A collection of notes from Athlone Fellows about themselves and where they are today

Compiled by

**Robert L Hemmings** 

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#### **Copyright Page**

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#### Contents

Copyright Page	3
Introduction	6
Dwight Aplevich, Athlone 1964, USask	8
Ted Aziz, Athlone 1960, Western	
David Brown, Athlone 1960, UBC	17
G. S. Peter Castle, Athlone 1961, University of Western Ontario	
Doug Chapman, Athlone 1968, UMan	24
Fred Christie, Athlone 1960, Dalhousie – 60 Years Later	
P. Wayne Clifton, Athlone 1966, UofSask	
Bill DeCoursey, Athlone 1951, UofA	
Fred A. DeLory, Athlone 1953, McGill	
Rod Desborough, Athlone 1965, Dalhousie (Mt Allison)	35
Robert Murray Duncan, Athlone 1960, UMan	
Gary Elfstrom, Athlone 1968, UBC	42
Robert (Bob) Evans, Athlone 1970, UofT	45
Bob Frindt, Athlone 1960, UofA	47
Monique Frize, Athlone 1967, U of Ottawa	50
Tom Gladney, Athlone 1964, UofT	53
Brian Grover, Athlone 1961, UMan	55
Lawrence P. Haberman, Athlone 1960, UMan	73
Bill Hanuschak, Athlone 1960, UofM	75
R L Bob Hemmings, Athlone 1962, UofA	
Steve Hrudey, CM, AOE, Athlone 1970, UofA	
Ron Johnston, Athlone 1962, UofA	
Edward V. Jull, Athlone 1957, Queens	
Jim William Kranias, Athlone 1961, UofA	
Bob Landine, Athlone 1962, USask	104
Garry Lindberg, Athlone 1960, UofA	
Earle Lockerby, Athlone 1964, Nova Scotia Technical College	

Gordon Lorimer, Athlone 1964, UBC	119
Si Seaforth Lyle, Athlone 1960, McGill	
Bill Matthews, Athlone 1961, NS Tech	
Gregory Malcom McNeice, Athlone 1964, UWaterloo	
Andrew Nellestyn, Athlone 1965, RMC	
John Nilson, Athlone 1960, USask	
Arthur Plumpton, Athlone 1962, McGill	
Robert (Bob) Roden, Athlone 1961, UofT	
Bob Ross, Athlone 1960, UofT	
Ian Rowe, Athlone 1964, UofT	
Don Shields, Athlone 1955, USask	
Oskar T. Sigvaldason, Athlone 1961, UMan	
Ben Smith, Athlone 1959, Dalhousie	
Roger Stone, Athlone 1961, UBC	
Ron Taborek, Athlone 1960, UofT	
Scott Taylor, Athlone 1960, McGill	
Bob Tucker, Athlone 1960, McGill	
Harold (Hal) Wackman, Athlone 1963, UMan	
Murray Woodside, Athlone 1960, UofT	
What does this collection of notes from many Athlone Fellows Mean?	
"I Thank you all"	

#### **Introduction**

As a result of hearing from many fellow *Fellows*, I have prepared a collection of personal notes, identifying something about what each of us have done since the Athlone, and what we are up to now. This compilation of individual notes about ourselves, which could have been put a few at a time in each of the future Newsletters, but as I just cannot manage those future Newsletters, I have now cancelled that option. Thus, this is the collection from almost 50 *Athlone Fellows* into a book form. Where agreeable with the individual contributors, contact information is included. The final order of presentation is alphabetical, making it easier to find any individual's story. Further, each contributor provided me with his information, permitting me to use it in this collection. Some were very short, some were longer, some even like a part of a detailed biography.

And, as you explore the messages from these Athlone Fellows, you will find many interesting and exceptional individuals. Please enjoy your excursion with these Athlone Fellows.

