

4-1-1961

The planning, installation, and results of a performance improvement program for supervisory personnel

Harold G. Hart

Follow this and additional works at: <http://scholarship.richmond.edu/masters-theses>

Recommended Citation

Hart, Harold G., "The planning, installation, and results of a performance improvement program for supervisory personnel" (1961). *Master's Theses*. Paper 174.

This Thesis is brought to you for free and open access by the Student Research at UR Scholarship Repository. It has been accepted for inclusion in Master's Theses by an authorized administrator of UR Scholarship Repository. For more information, please contact scholarshiprepository@richmond.edu.

THE PLANNING, INSTALLATION, AND RESULTS
OF A PERFORMANCE IMPROVEMENT PROGRAM
FOR SUPERVISORY PERSONNEL

By

Harold G. Hart

A Thesis

submitted in partial fulfillment
of the requirements for the degree of
Master of Science in Business Administration

The Graduate School

University of Richmond

1961

PREFACE

The scope or aim of this thesis is to plan, install, and measure the results of a performance improvement program directed towards supervisory personnel.

The planning stage consists of investigating secondary works by others pertaining directly or closely to the subject of performance improvement programs. Primary data have been collected in order to have all the facts necessary to plan an effective program. These data include past performance of shifts, defining shift problems and objectives, and techniques to accomplish objectives. An attempt is made here to record all the events that took place in planning this procedure.

The installation phase of the program is covered under "placing the plan into action". Discussions of group meetings with foremen, the follow-up with individual foremen, and the contacts with operating and union personnel are also enclosed within this report.

The program is evaluated and some conclusions are drawn from the evaluation in the last chapter below.

Harold G. Hart

January, 1961

CONTENTS

CHAPTER I

INTRODUCTION	<u>PAGE</u>
Scope of Thesis Defined-----	1
Performance Improvement Programs-----	1

CHAPTER II

RECENT HISTORY OF THE SHIFT	
Shift Supervision-----	6
Operating Personnel-----	7
Union Organization-----	9
Plant and Area Organization-----	9
Area Philosophy on Improving Human Efficiency-----	10
Past and Present Performance of the Shift-----	12

CHAPTER III

PERFORMANCE IMPROVEMENT PROGRAM	
Problems Defined-----	13
Primary Problem-----	13
Secondary Problems-----	14
Summary of Problems-----	17
Objectives Defined-----	18
Techniques to Accomplish the Objectives-----	20
Follow-up on Results with Individual Foremen-----	21
Performance Discussions with Individual Foremen-----	22
Discussions with Operating Personnel-----	23
Discussions with Union Stewards-----	24
Discipline-----	25

CHAPTER IV

PLACING THE PLAN INTO ACTION	PAGE
Discussion of Group Meetings-----	27
Follow-Up on Results-----	30
Performance Discussions with Individual Foremen-----	31
Employee Contacts-----	31
Contacts with Union Stewards-----	31

CHAPTER V

EVALUATION OF PERFORMANCE IMPROVEMENT PROGRAM	
Primary Objective-----	33
Secondary Objectives-----	35

CHAPTER VI

CONCLUSIONS	
Performance Improvement Programs-----	38
Future Plans-----	38
Reaction of Associated and Higher Supervision-----	39

BIBLIOGRAPHY-----	41
-------------------	----

LIST OF FIGURES

1. Shift Competitive Rating Chart
2. Plant Organization Chart
3. Shift Rating Chart
4. Safety Performance - Area A
5. Area A - Off-Standards
6. Housekeeping Performance - Area A
7. Area A - Control
8. Shift Safety Performance
9. Housekeeping - Shift Average
10. Shift Overtime Cost
11. Shift Disability Performance
12. Machine Cutage
13. Shift Waste Performance
14. Quality Performance

THE PLANNING, INSTALLATION, AND RESULTS
OF A PERFORMANCE IMPROVEMENT PROGRAM
FOR SUPERVISORY PERSONNEL

CHAPTER I

INTRODUCTION

Scope of Thesis Defined - The performance improvement plan discussed in this thesis is an authentic account of the planning, installation, and results of a program.

The performance improvement program is focussed on the five foremen who report to the shift supervisor. I am the shift supervisor.

The primary objective of this thesis is to report accurately the planning and installation of a performance improvement program, for supervisory personnel, and also to appraise or measure results of the program.

Performance Improvement Programs - The challenge of planning a performance improvement program becomes interesting and self-satisfying when a supervisor evaluates his personnel and originates a program working towards the improvement of men under his direction. This challenge requires some thought and study, which is stimulating itself.

"How to handle a problem? 1. Get all the facts. 2. Weigh and decide. 3. Take action. 4. Check results." ⁽¹⁾ This approach has been widely used in this company by foremen and supervisors in an effort to solve problems. One mistake commonly made in this

(1) Chase, Stuart, Men At Work (New York: Harcourt, Brace and Co., Page 49.)

approach lies in not defining the problem properly. To avoid falling into this error we should modify this technique by first saying to ourselves, "What is the problem?"

Sometimes the problem does not become clearly defined until all the facts are gathered and analyzed. At other times, the diagnosis of the problem is in error and the planned corrective action consequently fails to give the desired results.

As an illustration one of the foremen under my responsibility stated recently, "The rejects in my section are too high." He was then asked what the problem seemed to be. After some thought he replied that the machines were "running bad" and were difficult to keep in adjustment.

In order to solve the difficulty, he suggested that an intensive investigation by the maintenance department be made to find and repair any mechanical defects. If his analysis of the problem were correct, the corrective action would be logical. However, an observation of the operators at work in his section indicated that his diagnosis of the problem was probably incorrect. For instance, it was discovered that the operators were not making adjustments on the machines required to prevent the rejects from occurring. Furthermore, morale appeared to be at a low ebb due to a lack of discipline. The problem was seen to arise out of human relations rather than mechanical failures.

Errors in the proper diagnosis of a problem tend to create confusion and a loss of self-confidence.

The approach used in organizing the improvement program in this case is very similar to that already described in preceding pages.

The method used is as follows:

1. Define the problem.
2. Gather all the necessary facts.
3. Analyze the facts.
4. Define the problems.
5. Define the objectives.
6. Techniques to accomplish objectives.
7. Place the plan into action.
8. Evaluate the results after a fair trial of the plan.

In forming an effective supervisory development program, the supervisor needs to be thoroughly familiar with the problems confronting the foremen under his supervision. E. C. Bentzer has recently written in this connection: ⁽²⁾ "To create enthusiasm for self-improvement, a training course must embrace problems currently confronting those being trained and offer specific solutions to those problems. It must, therefore, be tailored to fit the needs of each student. For a fundamental course to be so tailored, it is necessary for the instructor to visit each trainee on the job and learn at first hand exactly what his job situation is and how his understanding of it compares with the facts. This concept demands that the instructor, in addition to being a capable teacher, have practical experience throughout the entire gamut of management and, preferably, in various types of industry." It is suggested here that a training program promises to be more effective if the instructor is an immediate superior because he is in an excellent position to observe the difficulties and progress of the trainee.

(2) "Forming Effective Supervisory Development Problems",
(Journal Advanced Management, August issue, 1960)

How, then, can a supervisor help a foreman overcome his difficulties in meeting the standard set for his job? If the objective is to train the foreman to cope better with his day-to-day problems, the supervisor must help him carry through a process of thinking about those problems so that the foreman feels responsible for diagnosing them, thinking up solutions for them, and testing these solutions out. Through this process the foreman gains greater confidence in his own abilities and, as time goes on, becomes more capable of coping with his difficulties without aid from above.

The idea of helping the foreman overcome his difficulties by stimulating thinking on his part so as to discover his own solutions to his problems is one of the major techniques used in this development program for supervisory personnel. That is, supervisors are helped by this approach and then required to use the same approach with the foremen under their jurisdiction.

Erwin K. Taylor, in the March-April, 1959 issue of Personnel says, "Gadgets and gimmicks become the order of the day. Work simplification, conference leadership, role playing, brainstorming, committee management and bottom-up management are but a few of the myriad methodologies that were devised to win the uncritical acceptance of the over-anxious executives to divest themselves of a responsibility, which they felt ill-equipped by talent or training, to discharge in the proper manner."

It is felt that these gimmicks and gadgets used by top management do have an effect on supervisors, whose task it is to

develop supervision under their responsibility.

The obstacle to the desired effect is that supervisors will tend to rely heavily on such programs without proper follow-up or appraisal. Partial programs are often expected to do a total job.

CHAPTER II

RECENT HISTORY OF THE SHIFT

Shift Supervision - The history of the shift, to which the writer has recently been assigned, dates back to the 1930's. However, my study is confined to an analysis of it only for the past five years, approximately.

The shift supervisory personnel has turned over numerous times due to transfers, promotions, and retirements. On the other hand, some of the operating personnel have been on the same jobs twenty to twenty-five years. The five foremen assigned to the shift have extensive supervisory experience. The average age of these five is approximately 47 years, and their supervisory experience ranges between ten and twenty years. All of them have had a high school education, and two have had some college training.

The shift supervisor is 33 years of age and has had approximately ten years of supervisory training. He has a B.S. degree in Personnel Management, and has carried on graduate studies in the field of business administration.

In planning this improvement program, I have given some thought to the difference in age and supervisory experience just mentioned. I feel that a feeling of complacency and staleness naturally develops among subordinates after a foreman has been on the job for a number of years. Moreover, certain traditions become ingrained in the relations between the union and management which commonly stand in the way of an improvement in efficiency.

It is quite difficult to move into a new assignment and make the necessary changes for improvement in a short period of time. A new supervisor has to be very careful at the beginning not to make sudden changes which may impair the morale of his people. He has to be in the position long enough for the foremen and operating personnel to gain confidence in his decisions.

After making a brief of the shift history, I directed my thinking toward a performance improvement plan which would create interest and enthusiasm among a group of foremen with long supervisory experience. I noted Scott's dictum: "It is human to be more or less dependent upon novelty. If I am to stir myself to continuous and effective exertion, I must frequently stimulate my interest by proposing new problems and new aspects of my work. If I am to help others to increase their efficiency, I must devise new appeals to their interest and new stimulations to action. If I have been dependent upon competition as a stimulus, I must change the form of this contest." (3)

Operating Personnel - There are 84 operators assigned to the shift, working in four production sections. Each section is headed by a foreman who is responsible to the shift supervisor. A fifth foreman relieves the other four foremen on vacations, days of rest, and sick relief.

Of the 84 operators, approximately 70 per cent form a stable nucleus in that they have been with the company for twenty years or more. Operators' wage rates have been increased upwards with cost-of-living increases and have been maintained above the

(3) - Scott, Walter Dill, Increasing Human Efficiency (New York: The Macmillan Company 1913) - Page 241

average comparable community wage scale. These good wage rates, together with satisfactory company plans and policies and better than average working conditions are probably responsible for the unusually high average in length of service just noted.

