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INSULATION CONTRACTORS

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# The Wrapper

## HISTORY OF DEVELOPMENT OF APPRENTICE TRAINING IN LOCAL NO. 16

A Personal Perspective by

Hans Siebert

#### HISTORY OF INSULATOR'S TRAINING

The interaction between labor and management is often imagined to resemble a rift. Such imagination includes transactions between Local 16 contractors and the union. Yet, both parties have existed and worked together under agreements on an almost continual basis since long before World War II. (During the war relations between unions and management endured government and military constraint). On the whole, the relationship between our employers and our union has been one of cooperation rather than strife. Cooperation is, after all, what the word "agreement" signifies.

These agreements ("contracts") spell out the professional responsibilities we have toward each They do not define our personal other. relationship. Still, almost everything we do professionally has an effect on our personal life. The purpose of our professional activity is to manage our living. The more skilled and efficient we work, the more capably we provide for our existence. One of the more consequential aspects of becoming proficient is the manner in which we are trained and what we learn through work experience. An agreeable method to obtain skills necessary to perform well as an insulator has not always been available, nor has it always been sufficient.

The development of training in Local 16 has its roots in two distinct circumstances. One was the degree and level of cooperation between workers and employers. Most of this cooperation was shaped by how both parties responded to trade demands. The other was the fact that one member of Local No. 16 recognized the need for a well

planned system of training, realized it was lacking and did something about it. The two dynamics came together into the resultant arrangement.

During World War II the trade experienced dramatic increases in work load and personnel. It is said that, at times, as many as three thousand people were working in the area covered by Local 16. This influx was primarily the result of the shipbuilding effort made to supply the war machine. The development of other industries, such as power houses and refining processes, had much less of an influence. Many immigrants, lured by the promise of defense jobs and the opportunity to help the country, flocked from other states to the California ship yards. Most of them were untrained or unskilled for the available positions. Such sudden increase in workload created formidable problems with the capability to supply trained workers.

In fact, during the war period neither the Union nor the employers had established formal methods of training new employees. With rare exceptions, -there exists only fragile photo evidence of some training being available -- instruction was done in an haphazard, chaotic fashion, and a proceed-asyou-can basis. Typically, a foreman or experienced journeyman would train the newly hired help to perform only certain specific work processes and place that worker on the designated task when he or she was thought to be able to carry out that task. Not much was done to teach skills beyond individual tasks. The time involved was often no more than a few hours. Also, since much of the training was limited to specific job details, workers wanting to improve their job skills, had to accumulate competence as they went along through a variety of jobs rather than through planned Issue 3, Page 2

training opportunities. This system was erratic at best. Needless to say, chances of this process providing comprehensive skills were few and far in between. The well-rounded journeyman, who knew all aspects of the trade, was unusual and invaluable. On the whole, workers were qualifiable only as "semi-skilled" and could not be called "journeymen" as we understand the definition today.

There are no exact records of how many of the workers were union members. It is assumed a majority of the wartime workers never became members. Instead, they worked under a "permit" system, whereby workers paid a work assessment or "service fee" rather than membership dues. Actually, many of them may not have wanted to become union members and preferred the freedom of moving from trade to trade when laid off. In addition, unions discouraged dual membership.

Immediately after the war ended, the large number of these "trained" hands posed problems for both employers and the union. For one thing, employers were committed to the union via contracts and could not hire randomly "off the street", even if they liked the work and abilities of the person submitting application. Additionally, employers were often swamped with job solicitations without having a matching work load available. The volume of defense work had dropped dramatically. The trade could not support all the available workers. Thus, if the employers didn't have the jobs, the Union could not make the referrals. Accordingly, the Union was unable to manage most of the people who knocked at its door trying to obtain work. To fix this, labor and management jointly resolved to establish a selection procedure to weed out and accept qualified workers. They set up specific standards of skill levels. Workers, who wanted to remain active in the industry, had to be able to pass examinations confirming they were able to perform all of the notable operations of the trade. The Union and the employers established an "examination committee", to administer an exam, -- an early version of the mechanics test -- wherein such ability had to be demonstrated. (By the way, this committee proved to be an initial form of the later joint committees dealing with such matters as health & welfare, vacation, pension, and apprentice trusts.)

