

Ted Zachwieja Leadership Recall

Ted Zachwieja Historical Interview - 2014

Editor Note: Ted was the first President of the Mountaineer Chapter, formed from Bluegrass Chapter. Mountaineer existed for about 20 years before becoming a section in 2005 and then the new WV ASHRAE Chapter in 2013. This makes Ted's Leadership Recall very interesting. This recall was done in May 2015. Art Hallstrom

Q) Ted – please start from the beginning. How did ASHRAE get started in WV?

A group of us wanted to get started. It takes 40-60 people to form a chapter. So, we got some help from the BlueGrass Chapter. They were an enormous help. We had the kickoff meeting and it was in an enormous room and the meeting filled the room. (WV saw the Mountaineer Chapter, then formed the Mountaineer Section in 2005 and then upgraded to the WV Chapter in 2013.) I been involved with ASHRAE since the 1950's. If it had not been for the Bluegrass Chapter, the first Mountaineer Chapter would not have been formed. They helped it get started. I was the first Mountaineer Chapter President. As time went on, I kind of left the ASHRAE Chapter and others took it on.

Q) When you graduated from College what did you do?

I went to work for US Steel in the structural steel design area. Then I got a call from an architect in Charleston. Why do you need me? He said I have a job for you. He said Zandoor Martin Holstead needs a mechanical engineer. So I interviewed, accepted the offer and started. They threw me into the big room with catalogs and said, Ok Ted – It is yours. I did not know a light switch from a computer. If I had known what was involved, I don't think I would have taken the job. I worked for 12-14 hours a day trying to learn. In those days you had to do lighting, hvac, plumbing and construction administration. That first year I did not get any help from the other engineers.

Take the First Presbyterian Church in St Albans. I went thru the job with a fine tooth comb. When the job went out for bid and I got a call from the contractor. He said, Ted, there is something on these drawing I can't understand. Is that a b or a c? I said it is a b. What else do you need? He said that's it. I think that was the best job I ever did. I put my heart into my work.

Q) How long were you there?

9-11 years. From there I went to Moore Engineering. It was a partnership. Over time, we had some differences so I left there and went to Moses Architects, and then with Most Subrave in Indiana. They were heavy into hospital work and I became their branch manager for about 6-7 years. After that I went to work with Todd at ZDS for the next 20 years. When I became 65, I said well I think I will retire. It was in July. I cut the grass three times that week and said I can stand this. So I called Todd, went back to work, and I stayed until I became 80 this last July. I am still having difficulty with retirement. I like to keep working

Q) When did you join ASHRAE?

In 1964. I joined for the education. I have been a member ever since.

Q) What was the motivation to form a Chapter?

A group of us decided we need one because the closest other chapters were Pittsburg or Lexington. When we formed it, it was only half the state. The northern half was Pittsburg Chapter.

Q) The new WV ASHRAE Chapter now includes the northern half, if fact the whole state. Was that a good deal?

Oh, that is excellent. I never thought I would see it happen. I thought once the Mountaineer Chapter became a section it was dead. Good to see the amount of activity.

Q) Where did the Chapter first met?

Rose City Café in Charleston. Then it moved to other locations ending up in the log cabin.

Q) The mix of members back then?

Engineers, reps and contractors. No students.

Q) Are those group still involved with ASHRAE?

Yes.

Q) What else did you do?

I taught for WVU for two years. Ron King was one of my students. Taught practical HVAC.

Q) How has WV changed since you started in the industry?

The equipment has changed. The codes also have changed. A lot more codes now. They have a state code now, did not have one in the beginning. We did not have an energy code either. One job I did was for an owner in Putnam County. I designed the job with air handlers and economizers and all the good things. The job went out for bid and the contractor came back and said the equipment price looked high. So the owner came to me and said "Ted what's on the units". I said economizer cycle. He said what is an economizer? I said economizers use cold outside air to save energy. "Take it out." What do you mean? "Take it out" he said. "Remove the economizers. I do not pay for electricity so remove them." They simply did not consider operating costs, only first cost. That is the way those shopping centers work.

The mall is the same way. I have always worked very closely with the state fire marshal. On one project I questioned an item and asked the state fire marshal to get involved. He said, "Ted, this is outside my jurisdictions. The only thing we look at are the state buildings, schools, federal buildings, things like that the private stuff we do not get involved unless someone get hurt or killed."

The only thing I don't understand and it happened in Ohio. They changed their code and it was strict, a lot stricter than WV and then they did not enforce it. They just piled things up in a corner. They did not have the personal to go around to check. They just filed them away. Now if something happened, that's when the fire marshal would get involved.

The codes they have now, I am glad to see it. But I am wondering who's going to check

Q) What do you think the challenges for ASHRAE is in the future?

We need to make sure the job are safe. Need enforcement, even if we have to raise taxes to pay for them. We just do have enforcement in the state and I don't think I will live to see it But I think the ASHRAE organization could do a lot of good with the state fire marshal. Get the legislation passed to hire more inspectors. They don't have enough people to check the HVAC systems and if they do they don't know what their checking. They would call me many times up there and ask me if it meets code. They did not have anyone that knew the mechanical or electrical systems.

The mechanical and electrical has always taken hind seat to the building structure. I will give you an example. The YMCA in Beckley WV. It has a swimming pool in there and I went to great lengths to calculate the evaporation rate of the pool and the exhaust and intake of air It needed. It went out for bid and came back about \$1.5 million over budget So the owner called me and said we need to take 25% out of the HVAC. Well, I had called every contractor and all had the HVAC under my budget. I told the owner you need it take it out of the architectural, not the mechanical or electrical. I refused to change the design. I did find out that if they would just change the brick from the jumbo brick that just come out to regular brick they would save about \$400,000 dollars. They told the contractors to redesign the job. The contractors then called me about a redesign and I said no, you build it the way it was designed, I don't care how much you pay me no redesign. So they went ahead on their own. About two months after it started, I got a call from the owner. Ted, we have moisture everywhere. Would you come down here to a meeting? I said sure. I went to their lobby and water was dripping off the T-bars. In the conference room there was about 15 people, half of them lawyers. The general contractor was there, not the mechanical. He said "Ted you designed this building." I looked out on the roof and could see the air handlers. I did not say anything. He asked, "did you look at the submittals?" I said no. They refused to pay me and I know I designed a good system for this building. If they put it in as designed it would work. I will tell you what. I will kiss his ass if there is exhaust on those units on the roof. So we all went out and inspected the units. No exhaust. All the outside air to the pool was being pumped into the rest of the building. They had a handball court and the wood floor was already warped. Gentleman, I said, this is not my problem and I got up and left Two weeks later I got a call. Ted, can you come and fix our problem. I said sure, send me my check and I will come on down. I did go down there and we straighten it out.

Q) ASHRAE today in WV, where should we be focusing?

Enforcement. And code classes to city officials and code officials.

Q) One last question. Are WV Universities creating HVA Engineers and are they staying

They are leaving. And they are not well trained in HVAC. I had one class in Thermo. They do not teach HVAC here (in WV). Penn State had an Architectural Course where they learn about HVAC. It is rare to be HVAC school trained. Most of us had to learn on the job and from ASHRAE. AIA has people that do training include code but it is oriented to the structure. ASHRAE needs to provide this training in WV.