ASHRAE Leadership Recall (formerly Leadership Recalled)
Transcription

Interview of: Donald E. Holte

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Interviewed by: Mort Slone

Mort Slone
Don Holte, it's a pleasure to welcome you here to this interview as one Canadian to another. I'm very happy that I'm interviewing you today for this Leadership Recalled series taped interviews.

Don Holte
Thanks Mort.

M.S.
I will refer to some notes here. The first thing I would like, could you give us some biographical background on you.

D.H.
Certainly, Mort. I was born in a place called Cold Lake, Alberta. It's in Western Canada. From Edmondton it's about two hundred miles in a northeasterly direction. I was one of three children. I have a brother two years older and a sister three years younger. Both still living. We moved as a family to Edmonton in 1940. Onset for a lot of us in Canada the second World War. My father entered the service and I we stayed in Edmonton ever since. I attended from grade one to grade twelve school in Edmonton and finished my high schooling in grade twelve in 1953 but I did not immediately attend university. It took a few years later and I had to enroll in University of Alberta in 1959 and graduated in 1963 with a degree in mechanical engineering. Currently I still live in Edmonton with my wife Weta. We've been married now, this is 42 years. I have two children. One lives in Calgary, my daughter. She is an engineer also, chemical. Her and her husband live in Calgary. My son who is, guess what, a mining engineer. He's up in Fort McMurray which is a place that is about 300 miles or 500 kilometer north of Edmonton. He's a mining engineer in a company called Syncrude which works in the car sound area in extracting oil. And my wife also just to make things interesting is also a civil engineer.

M.S.
Full engineering background.

D.H.
The family of Engineers.

M.S.
Was your father?

D.H.
No, my father was not. No, no he was a trades person.

M.S.
Okay, and you're still involved in engineering?

D.H.

Oh, my yes. I retired from my manufacturing company about fifteen months ago but we've always kept the engineering consulting firm alive. And my wife and I actively operate a small consulting engineering firm.

M.S.

Consulting in which field?

D.H.

HVAC, the typical building services field.

M.S.

Mainly for architects or developers.

D.H.

Basically. Not too much anymore with the architectural field. Mainly for the larger institutional or contractors, yes.

M.S.

And I suppose a lot of this is retro fitting buildings that were build prior to.

D.H.

Yeah I think there's anybody in the consulting practice today has been involved in retrofitting because we did build a lot of buildings that need a lot of help. Certainly the buildings that came through the 50s need some help.

M.S.

What prompted you or convinced you to go into engineering, to study engineering in the first place?

D.H.

Now this was very interesting. In 1953 I went to work with an oil exploration company. Things were booming, as you remember in the oil industry in those years. And typically I'd grown up there but I had no clue what this oil industry was, so I went to work there and I spent six years with them and eventually became their chief surveyor. The fun part was I was working with a whole bunch of young engineers and it was a relatively young industry. In that time at that province with all these young engineers they seemed to be having a heck of a lot of fun. And I remember saying to my wife to be, I think I should try that. So I went and enrolled in the university there in 1959 after working from '53 to '59 after high school.

M.S.

What we were you working in '53 to '59?

D.H.

That was the years I was surveying with the oil exploration company. I worked all over Alberta, up in the Northwest Territories.

M.S.

Why did you go to work for them?

D.H.

They offered me a job.

M.S.

That was the reason.

D.H.

I mean, you're a seventeen year old guy, you go looking for a job.

M.S.

So you found a job.

D.H.

And I started out typically as everybody as a rod man in the surveying and eventually proceeded on to become the company's surveyor.

M.S.

Okay. And what engineering did you study at university?

D.H.

Mechanical.

M.S.

Mechanical, where as your experience has been more in the Civil lines.

D.H.

Well it had but if you think of an oil company in the exploration field it is made up of every engineering talent you can think of. It's just people that wanted to get into the business. And when I look through the curriculum that was available at the university the things that are being taught in mechanical seemed ones I liked.

M.S.

I see.

D.H.

So I decided mechanical is where I go.

M.S.

I see. You went to University of

D.H.

Alberta in Edmonton Alberta. Yes.

M.S.

I see. So you didn't even have to move away from home.

D.H.

No, it was beautiful.

M.S.