Due to the average length service and relatively high average age of the operators, I gave special consideration to a program whereby the foremen could increase job interest and job enthusiasm on the part of the operators. I feel that a worker with twenty or more years of service has in all probability been influenced by several programs focussed towards increasing his efficiency. Now some have found that after a certain span of time human operating efficiency reaches a peak and then starts turning downward. "In case of workers an important factor in promoting maladjustment is the failure to keep pace with changing methods of work. This follows, in part, from the amount of unlearning required for new learning after old and inconsistent habits have become well set. Old viewpoints and old methods of working become firmly established and set up resistance against their replacement by improved methods of work. This results, in part, from stagnation and, in part, from failure of management to keep before the old workers the importance of continued change, of continued learning as a necessary factor of adjustment to work in modern industry." (4)

The basic premise in this study is somewhat different - that human efficiency can continue to increase up to retirement age,

(4) Viteles, Morris S., Industrial Psychology (W. W. Norton and Company, Inc., 1932) Page 603.

given the injection of appropriate measures designed to combat a drop in interest and enthusiasm.

Union Organization - The manufacturing operating personnel are represented by a local union which was formed during the 1930's. The union is represented by a president, several vice-presidents, a director for each area in the plant, and a steward on each shift within the area. The foremen and shift supervisors deal, for the most part, with the union stewards representing the operators on their respective shifts. The stewards, elected by union members, are commonly chosen so as to reflect their feelings toward management. To cite one authority, "It is a fair general statement to make that union leadership will be patterned very largely upon management leadership. The union members will tend to pick their leaders from men similar to the managements with whom they will have to deal. The tough, uncompromising management will usually generate a similar type of union leadership. On the other hand, the management that is honestly trying to deal fairly and to see points of view of the employees, the stockholders, and the public will discover a strong trend toward the choice by the union leaders who will match the management attitude." (5)

Plant and Area Organization - The plant staff organization consists of a Plant Manager, Assistant Plant Manager, Manufacturing Superintendent, Process Superintendent, Planning Superintendent,

(5) Finlay, W. W. Sartain, A.G., Tate, W.M. - Human Behavior in Industry (1954 McGraw Hill Book Co. New York, Toronto, London) Page 144

This statement is corroborated by my own experiences with the union stewards and by my observations and impressions received through association with union stewards and directors.

Personnel Superintendent, Works Engineer, and Accounting Superintendent. Responsible to the Manufacturing Superintendent are four area heads - one each in Product A - Manufacturing, Product A - Finishing, Product B - Manufacturing, and Product B - Finishing Area. The area in which the writer functions is the Product B - Manufacturing Area.

Each area organization consists of an area supervisor, two area staff assistants, four shift supervisors, and approximately five foremen reporting to each shift supervisor. The primary area of concern of this thesis is at the shift level of operation. (See figure 2 for outline of plant and area organization).

Area Philosophy on Improving Efficiency - "Many important houses use competition as part of their regular equipment for handling and energizing men." (6) The concept of competition between the four shifts is the primary tool used in our area to improve human efficiencies. The trouble with this approach is that it entails a tendency to lessen cooperation and teamwork, increases the tendency to make errors on records (especially when these records are kept by individuals whose performances are being measured by them) and frequently creates ill feelings, suspicion, and an adverse effect on morale. Nevertheless, even with these shortcomings, this method of approach has been known to produce results. In other words, the competitive approach can be used to a good advantage if administered properly.

"We assume ordinarily that competition exists only between individuals. As a matter of fact a slight degree of competition may

(6) - Scott, Walter Dill - Increasing Human Efficiency in Business (New York: The MacMillan Co. 1913) Page 63

be aroused between a man's present efforts and his previous records." (7) This same thought occurred to the writer shortly after being assigned as shift supervisor in the Chemical and Spinning Area. It was felt that key yardsticks could be kept on each foreman indicating his past performance, his present performance, and his objectives for the future. After a certain interval, these yardsticks could be used to discuss a foreman's performance comparing his past with his present performance. These yardsticks are discussed in greater detail in a later section of this report.

"Some men were afraid of all forms of competition. They believed that cooperation was essential to success and that any form of competition among the men tended to lessen such cooperation." (8) It may be true that high levels of safety, output, and quality can be realized only through cooperation. Cooperation and morale are very closely related. Since high morale is needed in order to obtain close-knit cooperation, one of this writer's first concerns has been the morale of the shift. In order to check morale, the first approach is to meet and talk with each man on the shift. It appears that the pulse of the shift can best be checked by this technique. This check is made to determine the correct degree of emphasis to place on this phase of the improvement program.

The reason for an evaluation of competition, cooperation, and morale is to find the advantages of each and to inject them into their proper perspective in planning an improvement program. It has been concluded after thought and concern, that competition is a good

(7) - Ibid. - Page 55
(8) - Ibid. - Page 59

tool to use in increasing human efficiency. True, there are drawbacks to it; but one cannot overlook the fact that other approaches also lead to difficulties of one type or another.

Past and Present Performance of the Shift - An individual's performance at our location is appraised in six basic areas of operation: safety, cost, production, housekeeping, employee-relations, and leadership. In order to evaluate the effectiveness of any improvement program, yardsticks measuring performance before the program is installed must be determined. This measurement of performance will be called the "before measurement". The area rates the four shifts on a one, two, three, four competitive basis, and these rankings are obtained by measuring each shift's performance on approximately twenty yardsticks. These twenty measurements are totaled at the end of each month to determine the ranking of the respective shifts. (See figure 1 for twenty items used to determine monthly ratings.) The lowest score represents a first-place ranking.

Figure 3 shows the rankings of the shift to which the author is assigned. January through May represents the "before measurement". The improvement of the supervisory personnel's performance program was started in the month of June. Note an immediate improvement in the rating, followed by a leveling-out in the months following.

A folder tracing the past performance of each foreman is set up in order to measure the effect of the program on individual foremen (figures 4-7 below). The yardsticks set up for each foreman are designed as closely as possible to match the six basic criteria used all over the plant to rate an individual's performance.

CHAPTER III

PERFORMANCE IMPROVEMENT PROGRAM

Problems Defined

Primary Problem - The primary problem of the shift when I assumed command appeared to be that the supervisors did not accept full and complete responsibility for all phases of their jobs. It was felt that the foremen had been on the job such a long period of time that they needed stimulation to create interest and enthusiasm towards the job at hand. "Many managers and more foremen are unable to develop this feeling of stimulation in their subordinates because they assume all of the responsibility and allow those under them no share of it." (9)

This very impression was given by the foremen under my responsibility, and it appeared that a similar situation prevailed among the operators reporting to the foremen. It is little wonder that the operators were not accepting the full responsibilities their jobs required toward safety, housekeeping, production, and cost, if their immediate supervisors shrank from these same responsibilities.

In order to sharpen the basic issue I give the following example to illustrate the importance of defining a problem properly. One of the foremen assigned to my shift was asked to have a certain area cleaned before a housekeeping inspection on the following day. This particular foreman has excellent job knowledge and has gotten along well with his men. However, previous observation led to the conclusion that housekeeping in his section was not up to minimum standards.

(9) Ibid. - Page 193

Near the end of the shift a follow-up check in this particular area showed it was still sub-standard. A casual remark was made to an operator, assigned to the section, concerning the inspection to be made the following day. It was learned that he was not aware of the inspection since he had not been informed about it by his foreman.

In response to queries on why he did not inform his operators about the inspection, the foreman simply stated that his area was normally clean, making the special instruction unnecessary. This situation, which actually occurred, is a typical illustration of a foreman's failure to accept the full responsibilities of his job.

Under such circumstances one supervisor might be inclined to undertake the job himself. The trouble here is that the responsibility and the authority to carry it lie in the foreman's realm of operation and should not be taken from him. As Robert Dubin states, "In the first place, the superior retains some control and direction of a delegated function. The subordinate usually feels impelled to inform his superior about what he is doing and to secure approval for it. Carried too far, this dependence upon a superior destroys the effectiveness of the delegation. The superior might just as well undertake to do the job himself if the subordinate fails to assume some initiative in implementing the authority delegated to him." (10)

Secondary Problems - The secondary problems associated with the operation of my shift stem from the primary problem that the foremen were not accepting the full responsibilities of their jobs.

(10) - Dubin, Robert - Human Relations in Administration (Englewood Cliffs, N.J.: Prentice-Hall, Inc.) Page 272

Accordingly, it is felt that these secondary problems should be defined and included in the improvement program for supervisory personnel.

One of the main secondary problems confronting me is that the foremen appear to be incompetent to analyze their problems thoroughly and to take appropriate actions.

This problem seemed to be more characteristic of older foremen who had become more or less set in their ways of tackling a problem. However, one of the younger and less experienced foremen also appeared to be improperly trained in this field. An example to further define this situation was given in the Introduction Chapter of this report under "Performance Improvement Programs." The foremen appeared to be performing satisfactorily in lining up important jobs within their crews but were generally lax in lining up daily routine tasks. This latter phase, showing a failure to line up daily tasks, or instructions given daily by the supervisor, or instructions found daily in the log book, appeared to be another problem associated with the shift.

This problem became more sharply defined after further checks. The complete job was not being done. It was stressed that it is just as easy to do a thorough job as an incomplete job and far more interesting and satisfying. Mr. Walter Dill Scott stressed this same point in 1913 when he stated, "The modern business man is exhausted no more by his actual achievements than by the things which he is compelled to resist doing."⁽¹¹⁾

(11) - Scott, Walter Dill, Increasing Human Efficiency (New York: The MacMillan Company 1913) Page 106

Another problem of the shift arose from the fact that the foremen, generally speaking, were afraid of upsetting the operators reporting to them on controversial instructions or issues. This type of situation led to "buck passing" and loss of respect.

Examples of controversial instructions or issues are "proposed labor saving procedures, housekeeping inspections, and cost reduction programs". An investigation revealed that foremen were giving instructions such as: "The area wants to try this new procedure", or "The boss wants the area cleaned for inspection", rather than we want to try this. It was no wonder the operators tended to lose respect for a foreman who reacted in this manner.

The union stewards and some of the operators were suspicious of most members of supervision in their dealings with them. This created a "barrier breaking" problem between the stewards and management. When the writer took charge of the shift many minor grievances were being funneled in for settlement. The stewards were going over the foremen's heads to the shift supervisor. The union stewards would also comment or give the impression that unless certain procedures were agreed upon and placed in writing, they were not compelled to follow the proposal. This type of situation gave the impression that every minor agreement or instruction had to be in writing if the other side were to live up to it.

It appeared that the foremen were not making full use of disciplinary procedures available for handling problem cases. Although it is better to make a man than break him, there are times when the only way to make a good man is through proper discipline.

Discipline has become less brutal, if not less strict, over the years; yet it is still an indispensable tool, assuming it is administered properly.

During the first three months of my new assignment, not a single operator was called off the job for constructive criticism or disciplinary action. This could be either good or bad, but judging from the shift's previous six months' performance, it appeared that discipline was inadequate.

Summary of Problems - Generally, the shift was not holding its own in performance results in comparison with the other three shifts. It was felt that this major problem was the result of a combination of problems defined above. This is a summary of the major problems, seemingly most important, and worthy to be included in an improvement program.

1. Primary Problem

- a. Supervision is not accepting the full and complete responsibilities of all phases of their jobs.

2. Secondary Problems

- a. Foremen are failing to analyze their problems thoroughly and take appropriate actions.
- b. Foremen are lax in lining up their men on routine daily tasks.
- c. The foremen fear to upset operators on controversial issues and instructions.
- d. An air of suspicion exists between the union stewards and some of the operators in their dealings with supervision.
- e. Foremen are failing to make adequate use of disciplinary procedures.

