

ASHRAE Leadership Recall (formerly Leadership Recalled)
Transcription

Interview of: Bill Coad

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Rod Kirkwood

This is a leadership recall interview for the people who have been important in the leadership of ASHRAE. And today we're interviewing Bill Coad, a past president of ASHRAE, as to his experience in this industry. I'm Rod Kirkwood, I'm a presidential member of ASHRAE also and we'll go on from there. You ready Bill?

Bill Coad

Let's go Rod.

R.K.

Okay. Well first question is would you give a brief biographical sketch of your life.

B.C.

Well it gets less brief all the time. Yeah, I was born in the midst of the Great Depression in 1931. My parents were, neither one had a high school education so they were having a pretty tough time of it. They were committed though to the fact that they started impressing on me when I was very, very young that I was going to go to college. And my dad was an authoritarian. That meant that I had no option but to be a good student. So I had an opportunity to get a private education. My high school days at a Catholic school, elementary school. My high school days I was educated by the Jesuits who probably taught me more that helped me get through life than I had learned in engineering school because they taught me logic. And I found that it was very beneficial in my life. Another thing interesting as I was growing up, my dad who I said didn't have a high school education, in the early 1930s, he couldn't get a job. A job was few and far between so he was, he would get jobs doing menial work of the different kinds. And he sat back as an uneducated guy now and he said I have to have a profession. I've got to learn something and it has to be something new that there's a demand for by people and he struck upon air conditioning and he wrote to a correspondence school in Chicago. He got, took a correspondence course and he studied air conditioning and he had the guts to go out and tell the Carrier distributor in St Louis that he knew all about air conditioning and refrigeration they hired him out as a service man. And at that point he started telling me that I was going to be an air conditioning engineer so I never made the decision. He made it for me and I guess if you look back a lot of people come into this industry in a lot of ways but I grew up in it. My first job was helping my dad on a service truck and when I was in high school, a junior in high school, my first year out of high school I became an apprentice pipe fitter and I learned on the job. And then I went to Purdue University to study engineering because it was dictated for me, it was programmed in my mind and after a little while just like a semester I ran out of money and it was after World War II, you couldn't get jobs on the campus.

So I came back to St Louis and went to work as a pipe fitter and I was trying to take some evening school courses and things of that nature. And a few years went by and the Korean War and I was drafted and then by the time I got out of the Army I had a wife and a child and the G.I. Bill. I went back to college at Washington University and I finished. That's how I got my education and I then went to work in the family air conditioning business and I sold the business in a couple years because it was contracting and I didn't like contracting, I wanted to be a designer and went to work for a small consulting engineering firm in St Louis and I was there the rest of my career. So that's kind of how I got into the industry and the career in my lifetime, career in air conditioning.

R.K.

That sounds like a good way to start out.

B.C.

It was easy. Took a lot of work but it wasn't hard.

R.K.

You've done well from there. Okay, the next question is describe the industry at that time.

B.C.

Well it was interesting. This now is the late forty's and the early fifty's, most of the air conditioning was add on, putting air conditioning in theaters and in stores. Very few buildings in the early days of my career were built with air conditioning and that kind of evolved through the fifty's so I would, you might say that that in my career I came on board when they were just starting to put central air conditioning in buildings and I've seen it all since, all of the change. And amazingly enough Rod, I hate to say this but in many cases we're not doing as good a job today as we did in the 1950s because we value, engineer the products, we have too much, just like the airlines once you start working for nothing but cost you start forgetting what it was you set out to do. So I've seen a lot of changes but the industry has matured. We've seen a lot of changes for the better and I think if we simply re-focus ourselves on what we set out to do, we can do a much better job.

R.K.

That makes good sense. Alright we'll go on from there with the next one. How and when did you get started in ASHRAE?

B.C.