The Americans move away from home, not the Canadians. What was your first job in HVAC?

D.H.

Well in one of the summers, you know as any summer student going to university you go hunting for a job. Well I was offered a job by a consulting engineering firm and of course this was very interesting because I had no idea what even a consulting engineering firm was, let alone one of that did building services. But I was offered a job and by this firm as a draftsman. So I went and worked a summer with them and found it very interesting. Went back and I worked another summer with them but I also got involved with a sheet metal contractor and went to work with a sheet metal contractor for a while and it was just totally being involved in the industry that seemed very interesting to me. Building services. And it was just a fluke, Mort.

M.S.

At that time air conditioning or cooling was not a big item of installation.

D.H.

Well you know it was interesting. It was and it wasn't. I remember the first building I worked on which I think everybody always will, was a residence for one of the Catholic institutions. The building is still there by the way. It was only a heating and ventilation job but we also were doing a new 12 story office building. It was fully air conditioned. So it was happening, the city was starting to grow and anybody building the new building would probably have to put in cooling. So it was happening as early as the late 50s early 60s.

M.S.

When you were starting to do air conditioning?

D.H.

Yeah, oh yes. Yeah, I don't think you'd have been able to rent in downtown Edmonton without a fully air conditioned building.

M.S.

Even that far north?

D.H.

Well that far north I mean it's pretty warm summer's up there at that latitude. You know and it's well far north, I guess 54 degrees north isn't that far.

M.S.

No and what was your first, that was your first job in HVAC.

D.H.

Yes it was.

M.S.

How long did you stay there?

D.H.

Well I was just there as a summer employee. Just there was what I did in the summer. On graduation it was a different thing. At graduation I went with a gas utility. I spent three years with an oil and natural gas utility company in the sales and utilization field and that serviced all forms of customers you know from residential up to the large heavy and light industrial. Our job was, of course to sell natural gas and in those days it was to figure out how to sell it in the summer.

M.S.

Was there a big absorption?

D.H.

We were greatly involved in trying to get absorption, more absorption into the market but besides that we did a lot of work on engine driven refrigeration compressors. In those days it was a new word that hit the street called total energy which today everybody would call it co-generation but it was the same approach to things. So it was a marketplace to sell natural gas and particularly to increase the load in the summer.

M.S.

As absorption would be.

D.H.

Yeah and any of those things it would help increase the gas sales in the summertime.

M.S.

That was your prime-

D.H.

My prime function was to work with the people using the natural gas.

M.S.

At that time did you get involved in ASHRAE?

D.H.

Well looking back at it, 1964 a sheet metal contractor in Edmonton and always I remember the man's name Ron Williams, came by and said Don, you got to come with me to an ASHRAE meeting. And of course I knew what ASHRAE was because we had seen the handbook but I hadn't gone to the meetings but I went with Ron and I have been going to Edmonton chapter meetings, northern Alberta chapter meetings I think every month since 1964. I still go every month.

M.S.

That's quite a record.

D.H.

It was a lot of fun.

M.S.

You have to miss some meetings.

D.H.

Well of course you miss some meetings or you're not even in the country. Every time I'm in, as long as I'm in Edmonton on the third Wednesday of the month I show up at an ASHRAE meeting.

M.S.

And that was your start in ASHRAE.

D.H.

It was. Just simply a contractor said come on with me.

M.

And you went through the various offices.

D.H.

Oh my chapter offices, society office.

M.S.

When did you get active in society? Shortly thereafter?

D.H.

Oh no, well at the chapter level, yes I got quite active fairly quick. Then at the society level, that would be about 13 years ago now, 14 years ago before I got active. I got active first of all as a regional vice chair in education and then from there went on as a DR, director and regional chair, eventually as a director at large. All of the other things that lead to becoming the president of the society.

M.S.

And you were president between which years?

D.H

'97 and '98 was the years I was president.

M.S.

And as president of ASHRAE you had certain goals, you had a certain theme of your presidency. What was your presidential theme?

D.H.

The presidential theme was technology for a better environment but what I wanted to do, what I felt we had to do was increase the awareness of our members on the impact our work has on the environment. We're going to face this issue forever and we had to somehow get more and more emphasis within the society on what we do and how it affects the world we live in. We as a society, we look very well at the inside of the building and now I think we had another responsibility to make sure what we do did not give us too much trouble outside the building.

