

THE ACADEMY OF ELECTRICAL CONTRACTING

Paper presented by
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Rear View Mirror

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FORWARD

The electrical contracting business, since its beginning, has been dynamic and part of an ever-changing world.

Many of you have been in this business a long time. You have contributed to its growth. But there does come a time when each of us phases out. At that time we should ask ourselves, "What did I contribute?" "How can I help benefit those who follow?"

This paper, "REAR VIEW MIRROR", is based on a talk I presented to the Tri-District on June 22, 1981. I tried to put myself in the moccasins of the younger electrical contractor and asked, "What would be interesting?" "What would give them something to take back to their respective businesses to think about?"



Norman D. Ferguson

"REAR VIEW MIRROR"

Now . . the beginning of my road . . on a business learning trip that has many grades, elevations, curves and views. Much of the input formulates your opinions on decision making.

It's hard for me to believe -- let alone you -- that 65 years ago my dad was in the electrical contracting business in El Centro, California, which he had established in 1913.

Dad felt that I should learn the meaning of hard work (even at that tender age). Work that has a measurement and sense of accomplishment he felt formed good work habits -- a disciplined life. Dad started me soaking leather heads to put on the nails in assembling the porcelain knobs (which came packed in the barrels of sawdust). The knobs were insulators used in the walls and attics of open wiring.

As time went by, I kept his books and worked on the jobs. I did testing by putting a large lamp screwed into the fuseholder, and by twisting two or more pigtail sockets together in a series -- then making the test. There were times that a lamp would blow up and give you a good burn.

What would OSHA say today?

Can you imagine, in this day and age, sending a teenager out alone to put on spurs to hike lighting poles on football and baseball fields in order to replace 1500-watt lamps in a 40 to 50-mile desert sandstorm?

When Kay and I were married, in 1933, I was all set. I would someday inherit my Dad's business . . . the Ferguson Electric Company -- the largest in Imperial Valley.

However, after a few months as newlyweds -- my bride, a cornhusker from northeast Nebraska, said: "I don't want to live in Imperial Valley!" Wow! A career decision had to be made. Can you guess who won? This was in 1934.

Most of you really don't know what a real depression is like. Those conditions caused the start of our social welfare state of today.

Now . . . back to my road of business life in 1934.

I walked the streets of Los Angeles -- along with thousands of others -- trying to find a job -- just anything -- at any pay. There was no unemployment insurance back then, or for that matter any social welfare.

No one else could afford to help (nor were they expected to). That's as it should be -- each and everyone should be on their own, and responsible for themselves.

Then word came. There could possibly be a \$14.00-a-week job available soon, in a supply house in San Diego. I hitchhiked to San Diego three times to land that \$14.00-a-week job!

A few weeks later an emergency call came from Ferguson Electric Company in El Centro. Word was that the local theatre service blew up, and 750 MCM copper was needed to re-pull the service. I was given the order to fill. I crawled under the docks and found enough footage -- and sent it on its way -- then saying to my new associates, "Now that's the way to give real service to the contractor!"

Would you believe I shipped weatherproof wire 123 miles over the mountains to the desert to be pulled into conduit?!

In the supply business there was a lot to learn:

- Receiving
- Freight carriers
- Freight claims

- Freight weights
- Freight costs
- Routing
- Shipping
- Timing
- Checking
- Packing
- Packaging
- Warehousing
- Stocking
- Minimums/Maximums
- Stock levels
- Inventory control
- Taking orders
- Writing orders
- Selecting lines
- Introducing new lines
- Promising delivery
- Delivery dates
- Order follow-up]
- Customer service
- Dependability
- Integrity
- Opportunities for direct sales
- Understanding the product
- Knowing what the product can do for the contractor
- Understanding and using catalogues
- Fully understanding and using price books
- Learning how to handle contractors

One of the contractors who was in every day wore an oversized mackinaw. It became a routine procedure to carefully follow him down the aisles to ensure that all of the material was charged out!

I witnessed how contractors, and yes, their men, waste time -- time which is money -- visiting the supplier on the pretext of picking up materials.