Well I wasn't a member of ASHRAE for many years. We had a chapter in St Louis and it was when I went to work for the consulting engineer the guy I was working for, his name was Chuck McClure and he was the program chairman for our St Louis ASHRAE chapter and he kind of got me interested in coming to the meetings. I was at my first ASHRAE meeting and I was sitting at the table with a lot of people I knew and one guy was a manufacturer's rep. And if you remember in the 19- this was the early sixty's now and in the 1950s, I forget the year where we merged the heating and ventilating engineering Society and the refrigeration Society. Well we had a large refrigeration contingent in St Louis and it was the big, kind of the fight for turf between these two groups and I was sitting with some people, a very good friend of mine the manufacturers rep, that said you know these guys, these refrigeration guys they want to take over everything and he said we ought to just split off from them and have our own group and I said to him, I said, I'm not going to tell you his name, but I said you know I think it's great that we have the refrigeration guys because I think refrigeration is half of what we do and the fact is that the next day I got an application, I joined ASHRAE for the specific purpose of trying to solve that problem and over the

years we developed a very, very harmonious group in St Louis between refrigeration and the air conditioning guys.

R.K.

Well that's what the industry needed. More people doing what you did and we came out alright.

B.C.

Well and it also helped me an awful lot because it got me started on another phase of my career that's probably been the greatest thing I ever did, that was joining ASHRAE.

R.K.

What were your goals when you were president?

B.C.

Let me just precede that with the comment that I observed, I worked, fortunately I worked very closely with a lot of the presidents of ASHRAE on different issues that were coming up on the days that I was on the standing committees starting with the issue that you started in 1973-74 that is standard 90. I had a chance to work with a lot of ASHRAE presidents and the one thing that I saw happening in many cases is that a president would come into the office, he would have, he would have an objective, he would have a plan and something would come out of left field and give him a blind hit which would throw him all off course and he and then he'd be reacting trying to solve this problem. So before I took over the job I tried to understand everything that could possibly happen and I have a - I have a firm belief in the fact that we really don't have problems in life we have opportunities. So I took every problem that I thought could possibly give me a blindside hit and I said now I want a turn and some kind of an opportunity to help the Society rather than stand aside and I've got some notes here, let me just go through some of the objectives. The one was a handbook initiative. Jim Wolf had traveled around the country to visit many, many, many chapters and he would visit employers and members while he was on this circuit. And the one complaint, the major complaint that they had, he'd ask them what they thought good about ASHRAE and what bad and the major complaint that they had was that our handbooks weren't what they used to be, they were losing their relevance. So the one thing I wanted to do was get major initiative to start revising the handbook and turning them into what people were asking for. The next one was the standard 62. The standard 62 was a big problem in the Society because we got proprietary interests outside the Society fighting with each other trying to manipulate ASHRAE to favor one or the other and I thought we have to do something to get this all out in the open and then we have to take advantage of these people fighting against each other to get input from them so we can develop a better standard. So I, standard 62 was a major initiative. I wanted to expand the membership base. The complaints we hear year after year from engineers: I designed the system to work a certain way and then they have a person that doesn't have the background experience to operate it, takes it over and doesn't know what to do and things don't work. And I looked at that problem, I said why don't we get those people that were there, say they don't know what to do and teach them what to do. So I wanted to expand our membership base so that we would start including the operators of buildings and the managers of buildings who employ those people. Energy awareness of course and I'll talk more about that in a minute. But the energy awareness I wanted to try to bring the awareness to the, you know, not only engineering community but through our outreach programs to the entire engineering community and anyone we relate to like the architecture community, that we just about used up the energy resources of the earth in one hundred fifty years and we created a very good way of life but it's

not going to last much longer and we have to put all our emphasis on trying to keep to preserve the quality of life while not using more energy resources or by reducing the energy resources we need and the energy dependence so that was a major initiative. Sharing of technology, traveling the world, we find that everyone everywhere in the world is looking to America but in the United States for technology and I, one of my initiatives was to try to do a better job of exchange of technology around the world and that has to do also with the expansion of the ASHRAE membership globally. The Region at Large, that was one of my objectives to be to bring every ASHRAE member into an ASHRAE region so that they have a representative on the board of directors and we wanted to get that done. And then the ASHRAE outreach - I wanted to get ASHRAE aligned with other organizations and some sort of partnering agreements so we can work on technology advances and other issues that were to both of our benefits and through that initiative we reached partnering agreements with the AGA, I'm - not that - the GSA, the General Services Administration, the largest real estate owner and operator in the world, with the International Institute of Refrigeration I.R.R and with the United States Green Building Council who really has the interest of the world on energy but they don't know about the technology so I thought we could provide them. So we have agreements with those three people and that's probably, those were my initiatives and I think as I sit here, all of them - I can't say that they were all accomplished but they were all put in motion. You know when none of us are naive enough to think that you can do everything in one year but at least we put these things in motion and I feel, I feel today as I go in the meeting rooms I hear people talking about these things, I feel like I probably succeeded there.

