

SIGNIFICANCE OF MANAGEMENT-LABOR RELATIONS IN MOBILIZATION

4 November 1953

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INDUSTRIAL COLLEGE OF THE ARMED FORCES

Washington, D. C.

Mr. James E. Trainer, Vice-President, Firestone Tire & Rubber Company, was born in New York City, 16 September 1895. He was graduated from a course in electrical engineering from Pratt Institute in 1914 and is now a trustee of that Institute. In 1942 he was awarded the grade of fellow in the American Society of Mechanical Engineers. During World War I, he served as lieutenant in the Army Chemical Warfare Service. After World War I, in 1919, he began his career at Babcock & Wilcox, Barberton, Ohio, serving in various important capacities in ensuing years until 1931 when he was made general superintendent of the firm, which position he held until 1938. He entered the employ of Firestone on 1 January 1939 as production manager. On 31 May 1940 he became vice-president in charge of production and in 1942 was made a director. During World War II he converted Firestone world-wide facilities to all-out production and was cited on several occasions by the War Department for Distinguished Service to the war effort. He also served as assistant director of rubber during the great rubber shortage in World War II. Mr. Trainer is very active in industrial safety. Firestone, under his direction has one of the lowest accident frequency in all industry. On 30 November 1945, the then Secretary of War, The Honorable Robert Patterson, cited Mr. Trainer for his "managerial and administrative services rendered personally to the Chief of Army Ordnance." In "Life" magazine, 4 October 1948 issue, devoted entirely to American Production, Mr. Trainer is mentioned as one of the 24 key production men in the United States. This is his first lecture at the Industrial College.

## SIGNIFICANCE OF MANAGEMENT-LABOR RELATIONS IN MOBILIZATION

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COLONEL PRICE: Admiral Hague, gentlemen: This morning we round out our formal lecture series in the Manpower Unit with a discussion on the "Significance of Management-Labor Relations in Mobilization."

This is a very important area, because if we have good relationships we get good production, though it is problematical whether we will or not.

This morning we are very fortunate in having Mr. James E. Trainer, Vice-President for Production, of the Firestone Tire & Rubber Company. Mr. Trainer has had extensive experience in the past mobilization, in both the conversion to and from war production.

We are very glad to welcome you to the Industrial College this morning, Mr. Trainer. Thank you.

MR. TRAINER: I want to assure you that it is a pleasure for me to be here and to be talking to a group such as this. I am very grateful for this opportunity to address this class of the Industrial College of the Armed Forces, and I must admit that I like to "talk shop," especially with you officers and men who may be called upon to play an extremely important part in shaping the destiny of our Nation.

My subject this morning is, "Significance of Management-Labor Relations in Mobilization." Despite the title, I am not going to stress the mobilization phase of my subject. Production obviously is a vital key to effective mobilization. Management-labor relations do affect production and, whether we produce for war or for peace, the significance of management-labor relations is exactly the same.

I will try to point up first the different reasons why good management-labor relations are essential to maximum output and then to tell you briefly my conception of the chief elements of sound employee relations.

Within the memory of many of us, America has served as the arsenal of democracy for World War I and II. We have seen it vividly demonstrated during and after those wars that slave labor cannot compete with free labor, whether in the production of munitions or of consumer goods.

Our country stands today as the colossus of production--a wonder of the modern world. It has become the Mecca for manufacturers of

other countries, and many pilgrimages have been made from afar by teams of experts who sought the secret of American productivity.

The findings of missions from various countries are similar to a startling degree. Those of the British experts in 1950-51 are typical. Chief among the reasons for America's superior productivity, according to the members of the team, are:

1. A competitive spirit, extending to the workers as well as to management.
2. New Ideas--their origin and acceptance at all employee levels.
3. Team spirit.
4. A greater use of unskilled labor by job breakdown.
5. Mechanization.

Now, the startling thing about all these surveys by foreign experts is that they give more credit to American labor attitudes and management techniques than they do to technology. If our friends from abroad have appraised correctly the reasons for America's superior productivity, and I am sure they have, it becomes apparent that good management-labor relations are the key to maximum production.

A moment ago I mentioned that Americans have come to the belief that slave labor cannot compete with free labor. I share that view. However, it is also my opinion that a dictator can get more output per man from people who have never known freedom than we could get from Americans if we were to try a dictator's methods of forcing labor. Americans feel themselves capable of choosing the jobs they can do best. They do their best work when they find such jobs. This attitude is part of our heritage of freedom.

I would judge that planning for an all-out war must certainly involve planning for some kind of manpower controls. The conscription of manpower for industry might range anywhere from total to slight; from the actual drafting and assigning of workers to jobs in the order of their importance on the one hand, to the types of controls we had in World War II on the other.

