

THE ACADEMY OF ELECTRICAL CONTRACTING

Paper presented by

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Productivity Analyzed  
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At a meeting of the Academy of Electrical Contracting at Colorado Springs, Colorado in July 1974, I committed myself to submit a paper on the subject of productivity at the 1975 meeting.

In Mr. Webster's Dictionary he defines the word Production as follows:

Production - "The act of producing"  
"The rate of producing"  
"The amount of production"

Mr. Webster also defines the word Productive as follows:

Productive - "Producing abundantly"  
"Marked by abundant production"  
"Effective results or"  
"The production of goods & services"

So when we talk about productivity, or the lack of it, we are talking about the results of producing, or the amount produced, or the lack of it. We are talking about abundant production, or the lack of it. Quite possibly we are talking about something very far removed from productivity. Perhaps we are engaged in the creation of economic values of our own, with regards to productivity.

We hear much today about the lack of production and this criticism is not by any means confined to the Electrical Contracting Industry. It exists in all segments of the building industry. It exists in manufacturing plants, in chain food stores, in chain drug stores, or, in fact, wherever people are employed. The question is to what degree does it exist? Where do you find the common denominator that would prove that productivity, or the lack of it, differs today from what it was 2 years ago, 5 years ago, 10 years ago or 15 years ago?

If the lack of productivity is prevalent, how did it begin? Where did it begin? Why did it begin?

Did it begin during the war years, 1941 to 1945, when our government spent money to a degree beyond the imagination of most of us, for the building of war plants, war materials, etc? Men not qualified, with little or no background in mechanical work, were hired at the same wage rate and the same fringe benefits that the qualified skilled journeyman mechanics were receiving. The qualified skilled journeyman mechanic not only had the responsibility of performing the work efficiently, but also inherited the practically hopeless task of trying to train this "unqualified helper." Is this when he started to become disillusioned and said "the hell with it?"

Or did it begin in 1948, when the Congress of the United States enacted legislation now known as the Taft Hartley Law? Union leaders from our Nation's Capital told their membership, and it was repeated time and time and time again, that the "terrible Taft Hartley Law" was anti-labor legislation and this was repeated time and time again on the local level. And, basically, what the labor people were saying to their members was "you have been had."

Was it at this time that a reaction took place in the minds of working men who now thought that the Congress and Management were against them? Was it at this time that sides were being chosen with labor on one side and management on the other?

I'm no authority on the Taft Hartley Law, but I understand its main thrust was to prohibit restrictive and unfair labor practices, to stop secondary boycotts, to stop the Union Hiring Hall, to give every member of the union the same job opportunity and to stop "baseball bat" type of organizing. It would be my considered opinion it had more effect on unions other than the building trades unions.

In the 50's, Congress enacted the Landrum Griffin Bill which again was construed as anti-labor legislation. Was the working man now convinced by the adoption of the Taft Hartley Law and now the Landrum Griffin Law that the government and management were against him? Is this where productivity became a whipping boy? Was this when workmen started to refer to management as the "God Damn Bosses?"

Is the lack of productivity the result of, or at least in part caused by, other trades on a project? Perhaps by the prime contractor, who has not coordinated all the work, only his own, and his continuity is (to use the word loosely) rippling action here today, some other part of the building tomorrow, and another part of the building the next day, so that an electrician is moving from one area to another, changing tools, changing materials, etc? To what degree does this affect productivity? Where in your preparation of an estimate do you allow for this type of operation of a job?

When you as a contractor are awarded a contract, is the preparation for the prosecution of the work properly developed? Material ordered? Tools ordered? Jobsite consideration for storage of tools and material? Facilities for the men to store their tools and clothing? Are jobsite trucks assigned to eliminate the man-

handling of material? Are your foremen or general foremen trained to forget about the small talk with the men, such as the results of a football game, baseball game, or what Johnny Carson said on the Tonight Show the night before? So Mr. Contractor, I say to you now, with regards to lack of productivity, how did it start? When did it start? I might also ask has it actually started or do we just notice it more today because of the higher wage rates and fringe benefits we are paying?