During that year the business agent offered me a journeyman's ticket -- (At that time, the wiremen were making over \$100 per week with the overtime, in preparation of the 1935 Exposition and World's Fair to be held in San Diego. The journeyman's rate was \$1.125 per hour and there were no fringes! Residential wiremen were making \$16.00 per an 8-hour-day for two men.

Why did I turn down the business agent's offer? Because I had a goal -- a goal to be a corporation president someday.

I did not realize then that nothing happens unless something is first sold:

You sell each other everyday -- your wife, your kids.
You sell yourself ... OR you UNsell yourself.

You sell your supplier as well as he sells you . .
You sell your customer at a profit or maybe your customer sells you on not making a profit.

When I first came to CALEWO, there was a total of eighteen employees -- primarily a motor shop that had started with two motor winders in 1917 . . .

There was one controlling stockholder and five minor stockholders (three of whom were in the motor shop -- one in the office and one in wiring -- an area that consisted of three wiremen -- mostly to wire in and connect the motors);

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CALEWO's way of doing business was not a hard-dollar contract bidder. Rather, CALEWO was more of a sales and marketing firm -- showing the customer he could get more for his money -- as well as better customer service satisfaction from CALEWO.

Two weeks after I joined CALEWO, I knocked on the boss's door --

He said, "What will you have, Son?"

I replied, "I want to be fair with you. I'm going to have your job!"

His response: "If you think you can get it, go after it!"

Can you imagine the nerve as to be so brash? I assure you, though, I was willing to pay the necessary price. And the price was heavy. Yes it was heavy -- on my wife, and our children. By not being able to be home and enjoy the family in those early years. Vacations were always "business-oriented" and most of our friendships were dictated by my position in the firm, and coming up in the business world.

Not long after joining CALEWO, the wiring stockholder left, and one of the wiremen was appointed to take over that part of the business. In my opinion, he was a very good wireman . . . but

Without anyone else knowing, I started calling on potential customers on what few 'off' hours I had. I presented ideas -- made lay-outs. Understand, this was done without any compensation. Soon the customers began to buy from me. When they did, I would turn the job over to the new department head.

When I talked to the customer, I would visualize what would be best to help his business in order to make him the most money at the least possible cost . . . and at the same time, make money for my boss as well.

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Soon, the new department head had to hire additional help. The big boss thought that in my immediate boss he had found a diamond in the rough . . .

As time went on with the hiring of more men, billings were increasing -- profits were showing. It wasn't long before my immediate boss's conscience began to work on him.

What happened was -- I kept my mouth shut and kept trying to make my boss look good.

After a while, my superior began to stop at the Red Brick, a little corner bar in the neighborhood, to have a beer and think things over, before going home. In time, he dropped in earlier and earlier, and was getting home later and later.

Meanwhile, the big boss became aware, as the wiring crew outgrew the motor shop crew by quite a bit -- that I was the one who had been responsible for the new-found business.

In 1937 I became the manager of the wiring department.

This is a good place to park a moment and reflect on this business road learning curve and its education . . .

You find selling comes first, but the pitfalls in the back-up must be minimal in order to have the profit you expect and/or desire.

You and the customer must be sure that you both visualize the same end results of time, quality and quantity, or you are heading for trouble and losses.

Then schedules for starting -- progress -- completion -- the importance of documented timekeeping with what the man accomplished that particular day in a given area -- to maintain an environment to get the maximum productivity out of your manpower and tooling.

The importance of a management reporting system to maintain job as well as overall business control -- wherein a daily job log can help keep you out of trouble.

In 1937, when I moved into management, there was a new vista to be seen -- not just selling the jobs -- then assembling the materials and tools from the inventory or through buying, plus having the manpower assigned to the job, then waiting for the job to be completed.

When I first came to CALEWO, there was no system of estimating -- it was up to me to create one.

The logical thoughts -- in my mind's view -- was that electricity comes from a source beyond your involvement.

But you'd better know the conditions under which it will be supplied, then you start to make your take-off at the beginning of your involvement.

You then follow it to the point where it accomplishes the desired results that your customer had in mind.

When you price the proposal, it is not just calling one or more of your suppliers for a price.

When you study purchasing, you find there is a great deal more success to be achieved.

