

President ASHRAE Niagara Chapter September 1971

Born in Hamilton Ontario in January 1939, George Menzies was a surprise to his parents, who already had a daughter of 20 years. During the 1920's his father (also called George) was a chauffeur, driving a Cadillac for the owner of Mercury Knitting Mills. Times became hard in the early 1930's and through his Masonic Lodge connections, George Sr. purchased a Dodge Fargo truck and began a successful business delivering goods for companies like Fuller Brush, Lifesavers, and Bell Thread.



Mercury Knitting Mills



Dodge Fargo Truck

George Jr. started school a little early because of his January birth, which meant that his peers were generally a year older. At age 6 he got his first job, selling LIBERTY Magazine (similar to TIME) – he was paid 2 cents per copy. By age 8, he had graduated to accompanying his Dad in the truck during summer months. One regular place of delivery was the local steel mill, where children were not allowed, so he had to cower on the floor of the truck so his Dad could drive in. This



was his first experience of the steel industry and he became fascinated by it.

At age 10, he had his first full-time job – at a bake shop. The job was actually 7days per week; on weekdays his task was "Punching Tarts" (forming pastry shells ready for filling), and he made cakes on weekend mornings. He had a quota of tarts to produce – 200 dozen per day! Of course the actual "punching" was done by a machine, and he still has a scar where the machine took a chunk out of his forefinger.

By age 13, his father's trucking business was growing and there were two trucks, one being driven by an uncle. Each evening after school, George Jr. was encouraged to park the two trucks in the alleyway behind the family home, and in this way he learned to drive. In the summer of his 15<sup>th</sup> year he was actually driving one of the trucks without a driver's license – he simply carried his Dad's which had the same name on it (but not the same birthdate...). On January 29, 1955, he drove a 1954 Oldsmobile '88 to an official driving test. He managed to drive one block before the testing official asked "Have you driven before? How far? 1000 miles? Take me back to the office, you passed the driving test". A beaming George Jr. left with a smile on his face.



Oldsmobile '88



McMaster University logo

Two of George's uncles were engineers with the railway, in charge of steam locomotives. His parents had been pushing him towards a career in engineering, which he originally mistook to be a train engineer. This was not the case and when McMaster University opened its Engineering program in 1958, George was accepted in the first enrolment of 50 students. His Dad bought him his first car, a 1936 Dodge, and he promised not to drink and drive. Halfway through his first year at University, his brakes failed due to corroded lines, and he narrowly escaped disaster driving down a steep hill – the car full of his buddies.

Around this time his father suffered a stroke which effectively brought his truck driving to an end. He offered the trucking business to George Jr., who elected to R.S. Potter Region II Historian George Menzies Biography remain in University – much to his father's delight. He was rewarded with a brand new 1960 Plymouth. Eventually George chose to specialise in Mechanical Engineering, and the class dwindled to about 26.



1936 Dodge



1960 Plymouth

During the summer breaks from University, George worked in the machine shop at Stelco Hamilton, a large steelworks. He was involved in maintaining the hoist equipment on the many cranes used in the works. It was common for undergrads to work part-time in the plant but a strike eventually caused him to be laid-off. A chance meeting with a project manager for the new Port Elgin Nuclear Plant (now known as the Bruce Facility) brought him work as a surveyor – for the 6 mile road leading to the site. He had taken two weeks of surveying as part of his first year at University and he soon got the hang of it. He worked on this road for two summer breaks and became quite strict with the contractors – ensuring that the correct thickness of tarmac and road bed was used throughout.



Stelco Hamilton Sign



Stelco Hamilton Works

By year three of University the class only had about 8 students left. After finishing year four the Dean of the University threw a party for the students and revealed that anyone who had passed year three would not have failed year four – but the students did not know that. And so it was that he graduated in 1962 with a Mechanical Engineering Degree.

In the last months of his final year he attended job interviews with the likes of Westinghouse, Ontario Hydro, and Stelco, who realised he had worked with them before. They offered him a job inside a minute and he was happy to stay in his home town. He started an 18 month training program – and learned a different task each month, working in the blast furnaces, coke ovens, steel making, eventually getting a thorough grounding in all major functions of the steel works.

His favourite month was spent with a group called Utilities which had a variety of divisions, one of which was ventilation. This was January 1964 and after a couple of months he was actually in charge of the HVAC division, largely concerned with maintenance of ventilation equipment. He had some technicians under him who changed filters and they generally ensured that new systems could be serviced easily. By 1965 he was used to dealing with contractors and he was invited to his first ASHRAE meeting – on the top floor of the Hamilton Professional Arts Building. He was surprised to see many of the contractors at the meeting and he was suitably impressed. He asked his boss if he could join ASHRAE which he did in November of that year.