Now, so long as men are drafted to die in battle, there can be no valid moral objection to the principle of total conscription. As a practical matter, however, in the interest of maximum output and quality of product, I sincerely hope that any manpower controls which necessity may force upon us will be designed to leave some leeway of choice to the individual.

Regardless of the degree, conscription of manpower for industry will not lessen the need for good management-labor relations. Rather it will increase it. It will require that manufacturers intensify their efforts to give the workers a sense of belonging, a sense of voluntary participation, a sense of being part of the team, if we are to achieve maximum production.

The basic principles of management-labor relations should not, in my opinion, be any different whether the workers have a union representative or whether they do not. Of course union relations are very definitely a part of employee relations. In many instances they introduce complicating factors, as, for example, where employees, or both, may be caught in the crossfire between competing unions or factions within one union.

Other complicating factors commonly found in dealing with some labor unions include a resistance to improved technology; the contention that seniority alone, without regard to ability, shall govern promotions; and the insistence that all dealing with management on behalf of labor shall be through union representatives. Some unions would go even so far as to deprive employers of the right to choose their own employees. To the extent that management agrees to any such union demands as these, it thereby agrees that it will consider labor en masse instead of as individuals; and when you cease to think of employees as people, as individuals, with varied temperaments and abilities and personal problems, you tear out the foundation from under sound employee relations.

Despite these complicated factors, the same principles that apply to dealing with employees direct should also apply to dealing with them through union representatives. The practice of these principles is more difficult because of the injection of a third party--the union. And in many unions there are rival political groups, each one anxious for an issue which it can use to advantage against its rival brothers. Nevertheless, I feel that the basic principles of employee relations apply alike to all employees, whether or not they are members of a union bargaining unit.

In most of our Firestone plants we operate under contracts with labor unions. We have been successful to date in maintaining the principle that any employee may first discuss any complaint he may have directly with his supervisor before making it a subject of union contract grievance procedure. Any man may, if he wishes, use his union representative for this purpose, but he is not compelled to do so. He is at liberty to discuss his problems direct with his supervisor. We believe it is infinitely better to get a complaint first-hand rather than to have some second- or third-hand explanation of what is involved. We believe it is better to handle that complaint

directly, on a man-to-man, informal basis, than to have it processed through grievance procedures provided for in our labor contracts. A complaint so handled, informally between a supervisor and a workman, is an act of cooperative team play that builds good will.

So for our discussion this morning let us assume that we are going to consider all principles and most practices of management-labor relations to be the same whether or not workers are represented by a labor union.

As additional background let us consider just for a moment some of the fundamentals upon which our economy is based and upon which good management must insist. Let us first take a brief look at the thing we describe so concisely as "production."

Production is the creation of material things of value. It is these things, or products, available in quantity, at reasonable prices, that set our American standard of living apart from that of the rest of the world. In terms of munitions, it is these things that have multiplied the strength of our fighting men.

The use of the products of industry has brought increasing hours of leisure to millions of people. This leisure provides added opportunity for education, self-improvement, or recreation and, in time of war, these leisure hours constitute a vast reservoir of manpower, the reserve strength of our Nation.

If he is to stay in business in our dynamic American economy, every manufacturer must strive constantly to make his product better, price it lower, and sell more of it. He must see that balanced justice is accorded the customers, the workers, and the owners.

Stated simply, our average standard of living might be determined by dividing our total production by the number of people in the country. Regardless of differences of opinion as to how that distribution is to be proportioned, it is obvious that improving the average can come about only through increasing the pool of goods and services to be divided. Therefore it is certainly in the interest of all that each individual make his contribution to the pool just as large as it reasonably can be made. To my way of thinking, anything that stands in the way of an individual's opportunity to make his full contribution, within the limits of healthful practice, is both wasteful and antisocial.

We must resist "featherbedding" in all its forms. Incidentally, you probably think, as most people do, that featherbedding is a practice confined to labor. I consider that it is also practiced by the European type of cartels or trusts when they fix prices and quality,

and when they assign exclusive sales territories so as to avoid competition between their members. I consider that featherbedding is practiced by Government when officials' families or political henchmen go on Government payrolls for the performance of mythical or nonessential duties; or when, in times of emergency, inadequate attention is given to the most effective utilization of skills; or when bureaus, departments, or offices, established for emergency purposes, remain in existence beyond their useful life.

Labor has rapidly developed well-defined featherbedding techniques through the past several years. Chief among them is the refusal to use machines that afford faster output, or, alternatively, refusal to operate such machines efficiently.

Featherbedding is repugnant to Americanism, whether it is practiced by Government, capital, or labor. The ends are the same-- somebody has a "soft snap" or gets something for nothing, while the consuming public foots the bill, or while the price of a needed commodity is driven beyond the point where many would-be customers can afford it.