The "Joint Examination Committee" (J.E.C.) also established specific completion requirements for "improvers" entering the trade after the pool of wartime man power had dwindled. In the late 1940's and early 1950's, more than rudimentary skill aggregation had become necessary to pass the qualifying examination. This exam obligated proficiency in cutting miters and lags on cork and magnesium carbonate, as well as on calciumsilicate applications. Tests were given for both cold and hot work. The aspirant had to be able to design, affix or sew canvas and asbestos cloth over a variety of insulated shapes and to construct pads for marine applications. Most of the cold work occurred on ships ("Reefers") transporting refrigerated components and perishables. The primary material used was cork. Mechanics examinations were conducted on the job, where practical, real-live challenges, and problems had to be accomplished by employing the materials, methods and specifications of a contract project.

Not all of the tests were performed on the job. Some were held in the warehouses of some of the shops. Two major companies, Fiberglas Engineering Co., also known as FENCO, (Now P.C.I.), and Plant Rubber & Asbestos Co. are said to have made space available when they were still located in San Francisco; "on or near Mississippi Street".

During a typical mechanics examination, aspirants would be transferred, if only for a short duration, to the "reefer"-job, in order to prepare and complete the exam. Both, union and employers were said to be quite tolerant of this job-hopping procedure. One old-timer, a former business agent, claims these adjustments posed more of a problem for the union dispatcher than for the employers. Work on the test and review at completion often took several days. Unlike today, graders knew whom they graded, often checking the work performance as it went on, or even giving advice and instruction. After the assignments were

completed, the joint examination committee reviewed the completed tasks and decided on the results.

Understandings about selecting and schooling applicants expanded into contractual arrangements. The following quotes, from a short historical review attached to the first set of improver regulations, give some insight into the developments:

"...Sometime later (during the mid fifties, Ed.) Local No. 16 acquired space in an employer's warehouse and assembled pipes, fittings, and tanks together for the taking of a more representative mechanics examination. The insulating material was supplied by the employers. The grading committee and the examinees met one Saturday a month for conducting the examination, which included a written and a field part and required several Saturdays for completion.

Still later, it was suggested that all improvers attend these meetings in order to gain practice in work not available to them on their jobs. The examination committee acquired the additional responsibility of instructing such improvers when they appeared, attendance being voluntary at that time. As considerably more material was required than formerly, an arrangement was made to buy this material from the employers who furnished the space, and the cost was prorated among all the employers on the basis of man hours worked in the industry...."

On December 3, 1958, at a trade board meeting, a resolution was passed to have all improver applicants take an applicant examination which included writing and mathematics. The grading of tests was assigned to the Joint Examination Committee. Only applicants who passed this test were accepted in the industry. The math portion of

the test included addition, subtraction, multiplication of whole numbers and fractions, as well as ratio and proportion problems and some simple, sentence type questions. The writing consisted of an essay of at least 500 words in length.

On August 1, 1961, language was added to the collective bargaining agreement, which included an employer payment of one cent per man hour into an "apprentice training fund". This fund was used to defray costs incurred in obtaining materials for the training and mechanics exams. Additionally, the fund paid for rent of a "larger space which had become necessary". A joint board of trustees was formed and put in charge of these funds. instructor from the union received transportation costs." It was at this time that the person, who had spent a lot of his own time in developing the training, became the administrator of the trust. There was no compensation for any administrative function, yet. The minutes of the apprentice fund show that compensation for the administrator developed over a period of time, after the amount of the administrator's work and involvement had first been demonstrated. Pay for this work was granted with great resistance and only after the need for this outlay had been persuasively demonstrated to the trustees.