Further, I will eventually add this collection to my **Athlone Collections** that are available at the following two sites:

#### University of Alberta

the following link: doi.org/10.7939/r3-6s01-m027

or

Engineering Institute of Canada

https://eic-ici.ca/engineering-history-papers-collection/,

#### as paper #118

At these two sites you can also find: *"A Short History of the Athlone Fellowship"*, Rev 3.

And while you are on the EIC site, why not look at Paper #100: *"Athlone Fellowship Program and Canadian Geotechnique"*, produced by the CGS in 2021. I quote from the introduction in that

paper: "Over its 20-year history, 810 Athlone Fellowships were awarded, all but three going to male engineers. The Fellows were selected from 21 Canadian universities. Of the fellowships awarded, we have identified 35 Athlone Fellows (all male) who were involved in the geotechnical field (see following table). These individuals came from 14 universities across Canada and all but four attended Imperial College, then part of the University of London. The four other institutions were the University of Glasgow, the City University of London, the University of Cambridge and the University of Manchester." The paper includes a brief summary of the careers of 31 of those individuals, several of whom are included in this list of "Athlone Fellows Today".

This *Final* revision of *Athlone Fellows Today* is the result of thorough review by each contributor, as well as a very detailed review by me, well assisted by Greg McNeice in the final review correcting a multitude of small errors by me, (correcting grammar and spelling errors, re-organizing the format into alphabetical order of the presentation, and making sure that all contributions are well presented).

#### Dwight Aplevich, Athlone 1964, USask

This is an expansion of the article that appeared in *A Short History of the Athlone Fellowship* to include some of what has happened since.

I'd like to add my belated observations on the Athlone Fellowships and all they entailed. I was one of approximately 40 young, cocky Canadians who debarked at Liverpool from the Empress of England in September 1964 after six long days and nights aboard, in which we had experienced force 9 gales. Two of our contingent were already in England.

After the efficient welcome by the Board of Trade, we headed to our destinations, some of us to Imperial College. We were informed that the term did not begin until mid-October, so to celebrate our arrival in England, several of us took a plane to Paris. We spent a hilarious few days there, partly because two of the group were from Quebec and language was not a problem. Returning to London to begin my program in communications and electronics, I experienced the British hands-off style of research supervision by being told to carefully read and reflect until I could formulate a thesis topic, about six months after which I should be finished. Not long afterward, my supervisor decamped to Africa for an extended stay. As it turned out, this supervision style suited my temperament, and his predictions came almost true although I attended several post-graduate lecture series that were needed for my project, and writing the thesis took longer than predicted. The camaraderie among fellow students who greatly assisted each other, the continuous stream of distinguished visitors who gave talks, the top-notch lecturing, the atmosphere of searching for excellence, and even the discussions over morning coffee and afternoon tea, which were attended by much of the department, made a lasting impression on us all.

Living in London was special. The concerts, the theatres, what Time Magazine called "Swinging London," Carnaby Street and the King's Road, the Beatles, the pubs, and the football matches all combined to produce an intense experience. Moreover, I had a car and, in the summer of 1966, it became my hobby to act as a tourist guide. Visitors, primarily from North

America but also many from the British Isles, would be given a brochure by their hotel porter. "Be shown around London by a young English gentleman," it read, "a student from Oxford or Cambridge reading the arts, letters, or the law." The lab telephone would ring and I would be told to pick up the Jones family from Michigan and take them on a three-hour tour of London or, perhaps, Windsor, Oxford, or an evening pub crawl. In those days you could park right next to Saint Paul's or in Parliament Square, for example, and one learned which traffic lane to take and to drop the passengers off briefly at Buckingham Palace at precisely 11:15 when the Guard marched out. On those occasions when members of the Royal Family were spotted, you could say "I didn't want to promise this, but there is Princess Margaret driving away ..." London was in ferment that summer because of the soccer World Cup, which the Germans remember as having a disallowed goal in the final and the English remember as winners. This was life at its fullest, but the day came when distractions had to be given their proper priorities with respect to writing a thesis.

