

DAVID T. UNDERWOOD



ASHRAE President 2015-16

Ahmed Alaa Eldin Mohamed: This is Ahmed Alaa Eldin Mohamed. I'm happy today to interview Mr. David Underwood. I'll start your journey with ASHRAE to ask you: Who is David Underwood?

David Underwood: Very fair question. Who is David Underwood? I'm not sure I can describe myself very well, but I was born many long years ago. I don't want to identify how old I am, but I was born in Regina, Saskatchewan. I am a Canadian. I have lived in five of the ten provinces in Canada, so I've been around the country quite a bit. At the age of ten, I was living in a small town in Saskatchewan where they were building a highway. They built a bridge across a river near my town. And I spent that summer watching them build this bridge and talking about it with the engineer who was on site. Of course, he was a civil engineer. This interested me in engineering, and I became a civil engineer from the University of Manitoba later. So that's, I started my career as a civil engineer, not mechanical. In most of my adult life, I've lived in Toronto with my wife, Jane. We have two children with their sons-in-law, and we have five beautiful grandchildren who are now growing up. As a matter of fact, two of them are going to college this fall. So that's sort of what David Underwood is to date.

However, the other things that David Underwood has done, beyond, you know, my family situation: I've always been very active in volunteer organizations. I love volunteering because I think I have something to contribute back to our industry. I have, you know, been involved in Ontario with our Contractors Association because I was a contractor all my working career. And I was on their board of directors, served in all their officer positions throughout the course of the years. And I also did a lot of work with the provincial government on refrigeration control and refrigeration management situations. I also worked with the apprenticeship program, where I often gave advice to the provincial government as to where I thought we should be teaching our apprentices and what we needed to do to keep them up to date with the industry. I've also participated in community activities, and right now I'm serving on the advisory committee about accessibility, because I am disabled in the city of, uh, Oakville, Ontario, where I currently live. That's the initial story of David Underwood.

Ahmed Alaa Eldin Mohamed: Okay. Can you talk to me about ASHRAE experiences and since when you are ASHRAE member?

David Underwood: When I left university, I went to work with the Trane Company. I spent, you know, six months with them, learning the HVAC in our industry, so I converted from being a civil engineer to a mechanical engineer. Because Trane always gave me training, uh, you know, information, uh, to keep me up to date with the industry, that was wonderful. However, I left Trane after about nine years, and then I came into the industry, and because I wanted to be up to date, I had to find somewhere where I could get that current information. And I discovered ASHRAE. And I knew about ASHRAE, but I didn't really know what they had done. The first ASHRAE system, first time I was really introduced to ASHRAE was

at this show in the wintertime, and I thought that's what ASHRAE was. It was a show. However, a little bit later, I found out there were technical committees, which I joined one, and, from there, I, you know, continued with ASHRAE until today. But my first real involvement, actually, that I thought was very interesting. Today I'm attending a meeting in Kansas City. Thirty-five years ago, there were two forums that started at seven, at eight o'clock, or seven o'clock in the morning on Sunday. One was with big buildings; the other one was with operation and maintenance. And because I was a design building services company, I was interested in the operation and maintenance side. These two forums, we were talking about buildings that didn't seem to work very well from an operator's point of view, both for the big buildings and also in the operation and maintenance. We felt, you know, with that early morning forum, which was the first forum, you know, of the, of the meeting that year, that there would be very little interest. Well, it turned out people were out into the hallways, and we talked to each other afterwards as to what the information was that we had gathered from the forum. And from there, the initiative of commissioning came to be within ASHRAE. And that was when we formed our first guideline committee to come up with commissioning, which has become a very large part of what ASHRAE does and, uh, our educational information in the world.

Ahmed Alaa Eldin Mohamed: This is explaining how you are attracted to HVAC and R and engineering part. Let me ask you again about your ASHRAE journey, which part is much closer to your heart from your journey of ASHRAE or your experience with ASHRAE?

David Underwood: Well, as I stated, commissioning is one of those things that I'm very, very interested in. I'm also interested in refrigeration because I was primarily a refrigeration contractor with, you know, my mechanics that work for my company, all certified refrigeration mechanics. Although we did other things because we are sort of a broad-based company, which you have to be in order to survive as a contractor in this industry. Other interests in ASHRAE, of course, is the management side. And I came through ASHRAE, you know, as far as the, you know, moving up to the positions that I finally served at ASHRAE, was through the Publishing and Education Council. So, it was really more through the publishing side of the organization than the technical side. Now, I was involved with the technical, through the technical committees, but, you know, I'm probably more of a technical manager than I'm a technical expert. And that's how I got to where I am within ASHRAE. And then I got into the, you know, onto the board, which is a wonderful experience, uh, serving as a DAL and serving as vice president for two years and on through the executive committee to have the great honor of serving ASHRAE in 2015-16 as the ASHRAE president.

Ahmed Alaa Eldin Mohamed: Great. Always in our life, there is someone, a special person in your life who's the mentor or the role model, a special person you can, mention to us?