There was no written mechanics test until sometime in the late fifties. The transition to the current formal training and testing procedure was mainly accomplished by one Local 16 member; none other than Brother Richard Holmes. "Dick" Holmes needs more than a passing mention. He had, what might be called, a real propensity for mathematics, and he had developed an abundance of practical as well as theoretical knowledge connected with pre-fabrication work. He and his partner, Jack Friend, were the Local 16 pre-fab experts. Having graduated from the University of California, Berkeley, Dick also was attracted to the educational process. He was, for purposes of developing the training program, the right man, at the right place, at the right time.

Dick's track to creating an acceptable program (acceptable to both employers and union) was not always easy. The two parties had to be convinced of the exigencies of Dick's ideas; not the least was the notion that an organized training was actually needed. After all, the industry had done fine without such for over forty-five years. (Local 16 received its charter in 1911 and had been in existence that long.) Additionally, training was not at the top of the agenda for either the business manager or the contractor. To both parties instruction was an indirect benefit and less quantifiable than the number of jobs referred or profits made. It could easily be placed on the back burner. For Dick, though, no other matter was more important than competency in your work.

Even more of an issue against progress in these attempts may have been Dick himself. Anyone, who knew Richard Holmes, would attest to his "droll" and idiosyncratic personality. In order to explain how Dick could be his own worst enemy when dealing with employers or business agents, warrants some reflection on his personality.

Any once-over of Dick Holmes' representative nature has to contain some anecdotes about his behavior, habits and appearance. therefore, a skinny, six feet-two inch, ashen looking person, with an enormous Adam's apple protruding over a dark blue, star-dotted tie; with graying and receding hairline, wearing perennially off-white shirts. Imagine this person almost always sporting a brown, sometimes stained, business suit together with cheap mesh-fabric or canvass-top deck shoes. The colors of the shoes never matched the rest of his clothing. Imagine further, that this person was in possession of a large, utilized and banged up Chrysler station wagon, which, when in motion, almost always exceeded the speed limit. Conjecture up a bachelor, who was somewhat of a social recluse and who lived and worked alone in his Oakland, upper Broadway house, which he heated by burning in the fire place old cardboard boxes and other combustible trash. Imagine speeches and instruction coming at you in rapid-fire sentences, darted at you almost with contempt and with an incredible anger about having to state the obvious.

Dick's telephone manner was appalling. If you had occasion to call him, he would immediately anticipate your question, interrupt you, respond with a ranting decision and hang up without allowing time for any further comments or questions. Generally, this behavior affected your design of dealing with him. Anytime you talked to him, you had to take his current mood into account. Just in approaching him, you always felt unsure about whether to call him "Mr. Holmes" or just plain "Dick". Much of the time he tried to be amiable, but the feeling never left you that this was extremely temporary and could be rescinded at any time. Finally, fancy a disposition, which was eminently intolerant of any frivolity or random imagination. Now place this person in charge of one hundred, or so, combative improvers.

In spite of whatever outcome this juxtaposition might call up in your mind, murder and mayhem were not the rule.

The above description is incomplete without reflecting on Dick's knowledge and intellect. Dick held a degree in mathematics and he knew his subject. Everywhere you look in his papers and in his lesson plans you can see his love for computation and numbers. Dick would include numbers in even the most simple explanations. For example, when describing how to mud a breeching, he insisted that a flat trowel, when used with finish cement, had to be worked precisely at an angle of "no less than 11 degrees and no more than 13 degrees."

Unfortunately, because of this propensity for numbers, he was totally convinced that everything else, -- life, the universe, and anything at all worthy of contemplation - was only following mathematical accuracy and pretext. To him there existed no other scheme or reality. Dick's entire perception of everything was biased by his demand for mathematical order, and so was the resulting strategy. Dick's approach to any problem was usually to quantify it numerically and then "to solve it in the most efficient manner". Aesthetic or pragmatic approaches were out of the question. Indeed, to his mind it was the mathematical

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method which set all limits. Richard Holmes' reasoning went something like this: a: Determine or find a problem. b: The solution to a problem is always mathematical. c: If the correct formula is found, the problem will be solved, "in the most efficient manner". d: If a formula cannot be applied, there exists no problem and nothing further needs to be done...."