3. General Situation

- a. Shift performance is not in a competitive position compared with other shifts.

Objectives Defined - My primary objective has been to improve the performance of the foreman reporting to me in order to bring the overall shift performance up to a competitive level with that of the three other shifts.

In order to accomplish this objective I saw that other secondary objectives would have to be defined and accomplished if possible.

One of the most important secondary objectives lay in delegating sufficient responsibility and authority to each foreman for the overall operation of his section. In other words, this objective was to begin holding the foreman truly responsible for the actions of the operators reporting to him, in getting the job done. Having been a foreman for approximately eight years, I well recognized that getting the job done through people is far from easy. Cooperation of all employees is the first purpose of any organization. Without loyalty and teamwork, really high levels of output, quality, and service are difficult if not impossible to achieve.

The second objective was to develop the foremen's abilities to define problems, to gather all facts and analyze them accordingly, and then to take appropriate action towards solution of the problems.

The third objective was to develop techniques which would enable each foreman to line up his operators on the details of their jobs, especially those concerning daily routine instructions.

The fourth secondary objective was to develop teamwork and a cooperative spirit between the supervisor and foremen in order to carry out any program or procedure initiated by the shift, area, or plant through joint effort. This objective was aimed also at creating team spirit among the operators. With development of the team and a cooperative spirit, it was hoped that the foremen would eliminate "buck passing" on controversial instructions. As previously stated, it was recognized that the foreman is "the man in the middle" and must follow instructions given him by the supervisor and hope to receive cooperation from the operator in carrying out such instructions. "Here the problem of getting smooth operation becomes acute because, as we have seen, the foreman, according to the logic of industrial organization must (1) uphold at the work level the standards, policies, rules, and regulations which have been originated by other groups and see to it that the workers conform to them and at the same time, (2) obtain if possible the workers' spontaneous cooperation to this way of doing business." (12)

The fifth objective was to eliminate suspicion harbored by both the union stewards and operators towards supervision. This objective also covered the development of the foreman's role in investigating grievances so he could settle them at his level of operation if possible. Accomplishment of this objective was dependent in large part upon an elimination of the reluctant attitude of the foremen towards enforcing discipline.

In summary, the main objective in this development program was an improvement in the performances of the foremen in accomplishing

(12) - Roethlisberger, Fritz J., Human Relations in Administration (Englewood Cliffs, N.J.: Prentice-Hall, Inc. 1951) Page 145

a complete job. It was hoped that the sum total of all these objectives would add up to improved performances by the foremen which would, in turn, result in a better performance on the part of the entire shift.

Techniques to Accomplish the Objectives

Group Meetings with the Foremen - It was felt that in order to get the performance program "off the ground", it was necessary to hold group meetings with the foremen to discuss shift objectives and methods of meeting them. Plans were made for the first meeting to discuss the problems and objectives outlined in the preceding sections with emphasis on the problem of securing full acceptance of job responsibility and the major objective -- improving overall shift performances.

Cooperation and spirit of teamwork were to be stressed at this meeting. The delegation of responsibility was to be discussed in detail, along with the authority that goes with this responsibility. Plans were also made to hold monthly meetings with foremen for the discussion of special problems, the outlining of objectives, and the ways to meet the objectives. Ideas were to be solicited from the foremen during these meetings.

Topics for later meetings with foremen would be as follows:
(1) Problem definition, analysis of problems, and appropriate action,
(2) methods to line up daily tasks, (3) employee relations, (4) union relations, and (5) disciplinary procedures.

It was hoped that these meetings, linked with follow-up checks on results, would help to accomplish the primary objective of

improving overall shift performance to a point where it would rival that of the other three shifts.

Recognition was given to the fact that words play an important role in conveying a message to a supervisor's subordinates and also, that a supervisor has to interpret what people say to him in order to understand the exact meaning of the message. "On the one hand he has to become skillful in using words that will appeal to his listeners' sentiments. In trying to secure the cooperation of individuals in the common purposes of the enterprise the executive often has to practice the art of persuasion. He uses words that he hopes will produce the appropriate effects on his listeners. In statements to stockholders, employees, and customers, the executive resorts to words, both oral and written. In handling complaints and grievances, the executive is using, as well as listening to, words. On the other hand, the executive must be able to interpret skillfully what people say, for insofar as his work involves the interactions of human beings his data come from what he hears as well as from what he sees and does." (13)

Follow-up on Results with Individual Foremen - It was felt that the next step in techniques to accomplish the objectives was to check on results with each foreman individually. These checks were to be made in the field on each phase of the job whether it be safety, morale, housekeeping, quality of production, cost reduction items, or morale of employees. Follow-up checks would also be made on instructions given to a foreman by his supervisor, or instructions by area in the daily log book to assure that these instructions were carried out as completely as possible.

(13) Roethlisberger, Fritz J., Human Relations in Administration (Englewood, N.J.: Prentice-Hall, Inc. 1951) Page 306

By making these follow-up checks and noting the extent to a foreman's determination to improve his performance, I could assess leadership qualities. If the follow-up check and the recorded data kept on each foreman indicated an improvement, the foreman was to be commended. On the other hand, if improvement were needed on a special phase of his job, a problem definition discussion would be held to try and help solve his problem.

Performance Discussions with Individual Foremen - Since it is a plant policy to discuss an individual's performance with him on a yearly basis, it is felt that a system should be set up permitting a foreman to know where he stands at all times. In other words, a foreman should be able to look at his performance record at any time and know his standing compared to those of the other foremen in the area. In this connection, I sensed a need for a device that would increase the accuracy of personal judgment of others.

"The questions, how efficient is a man, how successful is he, and how important is he to the Company, do not have to be decided on the basis of subjective preference. In fact, they should not have to be decided at all; they should be answered clearly by the objective yardstick that records efficiency and achievement immediately and automatically." (14) It was felt that objective yardsticks should be set up and plotted on a weekly or monthly basis comparing performances of each foreman with the other foremen in the area.

A system for plotting performances on graph paper was devised and the past six months' performances of each foreman were

(14) Drucker, Peter F. - Human Relations in Administration
(Englewood, N.J.: Prentice-Hall, Inc. 1951) Pages 294-295

plotted so as to have a base point, or "before measurement" point. It was planned to plot additional data on these charts monthly and also to analyze and discuss these charts with each foreman at the end of each month. Such a monthly discussion would also serve as a check on general effect of the improvement program.

If a monthly training meeting were held during the month and follow-up checks were made in the field, then I felt that these injected variables might result in improved performances.

that
I recognized ^a permanent improvement in performance is rarely forthcoming right away. Nevertheless, I felt that some improvement could be made in a short period of time, or at least I could lay the foundation for a higher and lasting standard of performance. I selected the months January - May for "before measurement" months. I made a number of charts and kept them in a folder, one set for each foreman, allowing each foreman to check his rating at any time during the year. (See figures 4 - 7 below for examples of performance charts set up for an individual foreman.) I also laid plans to use these charts as a basis for making ^a yearly performance review with each foreman.

Discussions with Operating Personnel - In order to promote and check on the morale of operating personnel, I made plans for a daily contact with each operator sometime during his shift, ~~for~~ the purpose being to gain some knowledge of his feelings and to give him an opportunity to discuss any problem on his mind. By these daily contacts, I hoped to learn of any unrest or strife immediately and be in a position to take action to head off any trouble. This plan was inspired in part by Thomas J. Luck's idea that "A good personnel

appraisal is regarded as a barometer. The appraisal should be undertaken frequently in order to have enough readings upon which to predict future action. Statistic audits may be made monthly and can help management to anticipate trouble. An increase in absenteeism, a drop in production due to employee actions, and other records can be used to indicate employee unrest or strife." (15)

Discussions With Union Stewards - Plans were also made to hold weekly meetings with the union stewards assigned to the shift in order to pass along pertinent information and discuss shift problems. These meetings would also present an opportunity to discuss in advance changes that affect the people and to dissolve differences engendered by such changes before they were placed into effect.

Another major point to stress during these meetings was our grievance procedures, the main point being ~~that~~ to persuade the stewards and foremen to avail themselves of every opportunity to settle grievances at their level. If satisfaction were not obtained at the foreman's level, of course, a grievance would then proceed to the shift supervisor and on up the line if necessary.

During one of the first meetings, I planned to inform the stewards of our shift objective: to improve the performance of each individual on the shift. I expected to solicit their ideas as to the accomplishment of this objective. The purpose of this type of contact was to bring the union in on the improvement program and to create a feeling of team effort and cooperation.

(15) Luck, Thomas J., Personnel Audit and Appraisal (New York, Toronto, London: McGraw-Hill Book Company, Inc. 1955)
Page 283

Discipline - In addition to the planned training discussion on disciplinary procedures, follow-up checks were planned for problem cases in order to assure proper disciplinary action. One thought here is that sometimes it is better to offer constructive (even mild) criticism than to take action of a drastic or severe character. "The supervisor who knows when to be lenient and when to be severe has mastered an important division of supervisory technique." (16)

In general I felt that disciplinary action to correct a bad situation should be taken only after all tools of constructive help had been tried with the persons involved. A fairly exhaustive period of investigating and working with a problem case should elapse before applying disciplinary penalties. If at any time during this period the superior felt that he had done all he could to help the person presenting the problem, then he could consider administering discipline. Even after the subordinate is placed on a special write-up, pre-problem case, or problem case, the objective of the superior should be to assist that subordinate to correct his problem.

After an individual is given every opportunity to improve his status, there appear to be only two reasons for his failure. First, he does not have the skill or intelligence to improve; or secondly, he does not want to conform to the prescribed method for performing the job. Regardless of which category the offender falls into, there is justification for transfer to a job he can perform satisfactorily, or ^{for} dismissal. Of course, every disciplinary case is different and must accordingly be considered on its own merits.

(16) Cooper, A.M. How To Supervise People (New York, Toronto, London: 3rd Edition, McGraw-Hill Book Co., Inc. 1952) Page 70

The general philosophy explained above was to be stressed to each foreman in an effort to improve the performance of all the personnel under his responsibility.

CHAPTER IV

PLACING THE PLAN INTO ACTION

Discussions of Group Meetings - Monthly group meetings were scheduled as planned with the foremen to discuss problems, objectives, and plans for obtaining these objectives. The supervisor conducted meetings of the conference type with emphasis on foreman participation.

At the first meeting, which was held the first week in June, we discussed the shift problems and objectives. These problems and objectives were very similar to those outlined in the first two sections of Chapter III. This first meeting was devoted for the most part to a discussion of accepting the full responsibilities of the job and our primary objective of improving overall shift performance.

The second meeting was held the first week in July. During this meeting we talked about the progress made in June. We noted that the shift was beginning to compare favorably with others in performance. (See figure 3 below for the improvement in rating as compared with the other three shifts).

After the shifts' performances were reviewed for the month of June, a discussion type of meeting was conducted on problem definition, analysis of a problem, and appropriate actions for solving it. Each foreman was asked to define a specific problem, analyze the problem, and outline possible solutions.