Actually, the basic interests of business and labor are identical. They require us to make the right product, of the right quality; to sell it at the right price and to deliver it at the right time. The customer bears the cost and he must be able to afford it. Management must therefore insist upon an honest day's work in return for a fair day's pay.

Over the past 40 years or so, our Nation has seen changes in production technology that have had profound effects upon the relationship between the average industrial worker and his boss. Prior to the introduction of the assembly-line techniques, the average worker, either alone or as one of a small crew, made a complete product. He had the satisfaction of accomplishing a complete piece of work; he had pride in his skill and his reputation as a craftsman; he had pride in the article he made; he knew its purpose, its abilities, and its limitations. He was a qualified and conscientious inspector of his own work.

Today, the vast majority of production operations are routine. They are limited to a single part or a single assembly operation. Instead of being an important man on a small crew, or doing a complete job himself, a worker may be one of a thousand on identical jobs in his own department.

Forty years ago, when the owner of the typical factory walked through the door, he probably said "good morning" to every one in the plant. He knew his employees by name; he had time to talk with each one of them occasionally to ask him about his family and to show

interest in him as an individual instead of as one unit of a vast item of production cost described as "labor." Since then, as businesses have grown, the owners have had to spend more and more time in the office. The number of employees in the average plant has multiplied to the point where it may be impossible for any one man to be acquainted personally with all those who work for him.

Today's conditions therefore demand a different method of bridging the gap between top management and the man on the machine.

More often than not, an informed worker is an interested worker. There are various means of keeping employees abreast of developments that affect their company and their jobs. Company publications, or house organs, are one method. Special reports or letters to employees are another. Providing them copies of annual statements is another. These are all good media; and I believe that an employee whose livelihood depends upon his job is as fully entitled to know the results of his company's operations as is the average stockholder.

The most important method however, and one for which there is no adequate substitute, is by word of mouth in daily man-to-man contacts of supervision with the people under them.

The only way to prevent unwarranted suspicion about the effect of new ideas on jobs is to give full and complete information about them. An incomplete explanation is not good enough.

By way of illustration, I would like to tell you about our experience with the installation of statistical quality control (SQC) as we call it in our Firestone plants. SQC is simply a method for recording spot checks on quality of a part or a product made by a given crew or by an individual. The experience of our Memphis plant is typical and, because it has done an excellent job of summarizing the history of its SQC program, I would like to tell you about it.

When our Memphis plant started on its job-by-job installation of SQC, a brief meeting was held with the workmen affected, either at their machines or in the department offices, to explain the program and the charts. The program was accepted--but indifferently. So we went a step further; and, from our Memphis report on this subject, I quote:

"Beginning in November, a series of quality meetings with workmen and supervisors of various production departments was conducted by the SQC department. In contrast to earlier, hasty explanations in the factory or in factory offices, these meetings were planned and prepared for in advance. They were held in the main conference room, and the employees were paid for the time spent in the meetings.

"Among the points emphasized in these meetings were: the general customer demand for better quality; the fact that the job of every person in the organization depends on satisfied customers; the fact that quality workmanship protects jobs, while poor work endangers them; in short, that the daily bread of every employee depends on the quality of the product turned out. The responsibility of the workers for customer satisfaction was further emphasized by display and discussion of the adjustments made with customers during the previous year because of defective workmanship. It was then pointed out that the defects responsible for larger percentages of the adjustments were given the most points in the rating charts.

"The positive approach to quality was emphasized by pointing out that the SQC program is designed as much to give credit for excellent work as it is to point out poor work."

In other words we place reprimands in an employee's folder for the things he doesn't do correctly and likewise we place a memorandum in his folder when he does outstanding work or has made definite improvement toward eliminating a problem. This procedure did as much to sell SQC as any other factor.

"This last point has since been further emphasized by letters of commendation sent workmen with the higher ratings.

"The charts were carefully explained, along with all details of the program applying to their operations and the people were invited to ask questions and make suggestions. The participation by the workers was good and several worthwhile suggestions were made.

"These meetings have been a major factor in the success of the SQC program, and the response of the workers to the quality control program following these meetings has proved that they are keenly interested in quality and will co-operate to improve it.

"Whenever practical to do so, these meetings were held before the SQC program was put into effect on any particular operation. There was a marked difference in the favorability of response to the program where this was done."

This is in contrast with the few small departments where charts were put up and the records begun before full explanations were made.

There were a lot of very interesting incidents in connection with installation of this SQC program. The men, as a general rule,

soon began to come and look over the charts. We had a group whose job was to reroll the heavy duck fabric in which cut plies are handled to tire building machines. Finally these men came up and asked, "Isn't our job important? We have no charts up for our work." We had to get these fellows in. They were called into the meeting room and given an SQC program. And did they like their charts! If someone wasn't doing a good job, they got after him and made him realize their job was important.

