to cope.

All these and other studies indicate that Leader Match is an effective method for increasing leadership performance. The training is also cost-effective, requiring no more than nine hours of instruction.

Why is Leader Match Training Successful?

The final question is, why does Leader Match training produce such significant changes in leadership performance? What do the trainees do that is different from those who do not receive this training program?

There are no simple answers to these questions. The evidence indicates that Leader Match training is beneficial to different people in different ways. For some individuals the most important gain from the training is increased knowledge of themselves as leaders. Looking at how you behave in different situations and understanding what motivates you to be a leader can have a positive effect on your attitude. Some individuals have more confidence in themselves as a result of Leader Match training. Relationship-motivated leaders find it reassuring to learn they can be successful managers in a wide variety of settings. Task-motivated leaders learn they can be successful by learning to cope with their interpersonal skills and building on their organizational ones. Finally, some trainees benefit from the knowledge and understanding they gain about other people's behavior, i.e., their boss, coworkers, or subordinate leaders.

Another area in which some individuals report the training to help is in analyzing situations. They understand how much control they have over certain situations, and learn to diagnose their problems by determining whether changes in leader-member relations, task structure, and position power will aid performance.

We feel, however, that the most important benefit from Leader Match training is in the area of job engineering. To understand that you can change your leadership situation is a valuable lesson for the new, inexperienced leader as well as for the "old hand." Simple techniques, such as learning to listen and getting to know your subordinates can significantly aid in improving morale and group relations. Learning to structure jobs, to take advantage of the boss's and others' knowledge about the job, and to use your power and authority, are also important benefits for the trainees.

There is no simple answer to why Leader Match is effective. It reaches people on many levels. Above all, it offers many more options for dealing with the management job that most leaders considered possible.

APPENDIX E
SUPERVISORY SKILLS TRAINING MATERIAL

TEACHING SUPERVISORY SKILLS TO MINE SUPERVISORS

This manual describes the specific steps for teaching supervisory skills by a method known as Behavior Modeling. The manual is designed for the use of mining companies which provide in-house training programs for their managerial and supervisory personnel. The method here described was developed originally by Sorcher and Goldstein (1974) for the General Electric Company and has been successfully used in a wide variety of organizations since that time. It has been adapted for the use of mining organizations by Chemers, Garcia, Mahar, Jobs, and Fiedler of this project and tested at the Texasgulf Soda Ash Operation in Granger, Wyoming.

The training method is based on the well known fact that most people find it very difficult to visualize clearly from verbal descriptions how they are supposed to deal with their subordinates. What, for example, does it really mean to most supervisors when they are told that they must be more understanding? Should they listen more closely, should they not interrupt, should they be more sympathetic? These are all reasonable ways of interpreting what is frequently meant by "understanding." Even more confusing are instructions to "relate better", or "inspire their subordinates", or to be "more considerate."

Needless to say, it is difficult to explain these terms; many supervisors feel frustrated and angry when they don't

clearly understand what is asked of them. The typical question is, "What, exactly do you want me to do?" or, "How, exactly, am I supposed to do this?" and it makes the trainer look bad in the eyes of the trainees if he can't give satisfactory explanations.

The method of supervisory skills training which is described here helps the trainer to give some concrete examples which show exactly what is to be done and how it is to be done.

A series of management and supervisory problems, commonly experienced by mine supervisors, is shown in the form of short video-taped interactions between an experienced mine supervisor and a mine employee. This manual, aided by the tapes, points to the specific behaviors which the experienced supervisor uses in dealing with the employee, and how these ways of dealing with employees help to accomplish the supervisor's goals and objectives.

The tapes stress four or five critical "learning points" the supervisor must keep in mind in dealing with the employee, and you, as the trainer, must make sure that these learning points are emphasized in your own presentation of this material. The learning points have been constructed from actual demonstrations of effective supervisory interactions with subordinates. They are designed to make the interchange between the supervisor and the employee positive and effective. After watching each of the tapes, have the trainees role-play the episode and reinforce each other's use of the critically important behaviors--discuss what the person playing the supervisor did RIGHT, AND HOW IT COULD HAVE BEEN IMPROVED. DO NOT HAVE THE ONLOOKERS CRITICIZE. The importance of not criticizing trainee's attempts to role play

cannot be stressed strongly enough. It is critically important that trainees receive positive verbal reinforcement for role playing. Criticism, or negative verbal reinforcement will serve only to frustrate and demotivate trainees. Trainees are then told to apply the learned behaviors in the course of the coming week, and to report back on their experience to the entire group at next week's session.

Before you begin your course of training, you should explain this method fully to top management of the mine, and if possible, take them through the training program. You may decide to omit one or more of the episodes and you may, of course, wish to add others in order to tailor your program more closely to the needs of your mine supervisors.

We recommend that you make no major changes until after you have led several groups of trainees through the program. The tapes which have been developed by this project have been carefully selected to cover the most important supervisory problems of mine managers, and they are likely to cover the main topics mine supervisors will want to discuss. The process of developing additional tapes is considerably more difficult and expensive than it may seem, and you will find it easier to make your own tapes after you get a fair amount of experience using the existing tapes.

The following eight supervisory problems are covered in the tapes which are included in this program:

1. Reinforcing good safety behavior
2. Correcting a tardy employee

3. Dealing with an irate subordinate
4. Orienting a new employee to the work and safety regulations
5. Introducing change
6. Dealing with a chronic poor performer
7. Discussing a safety problem with a group
8. Representing the company to employees

ADMINISTERING THE SUPERVISORY SKILLS TRAINING PROGRAM

1. LIST OF EQUIPMENT, SUPPLIES, AND FACILITIES

- a. Training manual
- b. Video-tapes furnished with this program
- c. Videoplayer for 1/2 inch tape and monitor (screen)
- d. Blackboard or appropriate writing surface
- e. Room appropriate for discussion and role playing

The optimum number of trainees is between 8 and 12, and having trainees sit around a large table or in a circle is preferable to having a typical classroom arrangement

- f. Paper and pencils for trainees
- e. We recommend coffee, etc. for frequent breaks
- g. Each tape and discussion will require 1 1/2 to 2 hours of uninterrupted time

INTRODUCING THE PROGRAM

1. Begin by asking the trainees to list the types of interactions with their employees which they find most difficult. List these on the board.

2. Have supervisors explain what they find difficult in these situations, and why.

3. Explain that the program they are about to begin deals with many (or most) of these difficulties. During the training they will see how effective supervisors manage these situations. Stress that the way the supervisors in the taped episodes handle their employees is not intended to be seen as the only method, but that it helps to see how some of the problems can be handled effectively.

4. Outline the procedure you propose to follow:

a. "We will first see a short illustration of how one good supervisor handled the problem of improving safety. As you watch the tape, write down what you think the supervisor did that was especially effective."

b. "We'll briefly discuss the main points you saw, and why you thought they were important, and then we'll look at the same tape again. This time, the tape will have on it the specific points you have to keep in mind in dealing with this problem."

c. "Finally, we'll do some role playing by trying out how you would handle a problem of this type, and have the group tell what the 'supervisor' did well, and, perhaps, how it could be done better."

5. Turn on the color monitor and run the first section of Tape 1.

6. Stop the tape when the first episode comes to the end, and begin your discussion of the learning points which the group brings up. Suggest learning points the group omits.

7. Restart tape. The identical episode will be replayed, but this time with the critical learning points written in at the bottom of the screen as they are demonstrated by the actors.

8. Stop after you come to the end of the replay of Tape 1, and ask for comments and discussion.

9. Call on two volunteers to role play, or select two supervisors to role play a similar situation of their own choosing. It is best if they role play a situation which they have seen or which has happened to them.

10. Have group discuss what role-playing supervisor did well, and also how it could have been improved. Call on two additional role-players, and have episode role played once more to include suggestions for improvement.

11. Divide group into pairs, and have one member of each role play supervisor, and the other the employee, and then discuss their interaction. It sometimes works best to divide group into threes, with one person as observer who does not say anything during the role play, and then discusses with "supervisor" and "employee" what went well in the session, and how it might be improved.

12. Instruct each person to try out the interaction with an employee in the course of the coming week, and to report back to the training group on how successful the interchange was and what could be done to improve.

13. Continue with the next scenario using the same procedures described above.

SUPERVISORY SKILLS INSTRUCTOR'S MANUAL

Description: These supervisory skills training modules are based on developing effective communication skills between the supervisor and subordinates. Each module is a 1 & 1/2 hour to 2 hour exercise which employs a videotaped presentation of a model displaying correct behaviors for the specific situation. These correct behaviors are captured in a specified set of KEY LEARNING POINTS.

- Objectives
1. To give trainees an understanding of the importance of proper communication to achieve desired behaviors in subordinates
 2. To increase trainees' knowledge of key points to remember in a range of supervisory situations
 3. To give participants practice in applying new learning

- Resources
1. Space One room for each session. The room should be set up so that a color monitor is visible to all participants. A central area should be available for the role playing portion of the session.
 2. Time required Time is somewhat flexible. The prescribed time for video-tape presentation and discussion is approximately 20 to 25 minutes. Time allotted to role plays is more flexible. Factors which affect role play time requirements are: a) number of participants in each session, b) whether all participants role play the behavior, and c) the extensiveness of the discussion around each role play. A typical role play session for each two participants will take about 5 to 6 minutes. A typical session for a group of 12 trainees will take about 2 hours at most.

3. Personnel One facilitator is needed for each session. The facilitator to trainee ratio should be no more than 1:12, with 1 facilitator to 8 trainees preferred.
4. Materials
 1. Videotape module: The center of the exercise is the videotape module. A videotape player and color monitor are needed for each session.
 2. Key Learning Points: These handouts need to be copied so that each participant has a handout (see the appendix).

Preparation: The person facilitating the Supervisory Skills Training session should do the following:

1. Read the instructor's manual and review the videotape. Read the introductory guide for a discussion about behavior modeling principles.
2. Review principles of role playing in:

Klien, A.F. Role playing in leadership training and group problem solving. N.Y.: Association Press, 1956.
3. Preview the videotape. Familiarize yourself with the content, timing, and operation of the equipment.
4. Make sure physical requirements are met, e.g. videotape player and color monitor is available, space is available and suitable.
5. Make copies of training handouts (see the appendix).