R.K.

That's good. Well let's see, more than anybody can start these things because once they are, the idea can go on, on its own with everybody else's help.

B.C.

That's right.

R.K.

Okay. Do you think that this is a change in the industry or were there events that changed the industry?

B.C.

Well then I guess you couldn't go through nineteen, through twenty- O -one or two without talking about an event that changed the industry. Of course the event is obviously 9/11. And that I didn't anticipate Rod. So that was one that blindsided me.

R.K.

You weren't the only one.

B.C.

That blindsided me and I was in the same position you were, I was getting ready to head to Naples that day for the conference for the REVAC conference. But I guess the reactions that I saw to that was absolutely unbelievable. My email got busy that day and I got e-mails from people all over the world, Eastern Europe, the Middle East, the Orient, Western Europe, people that I know that knew I was a president of ASHRAE. These are messages of condolences for what's happened to the United States, there were messages of comradeship and offering of help. I was absolutely dumbfounded by the outpouring of concern through the, our friends in the other countries, the ASHRAE members. And that's when I felt like we really have something different an ASHRAE in our globalization. We don't have, you never see engineers trying to tear things down. Engineers try to build and that's true in any country you

go into and one of the things that I really felt bad about was when this unfortunate incident came up where we were bombing Belgrade and a very good friend of mine in ASHRAE was a professor at the University of Belgrade. And he and I were communicating daily via e-mail when this was going on and trying to - to us we wanted to make sure that our friendship was hanging together. And I think that the, if you say, 9/11 change ASHRAE? No. Didn't change ASHRAE, it just brought all the engineers of ASHRAE closer together and that may change ASHRAE and that's a positive change. Now it's hard to say anything good came out of 9/11 but I think it really got the engineering community working together globally and I've noticed since then, travelling overseas I've never been anywhere as a president of ASHRAE that we weren't welcome. So it was an event that sort of gave us a blind side hit but I have to say that it didn't knock us down.

R.K.

Well that's a very positive statement. I think a very, very beneficial statement for the whole world and not just for ASHRAE. ASHRAE is a major factor in the world.

B.C.

I think that's true Rod.

R.K.

Okay, next question is what has ASHRAE meant to the industry's growth?

B.C.

Well to the industry's growth I'd say they probably meant everything as ASHRAE seems to me to be the glue that binds it all together. You go to our product show that we're having here in Anaheim and you look at it all the products - and what we have to do is we buy all those products, put them together and develop systems. The people that come to that show come to the short courses, they attend our meetings. If it wasn't for ASHRAE, I don't know what would hold the industry together because ASHRAE is unlike, say ARI, who is our partner in the show, ASHRAE is ? of putting those products into systems where ARI is admittedly - their interest is to sell the products. Now in our kind of an industry if you're selling the products who's going to put in the systems? Who's going to design the systems and I think that without ASHRAE I can't envision where our industry would be but I will say this. As I mentioned before I started in this industry when we were just starting to put systems in buildings and the changes that are taking place in fifty years are actually staggering and that wouldn't have happened it would have taken a different course. It would have taken an entirely different - we may still have package units in drugstores, I don't know. I'm sure it couldn't have happened the way it did, of course. The other thing that ASHRAE does is it gives a day to our association with the American Institute of Architects, with the Illuminating Engineering Society, with these other organizations, are what kind of really weld the designs together and we've been talking for a long time about integrated design but we're getting closer and closer and closer to it and it could never happen without a Society like ASHRAE. So I think that ASHRAE meant everything to the industry.

R.K.

One other point that ASHRAE did was establish new standards of efficiency required of all the manufacturers, energy efficiency. And that changed the manufacturing of everything and it continues. We are still increasing the requirements for products that are going to be used in our building.

B.C.

And we are, we're writing the standards and the government is looking for us to write those standards and it is painful because there's all kinds of differences of opinion out there but you know, the other fascinating thing, what I mentioned before about problems and opportunities, having these standards provides opportunities for the manufacturers to put new products out there on the market, to replace the obsolete ones that are inefficient. So it's turned out to be a win-win situation for everyone.

