Chapter III

ARBITRATION OF DISPUTES INVOLVING INCENTIVE PROBLEMS: AN INDUSTRY VIEW

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It is indeed a pleasure for me to speak to this audience. As an audience of arbitrators, it can properly be called an audience of experts on labor affairs—or even more properly an audience composed of the experts' experts. I am sure that many of you know much more about the "Arbitration of Disputes Involving Incentive Problems" than I, but here goes anyway.

I am sure that you are aware that there is a difference between the attitudes of unions and the attitudes of management concerning incentive standards. Solomon Barkin, a very articulate union spokesman, who is Research Director of the Textile Union, went right to the heart of this difference, when he said:

> The unions and workers seem to *** be in a position to secure additional wage concessions by the negotiation of work standards.
>
> Management tends to be in a better bargaining position if the standards are pre-determined against a fixed wage relationship.*** Unions, therefore, prefer to retain opportunities for negotiation on the individual job.

There you have it. Managements want to establish incentive standards on a factual basis to the maximum extent possible. Managements contend that the time required to perform a job is a fact. When such time is determined by industrial engineering procedures, incentive standards can be established so as to provide a consistent earnings opportunity above the guaranteed base rate on all jobs. For the same amount of effort, managements say, employees should earn the same amount of "extra" pay above the guaranteed base.

Unions want to negotiate standards. They believe this produces more earnings than relying on the so-called scientific measurement procedures of management. Union spokesmen argue that the techniques managements use to measure the time required to perform a job are not accurate enough; hence, the fixing of the incentive standard should be a matter determined by general bargaining.

The reasons for the difference in approach to incentive standards was noted by Robert Roy, Professor of Industrial Engineering at Johns Hopkins University. He described the condition that occurs after the introduction of an incentive system when the low cost, high-wage honeymoon has lost its bloom:

> As time passes, so does the initial sense of satisfaction to the workers. They begin to look upon the incentive increment in their pay as a right rather than a privilege, and to press for a variety of concessions which, taken one by one, seem quite reasonable.
>
> When some of these concessions are granted, wages are enhanced, but low costs are, if not forgotten, certainly hurt.
>
> ***. In any measured work-wage incentive relationship, the pressure of those measured is always in the direction of obtaining more, never less.

This "pressure of those measured for more" causes some of them, in the efforts to obtain more, to charge that, through the administration of the incentive systems, managements continue to squeeze more work from the workers for less money. They call this the "speed-up." To illustrate this, let me quote a comment by Walter Reuther concerning incentive programs:

> The right of the unions to strike over "speed-up" grievances is now established at the time contracts are negotiated. Continuous progress has been made in the fight against "speed-up," but to maintain what has been won, and to continue to fight against it, the steward and the committeemen in the shop must be trained and alert. ***

All thoughtful managements who operate plants with incentive systems recognize these natural motivations and know that they can be stimulated into destructive pressures. Such managements adopt policies which they hope will protect their incentive systems. One position taken by some managements to stave off this pressure for liberalization of incentive standards can be stated somewhat like this:

> We, the management, establish the incentive standards to encourage the individual employee to give us the extra effort which he alone can give. Hence, incentive standards are something personal between the management and the individual employee. Since we, the management, are providing these "extra" earnings above the wage rates negotiated with the union, we should retain the final say.

Now, the union representatives, somewhat surprisingly, might reply:

> If that is the position you take, that is all right with us. We don't want some inexperienced outside arbitrator settling our incentive problems any more than you do. However, we will be in to negotiate any incentive standard that we think is unfair, and we are warning you now that if you won't agree to correct those we believe to be unfair, we reserve the right to strike.

Management might then say quietly to itself:

> Let's agree with the union on this. It is true the union's reasons for not wanting to arbitrate disputed incentive standards are somewhat different than ours, but, after all, the employees won't strike over every dispute over an individual incentive standard and, hence, we will keep the final say and in this way keep control over the establishment of incentive standards.

The difficulty with this approach, which can be labeled, "The Standards Are Not Subject to Arbitration so We Retain Final Control" is that it surrounds the incentive system with a bargaining atmosphere of compromise and contest. The employees believe they face an uncomfortable dilemma—that they have to "take it or strike." Tensions build up and become deep-seated. Then, when collective bargaining time rolls around again, pressures can be ignited to strike level by the use of sloganized attacks such as "speed-up" and "chisel." Then the management, in its turn, faces the uncomfortable dilemma of having to concede to the demands for liberalization of the incentive standards, thus slowly destroying the incentive system, or refusing to do so, and bringing on industrial warfare. Thus, the approach we have labeled, "Standards Are Not Subject to Arbitration so We Retain Final Control," that appeared at first blush to keep management in the driver's seat, turns out to be a very weak shield indeed.

We have as the alternative to this first approach the view that management should submit incentive disputes to arbitration. If a company is willing to do this, it would seem that the emotional pressure which otherwise can build up around an incentive system and which permits suspicions to grow and flourish cannot build up. A claim of unfair treatment can be refuted by simply replying, "Well, let's find out if what you say is true. We will submit the question in dispute to an Impartial Arbitrator."

However, in spite of the persuasiveness of this reasoning, many managements remain frightened. They say:

> The whole idea of removing emotionalism by a willingness to arbitrate seems right, but few of the recognized arbitrators are industrial engineers, and what does one of those regular arbitrators know about incentives? Since our union won't agree to arbitrate such a dispute before a consulting engineer from a management consulting engineering firm, we won't be able to find an industrial engineer to be the arbitrator and hence the arbitration of incentives just won't work.