Appendices:

1. Key Learning Points- handouts 1 through 8

Conducting the Session:

I. General Strategy

1. Introducing the Module: the facilitator should explain the objectives, general content, and procedures to the participants. Care should be taken to allay fears or resistance to role playing.

2. Procedure:

- a. Introduction: See #1 above.
- b. Play the videotape to the first stopping point as instructed by the tape.
- c. Facilitate group discussion:
 - 1) Ask what the supervisor in the tape did that was particularly effective.
 - 2) Ask what other things might have been done.
 - 3) What might he have done differently?
 - 4) Write each response on a flipchart or blackboard.
 - 5) Try to get all participants involved, e.g., direct questions to non-participating trainees.
 - 6) Summarize responses into key learning points. Whenever possible the learning points derived in group discussion should be grouped and paraphrased in such a way as to be similar to the learning points contained in the second half of the taped presentation.
- d. Play remaining portion of the tape which repeats the original scenario but with key learning points highlighted on the screen.
- e. Conduct desired number of role plays:
 - 1) Select two participants for role-play. This can be done by asking for volunteers. (If initial resistance to role-playing is expected, the facilitator may identify two of the most cooperative participants and arrange with them, before the session, to be the first role-players.)
 - 2) Designate one of the two participants to play the role of the superior, and one to play the role of the subordinate.

- 3) Ask the role-players to make up a scenario of a situation which deals with the type of problem shown on the tape, e.g., correcting an employee, handling an irate employee, etc. (If the participants have trouble generating an appropriate scenario, the facilitator may suggest a sample scenario, common to the mining industry.)
- 4) Have the participants complete the role-play. (The role-play should not be interrupted unless it runs into serious problems, e.g., runs very long, gets very far off track, participants show signs of real distress. Less major problems can be addressed in the discussion following the role-play.)
- 5) At the conclusion of the role-play begin the discussion:
 - a. Ask the group for a general reaction to the role-play. It is important that this first reaction be relatively positive, in order to reinforce the participants. (The facilitator may model the positive reinforcement.)
 - b. Ask whether all the learning points are covered. Highlight the particular behaviors related to the learning points.
 - c. Ask for comments on ways in which the supervisor could have done better.
 - d. Briefly review the major points made in the group discussion.
- 6) Do the next role-play. (If all participants are expected to role-play, it is most efficient to have the same two participants reverse roles, create a scenario, and do role-play).
- f. End the session by encouraging participants to utilize the things they have learned back in the home environment.

II. Modules for Supervisory Skills Training

Module #1: Reinforcing Safe Behavior

- A. Description: This tape shows a supervisor asking an employee to perform a task which could be risky. The supervisor emphasizes safety procedures and then reinforces the subordinate for using these procedures.
- B. This module is designed to give the trainee the skills to enhance and maintain safe behaviors in subordinates. Emphasis is placed on giving clear, concise safety expectations; monitoring, and then reinforcing safe behavior. The key learning points include:
 - 1. Outline situation
 - 2. Clearly describe desired behavior
 - 3. Explain reasons for the procedure
 - 4. Monitor and praise the appropriate behavior

Module #2: Correcting an Employee

- A. Description: A foreman talks to a subordinate about procedures for loading and unloading a parts wagon so that all parts are properly put away for each new shift.
- B. Objectives: This module is designed to give the trainee skills for improving performance in such a way that defensiveness and the possibility of conflict are reduced. The key learning points include:
 - 1. Attack the problem and not the person
 - 2. Explain the problem and it's effects
 - 3. Listen to the employee
 - 4. Develop an action plan to correct the problem
 - 5. Set a procedure and a time for follow-up

Module #3: Orienting a New Employee

- A. Description: A shop foreman introduces a new mechanic to the shop, explaining facilities, procedures, and basic job description. The foreman emphasizes not only proper procedure, but safety procedures.
- B. Objectives: This module teaches trainees skills for establishing open communication with new employees to promote safe, effective performance as quickly as possible. Key learning points include:
 - 1. Explain the work procedure
 - 2. Emphasize safety
 - 3. Check for competence
 - 4. Establish open communication
 - 5. Monitor and follow-up

Module #4: Overcoming Resistance to Change

- A. Description: A supervisor asks an employee for suggestions as to how to overcome a difficult, technical problem. The two are able to establish a workable solution.
- B. Objectives: People frequently resist change, either because of a mistrust of the intentions of the agent of the change, a belief that the change will be ineffective, or a concern over the potential negative changes for themselves. This module illustrates a straightforward way of changing attitudes and alleviating fears. Key learning points include:
 - 1. Describe the change, and why it's essential
 - 2. Explain the reasons for the change, and how it will effect the employee
 - 3. Ask for the employee's feelings and concerns
 - 4. Develop a plan for employee participation in the change
 - 5. Set up follow-up dates to check on implementing the change, and follow up

Module #5: Handling an Irate Employee

- A. Description: An employee comes to see his supervisor. He is angry because he has been responsible for all bolting operations and he wants help. The supervisor elicits ideas and they come up with a solution.
- B. Objectives: This module shows the importance of remaining calm in the face of angry employees. The trainee will be shown how to turn destructive anger into constructive, cooperative efforts. The key learning points include:
1. Listen to the employee
 2. Avoid getting angry in return
 3. Admit you're wrong or compromise if feasible
 4. Ask for employee's help in solving the problem
 5. Develop action plan and follow-up
 6. Don't get involved in taking sides

Module #6: Improving Employee Attendance

- A. Description: A supervisor asks an employee to come into his office to discuss attendance problems. The employee is given a written memo to his personnel file in order to document and correct deficiencies in attendance.
- B. Objectives: An important part of any supervisor's job is to enforce standards and policies. In this module, the supervisor enforces standards and policies in a positive, fair manner using effective communication skills. Trainees will learn these communication skills which will increase the probability of directives being followed not only by the employee involved but by all employees as well. Key learning points include:
1. Explain the problem and it's effects
 2. Explain policy and set clear standards for acceptable performance
 3. Seek the employee's explanation
 4. Be firm but fair

Module #7: Focusing Attention on Safety

- A. Description: In this module a supervisor talks to his crew about a recent accident. The group discusses ways of handling

the problem and how to avoid becoming a victim of the same accident.

B: Objectives: The purpose of this module is to demonstrate how an effective supervisor can communicate safety standards by making employees aware of current problems and discussing ways of handling and preventing accidents on a regular basis. Key learning points include:

1. Focus attention on safety
2. Enlist group participation
3. Explore problem solutions
4. Stress the importance of safety

Module #8: Creating a Cooperative Work Team

A. Description: A supervisor is shown with his crew going over the events of the day. The supervisor emphasizes the work which was done well and safely, and praises employees for this behavior.

B. Objectives: This tape emphasizes effective communication skills for praising employees for safe, cooperative work procedures and that positive feedback given frequently for specific behaviors is effective for increasing group cohesion. Key learning points include:

1. Stay appropriately close to your crew
2. Monitor the health and safety aspects of the task
3. Give timely and specific feedback
4. Demonstrate helping behavior
5. Praise your crew for cooperation and good work

Supervisory Skills Training

Key Learning Points

Module 1: Reinforcing Safe Behavior

1. Outline the situation
2. Clearly describe correct behavior
3. Explain the reason for the procedure
4. Monitor and praise the appropriate behavior

Module 2: Correcting an Employee

1. The supervisor attacks the problem not the employee
2. He explains the problem and it's effects
3. He listens to the employee
4. He develops an action plan to correct the problem
5. He sets a procedure and time for follow-up

Module 3: Orienting a New Employee

1. Explain work procedure
2. Emphasize safety
3. Check for competence
4. Establishes open communication
5. Monitors and follows up

Module 4: Overcoming Resistance to Change

1. Describe the change and why it's essential
2. Explain the reasons for the change and how it affects the employee
3. Ask for the employee's feelings and concerns
4. Develop a plan for employee participation
5. Set follow-up dates to check on implementing the change and follow up

Module 5: Dealing with an Irate Employee

1. Listen to the employee
2. Avoid getting angry in return
3. Admit you're wrong or compromise if feasible
4. Ask for employee's help in solving the problem
5. Develop action plan and follow-up
6. Don't get involved by taking sides

Module 6: Improving Employee Attendance

1. Explain the problem and it's effects
2. Explain policy and set clear standards for performance
3. Seek the employee's explanation
4. Be firm but fair

Module 7: Focusing Attention on Safety

1. Focus attention on safety
2. Enlist group participation
3. Explore problem solutions
4. Stress the importance of safety

Module 8: Creating a Cooperative Work Team

1. Stay appropriately close to your crew
2. Monitor health and safety aspects of the task
3. Give timely and specific feedback
4. Demonstrate helping behavior
5. Praise your crew for cooperation and good work

I. B.O.S. RATING SKILLS WORKSHOP

Materials Needed: "Ace, Butch, and Cal" Sample Cases with B.O.S. scales for participants.

I. Introduction

- A. Description of the evolution of the development of the B.O.S. on site with special emphasis on upper level commitment and involvement in the project.
- B. Description of the importance of accurate monitoring of subordinates by foremen in order to give feedback aimed at helping to improve performance.
- C. The purpose of the B.O.S. Performance Appraisal
 1. Emphasize employee improvement based on clear feedback
 2. Increase the validity of evaluations for personnel decisions
 3. Better comply with federal regulations in personnel appraisal
- D. Clarification of the implementation of the B.O.S. system on site
 1. a.) 2nd Level supervisor fills out scale with recommendation
b.) 1st Level supervisor fills out scale for self-appraisal
 2. 2nd Level supervisor confers with 3rd level supervisor
 3. 2nd and 1st Level supervisor conference for feedback
 - a.) Discuss strengths
 - b.) Discuss weaknesses
 - c.) Resolve discrepancies
 - d.) Develop recommendations with action plans and dates
 - e.) 1st Level supervisor response to summary sheet is made
 - f.) Copy of materials sent to personnel office.