A great job was done and an important job; because when it is all said and done, the security of myself as an officer of the company, of the foremen, of the managers, and of every employee depends on the fact that customers want to buy our product. All the brick and mortar and buildings we have are worth absolutely nothing if people do not want to buy our products.

It is impossible to inspect every operation that goes into a tire. It just can't be done. You can measure the outline of a finished tire, but you can't see what is inside. We got those men to realize the importance of what they were doing--to appreciate that the smallest chafer strip or pinch of sulphur meant to them all the difference in the world.

When we started the SQC program, there were a few who said, "You are not going to get anywhere with this. These people are not interested." I said, "When the day comes that we have to admit that men are not interested in doing good work, we are really licked." So eventually we got all our thousands of production workers into the conference rooms and told them about the importance of their jobs. Almost without exception, everybody took the meetings very seriously.

The same kind of job is being carried on in connection with the work we are doing for the Government on munitions. The same thing is being done in our operation of the Ordnance shell plant in Ravenna. We point out that every detail must be done right; that it isn't any good to make a shell, bring it into some plant, load it, and ship it out to some place many miles away, and have it be a dud. We stress not only that this would be costly, but also that it may forfeit American lives.

All along the line the response was good. I think you could count on one hand the bad reactions we got in dealing with something like 20,000 men.

Here in this one program you can see illustrated the difference in degree of acceptance and cooperation that can be expected when employees are given a hurried explanation of a new program, on the one hand, and when they are given the full treatment, on the other.

Had we made no attempt at information, you may be sure our SQC program would have been completely ignored by the men whose work it was designed to improve. So information is very important.

Employee relations include many things: recreation programs, plant newspapers, attractiveness of plant surroundings, and so forth. But when you get right down to rockbottom, to the basic facts of life as they apply to employee-labor relations--I want to emphasize that the quality and the training of supervisory personnel are paramount. A good labor-relations program can be built solely upon supervision; and, regardless of all the other trimmings or devices that may be used, no management-labor relations program will succeed if it ignores the relationship between a man and his immediate boss.

A few minutes ago I mentioned that today's conditions demand a bridge, which was unnecessary 40 years ago, between top management and the man on the machine. The supervisor must be that bridge.

Recently the University of Michigan began a study of several businesses in different types of industry to try to find out just what it was that distinguished highly productive groups of workers from groups with low records of productivity. I believe the survey is as yet too small in coverage to be called conclusive. But there is one significant factor that was found in every single one of the high-productive groups. That factor was supervision.

The supervisors of the high-productivity groups spent more of their time in planning their work and less time on routine work. They spent more time on the floor out in the factory with their men. They were keenly interested in getting out maximum production. They took immediate action when employees would report machine breakdown, material shortages, or unsatisfactory materials. They encouraged employees to offer suggestions and helped them to develop their suggestions into workable improvements.

Well, I am not at all surprised that the University of Michigan study shows this to be true. Any good production man in the United States would have bet his right eye on that answer. Certainly any man forms his attitude toward his job out of his like or dislike, his respect or contempt for his immediate superior. What, then, should industry seek in its supervision?

First, I think industry should seek men of good character--men who are worthy of the respect of their fellow men. This is the building material that must be developed through work on the job and through a well-conceived program of supervisory training.

A supervisor must, of course--and I say this with emphasis--have a thorough knowledge of the job under his direction. He must

know the provisions of any union contract affecting his department. He must know, and be fully aware of, his company policy. It is obvious, then, that his company must have a training program for him, formal or informal, as the case and size of the business may require. And this program must be a regular, continuing, repetitious part of his education. He must be kept up to date on company policy and be brushed up to alertness on general principles and practices.

I try to impress upon members of our supervisory team, whenever I have the opportunity to talk with them, that the desire of men to cooperate with one another is as old as civilization itself. We see that desire reflected in popularity of sports that involve team play.

In the first place, we must remember that cooperation is not a one-way street. A supervisor owes it to every new employee who reports to him to cooperate with him by giving him the facts about his job and an outline of the place his job holds in the general scheme of things in the plant.

After this has been done, and before he leaves an employee on a job that is new to him, I like to have our supervisors say in effect, "I hope you will like it here and that you won't hesitate to ask me for any information you may want from time to time about your job or the plant in general." After that, for so long as it requires our new friend to become a smooth-working member of the team, the supervisor should personally follow up on his progress with sufficient frequency to insure that he makes good and likes his job.