The belief that since incentive standards are established by industrial engineers they must be arbitrated by industrial engineers, though it may seem reasonable on the surface, reveals a very fundamental weakness. If management believes that it cannot convince an Impartial Arbitrator who is not an industrial engineer of the fairness of a incentive standard, it is admitting that it cannot convince just an ordinary fair-minded person that an incentive standard it has established is fair. If that is true, how can it convince one of its employees, or the union leader, none of whom are trained industrial engineers, that a standard it has established is fair?

The only way management can rectify this sad state of affairs is to do two things:

First, incorporate into the labor agreement, through very careful negotiation, as clear and workable tests as possible to be used by the Arbitrator to determine the fairness of a particular standard.

Second, develop time measurement techniques to obtain the highest level of accuracy and consistency, and also the explanation techniques, so that a fair-minded person, be he an arbitrator or just an employee or a union leader, can be convinced that the incentive standard established by management, when judged against the contractual "test of fairness," satisfies that test.

Tests of Fairness

Since the arbitrator will be asked to compare the incentive standard in dispute against a contractual "test of fairness" contained in the labor agreement, we must identify the different types of "tests of fairness" found in labor agreements before continuing further. This is because the explanation techniques or, if you prefer a more legalistic phrase, the "proof" problems which will arise in connection with the arbitration of a disputed standard will be different under each of the various types.

The type of contractual "test of fairness" we shall classify as Type No. 1 is not a very common type. This test involves the setting forth in the labor agreement of the various procedural steps which are followed by the company's industrial engineers when they measure the time to perform a certain task and the steps they follow thereafter when they compute the incentive standard. The adoption of this type of contractual "test of fairness" results from the assumption that if the industrial engineer is required to follow an agreed-upon procedure step by step, the resulting incentive standard will be correct and fair.

One example can be cited to show that this assumption is fallacious. The contract contained a provision to the effect that a certain minimum number of job cycles must be measured when a time-study of a job is being taken. It was contained in the labor agreement between a union and a nationwide company. The clause was as follows:

> A minimum of at least a 30-minute study or at least a study of 20 cycles, shall be made for any time study.

At first blush, this provision sounds reasonable. It is a good industrial engineering practice to observe and measure the time of a sufficient number of cycles. However, this provision in the labor contract permitted a union steward to thumb through piles of work sheets, hunting illegal standards. He found one. It was based on time measurement of only 18 job cycles, rather than 20, and took less than 30 minutes. The steward marked it illegal. The standard was cancelled. Thereafter, the time required for each 20 cycles was measured and a new legal standard was established in the place of the illegal one. When the new legal standard was released, it was considerably tighter than the former one. Hence, the complaining steward got burned and the controversy got hotter.

Now, the point of this story is that contract provisions which specify the methods that are to be followed to measure the time to perform a task do not result in a satisfactory "test of fairness." In fact, they are worse than none at all because they actually multiply the areas of dispute.

Now let us consider contractual "test of fairness" Type No. 2. This type of test consists of standard data, tables, charts or formulas that have been introduced into the contract by an agreement between the parties. There are a great variety of such agreements. I merely want to illustrate them by using one example. I am taking it from an arbitration case in which I participated.

It involved the incentive rates for cutting patterns in a shoe factory. These rates were established by a very simple procedure, which can be called a standard data procedure, and it was part of the labor agreement. It involved a comparison of the pattern to be cut, or the outline of a pattern to be cut, with the outlines in a book, each of which had an incentive rate, finding the most similar outline and selecting the rate for that pattern, and then adjusting it by certain agreed-upon time values to take account of special angles, variations in length and so forth.

Pearce Davis, who follows me on this program, was the arbitrator. I recognized at the time that his task was quite similar to the task of an arbitrator who was being asked to resolve a job evaluation and classification dispute. In such a dispute the arbitrator compares the job content of a particular job as evaluated against certain job content factors with the descriptions of job contents of other jobs in a book of agreed-upon descriptions.

Once the description which is most comparable is located, the rate for the job classification in dispute can be determined quite easily and the dispute is resolved. In other words, the process of resolving the dispute over the incentive rate for cutting the pattern in this shoe industry case, which involved the use of a standard data system, was not difficult.

Let us now examine the third type of contractual "test of fairness." The third type is the most common. Under this type we lump a group of slightly different "tests" which some persons might consider to be different, but which really are the same. These are the "tests" that require the Company to provide with each incentive standard a certain earnings opportunity.

For example, there is an agreement that each incentive standard will provide an earnings opportunity equal to an "expected rate," sometimes called a "target rate," or an earnings opportunity equal to a fixed percentage of earnings above the incentive base rate.

Sometimes these earnings opportunity agreements are expressed in rather general terms—that the incentive standard must provide an earnings opportunity in equitable relationship to the base rate. Such an agreement means that an intentional ambiguity has been left in the agreement. Such an agreement is often given meaning in percentage terms by the arbitrator. Therefore, it is wiser to express the relationship as a percentage above base rate and not leave this question of construction for the arbitrator to clarify.

Sometimes the agreement will provide that the new incentive standard should provide an earnings opportunity equal to the prior average earning of the employees involved. Such contract provisions slowly inflate earnings. They are unsound, but not uncommon. Of course, I classify them as "unsound" from management's point of view.

A final variation of this earnings opportunity "test of fairness" is the provision in the agreement which says:

> The management will provide incentive earnings that will provide at least a minimum earnings opportunity which will be equal to at least (let us say) 15 percent above the base rate for an employee willing to put forth incentive effort.