II. Rater Training - based on (Latham, Wexley, & Purcell, 1978)

- A. Rater training as an attempt to minimize errors in accumulating information with which to make judgements
- B. Common rating errors with examples and discussion of solutions to each
 1. Halo
 2. Similar to Me
 3. Contrast Effect
 4. First Impression
- C. Review of B.O.S. items and discussion leading to a consensus on the meaning of each scale item
- DS. Individual Rating Exercise with Three Sample Cases (Ace, Butch, Cal, in order)
Participants:
 1. Read each case (note taking optional)
 2. Rate each case (notes and case material can be used)
 3. Sum the rating across subscales for each case
Facilitator:
 1. Describes the construction of the cases for maximizing halo and contrast error

2. Gives feedback on
 - a.) Check for basic instructions - "Butch," ratings should be the highest among the three cases. Everyone should agree. If not, the rating instructions have not been fully communicated and need to be reviewed.
 - b.) Halo error - "Ace" excels in the Technical/Administration Subscale and does poorly on the other subscales. scores should reflect this profile if ratings are accurate. If not halo errors exist and some discussion of the issue is worthwhile.
 - c.) Contrast error - The total score for "Cal" should be greater than the total score for "Ace." If not then contrast error has emerged due to raters having read "Butch" immediately prior to reading "Cal." If contrast errors exist discuss methods of minimizing the bias.
3. Discussion and Summary
 - a.) Reduction of errors important - discussion of a team effort
 - b.) Review of major error and importance of collecting concrete information
 - c.) Question/Answer/Individual Consultation

Ace is one of the more experienced people around. He has been a foreman for you for the past two years but has been at the job for about fifteen years and was a crew member for about ten years before becoming a foreman. During the last six months you have found that Ace is generally efficient in organizing his workday and having materials available for the job. From his accumulated experience Ace could operate and fix virtually any piece of equipment that he comes in contact with. If there is something that he does not know he will get the information any way he can (e.g., consult manufacturer's manuals, call company representatives, check with other foremen, etc.). Ace is always punctual with paperwork and it is of high quality. His reports and requests are always clear and never need to be interpreted. Ace loves the machinery and tools and always takes care to see they are treated well. Four months ago the word came down from the top that we were revising our procedure and while Ace had argued against it, his crew follows the procedure as well as any of the crews. Ace could be described as being distant from his crew and is not as receptive to suggestions by crew members as he might be. Ace always seems to have problems breaking in new crew members and keeping people in his crew. During the past six months over half of his people have either transferred to other units or have left the company. The workers usually say they want a transfer because they do not get along with him and that he often gets angry with them at the slightest disruption. His safety record is below average even though he knows the MSHA regulations. His record on safety meetings is irregular usually cancelling a meeting when there is pressure on his crew to meet production standards. Several of the transfers from his crew have complained that he will push people into a job that is beyond their capabilities and risk a potential accident.

Butch is one of the younger foreman in the operation. What he lacks in experience seems to be compensated for in enthusiasm and intelligence. He is in his second year as a foreman, first year with you, and worked in another similar operation as a crew member for about six years. His paperwork is generally up to par but you can count on one request in five coming back late. He is not as knowledgeable about the equipment as some of his crew members but he knows it and will seek out information to help him make decisions from what usually seems to be the most appropriate source. At the beginning of every shift he plans out with his crew the schedule for the day. In this session he also typically sets goals or marks as he calls them. His crew members often can be heard talking about whether they made their marks or not. Butch generally knows what his crew is doing and usually is aware of problems early on. Several members of his crew have received upgrades in the past six months and one of the first things he did when he was hired on was to assign crew members to different jobs on a rotation basis so they would become familiar with more of the operation. He seems to be sensitive to how well his crew members are getting along and is cautious about taking on new people, sometimes making it difficult to effect a transfer. His reputation with his crew members is high and they seem to appreciate the fact that he lets them know what is expected of them in their work. In addition, he is rarely known to become agitated in tough situations. In this end of the operation most hourly workers prefer to work in his crew over any of the other crews. Butch typically checks with other foremen and you on conditions and usually leaves his area clean and in good shape for the next shift. Butch's crew has one of the best accident records in the operation. He knows the law and is concerned about his people's safety. He pushes his crew but seems to know when things are getting ragged. He runs his safety meetings regularly and uses them to go over the law, take suggestions from the crew and let the crew know how he feels they have been doing on following procedures.

Cal has been working for you as a first-line foreman for the past year. He has been a foreman for the last four years and had been on hourly work for eight years before that. He knows the equipment fairly well and is always willing to get more information if there is something he needs to know. He usually sees to it that his crew maintains their equipment and uses proper tools but if in a hurry will sometimes miss a maintenance check. He generally has his paperwork done in an orderly fashion but is sometimes unclear in describing reasons for holdups in the schedule. Cal can be trusted to communicate new policies to his crew clearly and accurately. While he plans and prioritizes the work for his crew at the beginning of every shift he occasionally underestimates the amount of time for a job (particularly if he has an inexperienced worker). During the past six months this has caught him up short two or three times on fairly important jobs. He gets along reasonably well with his crew. Rarely does one hear crew members complaining about him. He has had one crew member in for an upgrade in the past several months and tries to assign new workers to experienced crew members whenever possible. Cal gets along pretty well with myself and the other foremen. He is well respected but sometimes will forget to alert you to a problem that may effect other aspects of the operation although he is generally good at this. He is willing to help out with his crew and can often be seen at the work area checking things out and lending a hand. Cal is regular about safety meetings and tries to look out for his men. He will ususally make sure everyone follows proper procedure but will sometimes look the other way when under pressure. He maintains a steady pace in most situations but will sometimes rush a bit too much when in a new situation.

APPENDIX 1

BEHAVIORAL PERFORMANCE CRITERIA FOR ASSESSING THE
EFFECTIVENESS OF FOREMEN AT
TEXASGULF SODA ASH OPERATIONS

Employee Information

Rating Period: From _____ to _____ Date _____

Employee's Name _____

Supervisor's Name _____

BEHAVIORAL PERFORMANCE CRITERIA FOR FOREMEN
AT TEXASGULF SODA ASH OPERATIONS

Instructions

This checklist contains performance related job behaviors which the foremen, their supervisors and the crew have reported as critical to job success.

Please consider the above-named individual's behavior on the job for the past ___ months. Do not consider other foremen or this individual's behavior at other times in the past.

Read each statement carefully. On the basis of your actual observations or on dependable knowledge (e.g., hard evidence or reliable reports from others), circle the number that indicates the extent to which this foreman actually demonstrated each of the following behaviors. For each scale, a 5 represents "Almost Always" or 80 to 100% of the time. A 4 represents "Frequently" or 60 to 79% of the time. A 3 represents "Sometimes" or 40 to 59% of the time. A 2 represents "Seldom" or 20 to 39% of the time. And, a 1 represents "Almost Never" or 0 to 19% of the time.

An example of an item is shown below. If the foreman being evaluated has acted in a helpful manner most of the time, you should circle "5". If he has only been helpful about half the time during the evaluation period, you should circle "3".

Example: Acted in a helpful manner.

Almost Never 1 2 3 4 5 Almost Always

A blank sheet is attached for you to take notes on this individual during the evaluation period. Take your time and remember the response errors that you were trained to minimize.

(1) Halo Error: (a) An individual is so impressive in one area that we rate him high in all areas, or (b) he is so terrible in one area that we rate him low in all areas.

Solution: Rate each behavior independently of the other behaviors. Just because a person deserves a high rating in one area doesn't mean he deserves a high rating in all areas.

(2) First Impressions: (a) An individual is so outstanding within the first three months of the appraisal period that we stop observing him during the last three months. (b) The converse is expressed in the question, "What has he done for me lately?"

Solution: Be a note-taker for the entire six-month period. Review your notes in an order different from the way in which you recorded them, and then make a rating.

(3) Similar to Me: I rate people higher the more similar they are to me; e.g., I like hiking and they like hiking.

Solution: Rate people solely on the frequency with which you observe them demonstrate the behaviors listed on the checklist.

(4) Contrast Effects: (a) The supervisor who is clearly better than the mediocre people who surround him is rated as outstanding when this is not truly the case. (b) The supervisor who is surrounded by geniuses is rated below adequate because, relative to them, he looks pale by comparison.

Solution: Rate people on the degree to which they exhibit the job behaviors, not on how they stack up relative to others. The latter should only be done after rather than before the rating.

(5) Toughness: I rate everyone at the lower end of the scale to make them stretch.

Solution: Stop demoralizing people and rate them solely on the basis of the frequency with which they engage in specific behaviors.

(6) Positive Leniency: I rate everyone at the top of the scale.

Solution: See No. 5.

(7) Central Tendency: I rate everyone in the middle. They are neither very good or very bad.

Solution: See No. 5.

Adapted from Latham, G. P. & Wexley, K. W. Increasing productivity through performance appraisal. Reading, Mass.: Addison-Wesley, 1980.

| | | | | |
|----------------|----------|-------------|--------------|-----------------|
| 1 | 2 | 3 | 4 | 5 |
| 0-19% | 20-39% | 40-59% | 60-79% | 80-100% |
| (Almost Never) | (Seldom) | (Sometimes) | (Frequently) | (Almost Always) |

SUPERVISOR EMPLOYMENT EVALUATION

I. Technical and Administrative Behaviors.

1. Knows technical aspects of the job, for example, basics of ground and mining or process operation, equipment operation, equipment maintenance, etc.

Almost Never 1 2 3 4 5 Almost Always

2. Seeks guidance, help, or advice when necessary.

Almost Never 1 2 3 4 5 Almost Always

3. Takes appropriate care of tools, equipment, and supplies, for example, good inventory, correct tool usage, proper procedure with equipment.