The third meeting was held in August with a discussion on "lining up" daily routine tasks. Specific instances were cited where instructions had not been carried out completely over the previous two months. It was suggested that each instruction given by the supervisor, and also those instructions written in the log book, be written down by every foreman affected in a small daily notebook. After each instruction had been given to the operator and completed, the written instruction could be crossed out of the book by the foreman. If the instructions were not carried out completely, the foreman was to notify the supervisor to that effect and give reasons for the failure.

The fourth meeting, which was held in October, centered upon employee and union relations. The objective of this meeting was to impress upon the foreman the importance of informing the employees and union stewards, in advance, of changes about to be made. Furthermore, we stressed the importance of a foreman's ability to handle and settle properly the grievances arising from within his crew at his own level. Another point brought out was that the number of grievances reaching the supervisor level was an indication of the success of the employee-relations phase of each foreman's performance.

The fifth meeting (and the last covered in this report) was a discussion of disciplinary procedures. It was pointed out that one good general procedure to follow was to discuss each previously determined objective with the operating personnel and request their cooperation in trying to reach that objective.

The next step was explained to be one of follow-up to determine results. It was noted that the majority of the operating personnel would probably conform, and that the desired results would be accomplished from this group. However, there would probably be a small percentage of workers who did not conform, with whom individual contacts would be necessary, with appropriate follow-up. After these individual contacts and subsequent checks on results had taken place, there might still be one or two non-conformists. These persons normally require eighty to ninety per cent follow-up by supervision and are the ones for whom disciplinary tools were designed.

The first step in disciplinary action was explained as a contact with employees off-the-job and a special write-up of the contact. If employees did not conform after this contact, another off-the-job contact was in order and the employee informed of his pre-problem status and of the necessity for immediate improvement in order to remove him from this status. If, after a certain time span, the employee apparently showed no improvement, he was to be classified as a problem case. The employee should be told of this step and made to realize that unless improvement was immediately forthcoming, the only recourse left would be dismissal, this step being placed entirely up to him. If, after this step was taken, the employee failed to improve in a reasonable time, he should be dismissed.

Actually, this principle of discipline could be administered at any level of supervision and is the same principle used by

this supervisor in planning this improvement program covered in Chapter III.

Problems Defined
Objectives Defined
Group Meetings with Foremen
Follow-up on Results
Individual Foreman Contacts
Discipline

Follow-up On Results - Folders were set up for each foreman and performances were plotted monthly on charts showing the results of follow-up checks on each foreman.

An attempt was made to include all six phases of performance recommended by our Plant Staff. These six items are safety, housekeeping, production, cost, employee relations, and leadership. Since it is very difficult to measure employee relations and leadership and use them as objective criteria for plotting a chart, I decided to confine measurements to the other four and take totals therefrom. The sum totals were figured to furnish a good indication of employee relations and leadership ability, as well as the best available yardstick on general performance.

In addition to keeping monthly records of progress by foremen, I made field checks on safety, morale, housekeeping, and quality items. If an off-standard condition were observed, I saw that the foreman in that particular area was notified and told to look into the situation himself. It was impressed on him to find these conditions and take corrective action on his findings, rather than on those observed by the supervisor. By taking this course of action I hoped that the foreman would gain respect in the eyes of the operator and would help place responsibility where it belonged.

Performance Discussions With Individual Foremen - Each foreman was contacted off-the-job on a monthly basis and his previous month's performance was reviewed with him. This review was made in relation to facts recorded in his performance folder. Items needing attention were given some emphasis, and the approach to be used for improvement was determined. Commendations were made on items reflecting an above-average or outstanding performance.

Employee Contacts - The shift operating personnel were contacted daily by walking through each section and speaking to each man. Some of the contacts were merely greetings of "Good morning, how are you", and asking others about their families. Others were lengthy discussions concerning problems the employee had, whether of a personal or a work nature. Any item of importance was passed on to the foreman.

By making daily contacts of this nature and getting close to the employees, I managed to detect informal leaders and to establish closer relationships with almost all the men.

It is well to realize that informal groups and leaders exist in every organization and that their formation is inevitable. The main problem seems to be how to deal with these groups and leaders. Past experience has indicated that the ability to sell these informal leaders and groups on new ideas generally expedites their acceptance on the part of the entire membership of the shift.

Contacts With Union Stewards - Weekly meetings were held with the two union stewards on the shift for the purpose of passing along pertinent information and bringing about a mutual understanding.

During the earlier meetings the importance of following proper grievance procedures was stressed. This involved gathering all the facts of each grievance before presenting it to supervision. The next point of importance was to discuss the grievances with the foreman involved before coming to the supervisor. If unable to settle the grievance at the foreman level, then the stewards were to proceed to the supervisor level for possible settlement.

The union stewards were informed of each change to be made, in advance, that would affect crew changes or labor-saving procedures. The stewards were given an opportunity to express their opinions on these changes and, in some cases at least, their ideas were incorporated into the proposals. This approach encouraged the acceptance of new methods and procedures because the stewards felt they had taken part in formulating the proposals.

The stewards were also informed of the progress made in the performance of the shift each month in comparison with the other three shifts. This type of meeting created interest and helped build a competitive spirit within the men on the shift.

Disciplinary procedures were covered at one meeting and the stewards were informed that supervision would keep them posted on all cases where disciplinary action was contemplated. The idea of keeping stewards informed on expected disciplinary action was to give supervision an opportunity to present its side of the case before action was actually taken. This procedure gives the facts of both sides of a disciplinary case to the stewards and commonly helps to prevent grievances following disciplinary action.

CHAPTER V

EVALUATION OF THE PERFORMANCE IMPROVEMENT PROGRAM

Primary Objective - An attempt is now made to evaluate the results of my Performance Improvement Program in an objective manner. However, objectivity is difficult to reach in some areas. The six major factors of performance, already noted in Chapter II above, include safety, housekeeping, cost, production, leadership, and employee relations. Results can be measured comparatively easily on the first four items but it is very difficult to set up yardsticks to measure leadership and employee relations except as reflected in the other four performance factors.

As stated in Chapter III, the primary objective of this program was to improve the performances of the foremen in order to bring the overall shift performance up to a comparable level with that of the three other shifts. In order to measure the improvement in overall shift performance, the items of safety, housekeeping, production, and cost factors are measured and presented in chart form below. These items are also given for the other shifts. This method of comparison should go far to determine whether the primary objective has been accomplished.

Chart 3 is a measurement of all factors combined. It indicates a sizeable improvement in overall shift performance. As already noted the months January through May made the period established as the "before measurement" or before the improvement program. The months June through November constitute the "after

measurement" period or period in which the improvement program was being focussed toward the foremen involved. Ratings are based on a one, two, three, four ranking. Note that the January through May rankings are commonly fourth place and the rank shifts to second and third places during the following months.

Breaking down this overall shift performance into individual factors, we present the safety factor first. Here we are measuring actual results obtained. All our safety efforts are aimed toward the elimination of injuries, both on and off the job. Figure 8 represents the safety performance of the shift from January through November. Plant or works injuries and non-works or off-the-job injuries are plotted in order to note performance. The shift experienced two non-works minor injuries and three works sub-minor injuries during the "before measurement" period. The shift was in first place on a competitive basis with the other shifts over the latest four-month period of "after measurement".

Housekeeping, which is also on a competitive basis, is evaluated by making weekly inspections of each individual shift's work area and assigning points according to certain specific items. These points are totaled and the shifts are then ranked on a one, two, three, and four basis. Figure 9 indicates the average monthly ranking for the shift during the measuring period. June through September appears to be a leveling-out interval, with an improvement actually occurring in the months of October and November.

The cost factor is evaluated by measuring sub-factors such as overtime, disability, machine outage, and waste. Figures 10, 11, 12, and 13 represent the four sub-factors, respectively.

Overtime cost and disability cost, as represented by figures 10 and 11, indicate an approximately stable level of performance throughout the eleven-month period. Figure 12 represents the shift's machine outage performance, with respect to both operating and maintenance performances. In this realm of performance a reduction in machine losses increases the yield of standard production. Improvement in reducing machine delay was consistent from the month of June through November. Figure 13 indicates the shift rating on waste performance as compared with the other shifts. Competition in waste performance is very keen. Our shift reached a competitive level but failed to sustain a leading position.

The fourth factor is production. Figures 5, 7, and 14 are given below to indicate production performance. A general improvement was made in the reduction of quality defects, ends down, and the uniformity of process, all indicated by lines on the charts.

In summary, it is noted that the primary objective of improving overall shift performance and bringing it up to a competitive basis has been accomplished. Even so, there is much to be desired in further improvement. The "after measurement" period will now become the "before measurement" period and another improvement program will be designed and evaluated.

Secondary Objectives - The evaluation of employee relations and leadership actually coincide with the secondary objectives listed in Chapter III. It is difficult to measure results in these areas and supporting figures and charts cannot be readily applied.

For instance, my first secondary objective was to delegate authority and responsibility to each foreman for the overall operation of his section. Objectivity is rather complicated and impossible to measure. However, the other areas allowing a direct measurement may be accepted in part as an indirect measure of the acceptance of responsibilities of the job. Since the shift made an overall improvement in measurable factors, it is felt that an improvement was also made in responsibility acceptance.

This same type of evaluation also holds true for the secondary objectives of problem analysis, techniques to carry out the details of the job, and developing a spirit of teamwork and cooperation to accomplish difficult tasks.

Progress towards the secondary objective of developing foremen so they could settle grievances promptly and at their level of supervision can be measured to a certain extent. Although figures on charts are not presented as supporting evidence, the grievances and complaints reaching the supervision level formerly were approximately one or two a shift. At present the number has been reduced to one or possibly two a week. A continuous program is planned for the future to reduce this number even further.

The last secondary objective to evaluate was a program to eliminate, as far as possible, the reluctance of the foremen to enforce discipline. In the beginning months of the program the tool of discipline was used only sparingly. In the last few months the foremen have used this tool more often and with a greater degree of confidence.

In summary, it is felt that some improvement has been made in the secondary objectives. However, it is impossible to support this feeling or opinion by measurable results.

CHAPTER VI

CONCLUSIONS

Performance Improvement Programs - In conclusion, it appears that performance improvement programs can be formulated, placed into action, and the results measured with reasonable assurance that some improvement in performance will take place. The field of human relations is not an exact science but it appears that the closer we approach this field with objectivity, the more we can predict and calculate performance in certain lines. In other words, it would be desirable to have certain proven processes that could be applied to problems in the field of human relations with reasonable assurance that certain results would be obtained each time this process is placed into action. Unfortunately, the subject of investigation is the human being - a very complex subject. This complexity of the subject, combined with the use of relatively crude measuring devices, makes it difficult to get accurate measurement. Since the measuring devices available are relatively subjective, it is difficult to make research in the field of human relations as objective as research in other fields.

Future Plans - The future primary objective will be to improve the overall shift performances to a higher level beyond the reach of the other three shifts. In other words, I want to be ranked as the number one shift within the area assigned. It is well recognized that competition between shifts is very keen. However, the tools are available, and if they are used properly, this future objective can be obtained.

Reaction of Associated and Higher Supervision - It is

somewhat difficult to report the reaction of other shift supervisors concerning the improvement program placed into action on my shift. Each supervisor has his own approaches and ways of doing business and normally believes his ways are better for improving the performances of his particular shift.