R.K.

Well I think it certainly has. Okay, well let's see. What haven't we covered. What about people that stand out in your memories in your-

B.C.

Well I have to start way, way back. Of course my father and then as I was growing up the high school physics teacher had a lot of influence on me. He developed a trait that I think is necessary in engineering- curiosity. He would develop a lot of curiosity and then show us how you get the answers. Then when I was in engineering school, his name is Father ? , a Jesuit. When I was in engineering school Charley Kippenhan? was the, an ASHRAE member, was the chairman of the engineering mechanical engineering department and he got me really fascinated in fluids and thermodynamics and heat transfer and these are all the fields that would help me later on. We became very good friends and he gave me my first teaching job. I was just one semester out of college and he was hurting for a thermodynamics teacher and he called me up and asked me if I'd like to try it and it started me on a whole career of teaching and public speaking and something I'd never done if I hadn't. The first time I walked into a classroom I was trembling and shaking but I forced myself to do it and it opened up a whole new window, a whole new part of my career. From that point I have to say that the Chuck McClure, the engineer I went to work for when I was about thirty. He was a, one of the guys used to call liberal arts engineer because his degree was in physics not engineering but he was an innovator and he believed in the energy ethic. Energy was cheap in those days. He'd get all over my backside if I used this ten horse power motor on a cooling tower when I could have found one with a five. So he instilled in me the fact that you could always do it with less energy if you think about it. So he was, he gave me a lot of a lot of opportunity to be innovative. He taught me to always be innovative but always have a back door. Never paint yourself in a corner and that's kind of helped me through my engineering career. And the other people that have helped me immensely are the people I work with in ASHRAE. When I first got on a TC, I thought I just kind of died and went to heaven because I met all the leaders of the technology, the guys that developed all the products that I was using on these TCs and then I got on to standing committees and I watched the presence of ASHRAE, and the president of ASHRAE is a leader. He really does make a big difference in the Society and I watched some of these presidents take on some very, very difficult tasks but you know you're running a fifty five thousand person Society and you're always going to find all of a sudden somebody is unhappy about something and you can't make light of any of that because everybody is important. So I watched these men and they've had an awful lot to do with my career and my life so I - those are kind of my role models as I went through life and I think I'm a very fortunate guy to have had so many good role models. And indecently Rod, you happen to be one of them.

R.K.

Thank you.

B.C.

Let's keep it all in perspective.

R.K.

Well, the big point is that you've learned from it and you enjoy the process of learning and it has helped in your career but it helped here.

B.C.

It sure has helped my career.

R.K.

What you helped do for ASHRAE. Okay I guess the last item I have on my list here is what advice would you give to a young person entering the HVAC industry?

B.C.

Well let me just say that I have given advice to a lot of young people entering the industry because for many years I taught a graduate program in, of course university, in environmental system design and I was a thesis advisor to the students of the program and then each of those students, virtually every one of those is working in the industry today. It's hard to say what advice you would give not knowing specifically who the student is and what advice they need but basically I try to give them a foundation and advice in staying close to the engineering fundamentals. Never design anything because somebody else said it is a good idea - if you don't thoroughly understand it, do something else. Always maintain a curiosity. Never take something for granted. Be curious how it works and try to relate that to your fundamental engineering knowledge. Don't work for money. Best advice I think I give a young person is do the kind of work you'd like to do and the money will come. Young people tend to say well we'll go into this field because there's more money. There's more money there today because somebody is desperate. There may not be a job there tomorrow. So you go into the career you want to pursue but you think you'll enjoy and pursue it aggressively and you always make a good living and I say that as a, with a lot of experience because when I went to work as a consulting engineer I was making about half as much money as the other students I graduated with at that time who went into aerospace and a military contracting design company and so forth and as time went on I was really having a ball in my career and they were usually out looking for a job once or twice you see. So that's I guess that's about the advice that I would have.

R.K.

Well we thank you very much for your sharing with us and it'll be inspiration to a lot of people going along behind you.

B.C.

Well Rod, I've enjoyed the opportunity to be able to do it and I thank you very, very much for giving me the opportunity.

R.K.

Thank you to you too

B.C.

Thank you.