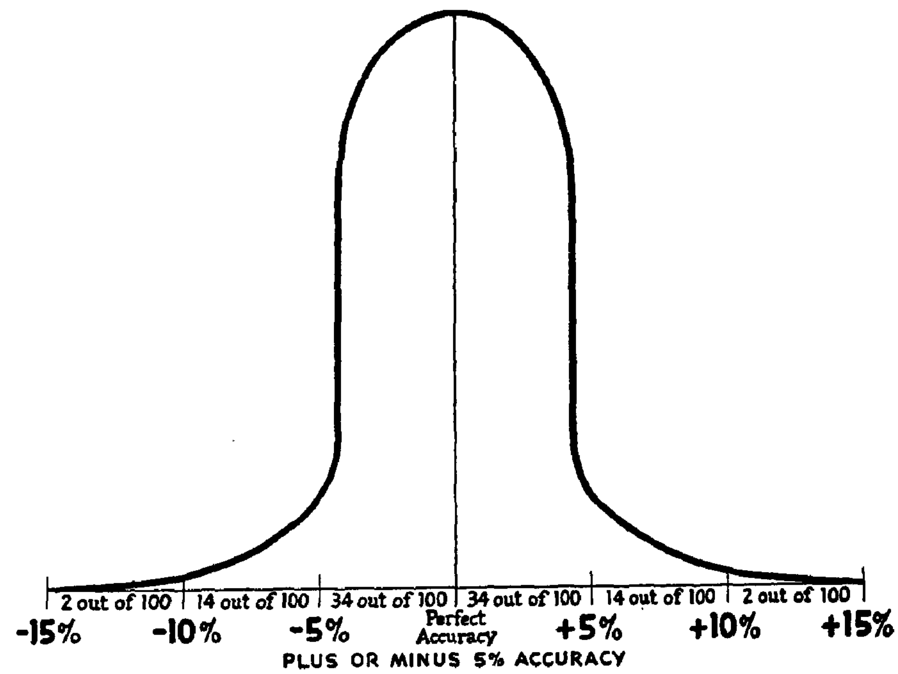
This test guarantees a minimum earnings opportunity rather than a specific one. Of the various earnings opportunity "tests of fairness" found in contracts, I prefer this last variety. I believe it recognizes the realities of incentive standard establishment and I think it is appropriate to digress briefly at this point and explain why. In so doing, some of the difficulties that confront arbitrators when they are asked to resolve disputes under earning opportunities "tests of fairness" will be pointed up.

Let us assume that a particular management believed that an employee working with full incentive effort would put forth about 25 percent more effort than he would when working on a fixed hourly rate. This management would then conclude that it would be correct to pay such an employee 25 percent more pay during periods when he was engaged in manual activity and was putting forth this full incentive effort.

However, if this management agreed in its labor agreement to a commitment to provide a 25 percent earnings opportunity above the base rate for full incentive effort it would soon be in difficulty. When I say this I am assuming that the incentive standards are established by leveling of manual performance times by judgment and that the management is attempting to provide no more than a 25 percent earnings opportunity.

Leveling of Performance Times

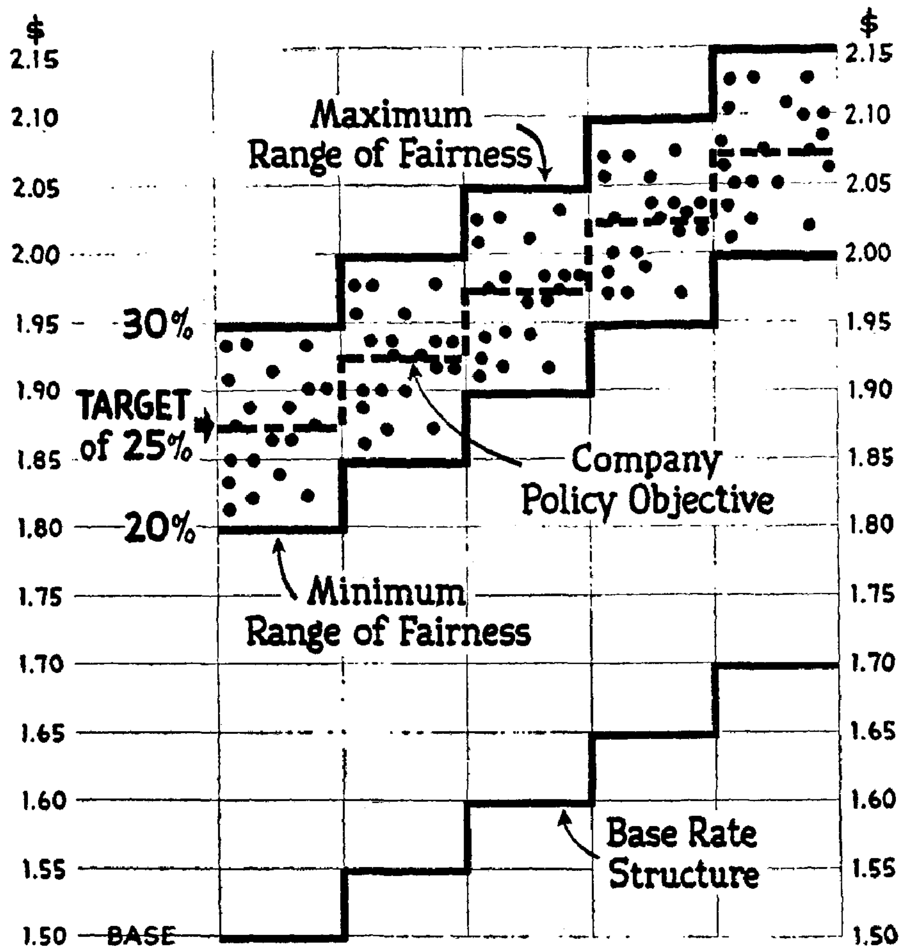
This brings us to the mystery point in the arbitration of incentive standards—that is, the problems involved in the leveling of manual performance times. Professor H. Barrett Rogers of Northwestern University, an outstanding student in this field, says that the possibility of error in the evaluation of manual performance times when they are leveled to a so-called normal time is "plus or minus five percent." This possibility of error is a little more serious than it sounds. The range of error represented by the expression "plus or minus five percent," when plotted, is a bell curve.