These happenings all occurred because of the Athlone Fellowships, a unique program that provided excellent education and unforgettable experience, the demise of which we all regret. I share the sentiments of others who cherish the memories of their experiences of British people and places. Mine lasted from 1964 to early 1968 when I left London for a year in Chicago.

The career of some Athlone Fellows might have followed a plan but mine seems to have unfolded because of random or, at least, unplanned events. My thesis related to what are today called neural nets, and on the recommendation of Professor Dennis Gabor (Nobel recipient for inventing holography), I was offered a position at the University of Chicago in what was then called the Committee on Mathematical Biology.

I flew from London to Chicago on a Friday afternoon. I had lived in rural Saskatchewan, in Saskatoon, Montreal, and London but had never had a sense of physical danger. Now I was living in the South Side of Chicago. On Sunday afternoon, I had a pistol pointed at me by a member of a group of youths, but I stupidly kept on walking and did not realize the danger until they ran. Two months later after a rehearsal of a musical production

in which I had a part, a girl asked me to escort her home to avoid having to walk alone. The next morning there was a stain on the sidewalk on my way to work. It transpired that a library worker had been killed the previous evening at a time and place where I would have been had the girl not asked me for a favour. Returning to Canada became a serious idea just about then but, in the remainder of my stay, the Vietnam War demonstrations, the Counterculture, the Democratic National Convention, the assassinations of Martin Luther King and Bobby Kennedy, and the triumph of the moon landing all made for a tumultuous time.

I had received a job offer from Atomic Energy of Canada and probably would have taken it up but I discovered that the project in which I would be involved was in funding difficulty. I also had an offer from the University of Waterloo so I decided to try that for a year or so. That was in the fall of 1969 and my last large class was in the winter of 2019, 50 years later and well after my formal retirement in 2008.

The details of an academic career are perhaps of interest only to other



Patricia and Dwight, 2006

academics but can be very satisfying, combining a freedom of action, the challenge of research and working with graduate students, the pleasure of teaching, and, in my case, the satisfaction of writing books.

In the fall of 1969 I met Patricia Kocur of Toronto, who was beginning a career teaching French at the University of Waterloo. We married in January 1971, celebrated our 50-year anniversary in 2021, and had two children who are now grown and who produced six grandchildren. The two photos show us during our two decades of ballroom dancing and, concurrently, our time racing a dinghy around Ontario and Michigan.

Since my wife taught French, spending time in France seemed to be a good idea, and I arranged a sabbatical year at a French government research



Patricia and Dwight, circa 2006

laboratory in Toulouse where we had a problem because my Saskatchewan high-school French was no better than their English. The problem was resolved unanimously by my colleagues, who decided that I should learn French, and their patience together with my watching *Bonjour Sésame*(the French Sesame Street) on television with my then two and three-year old children did the trick. After six months of this total immersion, I was haltingly able to conduct a research seminar, and after a year, my French was passable. We spent a total of three years in Toulouse at various times and it became like a second home. For our second stay, I was appointed Professeur Associé and, on arrival, I was

shown into the Professor's office. "What are you going to teach?" he asked. "Teach?" I replied. "You have to, your salary is paid by the Ministry of Education," he stated. So, I taught two graduate-level courses as well as conducting research, and let there be no doubt that regularly standing in front of a group of exigent students solidifies one's language.

Speaking French became an asset in Canada when I was asked in 1977 to participate in an inspection visit at Laval University as a member of a team from the Canadian Engineering Accreditation Board. I became a Board member, Chair, and, later, consultant to universities starting new engineering programs, a 40-year association that became a principal professional activity. I was also on the board of two companies and participated in university administration, for a while as Associate Dean of Graduate Studies, responsible for the funding of all graduate students.

Most of the above was the result of unforeseen events, receiving an Athlone Fellowship, walking home by a new route, choosing which job to accept, meeting my future life-mate, going to France, and learning a language. To the extent that luck was involved, I consider myself to have been very lucky, as our generation certainly has been.