George's first CRC was Quebec City in May 1971. At this CRC, Montreal's Hay Murray – then Research Promotion Regional Chair - agreed to create ASHRAE Research Canada so businesses in Canada could write off their contributions. This was in place by the following CRC. The photo at right shows George on the left, with Andy Boggs, ASHRAE's Executive Secretary at the 1971 Quebec City CRC.





In 1972 Niagara Chapter was renamed as Hamilton Chapter, and here George receives the new banner on March 16, 1972, from administrative head of ASHRAE Andy Boggs. On June 1, 1972, Hamilton Chapter sponsored a new chapter in London Canada to be known as "London Canada Chapter", and here George hands over their gavel and some seed money at a joint golf day.





George was Director & Regional Chair 1977 thru' 1979 and here he was present at Ottawa's Silver Anniversary celebration in October 1977.

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George's career was blossoming nicely at this point and the Stelco management team always involved him at the planning stage of any expansion. He always stressed that HVAC systems should be openly designed to allow for easy servicing.

The plant operated 24 hrs/day 7 days/week and one area of concern was the "Pulpit" room directly over the rollers for red hot steel ingots – which was so uncomfortably hot that the operators could only stand it for 30 minute shifts. It occurred to George that if the room could be air-conditioned, the 30 minute shifts would be a thing of the past, and he estimated that this would save the company about \$250k/year. He designed a total revamp of the Pulpit and provided cooling with a 7.5 Ton refrigeration system. All piping was stainless steel flex and the heat transfer coils had to be copper tube copper fin because the works atmosphere was so corrosive. The airflow into the Pulpit was about 1200 CFM, passing through five stages of filtration – final being HEPA.



Steel Ingots being rolled



Modern Control Pulpit

There was actually a larger Engineering Group (full of theorists) and gradually George's division was stealing work from them. He eventually had air conditioning installed in the main works lunch room – and he was a popular guy!

Years of success went by but 1990 brought a crippling strike to the plant. Auditors got involved and they discovered how extensive George's division had become, with its own sheet metal shop, and rented equipment provided by the



union. They had been building their own ventilation equipment for years – and all this came to an abrupt halt. About 7000 workers were laid off, with about 1200 in Engineering trades, downsizing and outsourcing being the new mantra.

George had managed to become a Registered Occupational Hygienist (ROH) over the years. The guy in charge of the lay-offs was nicknamed "Chainsaw Bob" – and he knew George's capabilities. He suggested that George could remain employed if he switched to the Health & Safety Group. He wanted someone who would actually find solutions to problems, not wander about moaning about them. Therefore he became the sole survivor from the Engineering Maintenance Division.

He worked for this Health & Safety Group for five years and when he joined, it had 20 employees, all of whom were chemists. George made 21 and he was the guy who found practical solutions. Methods were changing at shop floor level and the type of fire brick being used now contained large amounts of silica. These bricks were constantly being replaced and were cut to shape in-situ – with

consequential dust clouds. His expertise was used to great effect with the design of a large fume extraction system over the work area.

George has fond memories of those five years except for the fact that his boss was very timid and always afraid of doing anything that might offend Chainsaw Bob. Eventually he could not take it anymore and made enquiries about when he could retire with a full pension – and on August 16 1994, he gave one year's notice. He had very sensibly opted for a 2% employer-matched pension contribution way back in 1962 and he was happy to leave.

On August 17 1995 he and his wife Gail headed south to Florida in a Nissan pickup

truck. They returned after three months in time for Christmas, sporting fine tans – but George was feeling BORED. Through an ASHRAE connection, he heard about a company called Madok Industries in Brantford Ontario requiring some H&S help. They manufactured Heresitecoated heat transfer coils and required about 4 hours/week of George's specialized knowledge. Word soon spread that he was available for consultation and "GM H&S Consulting" was born.



George's ASHRAE involvement spans 50 years, highlights of which are too numerous to properly list here. When asked, he noted that he and his wife Gail have thoroughly enjoyed visiting the many ASHRAE meeting locations throughout North America which they may have not visited otherwise. Gail also participated as the CRC Secretary for many years and got to know and make friends with many of the ASHRAE Executive.



Gail and George seated with their daughter Suzy, in the new Hamilton Tigercats Stadium (Tim Hortons Field) during the August 2015 Hamilton CRC.