I can't emphasize that too much, particularly in these big plants where we are bringing a lot of people in to work, in many instances people who have not worked before, and are placing them on machines, tools, and equipment that are strange to them--often awesome. We should make them feel that they are a part of the organization. We should take them around and introduce them to their associates, and tell them that whenever they have a problem or question to come and ask us about it. We should try in the early stages to develop a relationship between the supervisor and the workers that is going to make it unnecessary to bring a third party in to intercede.

So much can be done by talking with men. We don't talk enough with the men who work for us. We in top management don't have an opportunity. That is why we must have supervisors on the job. Training a supervisor to do his job well, and to be a real person, is vitally important, just as it is with your noncommissioned officers in the Army, Navy, and Air Force. It is the relationship between men of all ranks that determines whether or not you have a good, happy working team.

A good supervisor is a good listener. He has a nice sense of balance between being "wishy-washy" on the one hand and pig headed on the other. If he knows the answer, he should in most instances try to handle any problem presented to him without delay. He should explain the underlying reasons for handling it the way he does. If he has any doubt whatever about the facts or the proper answer, he should take the problem under advisement, think it through, discuss it with his supervisor or foreman, and at the earliest possible moment give an appropriate answer and explanation.

A sense of balance is essential in a supervisor. If a man can be impartial without being cold; if he can be friendly without being chummy or showing favoritism; if he can be open minded without wavering like a reed in the wind; if he can recognize his own mistakes as well as the mistakes of others; and if he can help accomplish corrections of mistakes harmoniously and without recriminations, then he can smooth his way over many a rough road, and win and hold the respect of the people who work under him.

A good supervisor gives credit where credit is due and does not seek to cut for himself a slice of credit for ideas offered or developed by the men under him. The only men who are productive of new ideas are those who have confidence in the integrity of their boss. The supervisor who can inspire mental cooperation as well as physical effort is many times more valuable than a man who may be more ingenious as an individual but who does not have the confidence of the men under him.

It is very easy, when a man finds himself in a tight corner and at a loss for a ready answer, to hedge and make promises for the sake of temporizing. A supervisor must fix solidly in his mind this motto: "Don't promise what you cannot perform and don't fail to perform what you promise." It takes a long time to gain the confidence of others. It takes only one broken promise to tear down a foundation of confidence that has required years to build. And just one case of unmerited "appeasement" by a supervisor is likely to be construed as discrimination, to cause dissension, and to start a chain reaction of exceptions to sound practices.

Self-control and a friendly attitude will do much to win and hold the respect of anyone. A word misspoken cannot be recalled if it is spoken in anger. It may be interpreted differently if it's spoken in a friendly manner. At some time or other, all of us say some things that can well be interpreted in a way different from our intention.

Another important guiding principle for supervisors should be this: He should talk more with his people on subjects that represent common ground, or mutual interest, than he does on points of controversy--such as politics.

For example, safety programs and employees' suggestion programs serve useful ends in themselves. In addition, they have a very definite employee-relations aspect. A good safety program is concrete evidence of management's interest in the welfare of the individual. A suggestion plan fosters a sense of belonging to the team in a more important capacity than the individual job may permit.

You will recall that both the British Industry Team's report on USA productivity and the University of Michigan's survey mention origin of ideas as a characteristic of high-production workers. Obviously, a sound employees' suggestion program is an important morale builder. And both programs, Safety and Suggestions, foster a closer relationship between the supervisor and the workers by affording them a common meeting ground outside the regular field of getting out production, a meeting ground to further the welfare or ideas of the employees themselves.

These principles, gentlemen, adopted both in spirit and in practice by the supervision of any average group of American workers, will make that group more highly productive. They will do more than that. They will promote a confidence in management that will lessen a tendency to resist the technological changes that industry must rely upon for ever-increasing productivity per employee.

Thus, the basic principles of a sound management-labor relations program are simple. Their practice, on the large scale required in our industries today, is sometimes difficult because of the vagaries of human nature. But industry can have highly productive workers if it will choose high caliber supervisory personnel, train them adequately, and impress upon them constantly, not once and again, nor again and again, but again and again and again, these simple truths:

1. Companies are not brick and mortar; companies are people.
2. Cooperation and teamwork of the kind America needs cannot be bought with gold nor forced by the whip of a dictator.
3. It has only one price--a like amount of the same.

Gentlemen, I thank you.

COLONEL PRICE: Gentlemen, Mr. Trainer is ready for your questions.

QUESTION: Mr. Trainer, you emphasize the importance of the supervisors in your organization. How do you go about selecting those supervisors to insure that you get the caliber that you require?

MR. TRAINER: First-line supervisors are usually selected right from the working force. As you watch a group work over some period

of time you find that a man is a natural leader, that people come to him, and that he likes people. He is usually a master craftsman on the job he is doing. In other words he can be respected not only for his ability on the job itself but, of more importance, because he is the kind of an individual with whom people like to work. Try to select him on that basis. That's the first line.