M.S.

Okay, at that time we were, the energy crunch had come and you, stability if you want to call it that, had come into the end of the people into our civilization - there must've been, there were issues that you must've been involved with in ASHRAE at the time.

D.H.

Well Mort, you know the energy crunch that, the first thing that caused society to react in some fashion was back in the early 70s when the first OPEC oil embargo occurred. But as all things in the world there's a lot of interest when something happens and then it dies down unless there's something to prop it up. Well it had died down pretty well by the 80s, into the mid 80s and even by '97 we still weren't very worried. You know the price of electricity and natural gas was not very high in '97-'98. Nothing much had happened yet. So that, funny enough the energy thing was not an issue in the years I was in there. We had started to look at the problems though of global impact of what we were doing as humans. So that was certainly there and was a concern of the society and everybody else and I don't think energy was really forefront in '97-'98. Took another year or two, and certainly this last year.

M.S.

Well gas prices you know have gone up like crazy.

D.H.

Yeah, everything started to change in this last, probably this last calendar year the year 2000-2001

M.S.

When you were president of the society, what were the major issues facing us?

D.H.

The major issues were indoor air quality. We were definitely talking about that one. And certainly building energy use was a major issue. But I would suggest the environment, the outdoor environment because we were starting to struggle after the Kyoto protocol. Montreal Protocol got us through the refrigeration industry through the concerns we had with the refrigerants we were using and we're over and done with that one. Now we are moving in, trying to understand what was going to go on with the environment. So we had the problem with the indoor environment we were addressing with indoor air quality and it was an interesting time because the beginning of states and provinces starting to legislate smoking and bans on smoking were just starting. And here we were starting to write standard 62 and revise it. We didn't know how to deal with the smoking issues so we were writing a standard that basically said the standards are good but it does not deal with spaces that smoke and that of course caused another segment of the industry we work in called the hospitality industry to get very concerned so that certainly was a big issue in those days and still is, the issue of indoor air quality and how we deal with it. I think I was probably the biggest issue that was out. We had a lot of other internal issues we dealt with as a society. But the things that were outside influencing us I would guess indoor air quality was one of the major ones.

M.S.

And we're still seeing the effect.

D.H.

Oh, we're going to struggle with that one for many, many years. It's a very tough one to deal with.

M.S.

More and more buildings are becoming non-smoking buildings.

D.H.

Yeah and we're understanding that the impact of what we do better and better how it impacts the human.

M.S.

What would you say, what events have changed our industry?

D.H.

Change in the industry, I don't think our industry or ASHRAE in essence have something that causes a change. The society grows you know, things grow and we move ahead so does the industry. It does not do some miraculous change but the things that cause us to move are just even some of the issues I mentioned. Indoor air quality has had a profound impact on our industry. On how we manufacture things, how we design systems and certainly now we're starting to see a large impact from energy use and environment. But one thing, there is one thing, physical thing I believe that did cause us a fair change in things are done, and of course what it was, was a new advent of control systems that moved away from pneumatic and electrical analog devices and got into the digital electronic field. That and you know words pop up like DDC and this but it really was the fact that we now can move away from control systems who were rather problematic to keep in tune so to speak to something that we had a better control of. And I think that was a major change in our industry, was the movement into the digital electronic field.

M.S.

Do you feel we are still in an evolutionary stage?

D.H.

ASHRAE and the industry will continue forever to change and evolve because we as people will continue to come up with better pieces of equipment and better ways to build buildings so will always move and change.

M.S.

We haven't reached a plateau.

D.H.

Oh gosh no. We're just beginning. We're getting better but we're just beginning. We always just begin.

M.S.

Okay next question. What has ASHRAE meant to the industry's growth?

D.H.

From my perspective it is the organization that puts a common technical reference to an industry which allows all sectors of the industry to work from the same information base. Instead of having everybody going their own direction, we have this one overriding technical body called ASHRAE that really allows everybody to work from the same information base. And of course it gives us the information base, the technical information base. So it's almost the glue the starts to hold this industry together. I hate to

think where we would be on this continent without ASHRAE or some organization doing exactly what ASHRAE does because it really is the basis by which all of us work. It's the glue, as I say, that holds this industry together and a common technical reference.