The manufacturer, his representatives, and the supplier -- when asked, can be extremely valuable to you and your profits.

You must have mutual respect and confidence.

When the two or more of you reach the desired price and conditions, then you should help him to find ways that will assist him in making more money.

Yes! There is more to purchasing than looking in a price book or having your estimator call a supplier ..or the danger of your man in the field calling in his order directly to the supplier. Profits can be seriously affected.

Another area that can surely affect your profits -- one that should be carefully monitored -- is billing. Timing the invoicing, then following up in an expedient manner.

When a customer receives a statement, and it's not to his liking or satisfaction, you don't get paid. So the discipline has to have more thought than just a clerk preparing a bill and mailing it.

Maybe you should consider personally reviewing it .. even personally delivering it.

You did not have to be a genius in San Diego in 1939 or 1940 to realize that the United States was approaching involvement in World War II.

This feeling caused many worried thoughts -- as well as many opportunities.

One of my opportunities was to push myself into part-ownership of the business.

The boss and my wife knew that I did not have the money period . . let alone enough to make an investment at that time.

With this in mind, he was willing to call my hand and open up stock for sale . . an unprecedented action on his part.

But what they didn't know was that when I went to work for CALEWO, upon receipt of my first raise, I (for the first time ever) deceived my wife by not telling her about the raise, and placed the extra cash into a savings account. Thereafter, every other raise was handled the same way.

True . . this may not have been fair to my family. But I did have a goal in mind and was willing to pay the price.

Another opportunity that I had -- in addition to my job with CALEWO -- was that I sold the government-appointed general contractor on the idea of hiring me to head his electrical division as project manager and superintendent of a major military project . . . which, at that time, was when the United States government did not recognize subcontractors.

I hastily add that with the addition of this second job, I shared my salary with CALEWO, but it was okay for me to spend 16-20 hours a day covering both jobs -- including every Saturday and many Sundays.

This was my primary schedule of life during World War II.

On this second job, I learned a great deal about Unions. The business agent (not the one mentioned previously) came to me on the project, and in effect, stuck a knife in my back saying, "Norm . . you do want to belong to the Union, don't you?"

Naturally, my reply was, "Of course I do!"

This was a blow to me -- but at the same time opened up other avenues and new opportunities.

A short time later, while job walking in one of the many buildings, I found one of the imported out-of-state wiremen goofing off. Upon attempting to question him, he snapped back with a "You can't talk to me . . . "

So I pulled out my brand-new, paid-up Union dues card and replied, "My dear brother, let me see your blankety-blank paid-up card!" Just as I thought: His dues were not up to date.

Later on, he became a pretty good foreman.

Another example:

CALEWO had a master ship repair contract. We were doing jobs on many ships, including adding the first radar shacks on various troop and supply ships in preparation for a major campaign in the Pacific.

My Union brother, the business agent -- now a good friend -- allowed me to recruit my competitors' men from their jobsites in order to work for CALEWO on Saturdays, Sundays and holidays during that period of emergency.

In 1948 and 1949, I got CALEWO into a contract (based on a newly-hired engineer/estimator's estimate). He claimed to have had experience in this field.

CALEWO did not have the proper experience. As a result, we called our two banks for more money to help our cash-flow situation. Their answer: "We don't have that much loan capacity." And they didn't.

I then went with our bonding agent to Los Angeles to speak with the bonding underwriters. They took a look at our financial statement and then said, "You are liquid .. why should we worry?"

We said, "We know that, but we need some cash flow assistance now."

Their answer: A flat "No!"

We called all of our major suppliers in, at one time, and presented our problem to them. They said they would help the best they could -- and they did -- because our record had been cash discount.

In addition, we went to the small business loan agency -- (at that time called "Loan Agency of the Reconstruction Finance Corporation) -- in order to procure a loan -- signing our individual homes and property as security.

The lessons I would like to pass on to you are:

- (1) Too many contractors try to get into their competitors' field without the proper experience and know-how;
- (2) They try to do more business than their capital can handle;

- (3) More contractors go broke with too much work rather than not enough!
- (4) Add a healthy percentage to your margin -- You will still get your share.

Now ... back to me.