As my shift progressed to the point of competing with the other shifts, one of the older supervisors asked what we were doing on our shift that was responsible for our improved position. The program in general was explained to him and interest seemed to be aroused. He stated that past performance on my shift had been below standard for a long time and recent shift performances had obviously improved.

Another supervisor made the remark that the foremen assigned to my shift were cooperating better with associated foremen than in the past. This supervisor also questioned about our approach towards improved performances.

Discussions such as these with associated supervisors are the basis for measuring their reaction. It appears that the saying "action is stronger than words" fits this reaction measurement somewhat. In my opinion, the reaction of the other shifts at first was a "wait and see" attitude. As our performance improved interest was aroused to the point of questioning our means of handling the job at hand. The discussions that took place during this period were good. Each shift learned something from the other shift concerning different methods that could be used to obtain above average performance.

A discussion was held with my immediate superior outlining the program that was to be used on my shift in an effort to better the shift's ranking. He seemed impressed with the plan and asked to be informed of the progress at different time intervals.

Meetings were arranged with my supervisor at different intervals and he was informed of the shift's progress and problems encountered. Suggestions were made by him during these discussions to further improve our program.

The reaction of my superior is felt to be the same as top management. Both felt the program was a good idea; however, the feeling of a "wait and see" attitude was noted here also. This reaction is similar to an engineer's test: it has to be run and results evaluated.

After my shift started to function effectively, my supervisor was pleased with our progress. He indicated that his superior had noted the improvement in performance and the approach that was being used was relayed on to top management.

As stated in the beginning, reactions are sometimes difficult to evaluate. In my opinion, for the most part, the reactions from other shifts, my immediate supervisor, and higher supervision were favorable.

BIBLIOGRAPHY

1. Bentzen, E.C., Forming Effective Supervisory Development Programs (Advanced Management ~~XXXXXXXX~~) - August 1960 issue.
2. Chase, Stuart, Men At Work (New York: Harcourt Brace and Co.) Page 49.
3. Cooper, Alfred M., How to Supervise People (New York, Toronto, London: Third Edition) McGraw-Hill Book Company, Inc. 1952) Page 70.
4. Drucker, Peter F., Human Relations in Administration (Englewood, N.J.: Prentice-Hall, Inc. 1951) Pages 294-295.
5. Dubin, Robert, Human Relations in Administration (Englewood Cliffs, N.J.: Prentice-Hall, Inc.) Page 272.
6. Finlay, W.W., Sartain, A.Q., Tate, W.M., Human Behavior in Industry (New York, Toronto, London: McGraw-Hill Book Company, Inc. 1954) Page 144.
7. Luck, Thomas J., Personnel Audit and Appraisal (New York, Toronto, London: McGraw-Hill Book Company, Inc. 1955) Page 283.
8. Scott, Walter Dill, Increasing Human Efficiency (New York: The Macmillian Company 1913) Pages 55, 59, 63, 106, 193, & 241.
9. Roethlisberger, Fritz J., Human Relations in Administration (Englewood, N.J.: Prentice-Hall, Inc. 1951) Pages 145 & 306. (Article on Training Programs),
10. Taylor, Erwin K., Personnel ~~XXXXXXXX~~ (March-April issue 1959)
11. Viteles, Morris S., Industrial Psychology (W.W.Norton and Company, Inc. 1932) Page 603.

LIBRARY
UNIVERSITY OF RICHMOND
VIRGINIA

SHIFT COMPETITIVE RATING CHART

ITEMS MEASURED	RATING BY SHIFT			
	A	B	C	D
1. SAFETY				
2. HOUSEKEEPING - AREA A				
3. HOUSEKEEPING - AREA B				
4. HOUSEKEEPING - AREA C				
5. HOUSEKEEPING - AREA D				
6. ENDS DOWN				
7. AREA A - DEFECTS				
8. AREA B - DEFECTS				
9. AREA C - DEFECTS				
10. WASTE				
11. OVERTIME				
12. DISABILITY				
13. AREA D - REJECTS				
14. AREA D - POINTS				
15. AREA A - CONTROL				
16. TURBIDITY				
17. MACHINE OUTAGE - OPERATING				
18. MACHINE OUTAGE - MAINTENANCE				
19. HOOD CHECKS				
20. MOTOR FAILURES				
SHIFT RATING				

SHIFT RATINGS BASED ON ASSIGNED POINTS OF 1, 2, 3 OR 4 TO DETERMINE TOTAL SHIFT RATING.

FIGURE 1.