Of course, like other big companies, we are going to all the big universities today to select technical graduates. We put many of them through the statistical quality control course. That's a good opportunity to get them in direct contact with the work. As we develop these men, we find out whether or not they are the type of men who should work strictly on engineering or chemical problems or whether they are going to show ability in production management. Much depends on how they get along with the people. Does that answer your question?

STUDENT: I was concerned with the mechanics of selecting them. Is it through committees?

MR. TRAINER: No, it is generally by department managers. When we have a supervisor to be appointed, the foreman will present three or four names and the reasons why he feels these men are qualified for supervision. Then the department manager is the one who finally decides, in conjunction with the foreman.

Once we decide upon a new supervisor, we put him through a training course. In this course we then get a good measure of his ability and a check on how he actually performs out on the floor.

QUESTION: I wonder if you have had any experience with the TWI program and the so-called "J" programs of training used in the last war.

MR. TRAINER: They're excellent. Those became the basis on which we set up all our supervisory training programs. That was one of the very good jobs that came out of Government.

QUESTION: Would you discuss how you handle the relationship between your staff agencies like your personnel director and your line agencies, like your foreman and his supervisor, in covering the relationship with the workmen? For example, do you permit a personnel director or his representative to come in and talk with the workman on the workman's personal problems, or do you go through the foreman?

MR. TRAINER: We go through the supervisors and the foreman. We have the definite feeling that if some of the workers feel that they can bypass their immediate boss, it causes them to lose respect for the

immediate supervisor. If we get involved with a grievance which may bring out a weakness in a supervisor, then of course we take steps to help him correct it.

QUESTION: Mr. Trainer, we have had some people talk to us in the past about the lack of pay differential between the workman and the foreman. They say that when workmen setup up to the foreman's job they lose some of their pay benefits. Will you talk about pay differential, whether you have trouble getting people to move off the line into the managerial status?

MR. TRAINER: Supervisors generally earn about 10 percent more than the workers in their department. In the supervisory jobs there are other benefits that come to them, perhaps through leave on account of sickness; pay while being sick; and things like that.

We haven't had any trouble; but it is terribly important that you keep supervisor's pay higher than the workers' pay in the department. Of course you may have an individual worker in a department who is a piece worker and gets a higher wage because he is putting out more than anybody else. We don't try to give supervisors any fixed percent above him. Supervisors are above the average of the department. A foreman's pay runs from 10 to 15 percent above the supervisor's pay.

QUESTION: Mr. Trainer, you referred to the satisfaction which the craftsman in the days gone by derived from his work. At every point you refer to the necessity of recognizing a man as an individual. You have given us a number of management's devices which have been developed for trying to compensate for the loss of that satisfaction of the old-time craftsman. Would you care to express your opinion on the degree to which you feel we have succeeded in actually compensating for that loss?

MR. TRAINER: I would say to you that before we put in SQC there was no way for the worker to develop pride in his work. In other words the work was either passable work or rejected work. With SQC we put the spotlight on good work, and even where a man did not make a finished part, we were able to show him that his part of the operation was 90 or 95 percent perfect. Before we put in SQC there was no way to show him that. We knew the number of pieces he made per day or per hour, part of them good pieces, and part of them bad pieces. Whether his work was better than average, I don't think they knew.

It is surprising the interest you can develop all along the line. You can show the importance of even the mediocre jobs--even the sweepers of the floors. We showed them what would happen if dirt got into the product. We showed them their work was important.

QUESTION: You told us how you handle the matter of where a worker had a grievance against you. Suppose you have a grievance against a worker--how do you go about handling that? Is there any insistence upon the union representative that he get into the act, perhaps in the middle?

MR. TRAINER: We will file a reprimand against a man and put it in his personnel folder, for a serious breach of discipline or for defective workmanship if it assumes undue proportion. We first read it to him; then, show it to him and ask him to sign it acknowledging that he has read it. He either acknowledges it or he doesn't; there are many cases where he won't acknowledge it. In many of such instances, employees will bring union representatives in. Frequently, written reprimands become the subject of immediate grievance procedure, initiated by the employees to prevent having them put in their folders. There's another advantage of our quality control program. We put in the personnel folders also the SQC commendations where they did good jobs.

STUDENT: Who prepares those notices?

MR. TRAINER: That's done by the immediate supervisor.

STUDENT: The supervisor conducts the reprimand interview?

MR. TRAINER: Yes, sir. If that man wants to, he can call in his committeeman to listen. When they do that, we usually have a long drawnout argument.

QUESTION: Mr. Trainer, do you find it possible to adapt SQC to all your operations, such complicated ones as molder operations? Are you able to evaluate your employees' work?