[Dick accused me once of having a closed mind!!!]

Richard Holmes was the quintessential nerd. He would probably have become a computer fiend had he survived to the late seventies. A good example of his "program-like" sense could be observed in the way he arrived at the school before the start of improver lessons. Exactly two minutes before the scheduled time, the Chrysler would careen around the street corner, screech into the driveway and park in front of a sliding truck entrance to the school located behind a machine shop. (At the time the school was located at 8710 "G" Street in Oakland.) The front bumper came to stop at exactly six inches away from the door; Not four inches away, not eight inches, but six! This operation was done with such regularity and such uncanny precision that it just had to be an automated event. On one occasion this question was put to a test. An improver left an empty garbage can in the spot located exactly before the sliding door. To Dick the situation was unexpected. The result was that the can survived exactly six inches thick after the impact with the Chrysler. Dick never moderated his approach. However, he was overheard mumbling about the existence of the can, at that site, being something of a "highly irregular occurrence".

Dick was also very emotional, probably because of his difficulties in socializing. Improvers who picked up on this could easily get under his skin. One time, after an especially heated argument, when an improver challenged him to "go outside" with him, he consented. But he was not stupid. At the entrance, he quickly locked the door behind the improver, so as to not let him back into the building. The antagonist was left outside, banging

at the door, trying to re-enter. Another time one of the smarter students pre-occupied Dick on some totally inconsequential hypothesis, involving mathematics, of course, while all the other improvers split class. Dick never got on to the scheme until long after the class time was over. Needless to say, this was all planned to prevent Dick from administering the evenings test.

Because of his extraordinary ruminations and interest, Richard Holmes had accumulated, what would have been for just being an insulator, an entirely pointless knowledge of facts. For example, he could recite every square root of any number between 0 and 200. Likewise, he knew by heart every outside ( "heel" ) and inside ( "throat" ) measurement of any miter for pipe bends of sizes between 3 and 10 inches in diameter. Of course, this knowledge gave him the edge in almost all debates with improvers. To any challenges, he would bring forward premises and facts and then go on to conclusions with such enormous speed, leaving you without time to prove or disprove their accuracy. Naturally, he knew, by heart, every answer to any of the test questions he had ever devised for the program. You never tried to tell him he was wrong. If you didn't believe this, you found out if you questioned him. Dick would not bother to research the issue, nor did he ever feel there was a need for such. I remember vividly arguing with him over an answer to a question until both he and I realized that my test was designed for a different month than what he had in mind.

Dick loved routines. Some students learned his routines and took advantage of this by writing a test grade in red ink on their own tests. Since he often began to grade turned-in tests while slower students were still working, it was just a matter of placing your test in a strategic location in the pile. When your work surfaced, he would promptly accept the test with these false marks. Muttering something about having graded out of order, he placed them in the completed pile and went on to the next test. If you cheated in this way, it was important that you did not overstate your case with

too high of a grade. The safe formula was to place a real mistake, with a reasonable point deduction, right on top of the test and also to remain within your general average. But this was not always fool proof. Once the tests left the building for examination at his home, the scheme was likely to be discovered.

As far as his influence on the development of apprentices was concerned, Dick's ideas were often quite controversial. If you had not mastered mathematics to the extent that you accepted everything from politics to procreation as beset by numbers and mathematical logic, you were to him something on the order of being "unfit to be ranked among human civilization". And Dick did not try to make it easy on you. Imagine being a first year apprentice, just as happy as a lark to have landed a job, who received a handout that starts as follows:

"Expressions such as sin. Ø, cos. Ø, and tan. Ø are referred to as trigonometric functions, which are a division of transcendental functions, meaning any that are not algebraic. The word transcendental means beyond experience, and such functions were beyond the experience of mathematicians at a point of development of mathematics...."