PLANT ORGANIZATION CHART

PLANT
MANAGER

ASSISTANT
MANAGER

MANUFACTURING
SUPERINTENDENT

ACCOUNTING
SUPERINTENDENT

WORKS
EMERGENCY

PLANNING
SUPERINTENDENT

STAFF
ASSISTANT

AREA
SUPERVISOR

AREA
SUPERVISOR

AREA
SUPERVISOR

AREA
SUPERVISOR

STAFF
ASSISTANT

SHIFT
SUPERVISOR

SHIFT
SUPERVISOR

SHIFT
SUPERVISOR

SHIFT
SUPERVISOR

FOREMAN

FOREMAN

FOREMAN

FOREMAN

FIGURE 2

SHIFT RATING 1960

0 - SHIFT POINTS
 - HOUR AVERAGE

30

40

50

60

70

1

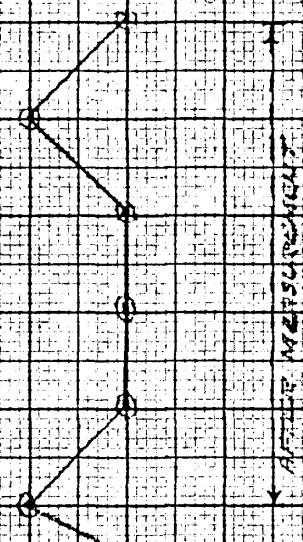
2

4

6

POINTS

RATING



BEFORE MEASUREMENT

AFTER MEASUREMENT

JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

FIGURE 3

SAFETY PERFORMANCE
AREA A - FOREMAN

WORK-RELATED INJURIES

PLANT INJURIES

4

4

3

2

1

0

4

3

2

1

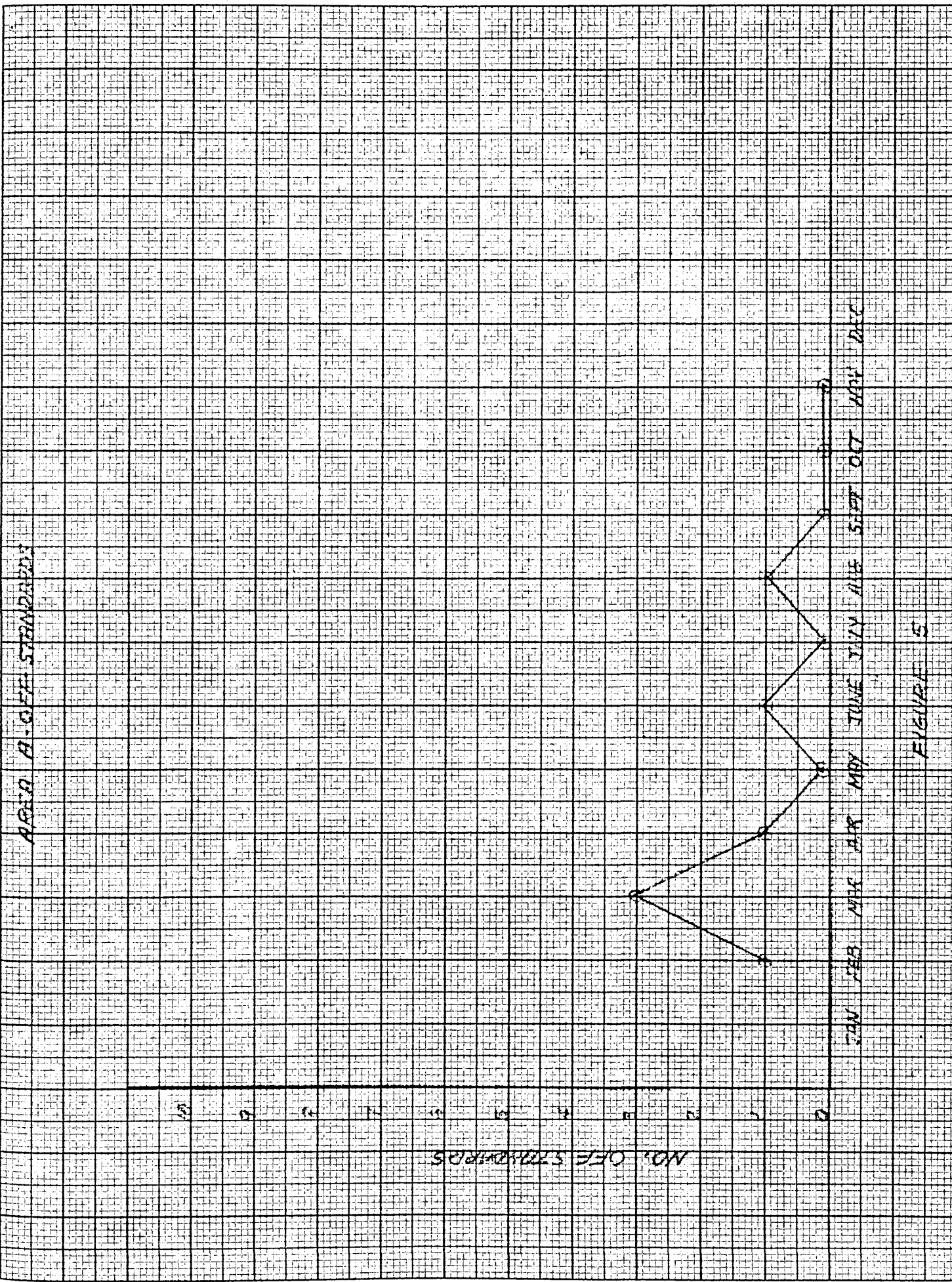
0

AS INDICATED

ALL INJURIES

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