MR. TRAINER: We can apply SQC to almost any job we are doing. It's largely a matter of judgment and ingenuity in developing a relatively accurate yardstick. It is a new tool that has been developed within the last 10 years. I think it is a very valuable one when used properly. It is not always one that will give the lower costs. Sometimes it will cost money, but it will improve the product, and it will result eventually in lower costs.

QUESTION: Mr. Trainer, it has been expected that in case of full mobilization we will have to bring in great numbers of women into the labor force. Would you mind commenting on your experience in using women in the labor force? Do you consider in your type of work that they will be able to satisfactorily hold down men's jobs? What special treatment or consideration or concessions will you have to make to them?

MR. TRAINER: It has been our policy to pay the women the same as the men when they do the same job. Usually when you have women on the job, it is essential to have some service for them in the way of handling and lifting materials, so there is some adjustment made in the rate for these services. If the job is not a heavy job, where the lifting is over 25 pounds, we find women can perform almost any operation; that goes without exception. We have had women build tires. We have some women in California building tires today, a carry-over from the last war; and these women will build tire for tire with the men, day in and day out.

QUESTION: From your statements we have all concluded that freedom of choice, voluntarism, is not only desirable but necessary in this country; but it seems to me that the theory of having both the union shop and the closed shop is not in keeping with that basic assumption. Would you care to comment on your company's attitude in respect to those two situations?

MR. TRAINER: Well, as a matter of fact, our rubber plants are all on the union-shop basis--not the closed shop--which means we are still at liberty to do our own hiring, to employ the best people we can get, the people we feel are best suited for the job. The union has nothing to do with the people up to that point. After they come into the plant, they have 45 days in which they can join the union. That still allows us control over who we hire.

When you get into a closed shop, you have lost that. You hire people who are members of the union. You get them from the hiring hall. You have to take them as they are sent. We hope we are not going to have that.

STUDENT: Does the worker himself have no choice? Does he have to join the union?

MR. TRAINER: In the case of a closed shop he has to join the union. He can be an active or nonactive member. That is up to him. Taking the union argument, it is that they do the negotiating, they are the ones who work out better working conditions, and negotiate pay increases, and it is not fair for part of the working force to pay for that and the other part of it not to pay for it. That was the basis on which these union shops came into being. We don't like them particularly, but we haven't found that they are too much of a problem.

As a matter of fact, before we had the union shop, 95 percent of our people belonged to the union anyhow. But the question of promoting people strictly on seniority always is a problem. We have to fight it and insist upon the right to select people for supervisory and highly skilled jobs, based on their ability. We do have some arguments on that, but it has not been too serious to date.

QUESTION: Mr. Trainer, you mentioned that management should resist featherbedding. Sometimes people working for wages establish low quotas of daily production. What action would you suggest in cases like that?

MR. TRAINER: Well, that gets to be a 64-dollar question. The rubber industry does it by establishing piecework rates on the various jobs. The rubber industry is historically a piecework industry, where the worker is paid so much for a piece. When a piecework rate is being established, the worker tries to get the rate established as much as he can to his own advantage, and he fights for a low number of pieces per hour. We set the rate. If we post a rate which is based on a good time study, it will stand up under examination. If the rate is not accepted by the workers and they challenge it, they have an opportunity to bring in their own time-study men and lay their time-study figures against ours; then, if we cannot agree, the rate becomes a case for an outside arbitrator and what he decides is accepted.

QUESTION: Of course we can't use time studies. We don't use piecework. What other means do you have?

MR. TRAINER: I think that rule was broken down. There was a time when you were not allowed to use time studies. I think now you can use time studies.

ADMIRAL HAGUE: That is correct.

MR. TRAINER: That was tied on to an appropriation bill. Some years ago you could not use a special wage. You should not put into a shop any job on which you don't have some kind of a standard. Let's assume you tell a man he ought to get 10 pieces per hour or per day. That is known as work on a day standard, but in effect it is piecework.

One of the big problems we have in the rubber industry is that after piecework rates are established the men become increasingly proficient. Instead of working a full shift, they may work only about 80 percent of the shift and stand around for a half hour or three-quarters of an hour at the end of the shift. They will have produced what they consider a day's work. We pay so much a piece; yet they and their machines are idle and they are taking up floor space.

Down in South America, in the Argentine, when a man finishes a number of pieces, in the big mills, he goes home. Some of the mills are empty at two o'clock, instead of working until four o'clock. They have done a day's work and are finished. We do insist that they stay on the job, that they don't go home.

QUESTION: Mr. Trainer, you have indicated that the productivity representatives from England were very much impressed with the American methods; yet, when they returned home, for some reason they did not adopt American practices. I have particular reference to coal mining and stevedoring. In your opinion is this caused from a greater percentage of nationalized industry, or is it the union attitude toward a new method?