Immediately the question came to mind if, henceforth, all rolls of duct-wrap would contain trigonometric function tables. And guess, what the average improver would utter to that, but not out loud? Indeed, if anything was said, it was a lot different from what was thought.

Or imagine having to write -- without prior warning and out of the cold -- a 500 word essay on the Malthusian theory about the effect of overpopulation on human survival. Of course such an essay would be no problem if you only knew what Dick wanted from you. To satisfy him was simply to let him know whether or not you could come up with five hundred words. He didn't care what you knew or wrote about the subject as long as the number of words was correct. Thus, after sweating over and advancing unfamiliar, possibly

preposterous, economic theories and then, either proudly, or meekly, turning over your expose', he would merely count all the words, mark a spot indicating that five hundred words were found, and tell you whether you had passed or failed. (After observing him in his home, burning cardboard trash, I always wondered how long he kept those applicant's tests, before expending them, "in the most efficient manner," as convectional energy through the chimney.)

By now it should be obvious that Dick was not exactly an authority on making the best case for his points of view. His ideas didn't lack wisdom as much as the fact that they were brought up at inappropriate times or situations. Then again, what he brought up was often in itself inappropriate. Yet, if you made an effort to see his point, and if you were honest about it, and then exerted yourself some more, you could come up with an opportunity to accept his judgment. The problem was, most anyone had to make the act of understanding and listening to Dick an exertion. It was also inevitable that the trustees on the apprentice trust would regard his views and proposals with circumspection.

Yet, because Richard Holmes had an indubitable determination and stubbornness, he eventually made the program a success. He developed and instituted the early curriculum and training processes without any help, and often, without sufficient support. The extent of his effort can only be surmised from the minutes of meetings covering a large period of that time. At one point, after having requested and having been denied a pay increase to redeem him for actual time spent in working with and for apprentices, he wrote a paragraph in the minutes which displayed his disappointment:

"...It should be pointed out that this entire projection (of work load and remuneration to Holmes, Ed.) is based on maximum efficiency of both instructor and apprentices, which may be subject to considerable variation. The handling of 160 apprentices, including instruction, grading of test papers,

completing monthly reports with monthly overall average grades, conducting applicant and mechanics' examinations, keeping the books and attempting to satisfy disgruntled fathers of poorly adjusted sons, on 166 hours of time is unheard of in any other building trades apprentice program, and perhaps cannot be done here."

The "poorly adjusted sons," were in the minority. They were those apprentices who sat in the back rows. Back row types (as well as front row types) are different. The front row improvers had no problems. They put out in accordance with Dick's efficiency contrivance. They clung to his every word. There was veritable competition among front row folks to please Dick. However, since back row students had egos as big as front row students, there was equally stalwart competition among their ranks to piss him off. This tension could easily have resulted in confrontations, had it not been for the buffer effect of the majority of improvers, who sat in the center rows. Such is part of the dynamics of any group, students or otherwise. Every drill instructor knows how to distinguish between back row and front row students and tries to put this knowledge to use. Not so Dick Holmes. To him any differentiation between improvers lay in the degree of "efficiency", to which an improver was inclined. And therein lay the major reason for his poor amiability quotient.

However, many of the old-timers, who knew and worked with Dick personally, and who did not have to endure his instruction, tell more of a positive story about him than the asinine narratives and colored perspectives which we obtained about him as apprentices. Dick did much for Local 16. We should not forget this. He had vision. He was the first person to advocate for an asbestos workers pension plan. He also was the first person who made us aware of the dangers of asbestos. And he was a prolific worker.