The Present Maximum Accuracy
that can be obtained when Incentive Standards are established by Traditional Methods

FIGURE 1

Let me illustrate the extremes of error that are contemplated by this curve (Figure 1). Actually 68 out of the 100 standards set by this method would deviate from the correct time only plus or minus five percent. An additional 28 will have an error running up to plus or minus 10 percent (14 between 5% and 10% too "loose" and 14 between



The "RANGE OF FAIRNESS" of Incentive Earnings Opportunity Above a Base Rate

FIGURE 2

5% and 10% too "tight"). An additional four percent would have an error up as high as 15 percent too "loose" or too "tight."

We should, of course, remember that the manual performance part of a job is not necessarily the entire job cycle, but this possibility of error

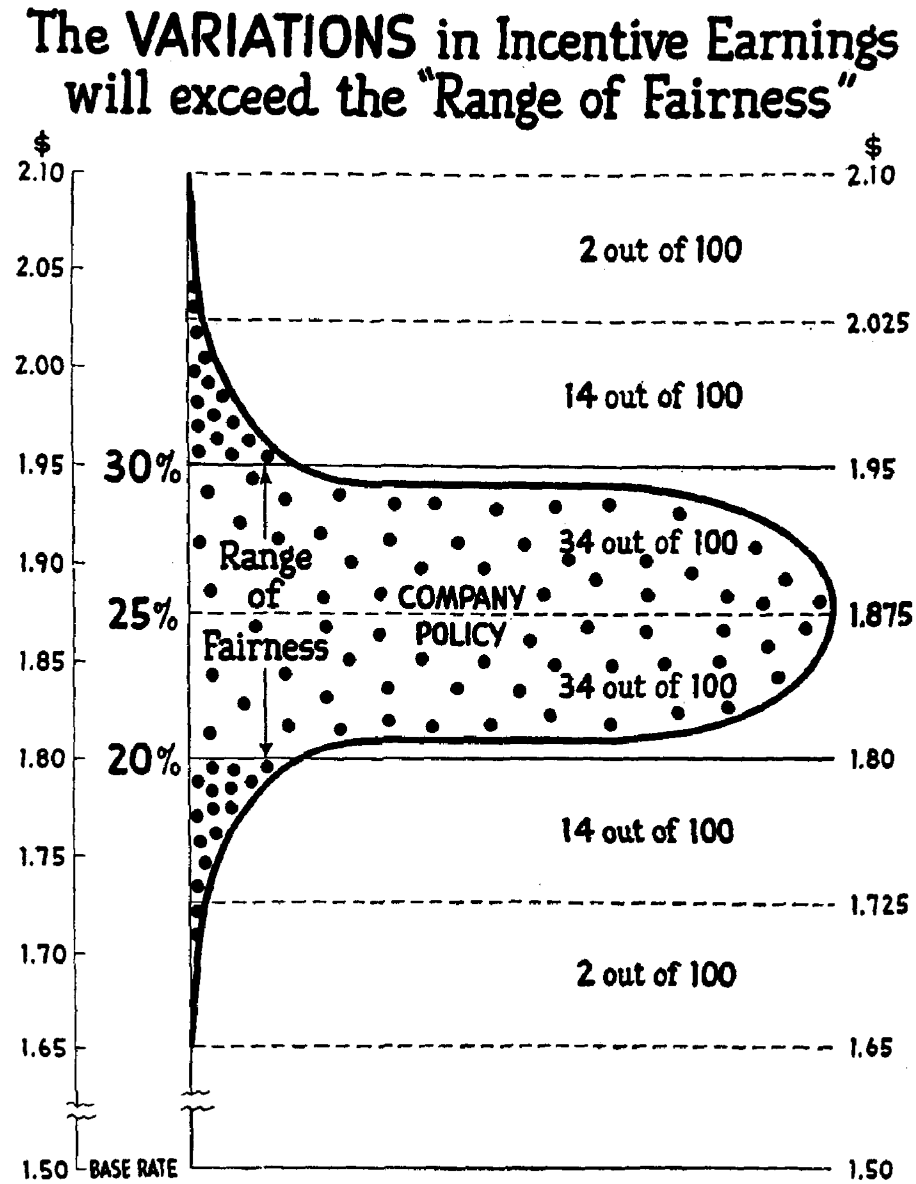


FIGURE 3

introduced by judgment leveling is a possibility that undoubtedly is the main reason arbitrators stay awake at night when the dispute involves judgment leveling.

This error is a human error caused by judgments exercised by industrial engineers and they are human beings even though union spokesmen sometimes forget this fact. It means that the actual "earnings opportunities" being provided on a manual job for true incentive effort, if it could be plotted, would actually scatter around the policy target point of 25% above the base rate (Figure 2). Even if a management was making every practical effort to set the standards fairly but was using judgment leveling techniques, we would find that the earnings for precisely the same effort would scatter around the policy target because of the inherent error involved when performance times are leveled by judgment, following observation.

For these reasons, what we should be really interested in determining is whether the earnings opportunities on the various jobs fall within a "band of fairness" rather than upon a specific percentage point above the base rate. If we then identify the minimum of that band and say, "Any standard that produces earnings for an employee putting forth incentive effort below that level is a standard which we will consider unfair," the union can process grievances to obtain the correction of truly unfair standards, but a realistic "margin of safety" has been left between the policy target and the contract commitment so that the industrial engineers can actually be in compliance with the labor agreement as they establish incentive standards on a day-to-day basis.