M.S.

We touched on this slightly before when you mentioned that certain people had affected your decisions and so on and influenced you. Can you elaborate on any of that.

D.H.

Oh, sure I certainly will. As anyone I think who grew up in the type of families most of us grew up in, my parents had a great influence on me. And I always remember my father saying to both my brother and I and sister, you want to walk down the street and not worry about your back. But what he was saying was be very honest and straightforward in what you do and you're never going to have to worry that somebody is coming up behind you and it was a good information. But it was a couple of other guys. There was Ross Cheriton, was a man I first went into a consulting business with in 1966. He was a heck of a smart and a very, very sharp engineer about 15 years my senior and he taught me an awful lot about business but I think more than anything about how you have to deal with this industry of ours. There's two things he said that have always stuck in my mind. One was our major duty as a consulting engineer was to protect a client from himself because so often the people we work for make decisions based on their concerns which are usually solely monetary. We were given a set of skills and acquired them and our decision is to make good decisions on behalf of that client because they will quite often not make the right one because they work from a different direction. They don't have our knowledge. So that was important. The other one he always said was, you got to learn to bite the bullet because we're humans and in our consulting business we will make some mistakes. So when you make them admit them, bite the bullet and carry on because you don't want to waste your time fretting over the things that have happened. Sure you make mistakes but we're all built that way just don't make too many. The other one though, the other man that really got to me, the person was a man named Dr George Ford who ultimately became dean of engineering at the University of Alberta and that. He instilled in all of us when we were relatively small class, I guess the excitement of being an engineer. I mean he loved the business and he instilled that in us and then he also had a couple things that he kept driving in our head. An engineer's job is to do more with less. And he said anybody can build something just if all it takes is to make it bigger. The engineer is there to make it better with less because that's what engineering is about, applying science in a proper way. The other one was, he said you have a great obligation and he said that's some word that he thought was missing was the obligation a person has. What once you have got yourself trained you have an obligation to society to carry on. So I think of the people I worked with, those two really stuck in my mind over the years.

M.S.

We're these members of ASHRAE?

D.H.

No they weren't. Well Ross Cheriton was funny enough. He was an electrical engineer but he actually was even the president of the local chapter for a while, for one year. He never went beyond the local work but he was a member of ASHRAE. Dr Ford was not. His world was really, strength and material.

M.S.

These are the people who influenced you.

D.H.

Yeah, they're the ones that really stick in my mind all these years later.

M.S.

They were important.

D.H.

They were. They, I think formed a lot of my thinking back when I was a pretty young man.

M.S.

Which you still are.

D.H.

Yeah definitely Mort. It's a relative term, is it not?

M.S.

Okay. What advice would you give a young person entering the HVAC field?

D.H.

Get involved. Number one. Anybody entering any field at technical field they should get involved with the industry become part of the industry through its associations and societies. Get involved because if you're not involved you will never ever be playing up to date. You will always be back there following someone else. So it's important to get involved and then if you're, you know, you're an engineering graduate or a technical college graduate what that's done for you is usually given you some physical sciences and mathematical tools. Now you got to learn the art. The other part of what engineering and design and construction and manufacturing is all about. And so often I think they're reluctant to get heavily involved in learning the art and that's a tough one. That takes a lot of time. That takes just as long as the formal education. Probably a lot longer. So you got to get in there and really decide to, this is, all business in a technical sense that we're in, is part of the application of your technology or your science and the other one is the art of the industry. You've got to learn that. So the young guy needs to get involved, not just a young one, the person coming into the business.

M.S.

Do you think that our association, that ASHRAE will continue to be in the position that it's in at the present time, the forerunner, the leaders in our industry? Is that going to remain or is someone else going to step in?

D.H.

We will, ASHRAE will lead the industry in certain areas but will never ever be able to, nor can it even today, lead it in all areas. And simply as any organization grows and evolves it sits there and tries and struggles to figure out exactly where it should be within the industry it serves. ASHRAE is struggling as, well it's probably struggled for 100 years to figure that one out. It will always lead I think because the members are involved. It's a volunteer organization and that's its strength because if it was any other kind of trade organization it would then go at the whim of the trade or of the manufacturer. But we don't. We go as a volunteer organization but an immensely broad membership. So we will always be I think at the forefront.