#### **Dwight Aplevich**

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#### Ted Aziz, Athlone 1960, Western



Ted & Carol, 1960 & now

We were married in Woodstock, Ontario on August 20th, 1960 and one month later landed in London and on to Nutford House for a few days while we got ourselves organized. The first flight of our lives, Montreal to Gander to London and our first trip out of Canada, except for the odd day trip to the US (quite a change from kids these days). We recall the flight with a chuckle, since it was all Athlones, all under 30 and by mid-Atlantic, the plane had run out of food and the toilets were full! We will never forget the view of London from the air in the early hours. It appeared to stretch for miles in every direction, which of course it did. Quite the view when you've come from a city of 180,000!

Met and made some lifetime friends, both on the flight and in our few day at Nutford House, as well as a number from Canada, the UK and many countries during our almost three years in London.

We lived in Wimbledon on the third floor of a house. The Smythes on the second floor and the landlady on the ground floor.

I attended Imperial College in year one, for a DIC in Concrete Structures and then continued-on for an M.Sc. splitting my time between Imperial and the University of London Computer Centre at Gordon Square. (Earned a bit of spare cash working there, as well).

Carol worked as a State Registered Nurse at the Wimbledon Hospital, a 'cottage' hospital as it was referred to, associated with a larger hospital further away. My Athlone stipend paid more than her full-time work as a nurse (crazy times). So, we were able to live on 'my' money and travel on 'her' money.

We especially loved the London theatre scene and attended many performances throughout our time in the UK. Our travels took us to many areas of England and Scotland, as well as, France, Spain, Germany, Italy, etc., which gave us the travel 'bug' and an appreciation of the World.

We were in London, for which at that time was the coldest winter in 100 years. It snowed. People got out and shoveled the snow onto the roads, because it would melt in a day or so. Six weeks later, the road in front of our place was like a moonscape of bumps and ruts! The 'tube' from Wimbledon ran on the surface into the core. On some snowy days, the 'shoe' would lose contact with the power rail and the conductor would get out with what looked like a croquet mallet to smack it clean and away we would go again. A couple of disturbing thoughts from that time. One was the fact that some old people, particularly women, partially frozen, were treated at the Wimbledon hospital. The other, that we saw a lorry loaded with coal hit a bump on our road, losing some coal and people rushing out to pick up the pieces to use. Only 15 years or so after WWII, there were still some problems with living conditions.

The Athlone Fellowship was one of the major events of our lives, providing us the opportunity to learn and experience a great time. Me to learn a lot about structural engineering and the application of computers in solving engineering problems. Carol to experience nursing in a whole new atmosphere from her nursing in Canada. In addition, for both of us to

travel to many countries, to enjoy theatre at its best and to make many friends from Canada and around the world.

We left the UK with mixed emotions since we loved it so much. We may have stayed longer, but had to get our Austen 850 out of the country to avoid paying the tax! (Had to be out within one year of purchase and didn't have to pay the Canadian tax, since we had owned it for more than 6 months. A win-win, so to speak).

Upon our return to Canada we lived in Toronto for a year. I was employed by IBM in the Toronto Data Centre as a Scientific Analyst and Carol returned to nursing at the Toronto East General. (The latter only lasted until she was obviously pregnant, at which time they let her go. Couldn't do that today without a lawsuit).

Our first child Scott was born in Toronto and we decided that we would relocate back to London. Firstly, since we thought it would be a better place to raise a family and secondly for me to try work as a Structural Engineer before I got locked in to the computer industry (much as I enjoyed that as well).

I joined a Structural Engineering firm which had been established in 1954 and started to do the work that I had been training for throughout my entire university journey. Been there ever since, with it becoming **Hastings** & Aziz Consulting Engineers in 1967. We provided structural engineering services for many of the major building projects in London and throughout South Western Ontario. Still at it, but within the last year almost 90% retired.