Almost Never 1 2 3 4 5 Almost Always

4. Insures that proper maintenance is performed on all equipment which is assigned to him/her.

Almost Never 1 2 3 4 5 Almost Always

5. Communicates effectively with subordinates.

Almost Never 1 2 3 4 5 Almost Always

6. Communicates effectively with superiors.

Almost Never 1 2 3 4 5 Almost Always

7. Completes paperwork accurately and on time, for example, reports, time cards, work orders, safety forms, etc.

Almost Never 1 2 3 4 5 Almost Always

8. Sees to it that company orders and directives are followed.

Almost Never 1 2 3 4 5 Almost Always

9. Others come to him/her for advice because they trust his/her technical knowledge.

Almost Never 1 2 3 4 5 Almost Always

Total = _____

| 1 | 2 | 3 | 4 | 5 |
|----------------|----------|-------------|--------------|-----------------|
| 0-19% | 20-39% | 40-59% | 60-79% | 80-100% |
| (Almost Never) | (Seldom) | (Sometimes) | (Frequently) | (Almost Always) |

II. Planning and Supervision

1. Prioritizes jobs and allows sufficient time for their accomplishment.

| | | | | | | |
|--------------|---|---|---|---|---|---------------|
| Almost Never | 1 | 2 | 3 | 4 | 5 | Almost Always |
|--------------|---|---|---|---|---|---------------|
2. When starting a job has a plan for the steps required to do it, for example, moving a miner, laying cable, repairing a machine, etc.

| | | | | | | |
|--------------|---|---|---|---|---|---------------|
| Almost Never | 1 | 2 | 3 | 4 | 5 | Almost Always |
|--------------|---|---|---|---|---|---------------|
3. Makes sure tools and materials are available when needed.

| | | | | | | |
|--------------|---|---|---|---|---|---------------|
| Almost Never | 1 | 2 | 3 | 4 | 5 | Almost Always |
|--------------|---|---|---|---|---|---------------|
4. Pays attention to worker effectiveness in scheduling overtime (maintains awareness of mental and physical condition of employees).

| | | | | | | |
|--------------|---|---|---|---|---|---------------|
| Almost Never | 1 | 2 | 3 | 4 | 5 | Almost Always |
|--------------|---|---|---|---|---|---------------|
5. Stays on top of things by frequent visits to the work site.

| | | | | | | |
|--------------|---|---|---|---|---|---------------|
| Almost Never | 1 | 2 | 3 | 4 | 5 | Almost Always |
|--------------|---|---|---|---|---|---------------|
6. Knows and monitors key indicators of successful crew performance, for example, down time, feet cut, crystal quality.

| | | | | | | |
|--------------|---|---|---|---|---|---------------|
| Almost Never | 1 | 2 | 3 | 4 | 5 | Almost Always |
|--------------|---|---|---|---|---|---------------|
7. Assumes responsibility for seeing that job is done as well as possible.

| | | | | | | |
|--------------|---|---|---|---|---|---------------|
| Almost Never | 1 | 2 | 3 | 4 | 5 | Almost Always |
|--------------|---|---|---|---|---|---------------|
8. Takes suggestions from subordinates.

| | | | | | | |
|--------------|---|---|---|---|---|---------------|
| Almost Never | 1 | 2 | 3 | 4 | 5 | Almost Always |
|--------------|---|---|---|---|---|---------------|
9. Give subordinates as much freedom to do their jobs as they can handle.

| | | | | | | |
|--------------|---|---|---|---|---|---------------|
| Almost Never | 1 | 2 | 3 | 4 | 5 | Almost Always |
|--------------|---|---|---|---|---|---------------|
10. Spends time and effort to increase crew member competence through training, job assignment, and so forth.

| | | | | | | |
|--------------|---|---|---|---|---|---------------|
| Almost Never | 1 | 2 | 3 | 4 | 5 | Almost Always |
|--------------|---|---|---|---|---|---------------|

11. Develops crew members for more responsible positions.

Almost Never 1 2 3 4 5 Almost Always

12. Develops good working relationship among his crew members.

Almost Never 1 2 3 4 5 Almost Always

Total = _____

| | | | | |
|------------------------------|-------------------------|----------------------------|-----------------------------|---------------------------------|
| 1 0-19% (Almost Never) | 2 20-39% (Seldom) | 3 40-59% (Sometimes) | 4 60-79% (Frequently) | 5 80-100% (Almost Always) |
|------------------------------|-------------------------|----------------------------|-----------------------------|---------------------------------|

III. Interpersonal Leadership

1. Lets crew and individuals know what is expected of them, for example, explains work, policy, and assignments clearly; checks for understanding.

Almost Never 1 2 3 4 5 Almost Always

2. Gives accurate, consistent, and timely feedback (praise and constructive criticism).

Almost Never 1 2 3 4 5 Almost Always

3. Employees find it easy to accept his directions and criticism.

Almost Never 1 2 3 4 5 Almost Always

4. Is pleasant and friendly in dealing with the crew.

Almost Never 1 2 3 4 5 Almost Always

5. Personally lends a hand to crew when appropriate.

Almost Never 1 2 3 4 5 Almost Always

6. Remains cool in emergency situations.

Almost Never 1 2 3 4 5 Almost Always

7. Deals effectively with employee problems (listens, takes action, follows through).

Almost Never 1 2 3 4 5 Almost Always

8. Treats subordinates fairly by assigning jobs evenly, playing no favorites.

Almost Never 1 2 3 4 5 Almost Always

9. Stands up for subordinates, for instance, investigates, backs subordinates up where appropriate, protects from inappropriate pressures.

Almost Never 1 2 3 4 5 Almost Always

10. Works cooperatively with other foremen by sharing information, leaving area in good shape for next shift, etc.

Almost Never 1 2 3 4 5 Almost Always

Total = _____

| | | | | |
|----------------|----------|-------------|--------------|-----------------|
| 1 | 2 | 3 | 4 | 5 |
| 0-19% | 20-39% | 40-59% | 60-79% | 80-100% |
| (Almost Never) | (Seldom) | (Sometimes) | (Frequently) | (Almost Always) |

IV. Safety

1. Follows MSHA regulations and company safety rules, for example, use of hotsticks, lock-out, tie off for high work, blocking, hanging cable.

Almost Never 1 2 3 4 5 Almost Always

2. Makes sure that work pace is consistent with safety.

Almost Never 1 2 3 4 5 Almost Always

3. Immediately corrects hazardous work conditions, for example, sounds back, checks cable, checks footing, checks equipment, etc.

Almost Never 1 2 3 4 5 Almost Always

4. Continually emphasizes safety to crew.

Almost Never 1 2 3 4 5 Almost Always

5. Will not send a subordinate into hazardous conditions.

Almost Never 1 2 3 4 5 Almost Always

6. Makes sure his subordinates are assigned to jobs they can handle.

Almost Never 1 2 3 4 5 Almost Always

7. Gives praise for safe work behavior and reprimands unsafe behavior.

Almost Never 1 2 3 4 5 Almost Always

8. Maintains a clean work area.

Almost Never 1 2 3 4 5 Almost Always

9. Holds scheduled safety meetings.

Almost Never 1 2 3 4 5 Almost Always

10. Immediately corrects unsafe work behavior.

Almost Never 1 2 3 4 5 Almost Always

Total = _____

APPENDIX 2

WORKSHOP ON RATING ERRORS IN PERFORMANCE APPRAISAL

I. B.O.S. RATING SKILLS WORKSHOP

Materials Needed: "Ace, Butch, and Cal" Sample Cases with B.O.S. scales for participants.

I. Introduction

- A. Description of the evolution of the development of the B.O.S. on site with special emphasis on upper level commitment and involvement in the project.
- B. Description of the importance of accurate monitoring of subordinates by foremen in order to give feedback aimed at helping to improve performance.
- C. The purpose of the B.O.S. Performance Appraisal
 1. Emphasize employee improvement based on clear feedback
 2. Increase the validity of evaluations for personnel decisions
 3. Better comply with federal regulations in personnel appraisal
- D. Clarification of the implementation of the B.O.S. system on site
 1. a.) 2nd Level supervisor fills out scale with recommendation
b.) 1st Level supervisor fills out scale for self-appraisal
 2. 2nd Level supervisor confers with 3rd level supervisor
 3. 2nd and 1st Level supervisor conference for feedback
 - a.) Discuss strengths
 - b.) Discuss weaknesses
 - c.) Resolve discrepancies
 - d.) Develop recommendations with action plans and dates
 - e.) 1st Level supervisor response to summary sheet is made
 - f.) Copy of materials sent to personnel office.

II. Rater Training - based on (Latham, Wexley, & Purcell, 1978)

- A. Rater training as an attempt to minimize errors in accumulating information with which to make judgements
- B. Common rating errors with examples and discussion of solutions to each
 1. Halo
 2. Similar to Me
 3. Contrast Effect
 4. First Impression
- C. Review of B.O.S. items and discussion leading to a consensus on the meaning of each scale item
- DS. Individual Rating Exercise with Three Sample Cases (Ace, Butch, Cal, in order)
Participants:
 1. Read each case (note taking optional)
 2. Rate each case (notes and case material can be used)
 3. Sum the rating across subscales for each case
Facilitator:
 1. Describes the construction of the cases for maximizing halo and contrast error

2. Gives feedback on
 - a.) Check for basic instructions - "Butch," ratings should be the highest among the three cases. Everyone should agree. If not, the rating instructions have not been fully communicated and need to be reviewed.
 - b.) Halo error - "Ace" excels in the Technical/Administration Subscale and does poorly on the other subscales. Scores should reflect this profile if ratings are accurate. If not halo errors exist and some discussion of the issue is worthwhile.
 - c.) Contrast error - The total score for "Cal" should be greater than the total score for "Ace." If not then contrast error has emerged due to raters having read "Butch" immediately prior to reading "Cal." If contrast errors exist discuss methods of minimizing the bias.
3. Discussion and Summary
 - a.) Reduction of errors important - discussion of a team effort
 - b.) Review of major error and importance of collecting concrete information
 - c.) Question/Answer/Individual Consultation

Ace is one of the more experienced people around. He has been a foreman for you for the past two years but has been at the job for about fifteen years and was a crew member for about ten years before becoming a foreman. During the last six months you have found that Ace is generally efficient in organizing his workday and having materials available for the job. From his accumulated experience Ace could operate and fix virtually any piece of equipment that he comes in contact with. If there is something that he does not know he will get the information any way he can (e.g., consult manufacturer's manuals, call company representatives, check with other foremen, etc.). Ace is always punctual with paperwork and it is of high quality. His reports and requests are always clear and never need to be interpreted. Ace loves the machinery and tools and always takes care to see they are treated well. Four months ago the word came down from the top that we were revising our procedure and while Ace had argued against it, his crew follows the procedure as well as any of the crews. Ace could be described as being distant from his crew and is not as receptive to suggestions by crew members as he might be. Ace always seems to have problems breaking in new crew members and keeping people in his crew. During the past six months over half of his people have either transferred to other units or have left the company. The workers usually say they want a transfer because they do not get along with him and that he often gets angry with them at the slightest disruption. His safety record is below average even though he knows the MSHA regulations. His record on safety meetings is irregular usually cancelling a meeting when there is pressure on his crew to meet production standards. Several of the transfers from his crew have complained that he will push people into a job that is beyond their capabilities and risk a potential accident.