The practical problem is well illustrated when the bell curve representing the error of "plus or minus 5 percent" is superimposed on top of the chart of the company's policy (Figure 3). You will see that even though the industrial engineers are careful in their initial evaluation of the employees' work pace, they will still make errors, and even though the "minimum of the range of fairness" is set 5% below the policy target, some unfair standards will slip through.

Many people fail to realize the inherent variation from theoretically correct time when manual performance times are leveled by judgment. I think that the industrial engineer is at fault because he does not like to concede to himself, let alone anybody else, that his measurement procedures do not provide precise answers.

Therefore, if a management is going to have an intelligent standard in a contract to work against, it should provide that:

> A qualified employee, working with incentive effort, shall have an earnings opportunity of at least 20 percent over the base rate.

If the policy target of the company is in fact to provide an earnings opportunity of 25 percent, a 5 percent margin of safety for error has been provided between the policy target and the contractual commitment.

This explanation has been somewhat oversimplified. There are many more facets of the problem of incentive standard establishment to be considered before a complete policy can be spelled out. We are considering here only the problems that arise when judgment leveling is used, because the differences in opinion concerning the work pace of the employee is a main source of grievance complaint over incentive standards.

When judgment leveling disputes get to arbitration they are difficult to handle. The arbitrator is being asked to look through the eyes of the timestudy observer at an employee whom he never saw perform a job that can never be performed again even by the same employee at exactly the same pace, and to determine whether the judgment estimate by that observer of the work pace of that employee was correct.

The arbitrator's dilemma is further increased when he finds that no one can clearly explain to him what mental "normal pace" the observer had in his mind when he compared the work pace he was observing and evaluated it as a certain percentage above or below his mental picture of "normal pace."

Walter Reuther explains the dilemma that confronts the arbitrator when the issue finally sifts down to a dispute over the judgment conclusion upon which the manual performance times were leveled to normal time. He said:

> The ordinary stop-watch time study involves use of a leveling or rating factor. This is the time study man's guess. He puts down a percentage figure which is supposed to indicate the degree to which the worker studied was performing faster or slower than some hazy idea of normal.

If a union representative also observed the employee performing the job and reported his conclusions to the arbitrator, the dispute does not become easier to resolve. It then involves a variation between the level in judgments of two observers. Which is correct? And beware of the "split-the-difference compromises" between the two, because such a principle spells slow death to equities and to the incentive system.

In his attempt to work his way out of the fog which surrounds disputes over leveling, the arbitrator should also refrain from being influenced by earnings information. The employees are claiming that they are working with incentive effort and do not have the earnings opportunity provided in the agreement. Of course, they will not prove that they have it by earning in excess of the level provided in the contract.

There was a time when many arbitrators were, to say the least, rather naive when it came to handling questions of this kind. They would support the union's claim that the standard was incorrect upon a showing that the employees were unable to make the expected earnings level. For example, one arbitrator, ruling that a standard should be increased, said the following.

> It is extremely unlikely that employees having an average of 24 years of experience would accept a serious loss of earnings over many months merely to establish that the rate was improper. Some allowance should be made for the obvious difficulty of such employees in adjusting to the new method.

When the arbitrator holds the standard incorrect on such a basis, the future earnings information when the employees raise their production level will prove only one thing—his naiveté. Employees have no compunctions about making a "chump" out of the arbitrator and arbitrators should always remember that the subsequently produced earnings information will prove they have been a "chump" if they are taken in by the self-serving earnings evidence that employees working on a job manufacture.

In recent years the more astute arbitrators have recognized these facts of life. They reject evidence of low earnings as unreliable evidence. In this connection, I should like to read a quotation from an award by Ralph Seward (20 LA 38):

> Such earnings, it is true [measured against an expected earnings level] have not been realized in actual practice. The umpire has given the union every opportunity to analyze the time studies and line speed studies on which the rates were based, and to point out errors or defects in those studies which would account for the failure to reach the target earnings.
>
> The union has failed to make such an analysis or to demonstrate any inadequacy in the studies or any errors in the assumptions which the company based upon those studies.
>
> * * *
>
> *It has offered the umpire no grounds for holding that the reasons for the failure to reach target earnings lay with the rates, rather than with the employees themselves.*

> Under the circumstances, the umpire has no alternative but to hold that the union has failed to establish that the incentive rates . . . are not in *equitable relationship to the old rates* and to deny the grievance on that basis. (Italics added)

Thus, the union has the burden of proving that the standards were unsound. Low earnings evidence by itself is not sufficient to overcome the presumption that the rate is established correctly.

Similarly, Harry Platt pointed out the same thing. He said (15 LA 195):

> *** *I cannot help but conclude that the union has failed to meet* the burden of proof requisite to establish the present price . . . as an unfair and improper rate. According to the evidence, the company made five time studies of the job in question (one of which was made jointly by a union and company representative) and they all show rather conclusively that the present gusset cutters could, by exerting normal effort, bring their earnings in line with their former earnings, if not exceed them.

Thus, another experienced arbitrator has rejected low earnings as evidence and has concentrated his attention on evidence concerning the *measurement of the time required* to perform the incentive task.

If an arbitrator should not rely on earnings evidence in hunting his way out of the fog that usually settles over a judgment leveling dispute, what evidence can he rely upon to increase his confidence that the award he must render will be a just award?