We have 3 children (an engineer, a geologist and an occupational therapist), 6 grand-children and 8 great-grandchildren. Still living in the first home that we bought back in 1968, with a few additions.

We have been fortunate to have travelled quite extensively with trips to the Caribbean, the Mediterranean, the Baltic and Black Seas (cruising), as well as to Europe, USA and of course Canada. The latter, partially due to the fact that 12 of our family are in BC.

Our hope during Covid 19 was that it would come under control so that live theatre can come back to life and we can all get on with ours. And, eventually, it did.

PS: Forgot to mention in my 'blurb' that in the almost 3 years that we were in the UK, we never once phoned back to Canada –  $12/\min$  in those days was a fortune. I don't think that anyone today could do that for more than a day or so.

We got one call a year at Christmas from our families back home. Of course not many of us had phones in house to even receive calls, let alone make them. Our landlady used the fact that Carol was a nurse and would be 'on call' to get the GPO to speed up installing her phone, which was in the down stair vestibule to give us access in case there was a call.

Ted Aziz, Athlone 1960, Western

#### David Brown, Athlone 1960, UBC

A bachelors degree in engineering from UBC in those days (the '60s) required five years of study: one year in Arts and Science, two years in general engineering studies covering multiple engineering disciplines and finally two years in an engineering specialty. My specialty was electrical engineering with an engineering physics option.

I applied for the Athlone fellowship largely because my wife was nostalgic for Britain where she spent her early years and had many close relatives. She was averse to flying so we were granted an exception and allowed to travel by sea. I recall arriving off Southhampton in a dense fog with a heavy smell of coal smoke. I was to experience many more such fogs in our two years living in St Albans and commuting to Imperial College in South Kensington.

We took the train to Waterloo where we were met by my wife's father and driven to St. Albans where we stayed first with her Aunt and Uncle for a considerable period before finding our own accommodations near by. The period of their hospitality was extended by our attempt to rent rooms in Kew. The place we found was on a two-lane road and seemed quiet when we visited it in the middle of the day but on moving in we found it was on a main road – the South Circular. My son was about 5 months old at the time and he was cold and overwhelmed by the noise; his mother and I were soon feeling very insecure. We retreated to St Albans where we were very happy for our entire stay in England. We could not have had better neighbors. The Arnolds vacationed in Switzerland each year and eventually retired to the Devon coast. They and my wife's aunt and uncle made those years the very best of my early life.

Since we travelled to England by sea I missed the orientation period of the Fellowship and didn't meet the other fellows at that time. There was one occasion when all the fellows, at least those near London, were invited to a afternoon tea party. I am not sure now who the host was but he was high up in the board of trade. I recall chatting with his wife and her amusement at my tale of a grey hair at my tender age of 24. This one afternoon was to be all I ever knew of other Athlone fellows with one notable exception. In

the mid-sixties I was working at the Pacific Naval Lab (PNL) in Victoria and needed to visit the Defense Research Board's Atlantic facility, the name of which I have forgotten. That lab was in Halifax and another 1960 Athlone Fellow was employed there. He introduced himself and invited me to dinner. We went down to a wharf and bought lobsters from a fisherman. Those were my first lobsters and that started a life-long passion. I regret I no longer remember his name; he deserves thanks.

My academic studies at Imperial College did not greatly enhance my engineering knowledge. The courses that they insisted I take largely retraced aspects of those I had taken at UBC. Colin Cherry's course on Communications was an exception. It was very useful for and perhaps enabled my ten years at the The SHAPE Technical Centre(STC) in The Hague. My Master's project at Imperial College was to build an analog to digital converter for television. This was in support of Dr. Cherry's work in bandwidth compression of television signals. He knew the path to removing the large amount of redundancy in television signals was through digital computing and this, of course, required a digital signal. My convertor used the then-new-fangled transistors which were barely up to the speeds needed to handle even the 400 line British TV standard of that time. The converter worked and my thesis shows a digitized picture from each bit output from the converter but for some reason I didn't build a Dto -A converter to show a reconstructed signal. This would have been trivial if the output was a conventional signal but it was grey-coded and perhaps my thought was it would be very simple to convert it in a computer before processing for redundancy. I was told years later that my machine was never used; perhaps a commercial product became available. This foray in electronics design, the communications knowledge I gained at Imperial College and the life experience in England provided by the Athlone Fellowship was definitely formative for my career.