Butch is one of the younger foreman in the operation. What he lacks in experience seems to be compensated for in enthusiasm and intelligence. He is in his second year as a foreman, first year with you, and worked in another similar operation as a crew member for about six years. His paperwork is generally up to par but you can count on one request in five coming back late. He is not as knowledgeable about the equipment as some of his crew members but he knows it and will seek out information to help him make decisions from what usually seems to be the most appropriate source. At the beginning of every shift he plans out with his crew the schedule for the day. In this session he also typically sets goals or marks as he calls them. His crew members often can be heard talking about whether they made their marks or not. Butch generally knows what his crew is doing and usually is aware of problems early on. Several members of his crew have received upgrades in the past six months and one of the first things he did when he was hired on was to assign crew members to different jobs on a rotation basis so they would become familiar with more of the operation. He seems to be sensitive to how well his crew members are getting along and is cautious about taking on new people, sometimes making it difficult to effect a transfer. His reputation with his crew members is high and they seem to appreciate the fact that he lets them know what is expected of them in their work. In addition, he is rarely known to become agitated in tough situations. In this end of the operation most hourly workers prefer to work in his crew over any of the other crews. Butch typically checks with other foremen and you on conditions and usually leaves his area clean and in good shape for the next shift. Butch's crew has one of the best accident records in the operation. He knows the law and is concerned about his people's safety. He pushes his crew but seems to know when things are getting ragged. He runs his safety meetings regularly and uses them to go over the law, take suggestions from the crew and let the crew know how he feels they have been doing on following procedures.

Cal has been working for you as a first-line foreman for the past year. He has been a foreman for the last four years and had been on hourly work for eight years before that. He knows the equipment fairly well and is always willing to get more information if there is something he needs to know. He usually sees to it that his crew maintains their equipment and uses proper tools but if in a hurry will sometimes miss a maintenance check. He generally has his paperwork done in an orderly fashion but is sometimes unclear in describing reasons for holdups in the schedule. Cal can be trusted to communicate new policies to his crew clearly and accurately. While he plans and prioritizes the work for his crew at the beginning of every shift he occasionally underestimates the amount of time for a job (particularly if he has an inexperienced worker). During the past six months this has caught him up short two or three times on fairly important jobs. He gets along reasonably well with his crew. Rarely does one hear crew members complaining about him. He has had one crew member in for an upgrade in the past several months and tries to assign new workers to experienced crew members whenever possible. Cal gets along pretty well with myself and the other foremen. He is well respected but sometimes will forget to alert you to a problem that may effect other aspects of the operation although he is generally good at this. He is willing to help out with his crew and can often be seen at the work area checking things out and lending a hand. Cal is regular about safety meetings and tries to look out for his men. He will ususally make sure everyone follows proper procedure but will sometimes look the other way when under pressure. He maintains a steady pace in most situations but will sometimes rush a bit too much when in a new situation.

APPENDIX 3

Workshop on the Performance Appraisal Interview

Materials. Included in this packet are an outline for a lecture on the functions and procedures of the performance appraisal interview and a set of three role play exercises.

Presentation:

Lecture. The lecture outline provided is straightforward. Copies of the outline should be provided to the workshop participants and each item should be discussed and clarified. (For more background see bibliography.)

Role-Play Exercise. Included in this appendix are the materials for three role plays, concerning the cases of Dale, Ed, and Fred. Each case includes a description of the role to be played by the subordinate and the superior (referred to as 2nd Level). The exercises should be conducted as follows:

1. Divide the participants into groups of three persons and separate the groups around the training room. Groups larger than 10-12 should be directed by additional trainers.

2. Designate each group member as A, B, or C. This designation will determine which role the group member will play in each case exercise.

3. Provide each group member with a packet of materials in an individual set of envelopes for each case. One group member will play the role of the employee, one member will play the superior, and the third group member will act as an observer of the interaction. Each of the first two members receive the appropriate role scenario, and the observer receives both scenarios to provide a complete understanding of the case. The preparation of the materials can be organized through the chart shown here:

| | Group Member | | |
|--------|---------------------|---------------------|-------------------|
| | A | B | C |
| Case 1 | Dale | Dale's 2nd Level | Observer |
| Case 2 | Observer | Ed | Ed's 2nd Level |
| Case 3 | Fred's 2nd Level | Observer | Fred |

4. For each case, allow group members about 5-10 minutes to study their case. When all are ready, allow 15-20 minutes to role play the performance appraisal interview, proceeding through all steps. Allow 5-10 minutes for the observer to provide feedback. Conduct a general discussion of the case for the entire group, approximately 5-10 minutes.

5. After all cases, involve participants in a general summary discussion of any important points raised during the session.

The Performance Appraisal Interview

LECTURE OUTLINE

The purpose of the performance appraisal interview is to:

1. help your subordinate set goals
2. give your subordinate feedback about his/her current performance
3. increase the amount and quality of information you receive about the operation
4. mutually develop an action plan for helping your subordinate meet his/her goals
5. help you monitor your subordinate's progress through follow-up on action plans

Guidelines for conducting the interview:

A. Preparation

1. notify your subordinate of the appraisal procedure
2. ask your subordinate to complete a self-rating
3. complete ratings
4. develop detailed recommendations
5. meet with your supervisor and get upper level support
6. arrange for the interview in advance

B. The interview

I. Warm up - give clear expectations about the nature of the interview

II. Information gathering -

1. ask your subordinate for his/her self evaluation
2. describe your evaluation (be specific)
3. identify common viewpoints
4. examine points of disagreement
5. reach a consensus

III. Problem solving -

1. ask your subordinate what he/she needs to improve
2. describe your suggestions for improvement (be specific)
3. reach a consensus
4. write out a plan
5. set follow-up dates

Dale - Self

I have been a foreman for about 9 months after graduating from college with an engineering degree. On my last performance appraisal I was ranked fairly low in all areas and have since tried to focus on doing a better job. I do not want to lose my job, especially because this is my first job since graduating from college. I have been trying to tie down loose ends in my job so everything will run more efficiently. My crew has not been listening to me, probably because I am the new college kid, and I have tried to show them who is boss by telling them what I think needs to be done, loud and clear. It is frustrating because this does not always work and they often challenge my authority and tell me that they know more than I do about the operation. I realize that while they may know more about some of the specifics I have a better understanding of the theory behind everything and I am probably smarter than most of them. Any way I can not let them know this or else it will erode my authority and I do not feel good about telling my boss this in view of my last performance rating.

Dale - 2nd Level

Dale has been working for you for about 9 months. He is fairly young and hired on with the company as a first line foreman immediately after graduating from college with a degree in engineering. His LPC score is low, 41. Overall his performance is below expectations. He is both accurate and punctual with reports. He keeps a close watch on his inventory and all of his equipment is well serviced and maintained. Furthermore, his crew always makes their schedule for safety meetings and their work area is always spotless. Dale rarely notifies other foremen or myself about conditions in the area and can be described as being very distant from his crew. He has a reputation for blowing up at mistakes made by his crew and unloading criticism which goes beyond the specific mistake. Dale is inconsistent in his planning. Some days things fall into place and other days are total chaos, for example setting up a job and not having the appropriate materials on hand or getting caught up short on a job because of underestimating the time needed to complete the task. He does not seem to be sensitive to the condition of his crew members. Several accidents have occurred to men he has assigned to overtime who are clearly overly fatigued and his safety record is below average. While he spends considerable time looking over manufacturer's manuals and other information on the operation he is not truly an expert on the conditions of the operation and equipment.

SUMMARY OF PAST PERFORMANCE

| | 1. | 2. | 3. | 4. |
|------------|-----|-----|----|----|
| Date | | | | |
| Supervisor | | | | |
| I. | 36 | 37 | | |
| II. | 33 | 36 | | |
| III. | 32 | 35 | | |
| VI. | 34 | 34 | | |
| Total | 135 | 142 | | |

Employee's Name _____ Dale _____

COMMENTS

1. Strength - Good paperwork. Takes care of tools and equipment. New to crew, does not know the operation yet. Misses some safety.

2. Strengths - Good paperwork and equipment care.
Weak - not in touch with crew, too much time in paperwork, inconsistent planning, does not pay enough attention to safety. Improving some since last evaluation.

3. _____

4. _____

SUMMARY OF PAST RECOMMENDATIONS

1. 2. 3. 4.

| | | | | |
|------------|--|--|--|--|
| Date | | | | |
| Supervisor | | | | |

Please indicate the recommendation(s) made in the appropriate space below.

| | | | | |
|------------------------------------|--|--|--|--|
| Commendation | | | | |
| Promotion/Increased Responsibility | | | | |
| Training | | | | |
| Needs Improvement | | | | |
| Probation | | | | |
| Other | | | | |

Employee's Name _____ Dale _____

EXPLANATION AND SPECIFICATIONS

1. New to operation, fresh out of college. Has potential, bright, needs seasoning.

2. _____

3. _____

4. _____

Ed - Self

I have been a foreman here for quite a while. I think I know the operation pretty well and have been successful in places where no one had ever made a go of it. My crew knows me and I know them. In a pinch I have confidence that they will work extra hard for me. This is not something that many foremen can rely on and I am proud of the fact that I can. My boss and I get along well and I have received good evaluations from him in the past. I think I work well with the other foremen and even try to use their expert advice in helping me with questions I can not answer. I suppose that I could probably improve on my paperwork, inventory, and equipment maintenance but they are not important as long as my people maintain an acceptable level of efficiency and everyone get along.