In 1966, I sat in a conference at White Sulphur Springs, West Virginia with 5 of the larger contractors in the Chicagoland Area. These contractors were doing large steel mills and other large facilities. They were jobs that employed from 125 to 475 men. Their complaint was the lack of production. Some examples they cited were that foremen were leaving the jobsite for lunch and not coming back at the prescribed time (half an hour), but were coming back maybe an hour, an hour and fifteen minutes or an hour and a half later. While they were away from their immediate group, the work slowed down almost to a stop.

I talked about this with the business manager of the local union at the time and he said, "Why don't they discharge those people? There is nothing in our agreement that protects members of this union who do not do their work, who do not put in a full day's work for the pay they are receiving. Why are they making men of this type foremen?" He said, "The problem, it seems to me, is your problem, because you do not have the proper supervision if that is what's happening on your jobsite." Investigation later proved that it was not all the fault of management, and a representative of the union was directed by the B.A. to give a greater degree of attention to violations of the agreement, etc.

In order to satisfy myself that there is a problem with productivity, or the lack of it, I developed some 18 questions. I then selected approximately 30 contractors in the Chicagoland area who I felt best represented the area. They are large contractors, medium contractors, and small contractors. I sent these questions to them with a covering letter in which I indicated my purpose and asked if they would consent to be interviewed and answer these questions. All but a few replied and agreed to be interviewed. I think that I have interviewed somewhere around 25 of these contractors and I'm in a position to give you their answers to all these questions.

I might also add that I posed a few of these questions to other contractors on an impromptu basis and that I also interviewed

labor people.

In the Chicagoland area there are 6 local unions of the I.B.E.W.; they cover the counties of Cook, Du Page, Kane, Lake, McHenry and Will; the productive labor in these areas is as follows:

1970	154 million dollars	1973	184 million dollars
1971	169 million dollars	1974	179 million dollars
1972	166 million dollars		

The 25 Contractors interviewed had productive labor as follows:

1970	36 million dollars	1973	39 million dollars
1971	35 million dollars	1974	45 million dollars
1972	31 million dollars		

I would think that this indicates that the men in the firms to whom we directed our questions were men well qualified to give us answers.

To Question 1: Are you familiar with the fact that there has been a considerable amount of conversation regarding the lack of productivity in our electrical construction industry? The answer was 100%, yes.

Question 2: Do you believe that your company has had a problem with the lack of productivity on any of your contracts? The answer to this question with the exception of about 3 or 4 contractors was also yes.

Question 3: Has the problem of productivity, or lack of it, been on a particular type of contract, i.e. small, medium or large? All of those who agreed that they had a problem stated that this was on a large job. Perhaps at this point I should indicate that the consensus was that a large job is any job having over 30 or 40 men. This of course differs slightly from question 4 where we started with a minimum of 50 men, they indicated it starts with 30 to 40 men.

Question 4: See above.

Question 5: Do you have a nucleus of dependable men in your work force? When they are in a majority on a particular job do you find better productivity? The answer, with the exception of I believe one or two contractors, was yes to both parts of this question.

Questions 6, 7 and 8 are questions that pertain mainly to the Chicago area and our seniority system, which is the labor pool

from which the men are assigned on the basis of their seniority in the union. It differs somewhat from some referral systems. A few of the contractors indicated that they did have a problem getting qualified men from the seniority system and a good number of the contractors indicated they did not have a problem of getting qualified men. I would believe the difference here is the luck of the draw. Some of the men say their work was affected by the journeyman electrician that they received from the seniority system, some said it didn't make any difference.

Question 8: Probationary men are men with temporary union credentials. Some contractors have indicated a preference for this type of workman because they believe his attitude is better. Seriously, I believe the main reason was that they receive a lower scale.