Richard Holmes was at one time Local 16 health & welfare and vacation trust administrator, apprentice trust administrator, apprentice instructor, and, for at least a short time, the

financial secretary of the Union. All these functions he did without any help. In seeing statistics on the member's state of health, he converted to become an ardent advocate for asbestos workers health examinations. But because he always was surrounded by a sense of rumpus, the love and esteem we extended to him for his productive work only came after securing a certain distance from his immediate presence and influence.

It was inevitable that Dick Holmes would come up with stricter rules and regulations which eventually made attendance at classes compulsory. In one memo he reflected that without such requirements it was clear that "apprentices would not attend (School) regularly unless forced to...." In 1963 the required monthly school attendance for improvers was nine hours. This was increased to 12 hours in 1965.

In the new collective bargaining agreement of August 1963, the apprentice fund received an increase of 2 cents per man hour worked. The school instructor, who was also the trust administrator, was paid on a part time basis. Improver shop performance was tutored by "coaches" who received \$30.00 for the effort.

During the next three years a curriculum for the first, second, third, and fourth year apprenticeship was developed. Also, suitable examinations to determine the progress of improvers were prepared. The improver applicant tests had been "revised by an authority on the subject from a local college" and improvers were "accepted only if they were between the ages of 18 and 24 years of age". Additionally, applicants had to be high school graduates, with an average grade of at least C in academic courses, and had to have completed one year of high school geometry with an average grade of at least C. These requirements were "deemed necessary in order to secure apprentices who would not be too difficult to teach the entire requirements of the trade presented in the most efficient manner."...

At the beginning of this paper, I stated that a combination of general conditions, such as trade

factors labor-management and cooperation, resulted in the eventual formation of the apprentice training program. This is undeniably true. However, the unusual tenet and substance of the program were uniquely the product of one person's involvement, namely Dick Holmes. This connection has had an influence persisting to this date. Our selection procedures still contain an agenda, which was largely created by Dick Homes. The school curriculum still conveys much of his cast. Had someone else been in charge, much might have turned out different. I make no inference about the possible results of such a different direction. The question of whether or not Dick's influence has been to the Local's or the Industry's advantage or disadvantage, is a different story. I am certain of one thing: Without the commencement of the program our opportunities would have been fewer and our abilities less.

The last minutes of the Apprentice Trust, which show Richard Holmes participating are dated June 23, 1971.

### REMINDER NOTICE

APPLICATIONS FOR HEAT AND FROST INSULATORS AND ASBESTOS WORKERS APPRENTICESHIP PROGRAM AVAILABLE for 1992 in 47 counties of Northern California and 10 counties in Western Nevada has 20 APPRENTICESHIPS, Written applications will be available and accepted EVERY SECOND MONDAY OF EACH MONTH during 1992. Applications are available from 9:00 AM until 3:00. Call 916-924-8985 or 510-865-2292 for locations.

MINIMUM REQUIREMENTS: AGE: 18 years or older. (Proof of age required at application.)

#### **EDUCATION:**

- 1. Applicants must have completed High School or equivalent. (such as G.E.D.)
- 2. Applicants must have completed a one year course of high school geometry; or its equivalent; with a minimum grade of "C".

Proof of education must be presented with application with official or verifiable documents. These must be originals (authorizing signatures and stamps or seals affixed). THERE WILL BE NO EXCEPTION TO THIS REQUIREMENT.

The Heat and Frost Insulators and Asbestos Workers Joint Apprenticeship & Training Committee (J.A.T.C.) is committed to recruit, select, employ, and train apprentices without discrimination because of race, color, religion, national origin or sex.

## THE MAILBAG....

This is a story about four people named Everybody, Somebody, Anybody and Nobody. There was an important job to be done and Everybody was sure that Somebody would do it. Anybody could have done it, but Nobody did it. Somebody got angry about that, because it was Everybody's job. Everybody thought Anybody could do it, but Nobody realized that Everybody wouldn't do it. It ended up that Everybody blamed Somebody when Nobody did what Anybody could have.

So that's all there is for your mailbag this issue......