Ed - 2nd Level

Ed has been working for you for some time. When he first came on board he was a ball of fire. Ed had turned a mediocre crew into one of the most efficient in the entire operation. Lately he has not been performing as well. In particular he seems to be spending less time with his crew, to the point of not paying attention to developing his people or to their capabilities in scheduling and assignments when he should. He has been spending more time in my office and with the other foremen. Ed still is one of the best foremen at lining out his crew and daily planning but because he is not spending time near the work area, monitoring his crew he has had more than his share of MSHA violations recently. In addition his paperwork has been late and sloppy, requiring me to send it back to him for reworking. Generally though, Ed knows his area and everyone seems to get along with him. Ed's LPC score is 80.

Fred - Self

I know this operation inside out. Sure this superior job is relatively new to me but I wish everyone would leave me alone. Heck I have MSHA inspectors crawling all over the place, other foremen telling me what to do, and my boss watching over my shoulder. I feel like I ought to sit down and let them all take my job. I can not get a day's worth of work done. I really feel like all this stuff is interfering with me, and just makes it hard for me to do the job the way that I know it should be done. On the other hand my ratings have been getting worse and this one is not going to be any picnic. Then there is this accident with the new kid. I do not know what to say. The other day with all this pressure to push, push, push the kid comes up to me and asks if his work area is safe. Well I looked at it the day before when it was safe if you had any wits about you and I told him to get back to work because I know it is safe. As it turns out the situation changed from yesterday and the kid went in and nearly lost his life. Oh my God! Hey, the easiest way to get sent out the gate is to be caught endangering someone's life. Maybe it is my fault but I have to protect myself and my job.

Fred - 2nd Level

Fred has been working for your for several years. He started out as a real greenhorn and came up through the ranks. He knows every end of the operation from just about every possible angle. Fred's LPC score is 38. Prior to becoming a foreman Fred was considered to be one of the best people in the hourly force. He is headstrong and does not care to have anyone bothering his crew. Fred had been performing well but has been showing a downward trend over the past few evaluation periods and your most recent rating of him indicates some serious problems. These problems have grown more significant as Fred has become more familiar with his foreman's duties and you have attempted to make sure Fred follows your procedure. You are concerned about Fred's procedures because you like to maintain absolute control over what goes on in your department. Also, in the past Fred would seek advice from you quite frequently which he now rarely does at all. All in all this frustrates you and you have been unable to crack the problem. In the meanwhile Fred has been very erratic with paperwork and other details. His crews have become surly in their response to company policy changes. You rarely see him and he never speaks to other foremen. He plans out his schedule well and really knows the basics of the operation. Rumor has it that he is tough to work for and you receive the most requests for transfers from his crew. He is respected for being a hard worker but he has a reputation for being short on instructions and long on criticisms. He does not emphasize safety enough and often tasks risks by pushing too hard. A recent accident occurred to one of his people and it appears that his pressuring may have contributed to it. All in all you would like it much better if Fred would just do what you told him so you would have a nice "tight ship."

SUMMARY OF PAST PERFORMANCE

| | 1. | 2. | 3. | 4. |
|------------|-----|-----|-----|-----|
| Date | | | | |
| Supervisor | | | | |
| I. | 38 | 34 | 35 | 26 |
| II. | 44 | 43 | 45 | 44 |
| III. | 44 | 45 | 41 | 33 |
| VI. | 43 | 34 | 34 | 32 |
| Total | 109 | 151 | 150 | 135 |

Employee's Name Fred

COMMENTS

1. Paperwork is good, maintains equipment and tools. Does an adequate job in all areas of responsibility. Fairly good safety record.

2. Safety is a problem area. Not attending to safety duties - pushes crew too much. Paperwork not as reliable, also inconsistent in reporting safety meetings. Other areas OK.

3. Accident rate too high. Not paying attention to safety matters. Too many violations for federal law. Paperwork still unreliable.

4. Safety still a problem. Not following proper procedure. Relations with crew and other supervisors poor. Does not represent company policy. Sloppy on reports. OK on planning. Needs attention. Serious accident recently in crew.

Title: Performance Appraisal: Development and Implementation*

Description: This module provides the human resources manager in the mining industry with some background on the theoretical and pragmatic aspects of performance appraisal. It includes a performance appraisal instrument developed for shift bosses at the Texasgulf Soda Ash Operations in Granger, Wyoming. Also included are lecture outlines and training materials for conducting the workshops necessary in the implementation of a performance appraisal system.

The module provides a brief introduction to the subject of performance appraisal. The development, validation, and implementation of a performance appraisal system is a far more complex and extensive undertaking than the implementation of the leadership training programs described in other modules. The manager who is considering the development of a new performance appraisal system should consult the bibliography provided at the end of this module. Unless the manager has specific training in the development and evaluation of personnel instruments, some professional consultation is suggested.

*The materials in this module are heavily based on the excellent book, Increasing Productivity through Performance Appraisal, by Gary P. Latham and Kenneth N. Wexley (Addison-Wesley Co., 1981). The serious reader is directed to the more comprehensive discussion provided there.

Performance Appraisal Systems

The Theoretical Rationale:

Functions of human resources systems. Most people in the personnel or employee relations field identify four critical aspects in the effective functioning of a human resources system. These are selection, training, motivation, and performance appraisal. A strong argument can be made that the first three functions cannot be accomplished effectively without a good performance appraisal system.

In order to select the right person for a job, it is first necessary to clearly know what behaviors the job occupant must display. In other words, the selection of the "right" person is a sort of performance appraisal conducted in advance. The skills, abilities, and experiences of job candidate can be best evaluated if their future job duties and responsibilities are well known.

In a similar vein, the development of a clearly articulated description of the kinds of behaviors which are critical for effective supervision provides the background for the identification of training needs. To the extent that organizational training is focussed on the job needs of the trainee, it is likely to be most effective and most enthusiastically received. Moreover, a good deal of management training does not occur within the confines of formal training programs. The day to day feedback of superior to subordinate provides a key part of the development of managerial personnel.

Finally, a considerable body of research in organizations indicates that a major factor in motivation is related to feedback and goal setting. A performance appraisal system which clearly specifies behavioral and performance goals and provides a mechanism for feedback to the employee about

how well s/he is meeting those goals can have an extremely positive effect on motivation.

An individual functioning without the benefits of clear feedback is analogous to a blindfolded archer. Each arrow unleashed toward the target gets no closer to the bulls-eye because, without feedback, the archer has no basis on which to adjust his aim. The analogy holds true for the industrial supervisor, as well. Clear feedback, facilitated by a good performance appraisal system, can reinforce effective managerial behavior and redirect and change ineffective behavior.

In summary, a performance appraisal system can be the centerpiece for a good program for the utilization of human resources. It can provide a basis for selection procedures, and later, can provide an evaluation of the selection process. Performance appraisal can guide and justify managerial training programs. And, performance appraisal provides the basis for the counseling and development of managerial personnel.

Types of Performances Appraisal. It is quite glib to speak of performance appraisal without acknowledging that a difficult and important issue revolves around what constitutes "performance" and what criteria should actually be appraised. Three broad approaches to the question can be focussed on 1.) personality traits, 2.) cost-related outcomes, or 3.) behavioral criteria. Behavioral criteria are probably the most useful. Let's see why.

The most serious deficiency of the traditional, trait-oriented appraisals is related to the ambiguity of trait terms. Traits like commitment, loyalty, initiative, and attitude are extremely vague and can be defined in very different ways by different people.

Thus, when an individual is evaluated on a trait measure, s/he gets almost no specific feedback that can be used to change subsequent performance. A related weakness with trait evaluations is related to their psychological impact. A person who receives a negative rating on a trait is being told, not just that he is engaging in some behavior which is incorrect, but that there is something wrong with him. Such judgements are likely to engender anger and defensiveness rather than a willingness to change.

The pragmatic manager is often drawn to cost-related outcomes as a performance measure. While admittedly attractive, such measures suffer from a number of problems. The most immediate difficulty arises from the fact that, for many managerial jobs, clear outcomes are not available. This may lead to the designation of outcomes that are easily quantified, but are not comprehensive. The employee is then encouraged to maximize the measureable indices at the cost of ignoring less easily measurable but highly important facets of the job. For example, a foreman might seek to maximize the tonnage of ore or "feet cut" during a work shift, while ignoring the effects on equipment maintenance or safety. Such actions might show beneficial short run effects, but very detrimental long run outcomes.

Another problem which is quite prevalent in mining performance is that the individual being evaluated may have little or no control over the factors which affect the outcome. The quality of the ore body, ground conditions, or the adequacy of maintenance and supply support will strongly affect the shift boss's ability to maximize cost-related outcomes. The employee feels, quite justifiably, that s/he is being unfairly evaluated.

Finally, like trait measures, cost-related appraisals provide the

employee with no information on how to improve future performance. The shift boss, who is trying hard to perform well but consistently coming up short, gets little useful guidance from being told that tonnage figures are below average.

Behavioral criteria for performance appraisal can attend to job complexity, can be related to what the supervisor actually does, and can minimize factors which are not under the control of the supervisor. Behavioral feedback is less threatening and can be directly focussed on what the supervisor can do to improve. Training programs can be developed to provide the supervisor with the behavioral skills necessary to meet expectations. Superior and subordinate can work together to solve problems which might impede the performance of specific behaviors.

Thus, a shift boss with a poor safety record, can be trained or counseled to follow company work policies, provide necessary equipment, maintain a safe work pace, and assign workers to jobs for which they have the necessary competence. Rather than being told that s/he doesn't care about safety or isn't meeting some outcome standard, the supervisor can be directed toward the specific behaviors which are likely to result in the desired performance. The supervisor has something tangible to work with and to work on.

Development of Behavior Observation Scales:

The performance appraisal system developed for the Texasgulf operation falls into the category of systems labelled "behavior observation scales" (B.O.S.). The B.O.S. consists of a set of behaviors which are critical for effective supervision. The rater, here the "area boss" (second level supervisor) is instructed to observe and note the behavior of the shift boss during the rating period. Periodic performance appraisals are then based upon

the observed behavior of the ratee.