There are various ways to demonstrate the relative accuracy of a leveling judgment in an arbitration proceeding. Each of the various methods of proof of the accuracy of the normal time to perform the manual portion of the job has its uses. A detailed exposition of all of them would require more time than is available but we should not pass the question of proof of the correctness of manual time without discussing pre-determined manual performance time systems which I believe are bringing some real sunlight to the arbitrator when he faces this type of dispute. There are two well known pre-determined time systems in use in many, many plants in this country.

The first system is known as the Methods Time Measurement system, called MTM, and the second is the Work Factor system. Both of these systems use a table of fundamental motions and matching time values. The normal time for the manual portions of a particular job can be developed by analyzing the motions that are employed on the job including the measuring of distances, determining weights, pressures, etc.

Then, the normal time for each motion is found by totaling the values that have come off the chart and converting them into time. No stopwatch need be used and hence the pace of the employee performing the job is of no consequence as no judgment leveling of observed and measured manual performance times is necessary.

The MTM Association conducts a continuous research program and is working in conjunction with the University of Michigan. Many incentive scholars are working on projects for this Association. There is a great deal of academic support for this program, from some who have been critical of MTM and pre-determined time systems in general. One of them, incidentially, is Professor Nadler, who teaches at Washington University, where Bill Gomberg is now teaching. He claims that pre-determined time systems do not produce theoretically perfect time findings. It is not claimed by the advocates of these systems, nor am I stating here, that these pre-determined time procedures produce theoretically perfect answers. However, I am saying here that they become a working tool for handling incentive problems which are immeasurably better than the traditional tools, because they do not involve the subjective judgment involved in judgment leveling. In other words, the use of these systems frees the establishment of the incentive standard from the thing which causes most of the trouble—the judgment leveling of manual performance times.

Let us examine how pre-determined time information can be used in arbitration. The job involved can be set up in front of the arbitrator or can be photographed on motion picture films. In this way, the various motions involved can be identified and listed—the distances, the weights, the pressures used are determined. If any dispute arises over any of these facts, the issue can be resolved by the arbitrator.

Then the arbitrator will receive an explanation of how the time values are selected for each motion from the table. The union representative is in a position to challenge the judgment exercised by the company's industrial engineer in his selection of one or another of the available time values from the table, but the difference here is that all the cards are face up. No determination is done in the secret way that is involved when actual performance times are leveled by judgment.

The arbitrator may be presented with two alternative applications of the time values in the table—one urged by the union and one by the company representatives. He might ask each side to again explain the reasons for its proposed application. From that point on the process he will follow is very similar to the process an arbitrator follows when the issue in dispute involves the determining of evaluation points for a particular job under a particular job classification manual, or, for that matter, the process would resemble quite closely the process that Pearce Davis went through when he had to compare the outline of the shoe pattern in dispute with the outlines of shoe patterns in the book to determine by arbitration the proper rate for cutting the particular pattern in dispute.

Even if the incentive standard were first established by judgment leveling, the relative accuracy of this leveling can often be determined by using pre-determined time information. Where pre-determined times are not used generally within the plant so as to become validated by actual use, they are, of course, a more difficult tool to use.

New Standards for Changed Jobs

Let us leave the dispute over leveling which is likely the most difficult problem in arbitration of incentive disputes. The second major problem is whether or not there has been a method of change sufficient to permit the issuance of a new standard.

Labor agreements usually provide that management may not establish a new incentive standard for the performance of a particular incentive task unless there has been a change in the method of performing that task. This provision results from the desire on the part of the management to assure employees that the standards will not be "tightened" merely to reduce high earnings so that the employees will have more confidence and will put forth high effort.

If we remember that the standard is merely a measurement of the normal time to perform a certain task by a particular method, a change in method justifying a new standard must be a change that will affect the time to perform the job. It should be equally obvious that when a change in method has occurred which changes the normal time, a new standard *must* be established if a fair and equitable system is to be maintained.

Where you have a change in the feeds and speeds of a machine, such a change will affect the time cycle required to perform the job. When this occurs, the revision of the standard is not difficult and is generally accepted by the employee. The employee can see the machine go faster when the feeds and speeds of the machine are increased. The effect of such change can easily be calculated. In spite of this, the claim that a speed or feed change is not a methods change has often gone to arbitration and has unfortunately confused some arbitrators.

The methods change problem becomes much more difficult to handle in arbitration when the methods change that has affected the manual time consists simply of a change in the employee's motion pattern. Let me illustrate this latter problem by taking an example from an actual arbitration case.

The employee took a washer from a box and held it with his thumb around a hole drilled in a piece of angle iron. He put it into a spot-welding machine and tripped the spot welder, welding the washer to the angle iron. Then he took the piece of angle iron out of the spot welder, *turned it around in his hands,* put it back in the spot welder, tripped the spot welder again welding the other side of the washer to the angle iron. Then he removed the piece from the spot welder and put it in the tote box. That was what he did when he was timed.

As soon as the incentive standard was released, the employee picked up the washer, held it over the hole in the angle iron with his thumbs, put it in the spot welder and made two welds with a spot-move-spot motion and then dropped the part in the box.

This job was a short-cycle job. The normal time of Method One, involving a "taking out and turning around" procedure was about twice the normal time of Method Two, involving a spot-move-spot procedure. Unless the standard was changed, the employee could about double his percentage earnings above base without putting any additional effort into the performance of the job. The operator had changed his method or motion pattern. The company established a new standard. The dispute went to arbitration.

The arbitrator held that the company had a right to establish a new time standard because of the change in the motion pattern which he considered a new method. Incidentally, if the arbitrator had found that the normal time determined by the clumsy method was to apply to the job performed by the improved method, he would have made a determination that would have been contrary to the basic concepts upon which the pre-determined time systems are based. That is, that the normal time to perform a job can be determined from an analysis of the motions involved in performing it.