FIGURE 4



NO. OF STANDARDS

NO. OF STANDARDS

JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

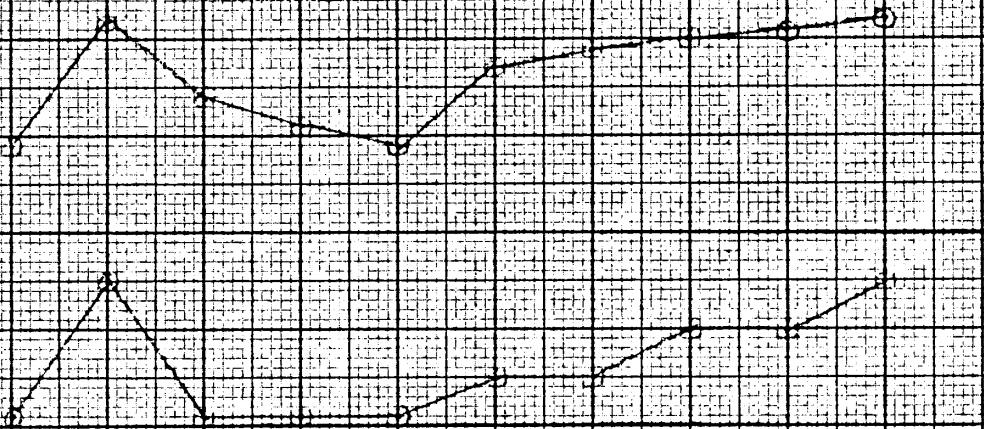
FIGURE 5

HOUSEKEEPING PERFORMANCE AREA A

SECTION 1

POINTS
165
160
155
150
145
140

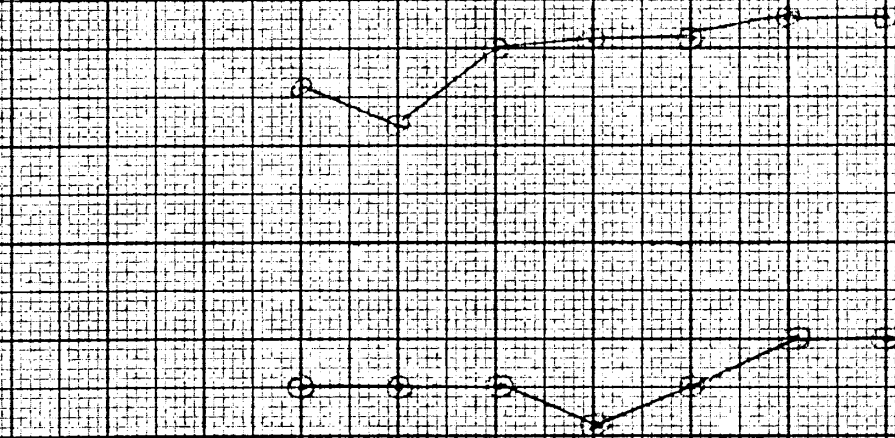
RATING
1
2
3
4



SECTION 2

POINTS
165
160
155
150
145
140

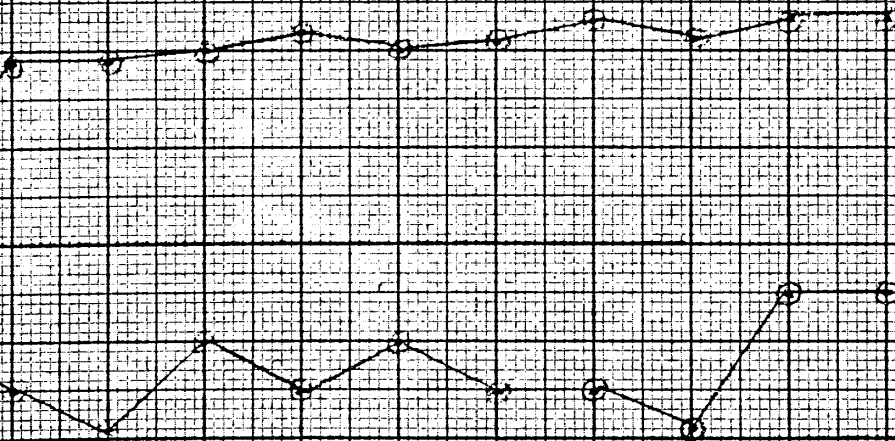
RATING
1
2
3
4



SECTION 3

POINTS
150
145
140
135
130
125

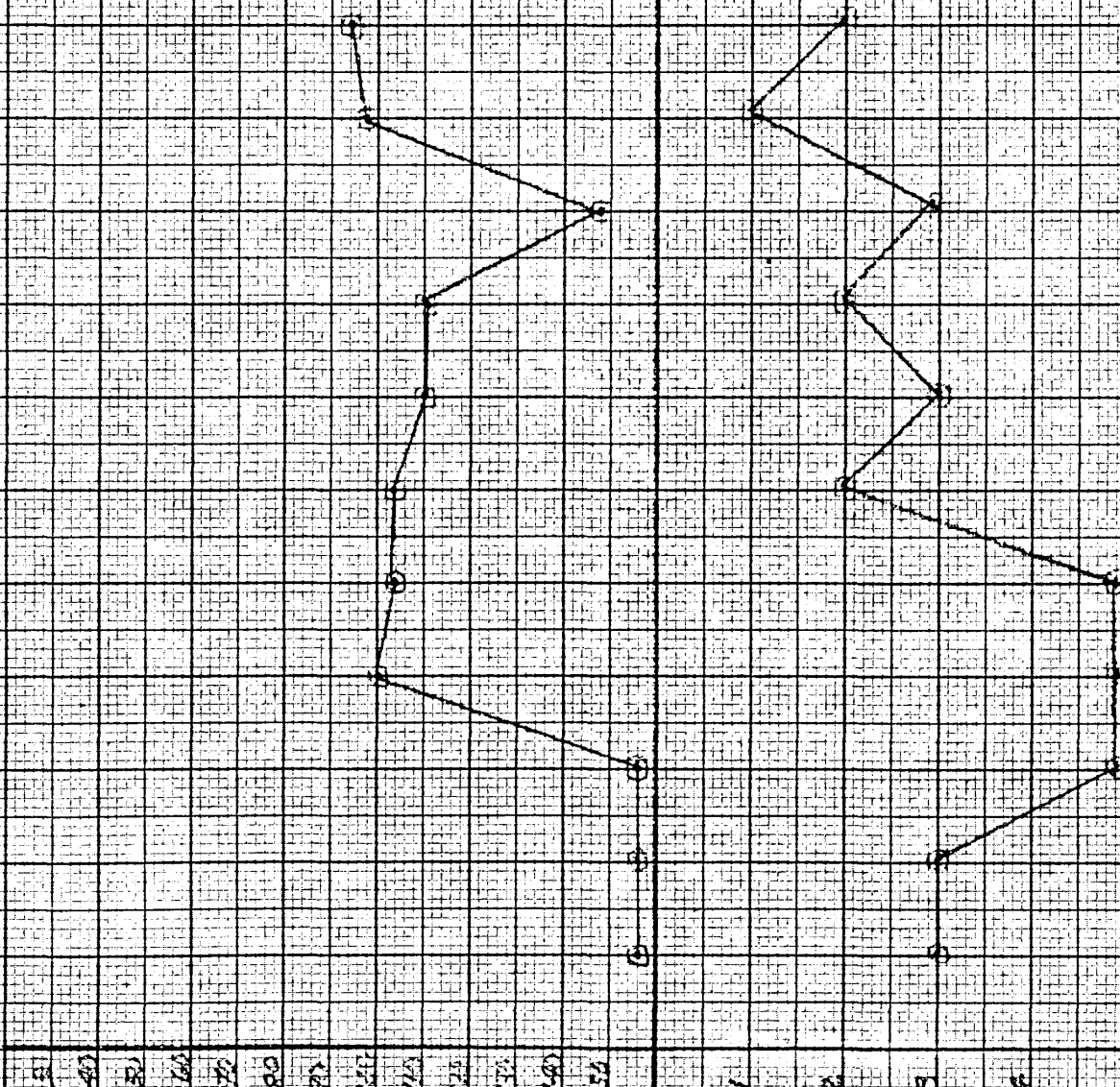
RATING
1
2
3
4



JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

FIGURE 6

AREA A CONTROL



JAN FEB MAR APR MAY TIME LEFT AND SECT CUT NOV DEC
FIGURE 7

SAFETY PERFORMANCE

NON-WORKS INJURIES

PLANT INJURIES

SHIFT RATINGS

3

2

1

0

NOV

NOV

RATING

1

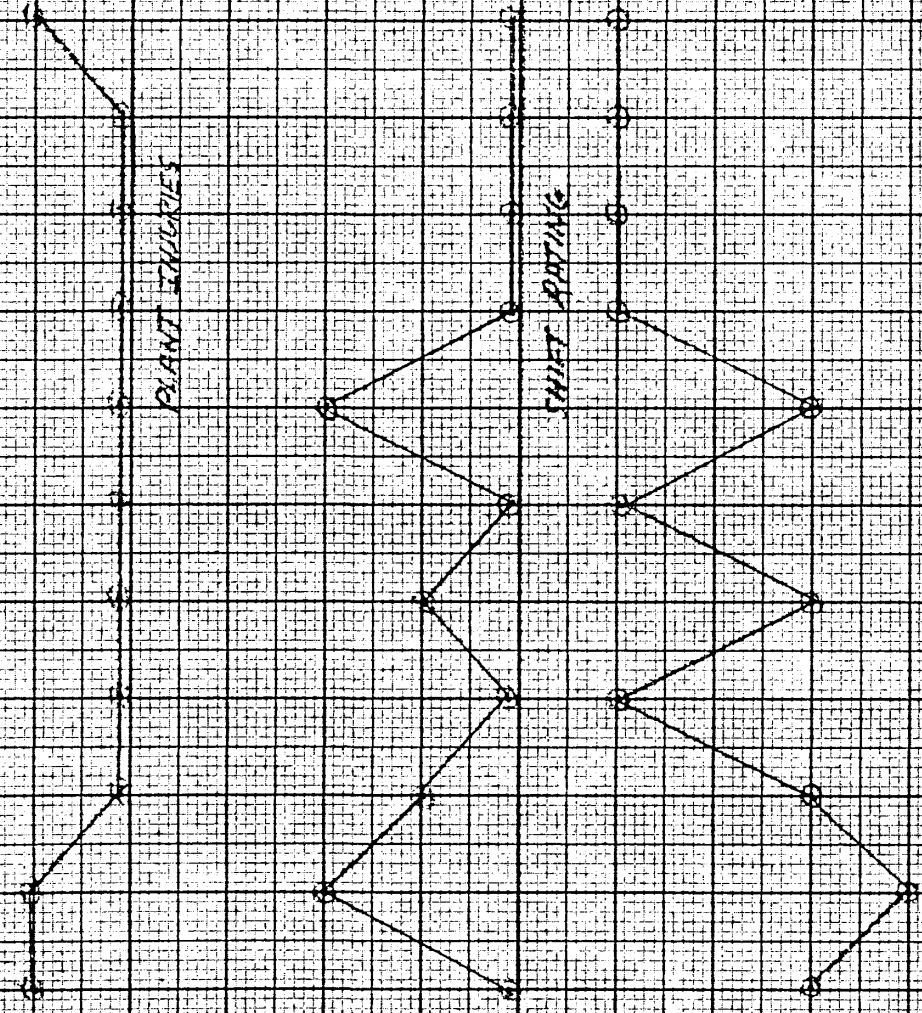
2

3

4

NOV FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

FIGURE B