M.S.

Why do you feel that ASHRAE is so successful? Because they are.

D.H.

They're successful because they only accept individual memberships they do not allow dominance by any specific company or industry and they work with volunteers because the minute you start paying people, well sure we have a staff that's paid to handle all the work we need. But all of the technical things we do and all of the chapter work is volunteer basis. That's a whole different way. That gives a whole different mental attitude. If you pay someone to do those things that then becomes a job and therefore someone says, what do I do with in this job now to advance myself usually financially. We don't have to fight that battle.

M.S.

Nobody's in it for personal gain.

D.H.

That's right and so it causes a whole different way. People are more apt to share their information and their abilities when they're not in there for financial gain.

M.S.

Yeah, nobody's in it for financial gain because there's no money to be made.

D.H.

Exactly. We're in there because we enjoy what we're doing. And we feel there's an obligation to share.

M.S.

You have any other observations you would like to make. Any other comments you'd like to make Don?

D.H.

On which?

M.S.

On anything. On any subject relating to or not relating to what we're talking about.

D.H.

Well you know the question came up, sure I had been, this is terrible. I see looking back to first job I had is 40 years ago in this industry. So what was going on 40 years ago? I wonder what's changed. Pretty interesting. So I started looking at that thing and it was very interesting. Where I live in Edmonton Alberta, 40 years ago no one even discussed the word energy cost. I live in a place that produces oil and natural gas and an abundance of electrical power. So it was a non issue, there was no issue dealing with that. But we never heard the word indoor air quality. We never heard the word sick building syndrome. The word sustainability in reference to what we do didn't exist. None of these words were there. There were no variable air volume systems. We didn't have any computers yet outside of a couple strange beasts in a university. There was a whole different, we were building big central systems in buildings. I can remember designing these things that had fans in them. They were monsters. We had one big fan system for the whole building. So there was a whole different industry there. We were in a period of growth and everything was almost bigger is better and keep going. Then summers, I think summers in the 70s, things started to change because I think because you say we went through the first energy problem so we started thinking maybe we've got to get a little serious about what we're doing. I remember back one of the first jobs I got with a client in 1967 was on a school we were designing in this little village town north of the city of Edmonton. One of the discussions were how do we convince the owner that we should add an extra or add an inch, one inch thick insulation to the roof of the building. It was a built up roof using a fiber board of about three quarters inch thick. And you know you had to work and show a proof that adding one inch of insulation was of value to that owner. We were at that

point in the early 60s, I guess even in the mid 60s, we just saw no value in spending any money on anything like insulation because energy was so low cost, so plentiful.

M.S.

I think this was constant across Canada.

D.H.

Yeah, I imagine it was constant all over North America. We were just living a good time but things changed. And now of course we're dealing with the whole other issue of convincing owners to do things with a building to reduce energy.

M.S.

Anything else to say sir. Any comments

D.H.

Well ASHRAE has been the most enjoyable organization and interesting that I have belonged to over the years. I'm a registered engineer in three Canadian provinces. I've been involved with associations and different engineering institutes in Canada. Canadian Society of Mechanical Engineering. None of them have ever interested me like ASHRAE. I've always sat back and said, why does ASHRAE interest me so much? Well one of the things that I think ASHRAE does and rightfully so is they did not set up an organization with a limited membership. One of the other organizations I belong to had really what's called a limited membership. You must be an engineer, a graduate engineer from a university before you can belong to the organization. ASHRAE's strengths is a broad, the immense broad membership base. So we bring to all meetings, views from many directions, and it makes it a very, very interesting place to be. I've, as I said I just totally enjoy it and now it's gone past the technical society to us, to my wife and I. This is fraternal. We come here equally as much to visit with friends as we do to see what's going on technically and we'll probably keep coming and keep coming as long as we can.

M.S.

It's been- that's it?

D.H.

As far as I'm concerned Mort unless you have something more.

M.S.

No I just want to say that it's been a real pleasure talking to you Don. And I wish you all the best in the future.

D.H.

Thanks Mort.

M.S.

My pleasure.