Fundamentally, incentives are to compensate for the expenditure of energy and when you simplify the motions involved in performing the job, the job becomes easier. Why should you pay a man for a difficult operation of taking a piece out of the machine and turning it around when you are only asking him to perform a simpler task which involves only a spot-move-spot operation while the part is still in the machine?

Now, some unions and some arbitrators incorrectly believe that a change such as the one described above is an employee-invented method for change, and as such, does not justify a change in the method. Such a concept puts a premium on the presentation of false motions to the industrial engineer when the task is being analyzed in an attempt to gain an unfair advantage. In the spot-welding case it was pointed out to one of the employees who had appeared as a witness that the "taking the part out and turning it around in his hands for the second spot" procedure that he had been using when the job was being timestudied, was a very clumsy and inefficient method. The witness replied, "We always do spot-welding jobs that way when we are being timestudied." Is the subsequent change in method a manifestation of some form of invention? I think not.

Now, the arbitrator who decided the spot-welding dispute understood that incentive standards are time measurements that should be used only with the task for which they were designed. Since the standard as first released covered an element of work involving the "taking out and turning around" it should not be used when the work element is "spot-move-spot." If a system is to be truly equitable, only standards designed to cover tasks as they are in fact being operated should be used.

An analysis of arbitration decisions unfortunately reveals that some arbitrators lack an understanding of this simple truth. For example, some arbitrators are quick to hold that if there is a methods change, the mere passage of time will make the normal time required to perform a task by an employee by a prior method applicable and correct for the performance of that job by an entirely different method. For example, an arbitrator whose awards seem to me generally sound, stated that the right to change an incentive standard, if there is a change in a method, should have incrusted upon it by implication a limitation to the effect that that right must be exercised within a reasonable time.

I think the fallacy of such a holding can be easily demonstrated:

1. If you are going to have sound incentive systems, the standards should be accurate. Therefore, the normal condition should be that the incentive standard which is being applied should be the incentive standard designed to cover that particular job performed by that particular method, and anything else is an erroneous application, and

there should be no vested rights in errors created by the mere passage of time.

2. If management has the right to direct the manner in which the work is to be performed, and we find there was a methods change which had, in fact, taken place, but that no new applicable standard had been issued, the management could ask the employees to perform it by the prior method. An interesting case was decided by Benjamin Selekman in 13 LA 585 on that very point.

Since the management had asked the employee to go back to a prior method, using a standard based on the normal time to perform the task by that prior method, the standard should be considered correct.

Now, after the passage of some additional time, the management could instruct the employee to perform the task by the new method and would then release a standard concurrently with this officially-instructed change. Would the same arbitrator then hold that because once in the past, the company failed to establish an appropriate standard promptly after a methods change had occurred, it could not now establish an appropriate standard for the methods change that had just occurred? I think if this were the set of facts, he might realize that his reasoning in the prior case was rather thin.

Management must maintain its incentive systems as accurately as it possibly can if its system is to produce fair and equitable incentive payments to all employees. The natural pressures for looseness and liberality can become very intense. The arbitration process can remove much of the tension that sometimes surrounds incentive rate establishment, but it can only do this if it does not itself engender further compromise and inaccuracy. If arbitration does bring compromise and inaccuracy in any case, such action cannot be justified on the theory that a little adjustment by way of a compromise will "keep peace in the family." It is the small compromise that may start the process of disintegration and inequity—a disease that can spread very rapidly once it gets started.

I appreciate that many of the limitations imposed upon the maintenance of a sound incentive system by arbitration awards are nothing but very fair construction of the clumsy contract language that management has often agreed to, for reasons known only to them, but I hope that the tendency of some arbitrators to *imply* restrictions into language when the restrictions are not truly there, or to compromise an incentive dispute in the belief that such action is "good labor relations" will continue to diminish so that the arbitration of disputes over incentive standards can be espoused by managements with enthusiasm.

Discussion—

PEARCE DAVIS

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Owen Fairweather's interesting and provocative paper deals, as you have seen, with broad concepts and also with numerous matters of detail.

I pass over most of his discussion of detail—because of time limits—to comment on some of the larger issues either raised by his presentation or suggested by it.

Union-Management Attitudes Toward Incentive Arbitration

I agree that it is proper and appropriate to arbitrate incentive grievances. To do so is both theoretically sound and conducive to better labor-management relationships. Therefore, to me it appears salutary that a constantly widening circle of management representatives is accepting this view. I am sure this trend will continue until arbitration of incentive disputes becomes as routine as discipline and discharge cases are today.

Unions, it seems to me, have never really been broadly opposed to this phase of arbitration, though there are notable present-day exceptions, as has already been noted. The hard core of resistance has clearly been on the Company side.

The upshot of the trend now developing will certainly be a substantially increased workload of incentive disputes in the arbitration portfolio. Such statistics as I have seen support this forecast.

As Mr. Fairweather has emphasized, some unions and some managements still prefer to reserve the right to strike and lock out rather than arbitrate grievances that involve the incentive system. Concerning these I would venture the prediction that they will seriously modify or wholly abandon this position in the not-too-distant future. Retention of these weapons carries the constant threat of the use of force to settle differences at the very time that industry—by agreement—is operating under an established regime of constitutional government. Resort to "self-help" for resolution of such disputes is a stark contradiction where union-management contracts are in force. Those who cling to methods of coercion are running against the tide of modern labor-management relations. In time, the measures they now advocate may be expected to wither away.

Justification of Incentive Arbitration

Mr. Fairweather justifies arbitration of incentive grievances primarily on practical, good human relations grounds. Not to do so, he says, establishes an atmosphere of conflict, creates a sense of frustration among workers. With all this, I agree. But I would go further. I would say arbitration of incentive disputes is fully justified on pure theoretical grounds.