Question 9: Turnover of men in the work force due to layoffs, quits and discharges, varies from 10% to 50% per year with some organizations.

Question 10A and 10B: Describe the use of a Superintendent, General Foreman, and Foreman. The larger firms have this chain of command and it is generally well established. In most cases the supervisory personnel come out of the work force, and are trained to one degree or another by the contractor.

Question 11: Small contractors have only foremen and as a rule they report to the owner or the estimator.

Question 12: Do you believe that the presence of a job steward on a particular job affects productivity? The answers were divided on this. But on the larger jobs, where the local union decides to select and appoint the steward, it seems that this has an effect on the job and the productivity. Strangely enough, some have said it helps, some have said it hurts. I would believe it depends on the man.

Question 13: Is your productivity, or lack of it, affected by the general contractor's procedures? And gentlemen, this was a real shocker because practically every contractor agreed that their work, to one degree or another, is affected by the procedures, or lack of them, of the coordination, or lack of it, of the general contractor.

Question 14: Do you believe that the Electrical Contractors Association, on a national level, should do more to bring to the attention of general contractors and architects that time lost due to the lack of their coordination on a project is going to be the basis

for additional monies for the trades affected? The answer to this varied. Most of them thought it should be done nationally. A few of them thought it should be done locally.

Question 15: Have you as an electrical contractor modified or in any way changed your estimating procedures, i.e. have you reduced allowances for the installation of conduit, wire, fixtures, etc? A good many of them admitted that they had. Their reason was the price structure that work was going for; their inability to get work using higher units.

Question 16: Have you as an electrical contractor changed or modified your percentage for overhead and profit? And again, strangely enough, many of them admitted that they had, and they said that the reason for it is the economic conditions of the day.

Question 17: Of the men interviewed, the one with the least amount of men on his larger job was 60, and the highest was 475.

Question 18: OSHA! My remarks on this will be limited because I have a "short fuse" on the question of OSHA, as have most of the contractors who were interviewed. I might inject this: That to comply with OSHA rules and requirements on the Sears Tower in Chicago could have cost the contractor an additional \$100,000.00 were it not for the legal action taken by our association chapter and contractors.

In my opening remarks, I indicated that a year ago I committed myself to submitting a paper on productivity. My reason for doing that was that for years I had interested myself in this subject.

In 1955, I became a member of the Joint Arbitration Board in Chicago. I served on the Board for some 17 years, the last 10 of which I was the chairman. You become somewhat privy to problems that come to pass in our industry.

As a member of the Joint Arbitration Board, I had the privilege of working with good labor men. One was the late Michael J. Kennedy, Business Agent of Local 134 and the other is present Business Agent of Local 134, Mr. Alphonse Soudan. During Mr. Kennedy's term we began to pick our agreement apart, or at least I did. One of the "Principles" of our agreement is that the Foreman is the representative of the employer. We had a clause in the agreement at that time that when the fifth man was hired he automatically became a foreman. I argued this was a contra-

diction, that if the foreman was our responsibility and our representative, then we should have the privilege of determining when his services were needed. Maybe we needed a foreman with two men, maybe with ten men. This was agreed to and that part of the agreement was eliminated.

We also had a traveling time and traveling expense provision in the agreement. It differentiated from the borders of the city of Chicago into the county. I argued that the jurisdiction of local 134 was set by the I.B.E.W. and it was their obligation to be on the jobsite anywhere in the jurisdiction without additional time or money. I pointed out that most people travel by automobile and that the highways were accessible and this was agreed to.

In 1972, in the February 24th issue of the Engineering News Record, a Mr. Edward M. Young, then a senior editor of the magazine, prepared an article on "Low Productivity" in which he said "the real sin of low productivity is high wages." He spent practically one year accumulating the data he put in this article; I have never heard it challenged. He stated, and I quote, "last year an east coast master mechanic parlayed a maximum \$11.00 hourly wage into a yearly salary of \$90,000.00; about \$76,000.00 of this was for overtime."