My associates, meanwhile, who had enjoyed the tremendous growth of CALEWO wiring department and the financial rewards they received . . . were now having a field day trying to get rid of me and go back to the 18-man motor shop.

My answer: "I'm not a quitter . . and CALEWO will continue to grow!"

Soon afterwards, about 44 percent of them left the firm.

These experiences teach you a lot about people -- They enjoy a free ride but leave you when the going gets rough.

The major stockholder did not want to take the calculated risk to this extent any more, plus he wanted to be able to plan for his retirement. However, each time I would present him with a plan to buy him out, he, in his paternal way, would not be quite ready to give it up to the boys -- that of being President and the major stockholder.

In 1952, I finally sold him on the idea of taking the building for his stock, and then negotiating a percentage lease, keeping him on the payroll on a consultant's basis, for a given length of time.

I subsequently became the President, and he began to make more on his investment than he ever did while managing the business.

Lesson: When you have a goal -- stick to it.
Discipline yourself and be willing to pay the price.

When you put a package together, be sure it's a good deal for both parties.

On this road of business life, when you move in as Chief Executive Officer, you find more pressures in producing a profit than you ever realized. Only then do you really begin to understand the whole picture.

Example:

You borrow money but your cash flow is not enough to cover your business needs.

What caused all of this high rate of bank interest?

I need not remind you that the cost of money is high -- so why is it necessary to ask the bank for money?

You find that you and/or your employees have not done all that the job is paying you to do.

More times than not, the borrowing is caused by:

- | | |
|-------------------------|-------------------------|
| (1) Inventory | (4) Unbilled retentions |
| (2) Unbilled costs | and others . . |
| (3) Accounts receivable | |

This hurts your profitability. Now . . . let's examine the above-mentioned areas -- one at a time:

Inventory

Shelf inventory investment needs turnover. When your capital buys one dollar of inventory from the supplier, you put it on the shelf; that same day you remove it, sell it, bill it, and collect that dollar's worth of capital. Repeating that cycle everyday makes the capital worth \$365 in a year.

When the sample cycle is completed each week, the capital is worth \$52.00.

When the cycle is completed each month, the capital is worth \$12.00.

When the cycle is completed only once each year, the capital is worth only one dollar.

Now . . listen to this:

When that one dollar's worth of capital is not completed for two years, it is worth only fifty cents.

Do you, too, have some parts of your inventory that you have carried for more than two years?

Think about it.

Some of your inventory is because someone goofed on a job or estimate.

Some of the cost is due to poor purchasing practices, as well as not setting minimum/maximum's ... inventories.

Accounts Receivable

Accounts Receivables increase because:

- (1) Credit was not properly checked or acted upon
- (2) The person making the sale and the buyer did not understand each other as to what was to be done in time, quantity and quality . .
- (3) The billing was not acceptable ..
- (4) The follow-up was not timely enough
- (5) Settlements were not soon enough ..
- (6) Leins were not executed ..

plus other causes

Unbilled Costs

The unbilled costs are too high because:

- (1) None or poor scheduling;
- (2) The field management ordered too much material on the job and it is not turning your dollars over fast enough as well as being subject to theft;
- (3) Someone with the responsibility did not cover the cost in the billing;

plus other reasons . . .

UNBILLED RETENTIONS cost you more than they should because:

- (1) You have not sold the customer on a percentage reduction after 50 percent of the job is complete;
- (2) You have failed to bill for the retention;
- (3) You have failed to convince the customer that you have finished the job;
- (4) You have failed to follow-up or complete your necessary paperwork (i.e., submittals, as=built, etc.)

As a result, you and I pay our bankers a lot of money that should be in our coffers. Often the banker gets more from you than your net profit dollars before taxes.

Many more learning experiences have happened to me on my business road of life including the organization and creation of the N.E.C.A. Chapter in San Diego and Imperial Counties, with two other contractors who are no longer with us.

It has been a pleasure to serve our Industry in many capacities, some of which have been as the President and the Governor of the Local Chapter -- to head the State and District offices -- to serve on several National Committees -- to chair the Marketing Committee for some time -- to be the first N.E.C.A. National Vice-President from the San Diego area -- to have run for the National Presidency -- and to have been one of the founding fathers of the Academy.