MR. TRAINER: I would say you picked a couple of stickers--the stevedores and the miners. I think a lot of it starts with the action we get at the top, and the example they set. We are operating a plant just outside London, at Brentford. I was there four weeks ago; the productivity per man-hour is not as high as it is in the United States, but it is pretty good. It is up to around 85 percent of our American performance. That reflects the influence of American management principles in the British plant. Performance depends largely on whether or not the people at the top want to do this job. That is one advantage in our business--we keep drawing comparisons between our American and our foreign plants. Those managers in our English plant are all Englishmen. We have no Americans in that plant at all. They are American trained. They have taken our ideas and are producing with them and they are doing an outstanding job.

I was also in Germany on this last trip and in Italy. I was astounded at the productivity of the German workers. It is fully the equal of the Americans. They don't have, in many instances, the same kind of equipment we have, but, so far as the work effort is concerned, they are right up there. The same thing was true of the rubber workers in Italy. As a matter of fact, on one production line I saw them making boots and shoes in Hamburg, the tempo of individual workers exceeded anything I had ever seen any place.

QUESTION: Mr. Trainer, would you comment on the effect the installation of SQC, in your experience, had on total production as compared with that just prior to your installation of SQC, and, second, do you plan to use these statistics in fixing the wages of the workers on their performance of acceptable products?

MR. TRAINER: The answer to the last question is, no, we have not considered paying wages based on quality. To do so would throw quality into union bargaining as a part of wages, with risk of compromise. And management must never compromise on quality. On some small operation you might be able to do it, but not on a big operation. Almost without exception men want to do good work and where we pointed out poor workmanship, they have gone about correcting it.

You should not put it in with the idea that you are doing it to increase productivity or reduce your cost. Put it in directly on the basis of improved quality. If you get improved quality, you are automatically going to get lower cost.

One of the problems in building tires is the balance of the tire. We measure it in inch ounces. We take tires and check them, and we find the workers build tires within certain balance limits. We pointed out that the tires become better tires with more nearly perfect balance from the center point. If balance was off beyond a given number of inch ounces, we would have to make a correction on the tire. In that correcting line we had eight people per shift in one plant. After we put SQC in, the eight people were gradually reduced to two people.

There are lots of pluses to be added in. You will find enough plus, usually, to offset the increased cost of the SQC. That was true in ammunition loading at our Ravenna arsenal. We got a higher-quality product and a higher yield of acceptable pieces.

QUESTION: Mr. Trainer, would you care to comment on the feasibility of the guaranteed annual wage as applied to the rubber industry?

MR. TRAINER: That's really a 64-dollar question. I don't believe I can answer it fully. Whatever it costs must be passed on to the consumer and we can see that it is going to increase costs. In the last 15 years that would never have been a problem, because we were always increasing production, always producing more each year than we produced the year before. There were no layoffs. We hope we are going to continue on that basis. If we do, there is no need for a guaranteed annual wage. If we have substantial cutbacks, I don't know how we could afford it.

The tendency under a guaranteed annual wage would be to trim your organization down, take off 10 percent of the people and work with 90 percent, figuring you could better afford fewer sales than a heavy potential loss in guaranteed wages. I don't think for the overall economy of our country it is good to do that.

QUESTION: Mr. Trainer, I have read of instances where the union has come in and solved a problem that has distressed management. Can you give me some idea how union relations with your company have worked out?

MR. TRAINER: I don't want to evade that question. I am going to answer it exactly the way I feel, based on my experience. I am telling you today, the union has not solved a single management problem that we have had. We don't expect it to do so. It is our job and it is up to us to do it. Management will never run an efficient plant on the basis of sharing management responsibility with any union.

QUESTION: It is very revealing to me to hear you speak and to see the enthusiasm you can generate. I just wonder if we can apply

some of the things you talk about here to the civil service. Have you any ideas how that could be done? If anybody can do it, you can. I am interested in having your comments.

MR. TRAINER: I haven't any complete answer to that question, but it goes back to the fundamental principle that you cannot get something for nothing. The productivity of the individual worker is paramount; we encourage every worker to produce by rewarding his individual effort, by paying for extra pieces produced, by commendation for good work, and by opportunity to advance--all based on what they have done.

COLONEL PRICE: Mr. Trainer, on behalf of the staff, faculty, and students, I wish to express our appreciation for a very interesting discussion this morning.

MR. TRAINER: Thank you ever so much. It is indeed a pleasure to be here and have an opportunity to talk to you. I hope, if you get any one thing out of what I have said today, it is, train your supervisory force. That applies to your noncommissioned officers, because they are the direct contact between the working force and management, whether it happens to be the top of the Army, the Navy, or the Air Force, or whether it happens to be the top of an industrial concern. Thank you very much.

(5 Jan 1954--750)S/sgH