SHIFT
HOUSEKEEPING AVERAGE

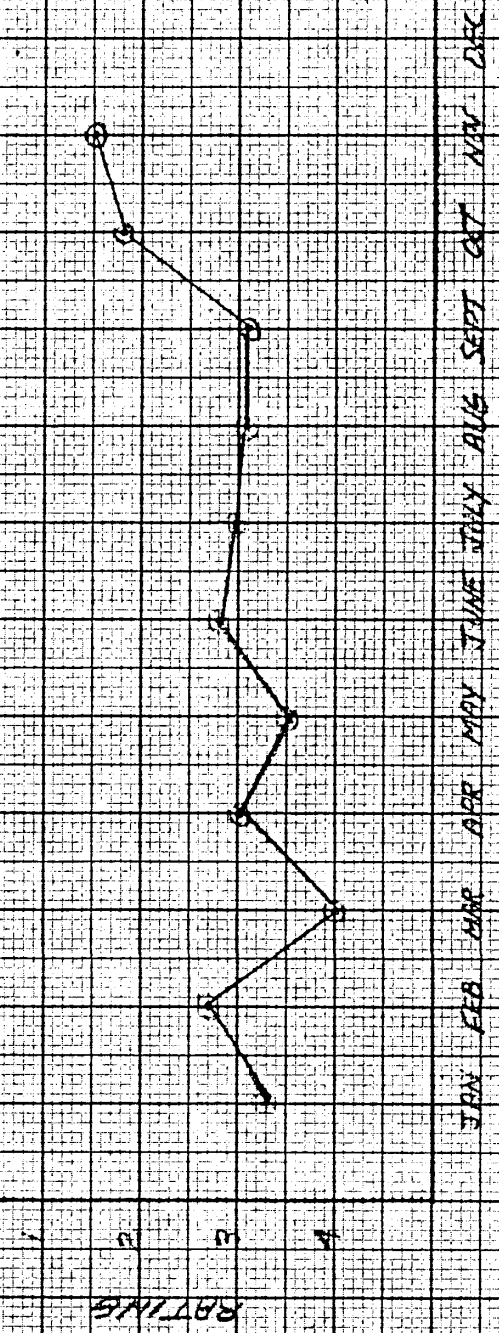


FIGURE 9

SHIFT OVERTIME COST

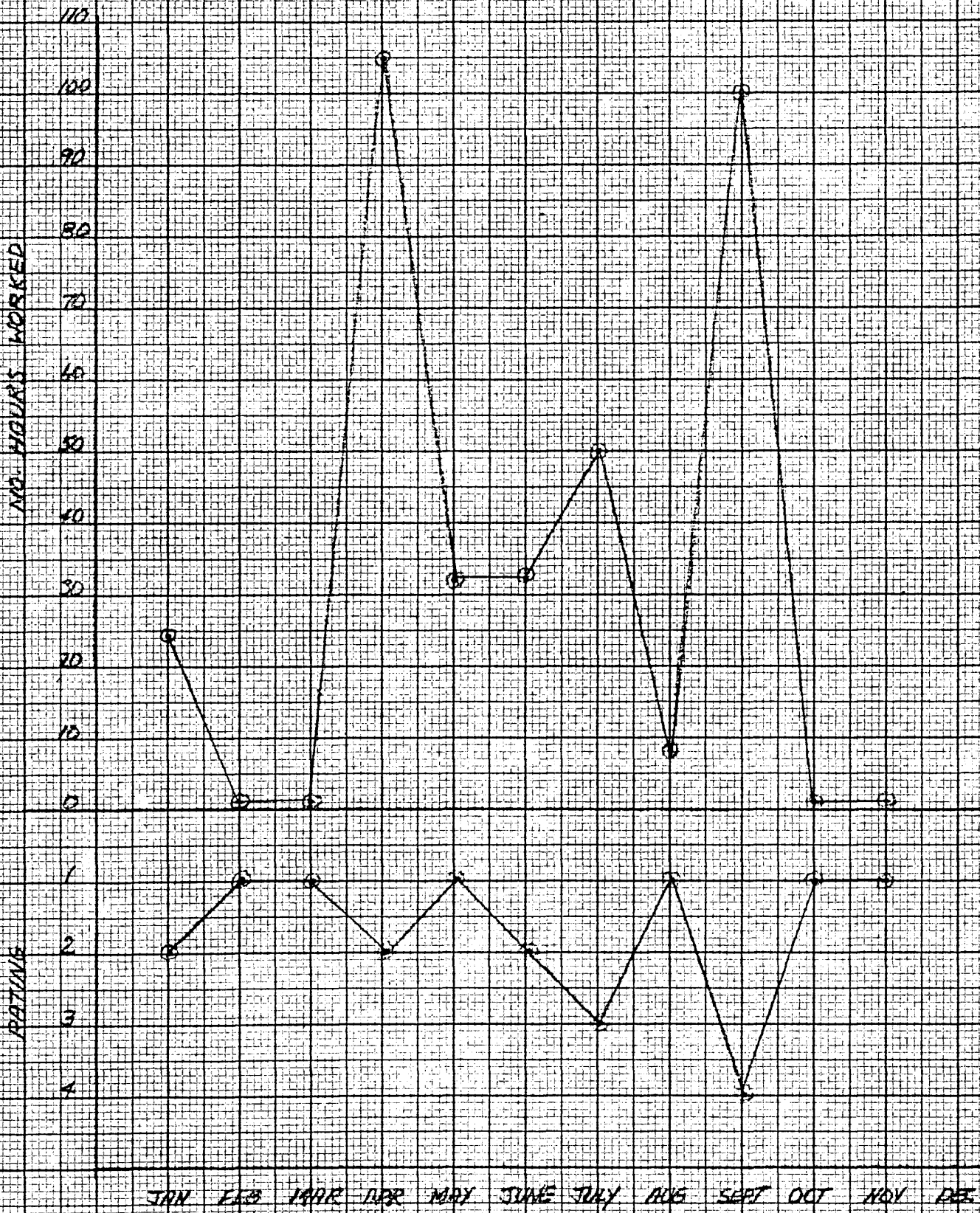


FIGURE 10

SHIFT DISABILITY PERFORMANCE

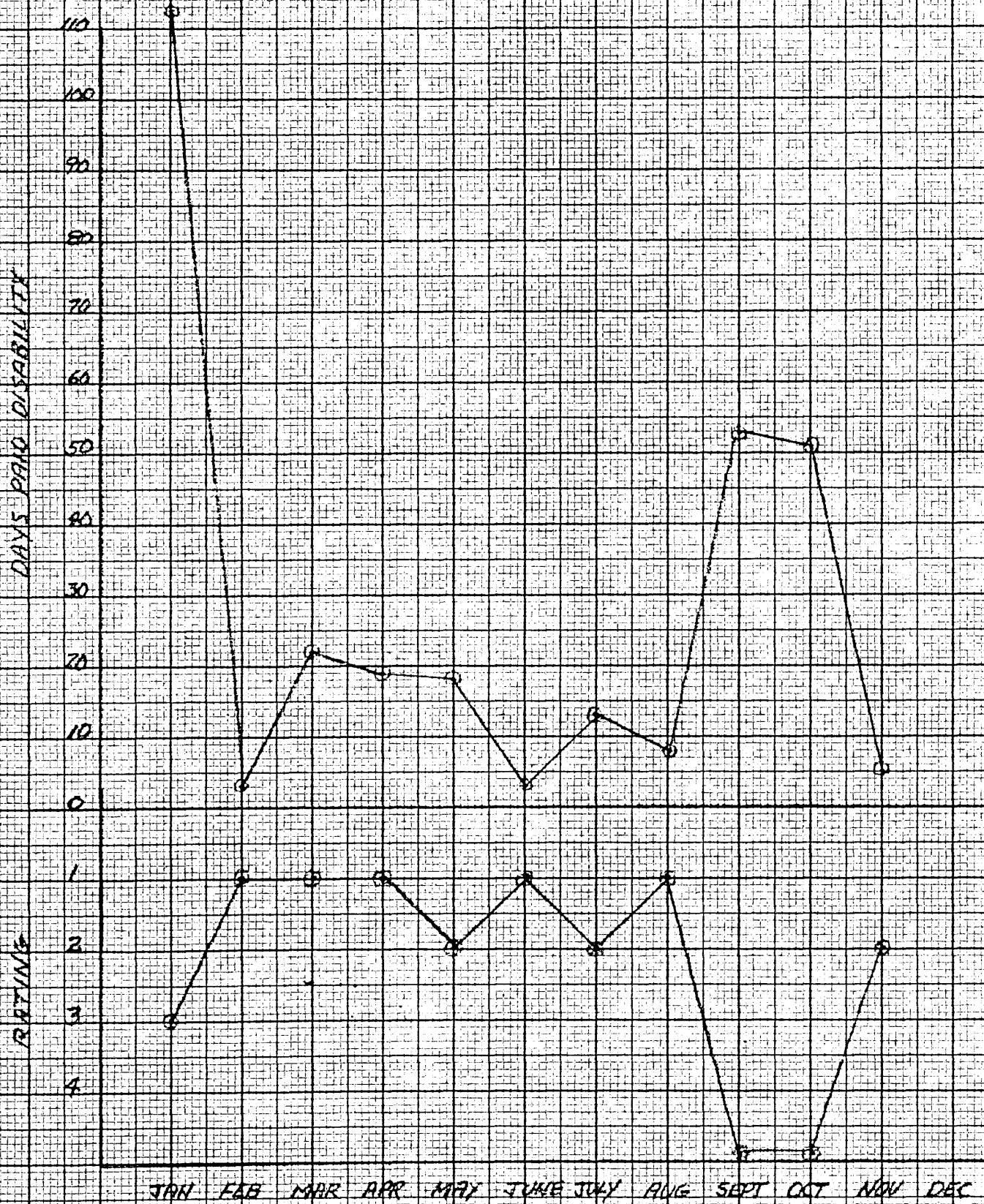


FIGURE 11

MACHINE OUTAGE

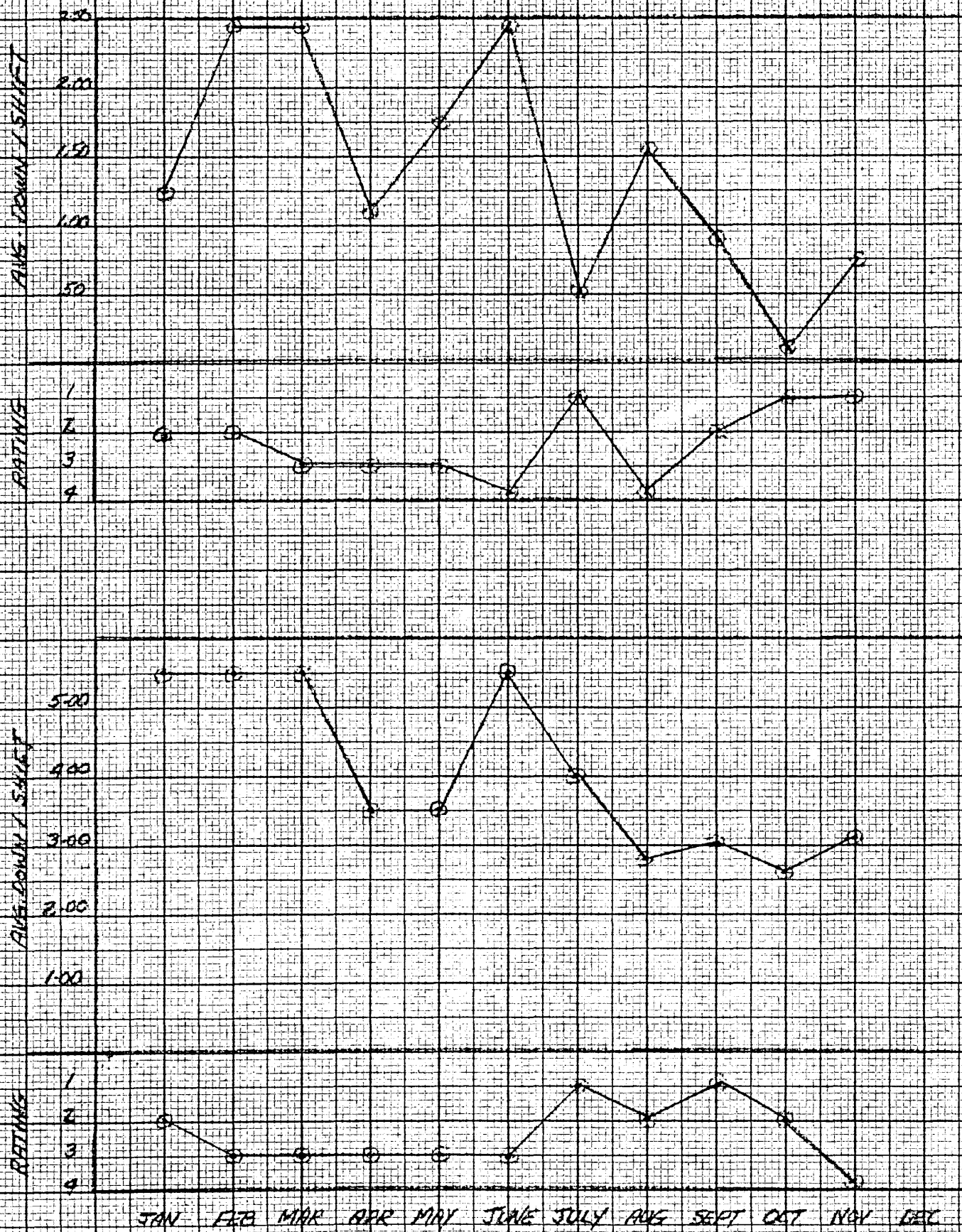
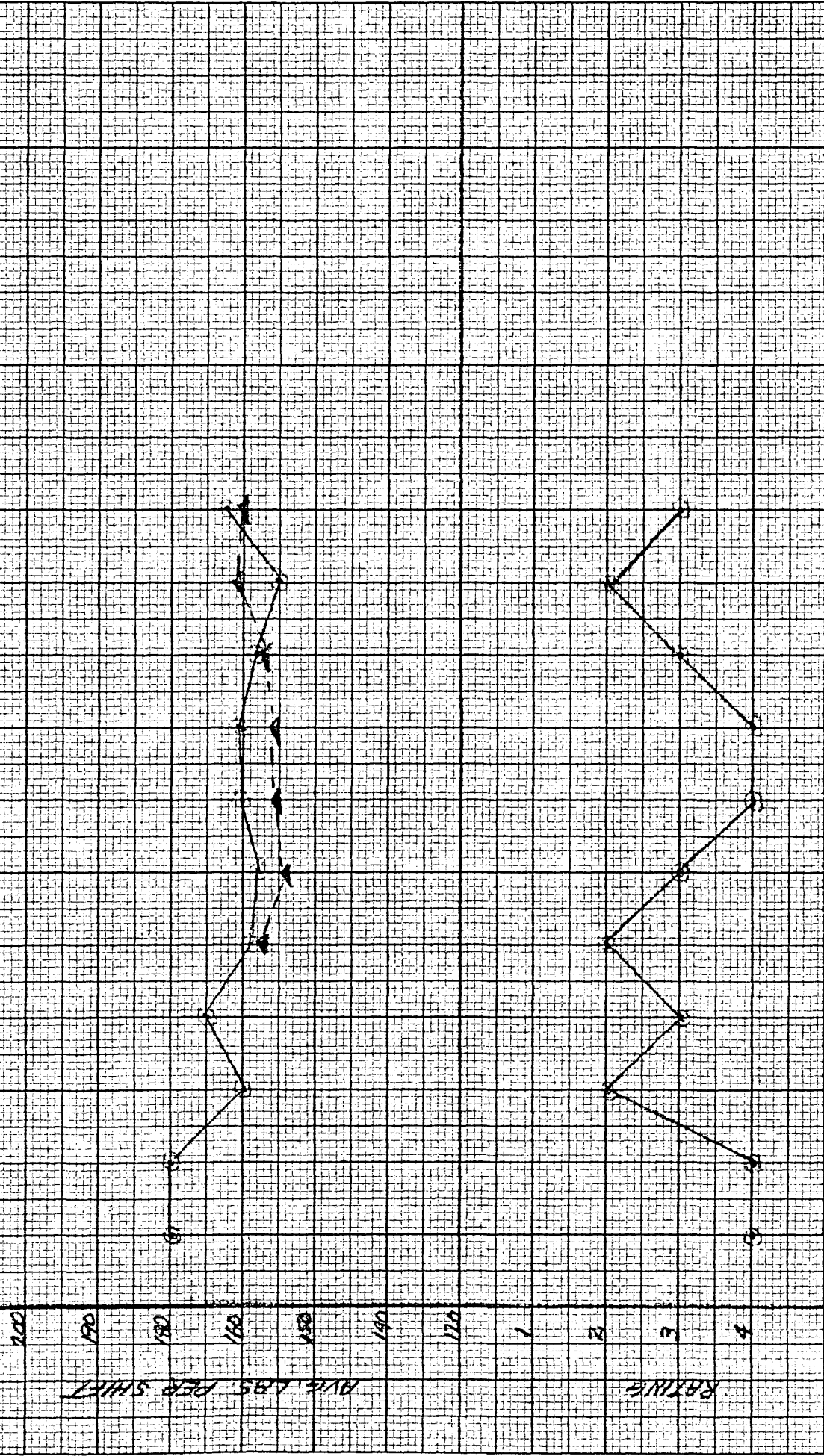


FIGURE 13

SHIFT WASTE PERFORMANCE

9th SHIFT LBS.
A - AREA AVG.



JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

FIGURE 13

QUALITY PERFORMANCE

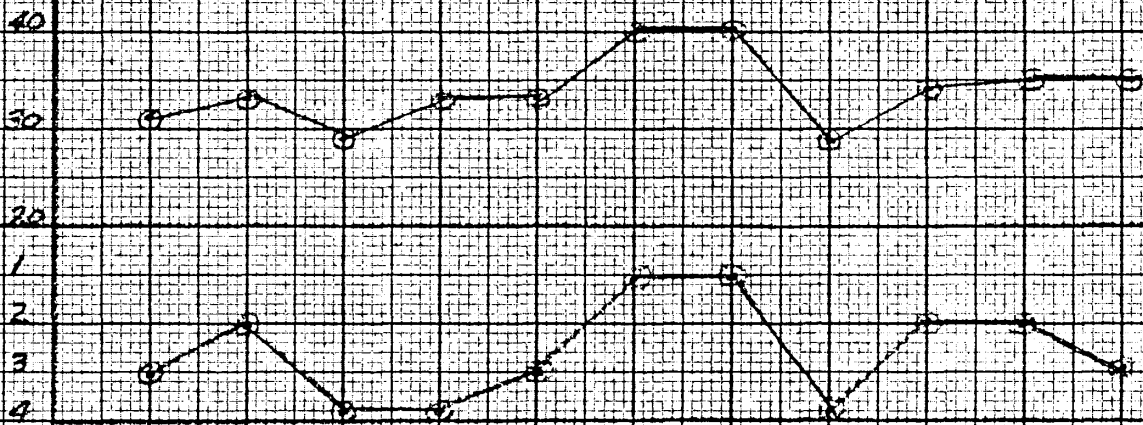
HOOD CHECK

NO. DOWN

40
30
20

RATING

1
2
3
4



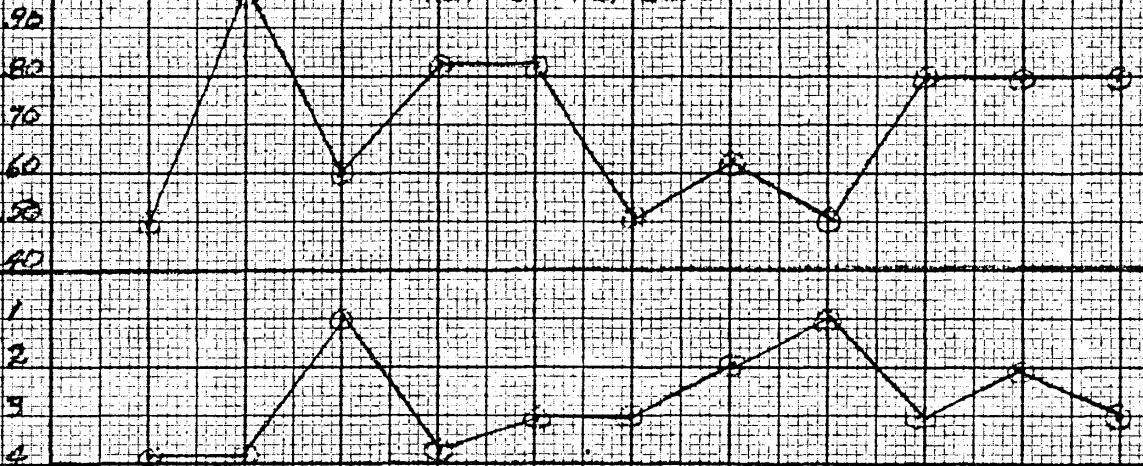
WREN - DEFECTS

% DEFECTS

90
80
70
60
50
40

RATING

1
2
3
4



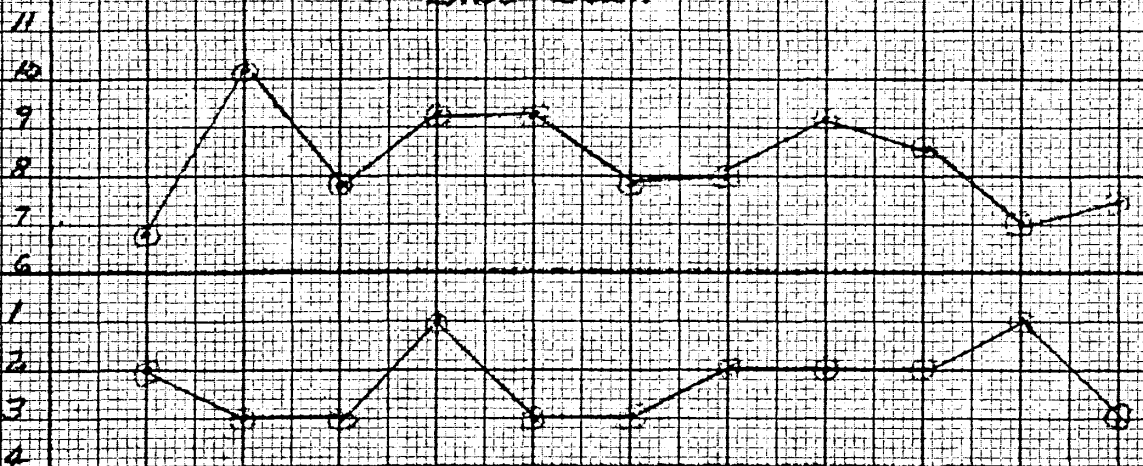
ENDS DOWN

Avg. No.

11
10
9
8
7
6

RATING

1
2
3
4



JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

FIGURE 14