Earlier . . . you were asked to join me through years of trials, tribulations, experiences, and learning curves for the purpose of this assignment of profits and management.

Part of my purpose is to show that nothing worthwhile comes easy.

The first thing that happens in a business is that somebody has to sell something. How you make that sale is up to you.

In my opinion, one of the most important things is for you, yourself, to look in your own mirror.

Be honest with yourself -- find out about you and:

- your strengths and weaknesses
- your likes and dislikes
- your resources
- your potential depths
- your ability to influence people
- ah-hhh, yes . . . your own gullibility
- Can you handle your people, or do they control you?
- What do you wish to excel in?
- Remembering you cannot be all things to all people
- Do you prefer to bid and then let the chips fall where they may -- or do you bid, and then pick up your competitor's price -- then cut your price -- banking on the thought that if they can do it for that price, you can come out on it, too?
- Or, do you just have to have every job?
- Or, do you know that you can help the customer get more for his money and his desired end results . . .

There are many more angles -- each one of you practice one or more of these ways. Some are constructive -- some are destructive -- to the customer, to you, and to the industry.

Truly challenge yourself as to your "CAN-DO" attitude:

- your dedication
- your discipline of self
- your "stick-to-it-tive-ness"
- your willingness to go that extra mile --
- your goals --
- Are you a self-starter?
- Are you a communicator?

In your own self analysis, you will find what market best fits you and your particular business. This is for now -- not for all time.

As you change, your business will change. Your environment will change.

So-oooo, you made a sale!

At that point, you and the customer are happy. You and the customer agree. Let's get on with starting and completing the job. At this point, it is very critical that you and the customer have the same mental picture of the expected end results, as to time, quality, and quantity.

Should this not be -- you're both in trouble!

Regardless of the size, your firm is like a fine watch -- or automobile -- or sports team -- or, for that matter, your own body. In all cases, each activity, each function, part, etc., has a purpose and an expected end result. Should any of these areas not accomplish its mission -- then you are in trouble.

When this happens in your own business, you will not make the profit that you should. It is up to you to find out about yourself and those to whom you are responsible.

Following, are a few suggestions:

- First - Strive to be the very best in all your pursuits;
- Second - Arm and surround yourself with people who are wholeheartedly in support of your goals and your objectives;
- Third - Be sure you have a full working knowledge of your product and/or service;
- Fourth - Be sure to have full control of your manpower in areas of middle-management; supervision; sales; estimating; production; purchasing; materials; tools/equipment; accounting/collections; top management, and most importantly: your information systems
- Fifth - Leave no one facet to remain second best
- Sixth - Check out all of your people thoroughly before hiring, and be quick to change when they do not pull their share of the load.
- Seventh - All businesses are born out of just two basic ingredients:

MONEY and PEOPLE

CONCLUSION

Thank you for riding along with me today on the "Road of Business Life" . . . in electrical contracting.

My objectives were to simply make suggestions -- some of which might give you an idea or two which, hopefully, will help you to be more profitable.

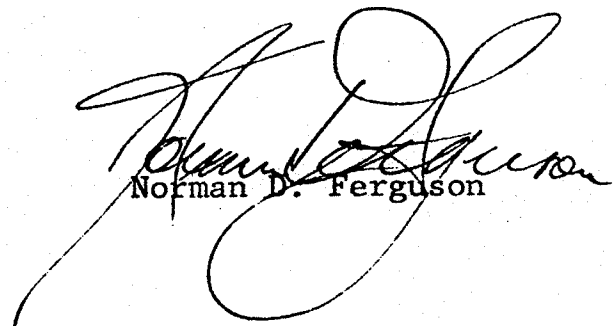
These various objectives contribute to the achievement of the goal of more profits for each and every one of us for each dollar billed . . .

Now . . . at the end of today's "Road of Business Life", looking in my own "REAR VIEW MIRROR", I see my old boss in his paternal way . . .

And yes, now I see myself, in my paternal way, of having trouble turning the business over to my own successor with his goals.

I ask myself, "Does he have all that it takes?"

And I know the answer is "Yes! He does!"



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