David Underwood: This is very difficult because I have so many mentors and so many wonderful people. But I'm going to talk about two mentors first, and then I'll talk about ASHRAE mentors. But the two mentors that I had, you know, in my career that helped me build a company and become a better HVAC&R engineer, one was a Hall of Fame member of ASHRAE. His name is Bob Tamblyn, and he is from Toronto. Bob Tamblyn gave me a great deal of confidence in my abilities because he often called me up to talk about refrigeration problems and how I would solve them. So that was, you know, very, very, you know, encouraging, and it really helped me think about who I am and what I can do, and I had great capabilities.

The other one's- person's name is Jim Rose. And Jim Rose worked with Bob Tamblin, but he also had worked on his own. He was a very good engineer. Every time I had some complex problems that I need to solve, I went to Jim and said, "Jim, how do I solve this problem?" Jim was very good as a mentor. He posed back sophomore questions to me that forced me to figure out myself what was wrong and how I could possibly find solutions, because I truly believe engineers are in the solutions business, and if we can't find solutions for problems, we need to turn them to somebody else who can find those solutions.

As far as ASHRAE is concerned, George Jackins is one of the great mentors that I have had. He was a great mentor for me. Dick Charles was also another great mentor of mine. Dick and I used to talk to each other. He helped me a lot in my thinking and thoughts about ASHRAE and how ASHRAE works, how I could actually, you know, give some information back to ASHRAE because I've always believed that this industry has been so good to me that I really need to give something back to it. And he gave me great ideas of how to do that within the ASHRAE organization. So those are four mentors who I had were particularly valuable to me in my career.

Ahmed Alaa Eldin Mohamed: During your time in ASHRAE as a member or as a leader, what events changed ASHRAE and what events changed the industry?

David Underwood: Well, I've had a very long career, as you probably know, 'cause I'm not, you know, 20 years old anymore. When I first came into this industry, the control systems were either pneumatic or electromechanical. Now everything is direct digital control. It's a tremendous change from where it was when I first came into this business. It has required a lot of deep thinking. It's required a lot of, you know, adjustments in how I approach things when you look at the way we run control systems in our building system today. But one of the things that I, you know, I find that there are some really great things you can do with DDC. However, there's some issues with DDC as well. And one of the issues that I find that is somewhat difficult from an operations point of view is the fact that oftentimes operators do not really understand how to run these systems. Engineers are great at designing things, and operators are great if they know how to run things. This comes back to commissioning, which is one of those things near and dear to my heart within ASHRAE. I believe that there is a string with ASHRAE. It ties the owner, the designer, the contractor, and the operators together. And if you don't have that string that's, you know, that works from one to the other and the way through the system, you end up with an operator that doesn't know how to run this building. So, whenever I talk to an owner about commissioning a system, the very first question I ask him is, 'Who's going to run your system?' Because if it's your janitor, don't make a complicated system or guarantee that your systems will not work.

Ahmed Alaa Eldin Mohamed: Well, uh, during your experience, what can you say the lesson you have been taught by ASHRAE changed your perspective in life?

David Underwood: Well, you know, the answer to how ASHRAE has really changed my life is that I've established great friendships; I've established great relationships with people within ASHRAE. Not just within ASHRAE, because of the experience I've had with ASHRAE and the opportunities it has presented for me, I've met people from all around the world. We made friends from all around the world. And I'll tell you, for somebody from a little town in Saskatchewan to be there and meet these people around the world is an incredible journey. And ASHRAE has afforded me to do all those things, which, I think, for that, ASHRAE has certainly changed my life.

Ahmed Alaa Eldin Mohamed: Among your journey, what is the memorable memories from ASHRAE, which is, we can say, a markable or a special memory for you?

David Underwood: Special memories for me are so legion; it's very hard to pick one out. Maybe I can give you an experience that we had in one of our early journeys within the executive committee of ASHRAE. And I don't want to cast any aspersions on anybody. I'm just, this is an interesting story, I believe. We were in India, and we were at the Delhi chapter, and they took us down to see Agra, which is a wonderful day. Then they put us on a train to go to Jaipur, which is also great. It was an experience of riding on a train in India, which, of course, I'd never done before. We arrived in Jaipur. We got into the station, went out to the front of the station, expecting to see somebody with a name card saying Underwood. There was nobody there. And I, as a foolish person, did not know the hotel. I did not know the phone number of the person we were, you know, to meet. So, there we were, and it was eight o'clock at night. It's dark, and, uh, you know, an older person and his wife in a wheelchair attracted a great deal of attention. So, we had a lot of people gathering around us. Fortunately, I was able to call back to Delhi and talk to one of the people that I knew there, and he finally found out where the hotel was, and that's how we found our way to our destination. It was very scary, but looking in retrospect, it was kind of a funny situation. It was also a dumb situation for me.

Ahmed Alaa Eldin Mohamed: Before closing our interesting interview, I want to ask you what ASHRAE meant to you personally in one sentence.

David Underwood: ASHRAE has been a cornerstone for lifelong learning, making great friendships, and giving me opportunities to share my knowledge with others.

Ahmed Alaa Eldin Mohamed: Thank you, sir.