In terms of the basic philosophy of the firm, there is no more reason why management should transfer to an impartial outsider authority to make final decisions in matters involving *discipline* and *discharge* than in disputes concerning *incentives*. Management responsibility for discipline in the plant and composition of the work force is surely no less fundamental than management's authority for operation of an incentive wage plan. One is not more "sacred" than the other. Neither represents a more crucial management "right" than the other.

Further, I seriously doubt that potential criteria for determination of incentive disputes by arbitration are less precise, or more vague than those utilized for discipline or discharge cases.

Arbitration of disciplinary issues functions, of course, within the benchmarks set by the "just or proper cause" concept. Certainly, these limits cannot be called narrow!

Indeed, I would say they probably are *broader* than criteria potentially applicable in incentive arbitration. Today, many incentive contract provisions and stipulations of the parties set up reasonably discernible boundaries within which the arbitrator is to function. If not, they certainly can be designed to accomplish this end.

It is appropriate to arbitrate incentive grievances for still another reason. I am quite certain that everyone professionally conversant with the subject will acknowledge that the setting of incentive rates—in fact the installation of the entire system—is a "scientific art" rather than an exact science. All who are informed would agree that there is an appreciable margin of human judgment implicit in the process.

Because it is generally recognized that substantial areas of subjective evaluation do exist, there is no longer any basis for the old claim that an arbitrator may upset a purely scientific determination that has been made with unique and unassailable precision.

The Incentive Arbitrator's Qualifications and Independent Judgment

The theme of Owen Fairweather's presentation is, first, that management should arbitrate incentive disputes and, second, that management should prepare its cases so that the "lay" arbitrator can understand the issues involved and, incidentally, be convinced of the rightness of the Company's position.

As already stated, I am in wholehearted accord with proposition one. With regard to the second I have *no disagreement.* I applaud any effort by the parties which is calculated to simplify the thoughts and the lives of those of us who arbitrate incentive disputes.

But I would not stop at this point. Speaking as an arbitrator to arbitrators, I would urge with as much vigor as I can command, that incentive arbitrators must be equipped and prepared to pass *independent judgment*—I repeat, *independent judgment*—on the merits of the Company and Union positions and arguments.

I do not wish to appear pontifical. But I do sincerely say that if we are truly to discharge our mandate of impartiality we cannot possibly be "innocents abroad." Incentive arbitrators themselves must possess sufficient technical knowledge and experience to evaluate, from the neutral corner, arguments persuasively urged upon us.

Offered at least two doors through which we may pass, we must, in fairness to ourselves, be ready to make a confident choice. I would add and emphasize that the more accomplished and adroit the presentations of the parties, the greater is the need for the capacity of independent judgment.

There is to be more incentive arbitration. More arbitrators will, therefore, decide incentive cases. I would think that the practitioners of our art who are not suitably equipped—especially those in the stage of younger maturity—would want to reassure themselves by adding to the tools at their disposal.

It is scarcely necessary for me to say that the remarks immediately preceding are obviously not directed to my "live" audience. I am sure all you before me have long since become aware of the point I make.

Your own practice demonstrates that you have. These immediate thoughts are directed, rather, to arbitrators now moving up the line and arbitrators yet to come.

I am not suggesting that anyone go back to school or that it is necessary for young arbitrators to become professionals in the field of industrial engineering. Such a course is unnecessary. Means are available for equipping one's self without undue effort and time.

The Not-So-Mysterious Scientific Art of Industrial Engineering

I would be happy if my next remarks were considered against the background fact that I know industrial engineers rather well, have worked with them for a considerable period of years and have a high opinion of their general ability and competence. Certainly I am not anti-Industrial Engineers. If anything, I am in the "pro" category.

Nevertheless, I believe Owen Fairweather is entirely correct when he states that unions commonly refuse to accept industrial engineers, from management consulting firms especially, as arbitrators.

Speaking with frankness, I think the unions are right—from their perspective — to take this attitude. Industrial Engineers as a group, indeed engineers generally, tend to be management-oriented. This circumstance arises (1) because of the climate of their professional training, first interests, and professional societies and (2) because by far the greatest number of their economic opportunities lie with the management team. Their bread is buttered on the management side and in their own interest they must lean heavily in that direction.

Because of the foregoing facts, I suggest that management not include in their arbitration clauses the frequently encountered provision requiring that the arbitrator of incentive grievances be a "qualified industrial engineer." Avoid the resultant search that leads round and round to nowhere.

Instead provide that the incentive arbitrator be one familiar with incentive systems and incentive methods—or words to that effect. The consequences will be more expeditious and fruitful. Such persons can now be found and will, I hope, be available in increasing numbers in the future.

In conclusion, I think you might be interested to know that even in the most "liberal" industrial engineering college curricula only a small fraction of total training time is concerned with training which bears directly on incentive systems and problems.

The relevant area typically is composed of one course in motion and time study, one in job evaluation and wage incentives and, possibly, though not regularly, a course in advanced motion and time study.

A "liberal" industrial engineering program would also require work in factory planning, quality control and production planning amounting, in very approximate terms, to 6 percent. The remainder would be distributed as follows:

1. Mathematics 15%
2. Natural Science 15%
3. Engineering proper 30%
4. General education 20%
5. Business subjects 10%

From the foregoing it is easy to see that arbitrators who are not industrial engineers should not develop too deep a sense of anxiety in the presence of professional industrial engineers. Those who are not already equipped have only a moderate amount of preparation to do. Do it, and when an industrial engineer passes by, hold your head high!