The first step in the development of the B.O.S. requires the determination of the behaviors to be measured. A team of four trained interviewers met with approximately twenty percent of the hourly, supervisory, and managerial personnel responsible for mining and processing the product. This was a quite extensive procedure representing about 25 person days of effort.

Interviewees were asked to recall specific incidents in their recent experience in which they were impressed by a particularly effective or ineffective action on the part of a shift boss. The respondents were instructed that the particular shift boss described need not be their own supervisor and should not be personally identified. An effort was made to elicit about ten such behavioral incidents in each interview. Interviews with area bosses and higher level managers followed a similar pattern in which behavioral criteria of performance for shift bosses were elicited.

The interview procedure resulted in the collection of approximately 700 behavioral items. These items were analyzed by a team of three trained organizational psychologists. The major point of each episode was extracted into a short phrase of statement e.g. meets paperwork deadlines, rewards safe behavior, communicates with subordinates, takes care of equipment, etc. All items were listed, and items with very similar focus were grouped into a single item. Items were also analyzed for agreement in their importance across levels, i.e., hourly, shift boss, manager, interviewees. In fact, very high levels of agreement were found across interviews. The resultant list of unique, critical items numbered about forty.

Each of the three analysts independently grouped the forty items into performance categories. The three category sets were compared and found to be quite similar. Minor discrepancies were adjusted and a the first draft B.O.S. was organized into four categories; Technical and Administrative Behaviors, Planning and Supervision, Interpersonal Leadership, and Safety.

A sample scale was developed, and a series of meetings were held with Texasgulf personnel at all levels to get feedback on the appropriateness of behavior items and categories. Based on the responses, a revised B.O.S. was prepared for use. Following the first administration of the instrument, further feedback was sought, and the scales were revised further. The final form of the scale is shown in Appendix 1 of this module. The B.O.S. was successfully used in the evaluation and feedback of first level supervisors in the production, maintenance, and utility departments of the underground mining and surface ore-processing operations. With minor modifications, this performance appraisal instrument could be employed for first-level supervisors in a fairly broad range of mining operations.

Implementation of the Performance Appraisal System:

Gaining cooperation. A meeting of all managerial personnel at the second level and above was held to discuss the B.O.S. Approval was given to undertake the first administration after the second-level personnel were trained in the use of the instrument.

At this time, the ORG project team met with all first-level supervisors in small groups of five to ten people. Supervisors were shown a copy of the B.O.S. and the evaluation procedure was described. The response of the shift bosses to the B.O.S. was very positive. They felt that the articulation of

clear performance criteria with regular feedback would reduce their uncertainty and make work easier.

It was considered essential that both raters (area bosses) and the ratees (shift bosses) be included in the process of development and implementation. The commitment and cooperation of those key personnel would determine the success likelihood of the evaluation process.

Evaluation process. The implementation of a performance appraisal system involves several decisions. Who should do the ratings, how frequently they should be done, how the evaluations and feedback should be conducted, and the relationship of the evaluation to subsequent actions e.g. training, salary raises, promotion, termination, etc., must be considered.

The source of the evaluations, who should do the ratings, is a complex and important issue. Ratings could be solicited from the shift boss, himself, superiors, peers, subordinates, or outsiders. Each source has some positive and some negative features.

Self ratings have many advantages. The employee usually has more information about his/her own performance than anyone else, and tends to be more discriminating in analyzing relative performance across various aspects of the job. Self ratings allow the employee to gain a clear understanding of what is expected and provide the superior with some insight into how the employee sees the job and himself. Such ratings increase the communication and understanding between employee and superior and give the employee a feeling of greater involvement in the process. The dangers in self-ratings involve the desire of the employee to look good and the possibility of a lack of awareness on the employee's part. However, the important advantages of self ratings argue for their inclusion as, at least, part of the appraisal

process.

Superior ratings by the immediate supervisor are the most common procedure in performance appraisal. Since the immediate supervisor is in close contact with employee and is usually responsible for the control of rewards and punishments, it is logical to have the superior involved in the process. The evaluation process also reinforces the supervisor's authority and enhances his/her ability to influence the employee's behavior. The major drawback to superior rating is that they are usually subject to considerable subjectivity and bias. The quality of the relationship between employee and supervisor can color the ratings. This problem requires that supervisors be trained to minimize such biases by focussing their attention on the observation of the critical behaviors.

Peer appraisals tend to be quite reliable and valid. Peers are able to bring considerable objectivity to the rating situation and their ratings typically overcome the problems associated with the biases held by the employee or the supervisor. One major drawback of peer evaluations relates to the hesitancy and resistance of workers to rate their peers. A serious drawback for the mining industry is that in order for peer ratings to be accurate, group members must have close contact with one another. The technology of the mining process usually makes this contact less than is appropriate.

Subordinate ratings can be quite useful as a feedback device from hourly workers to their boss. However, subordinates often feel threatened by the possible consequences of negative ratings. Such ratings also have the potential for weakening the authority of the boss. The decision to use subordinate evaluations should be made carefully on the nature of the specific

organization.

Evaluations by outsiders have little to recommend them. Outsiders often have an inadequate understanding of the situation, and the time-limited nature of observation can result in very artificial behavior by those being rated. Furthermore, outside evaluations add little to enhance the communication process between employee and supervisor.

The appraisal process which was decided upon at Texasgulf involved a combination of self and supervisor ratings. Approximately two weeks prior to the periodic evaluation meeting, the area boss informed the shift boss of the event. The shift boss was given a copy of the evaluation form and asked to rate himself subsequent to the meeting. At the meeting, the shift boss and area boss compared their ratings, discussed discrepancies, and worked out a plan for subsequent actions.

Prior to the first administration of the performance appraisal, area bosses received training at two workshops conducted by the ORG project team.

The first workshop was a two-hour session devoted to procedures for reducing errors and biases in ratings. A lecture outlined and explained the most common types of rating errors. A series of exercises provided practice in the use of the B.O.S. and illustrated certain errors to the participants. Finally, participants were instructed in the most effective means for reducing errors and increasing rating accuracy. Appendix 2 of this module contains an outline of the lecture material and the specific exercises used.

A second, two hour training session focussed on the proper manner for conducting the performances appraisal feedback interview. Area bosses were instructed in the functions of the interview, how to prepare and conduct the feedback portion, and how to develop a plan for future action. A series of

subordinate, and observer, provided practice in the procedure. Appendix 3 of this module contains the outline of the lecture material and the role-play scenarios used in the exercises. The content of the role plays included information relating to leadership style and situation based on the Leader Match training conducted previously. (See module: Leader Match training.)

The frequency of evaluation in performance appraisal is based on two considerations. Evaluations should be frequent enough to provide meaningful feedback on which the employee can take actions. However, evaluations should not be so frequent as to become overly burdensome. The Texasgulf organization chose an initial evaluation schedule of every six months, with the consideration of its appropriateness after the system had been in place for some time.

A final issue in performance appraisal concerns what specific actions and outcomes should be tied to the evaluation. The most central concern is usually whether or not salary decisions should be directly tied to the performance appraisal process. At first glance, it seems quite logical to tie the annual merit raise to the system. However, there are some very good reasons to argue against this policy.

The performance appraisal system is designed primarily as a process to facilitate the development of managerial talent. The use of feedback and future planning is intended to help the employee improve his/her managerial performance. However, when dollar outcomes are tied to the ratings several problems interfere with the purpose of the system.

The employee may feel forced to inflate his self ratings, converging up rather than openly acknowledging problem areas. If the supervisor is not role play exercises in which each participant played the role of superior,

aware of a problem, it will remain hidden and unsolved. The employee also becomes very defensive about the superior's evaluation, denying criticism. The feedback session can turn into an argument over specific ratings rather than an exchange of information. Similarly, the superior out of loyalty to his subordinates or a desire to avoid conflict may be led to inflate ratings.

It is also the case that different raters may use the scales quite differently. One supervisor might be an especially hard grader and another an easy one. When those biases are translated into salary decisions, the inequity can have bad effects on morale and communication. Such differences in rating style are less important when they simply provide the background for discussion and planning.

It is certainly true that evaluations of an employee's performance must be considered in merit raise decisions. However, the process of salary review should be conceptually separated from the performance appraisal process.

The planning for future action should be centered around activities that will sustain or enhance desired behaviors. Training, increased responsibility, greater structure, more contact, etc. can be planned to fit the specific needs of the employee. The organization as a whole can work to provide the area boss and the shift boss the support they need to fulfill the proposed action plans.

A Final Word

The material in the module on performance appraisal is designed to give the human resources manager some theoretical and pragmatic information on the development and implementation of a performance appraisal system. The materials included in the appendices provide a sample instrument and training

protocols to aid in installation. For some organizations, these materials will need very little change to be ready for use. Other organizations will need to make extensive changes or develop their own system. Professional consultation is advised in making such decisions.

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APPENDIX F
OD PERFORMANCE APPRAISAL FORMS

PERFORMANCE APPRAISAL REPORT – MANAGERIAL

| | | | |
|------|----------|------|-----------------------------|
| Name | Position | Date | Appraisal Period Ending: |
|------|----------|------|-----------------------------|

PART I

OVERALL MEASURE OF ABILITY TO GET THE JOB DONE

Goal Achievement Low 1 2 3 4 5 High
 Achieves or exceeds goals in safety, production and cost control. Implements company policies and programs. Achieves or exceeds both quantity and quality standards of performance.

COMMENTS/EXAMPLES _____

SPECIFIC PERFORMANCE FACTORS

1. JOB KNOWLEDGE Low 1 2 3 4 5 High

Knows principles, techniques, and requirements of own job and related jobs. Has knowledge of what should be expected of subordinates, that is, accurate expectations of a day's work. Stays current with changing job requirements and demands.

COMMENTS/EXAMPLES _____

2. GETS THE JOB DONE SAFELY Low 1 2 3 4 5 High

Knows safety regulations and safe practices. Has positive attitude toward doing the job safely. Frequently talks up safety with subordinates. Insists on safe practices at all times. He and subordinates have good safety records. Sets a good example for others regarding safety.