He also said, and I quote, "contractors agree to featherbedding clauses in union contracts knowing they can generally pass the cost on to the buyers of construction." He also said "union electricians must be on hand where temporary lights are used. They are paid \$7.00 to \$10.00 an hour around the clock to watch the lights burn." His suggested cure or cures: a separate set of labor laws, regional bargaining rules, eliminate featherbedding, eliminate craft type unions.

Just about one year ago, June 27th, 1974, the Engineering News Record carried an article about the "open shop leader Michael G. Callas" who indicates that the ABC (Associated Builders Contractors) a non-union operation is looking forward to a 25% annual growth.

In the November/December issue of 1974 Solutions, a magazine prepared by IBM corporation, there was a special report on productivity. Opening remarks were, "for several years American businessmen have been concerned about rising inflation and declining productivity." They ask "What is the Reason?"

The Research Institute of America staff recommendations dated



June 9, 1975, file 33, states, "few businessmen would argue against the need for boosting productivity. But even fewer can tell how to go about it."

Even the federal government national commission on productivity has failed to come up with any practical guidelines, despite more than one year of steady analysis.

Well, if the national commission on productivity of the United States government who spent over a year on it can't come up with an answer, I doubt very much if someone like myself can come up with an answer. I do feel, however, that the problem of productivity, or lack of it, revolves around supervision. I think each job, each contract, must be supervised in a different manner.

As I attempt to try and resolve this problem, I begin to wonder if we have a "Phantom" in our Industry. I wonder if when we talk about Productivity, or the lack of it, we are actually thinking of something else, such as wage rates, fringe benefits, traveling expense, traveling time, high time, low time, and overtime. Perhaps these are festering sores with many contractors and because of these they are transferred in thought to productivity, or the lack of it.

I think the time has come when NECA and the I.B.E.W. must make a judgement on all agreements that call for control of supervisory personnel and also other items of expense that are above and in addition to normal wage rates.

I think every contractor member of NECA has the responsibility of analyzing his own operation and to determine whether he has a problem with productivity, or the lack of it.

QUESTIONS FOR CONTRACTORS

1. Are you familiar with the fact that there is and has been a considerable amount of conversation regarding the lack of productivity in our electrical construction industry?
2. Do you believe that your company has had a problem with the lack of productivity on any of your contracts?
3. If you have had a problem in the lack of productivity has this been on a particular type of contract, i.e. small, medium or large?
4. If it has been on a large contract have there been more than 50 to 100 men on that job?
5. Do you have a nucleus of dependable men in your work force and when they are in a majority on certain jobs do you find a better productivity?
6. Do you have difficulty in obtaining qualified help from the seniority system?
7. Do you believe that the Seniority System has any effect on the productivity of the journeyman electrician?
8. What is your experience with the use of probationary men?
9. Would you be in a position to give me an approximate percentage of turnover of men in your labor force?
- 10A. Would you describe you use of a Superintendent, General Foreman and Foreman.
- 10B. Are your supervisory personnel trained by you?
11. If you do not have a superintendent or general foreman to whom do your foremen report?
12. Do you believe that the presence of a job steward on a particular job affects productivity?
13. Is your productivity --- or lack of it --- affected by the general contractor's procedures?
14. Do you believe that the electrical contractors association at the national level should do more to bring to the attention of architects and general contractors that time lost due to the lack of their coordination on a project is going

to be the basis for additional monies for the trades affected?

15. Have you as an electrical contractor modified or in any way changed your estimating procedures, that is have you reduced allowances for the installation of conduit, wire, fixtures, etc.
16. Have you as an electrical contractor changed or modified your percentage for overhead and profit?
17. What is the largest labor force you have had on one job?
18. OSHA?