COMMENTS/EXAMPLES _____

3. ORGANIZATION OF RESOURCES Low 1 2 3 4 5 High

Is able to plan and schedule. Insures supplies and personnel are at hand when needed. Shows good judgment in delegating tasks and in anticipating needs. Manages own time effectively. Completes work on time. Initiates needed actions without being told. Follows through on tasks.

COMMENTS/EXAMPLES _____

4. COST CONTROL Low 1 2 3 4 5 High

Controls costs and meets budget objectives. Eliminates wasteful practices. Implements cost-saving methods.

COMMENTS/EXAMPLES _____

5. LEADERSHIP/MANAGING SUBORDINATES Low 1 2 3 4 5 High

Shows ability to motivate; is effective in dealing with people; shows decisiveness, firmness, and fairness. Has the respect of subordinates; gives prompt, constructive feedback to subordinates. Is open to suggestions, willing to adapt where appropriate, and is sensitive to subordinates' needs.

COMMENTS/EXAMPLES _____

6. PROBLEM SOLVING/JUDGMENT/CREATIVITY

Low 1 2 3 4 5 High

Responds appropriately to problem situations. Sees real problem quickly and accurately. Shows skill and judgment in anticipating and solving problems. Quick to learn. Willing to make decisions in problem situations. Judgments are correct and timely. Accepts responsibility for decisions. Looks for new, original, or creative ways to solve problems.

COMMENTS/EXAMPLES _____

7. COOPERATION WITH PEERS AND SUPERIOR

Low 1 2 3 4 5 High

Works well with others; is tactful. Coordinates well with related departments and crews. Relays necessary information to others on a timely basis. Offers help to others where needed. Is responsive to superior and follows directions.

COMMENTS/EXAMPLES _____

8. ATTITUDE

Low 1 2 3 4 5 High

Shows enthusiasm for the job and loyalty to the company and its people. Shows a willingness to accept responsibility, and aggressiveness in working for the company's interests and the workers' interests. Always shows a concern for safety.

COMMENTS/EXAMPLES _____

9. COMMUNICATION ABILITIES

Low 1 2 3 4 5 High

Shows verbal and written skills in communicating information both to superiors and subordinates. Also demonstrates ability to listen to desires, interests, and needs of superiors and subordinates.

COMMENTS/EXAMPLES _____

10. DEVELOPING SUBORDINATES

Low 1 2 3 4 5 High

Helps subordinates to develop their capabilities to improve the work they are presently doing and to take on positions of greater responsibility. Helps subordinates develop additional skills. Prepares people to take over his own position.

COMMENTS/EXAMPLES _____

11. EVALUATING SUBORDINATES

Low 1 2 3 4 5 High

Shows ability to evaluate subordinates accurately and fairly. Develops people through the use of constructive feedback, counseling, and evaluation.

COMMENTS/EXAMPLES _____

PERFORMANCE APPRAISAL REPORT – PROFESSIONAL-TECHNICAL

| | | | |
|------|----------|------|-----------------------------|
| Name | Position | Date | Appraisal Period Ending: |
|------|----------|------|-----------------------------|

PART I

OVERALL MEASURE OF ABILITY TO GET THE JOB DONE

Goal Achievement Low 1 2 3 4 5 High
Achieves or exceeds goals in amount and quality of work produced within budget provided. Implements company policies and programs.
Achieves or exceeds performance standards for the job.

COMMENTS/EXAMPLES _____

SPECIFIC PERFORMANCE FACTORS

1. JOB KNOWLEDGE Low 1 2 3 4 5 High
Is knowledgeable in his field. Keeps up with developments, changes, and advances in his field. Has both technical and practical knowledge of the field and the job.

COMMENTS/EXAMPLES _____

2. HANDLING OF "ROUTINE" WORK Low 1 2 3 4 5 High
Both quantity and quality of daily, routine assignments meet or exceed expectations. Is a self-starter and often goes beyond the minimum job assignment. Is dependable, reliable, diligent, and precise on daily work assignments. Carries "fair share" of work load.

COMMENTS/EXAMPLES _____

3. CREATIVE/IMAGINATIVE WORK Low 1 2 3 4 5 High
Generates high quality, well developed, original ideas. Shows creativity and imagination in solving problems. Displays initiative in doing what he thinks is the best thing for the company and its people.

COMMENTS/EXAMPLES _____

4. COMMUNICATION Low 1 2 3 4 5 High
Shows communication skills verbally and in writing for both superiors and co-workers. Demonstrates listening skills in attending to the interests, desires and needs of both superiors and co-workers. Can "sell" his ideas to others.

COMMENTS/EXAMPLES _____

5. ORGANIZATION

Low 1 2 3 4 5 High

Plans, organizes, and executes own work well. Sets priorities and follows through. Organizes and documents own work so someone else can take over if necessary. Keeps records and files up to date.

COMMENTS/EXAMPLES _____

6. JUDGMENT

Low 1 2 3 4 5 High

Is able to make critical and high quality judgments. Judgments and recommendations have proven to be appropriate, accurate, and feasible.

COMMENTS/EXAMPLES _____

7. DEVELOPING SUBORDINATES

Low 1 2 3 4 5 High

Helps subordinates to develop their capabilities to improve the work they are presently doing and to take on positions of greater responsibility. Encourages subordinates' professional growth. Prepares people to take over his own position.

COMMENTS/EXAMPLES _____

8. ATTITUDE

Low 1 2 3 4 5 High

Shows enthusiasm for the job and loyalty to the company. Displays initiative in finding ways to do the job better. Willingly accepts responsibility, assignments, and directions.

COMMENTS/EXAMPLES _____

9. COOPERATION

Low 1 2 3 4 5 High

Works well with others. Is tactful and considerate. Coordinates well with others whose work depends on him. Maintains a cooperative attitude toward co-workers and superiors.

COMMENTS/EXAMPLES _____

10. GETS THE JOB DONE SAFELY

Low 1 2 3 4 5 High

Knows safety regulations and safe practices. Has a positive attitude toward doing the job safely. Insists on safe practices from self and co-workers. Has a good safety record. Sets a good example for others regarding safety.

COMMENTS/EXAMPLES _____

PERFORMANCE APPRAISAL REPORT – CLERICAL

| | | | |
|------|----------|------|--------------------------|
| Name | Position | Date | Appraisal Period Ending: |
|------|----------|------|--------------------------|

PART I

OVERALL ABILITY TO GET THE JOB DONE

Goal Achievement Low 1 2 3 4 5 High
Achieves or exceeds goals in both quantity and quality of work produced. Implements company policies and programs. Assumes responsibility for high standards of performance.

COMMENTS/EXAMPLES _____

SPECIFIC PERFORMANCE FACTORS

1. WORK QUANTITY Low 1 2 3 4 5 High
Amount of work accomplished meets or exceeds expectations. Plans and schedules work effectively. Finishes assignments on time.

COMMENTS/EXAMPLES _____

2. WORK QUALITY Low 1 2 3 4 5 High
Accuracy and quality of work meet or exceed expectations. Work shows thoroughness, clarity and completeness. Meets reasonable deadlines.

COMMENTS/EXAMPLES _____

3. ATTENDANCE/AWARENESS OF JOB RESPONSIBILITY Low 1 2 3 4 5 High
Attendance is steady, dependable, and punctual. Takes job seriously and responsibly. Minimum use of work time for personal concerns, errands, phone calls. Ready and able to devote attention to job duties.

COMMENTS/EXAMPLES _____

4. ATTITUDE Low 1 2 3 4 5 High
Willing acceptance of job responsibilities. Not a chronic complainer. Shows enthusiasm for the job and loyalty to the company.

COMMENTS/EXAMPLES _____

5. JOB KNOWLEDGE Low 1 2 3 4 5 High
Understands own job and related jobs well. Has knowledge and skills necessary to meet job requirements. Learns quickly. Willing to learn new skills.

COMMENTS/EXAMPLES _____

6. INITIATIVE

Low 1 2 3 4 5 High

Initiates needed action without being told. Can work independently. Follows through effectively on assignments. Completes tasks on time. Pursues self development. Keeps current with changing job requirements.

COMMENTS/EXAMPLES _____

7. COOPERATION

Low 1 2 3 4 5 High

Works well with others. Is tactful and considerate. Coordinates well with others whose work depends on him or her. Gets along with co-workers and supervisors.

COMMENTS/EXAMPLES _____

8. COMMUNICATION

Low 1 2 3 4 5 High

Shows communication skills verbally and in writing for both superiors and co-workers. Demonstrates listening skills in attending to the interests, desires and needs of both superiors and co-workers.

COMMENTS/EXAMPLES _____

PART II

DEVELOPMENT PLAN FOR IMPROVING CURRENT PERFORMANCE

In my opinion this person's current job performance is:

Low 1 2 3 4 5 High

Major Strengths are: _____

Major Areas Needing Improvement are: _____

The employee and I agree that performance should be improved in the specific areas described below. The improvement areas and goals are listed in priority with the most important factor first.

1. _____

2. _____

3. _____

Specific plans for obtaining improvement in the areas listed above.

1. _____

2. _____

3. _____

Comments on the achievement of improvement goals in the last year.

Improvement Goal

Results

1. _____ 1. _____

2. _____ 2. _____

3. _____ 3. _____

Employee's comments on current performance and improvement plans.

EMPLOYEE POTENTIAL AND DEVELOPMENT

In my opinion this person's potential is:

Low 1 2 3 4 5 High

To utilize this person's potential best I suggest the following job changes: Consider advancement or promotion, adding or deleting responsibilities, a lateral "growth" move, cross-training, or a remedial move. What is the appropriate timing of job changes? Or, alternatively, the person's potential is best used in the present position.

Needed Skills, Knowledge, or Experience Necessary to achieve competence in New Position.

Specific plan to develop needed competence: _____

The person has indicated an interest in moving into the following work areas or position(s):

Possible replacements for this position should a vacancy occur:

| NAME | PRESENT POSITION | DATE AVAILABLE |
|------|------------------|----------------|
|------|------------------|----------------|

| | | |
|-------|-------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Employee's Comments and Reactions to the Interview.

Rater's Comments and Reactions to the Interview.

SIGNATURE OF RATER(S) _____ DATE _____

REVIEWED BY (1) _____ (2) _____ (3) _____ DATE _____

ADDITIONAL COMMENTS: _____