I spent four years at PNL designing electronics for underwater acoustics experiments and participated in measurements at sea in the North Pacific. I Worked at STC for two periods: the first in the late sixties on meteor burst communications. I became fascinated with this very low data-rate but highly robust form of communications. The period between STC stints was

at BC Research on the UBC campus. We put strain gauges on the stretched BC Ferries to help prove the design. My second period at STC was again in communications and focused on a satellite communications system for communication amongst the NATO Nations, the Major NATO Commanders and their subordinates. For the last 20 years before retirement I worked at Computer Sciences Corporation in Falls Church Virginia. I supported various projects related to communications, Computers and Command & Control. Almost as an aside in these years I wrote a computer model of a meteor-burst communications system based on the physics. This included measured sporadic and shower meteor intensity and radiant data, upper atmospheric data, formation and decay of ionization columns from meteors of various sizes, specular reflection from ionization trails, antenna patterns of antennas as a function of height, and background galactic noise intensity as a function of antenna look angles.

I retired in 1998 and have spent my time on gardening, wood-working, including lumber production from trees felled on our property, genealogy and on travel. When my wife retired in 2011 we took a three month world cruise –: a once in a life-time experience. We did something similar the next year: around South America including a visit to the Antarctic Peninsula and the Falkland Islands. But for the Athlone Fellowship I might not have experienced so much of the world.

#### **David Brown, BASc(HON) UBC 1960** dwbrown@pobox.com Imperial College, London MSc & DIC 1962

#### G. S. Peter Castle, Athlone 1961, University of Western Ontario

My wife Judy and I were married on Saturday, September 2, 1961. Six days



Peter and Judy September 8, 1962

later we were sailing to England aboard the RMS Ivernia as part of the 1961 contingent of Athlone Fellows. (see earlier story, *Athlone Honeymoon*). Judy had just completed writing her RN exams in the two days before we left and I had recently graduated with my BESc in electrical engineering from the University of Western Ontario, in London ON. I had worked that summer at the local Northern Electric telephone manufacturing plant, Yes, telephones were still being manufactured in Canada in those days!

Today, as we approach our 63rd wedding anniversary, there is hardly a week that goes by when we do not allude in some way or other to an event, person, or experience from our 26 months in London, England. What wonderful ride it has been. The Athlone experience transformed us from two very young and somewhat naïve innocents into confident and independent young adults who have gone on to live extraordinarily satisfying lives.



And at their 62 Anniversary in September 2, 2023

While in London I obtained my MSc (Eng) and DIC from Imperial College in microwave engineering while Judy worked part time as a nurse (36 hours per week) in the paediatric wing at the West Middlesex Hospital in Twickenham, not far from our rental flat in Kew Gardens. The generous Athlone stipend more than covered our living expenses while Judy's modest earnings enabled us to undertake some summer travel visiting parts of the beautiful English countryside as well as an overland adventure in a Bedford van that took us to Moscow and back. The latter took place in the summer of 1962 and involved travelling through the just opened "Checkpoint Charlie" in East Berlin, much to the alarm of our parents back in Canada. These trips planted the seeds of our lifelong interest in travel.

Upon returning to Canada in 1963 we moved to Ottawa where I joined the then recently opened Northern Electric R&D Laboratories working on microwave communication links. We were engaged in developing new solid state devices and strip lines to replace the existing vacuum tube components and waveguides then in use. However, I soon became disillusioned as the devices we had available were already outdated due to the rapid advances in solid state technology and we continually seemed to be "reinventing the wheel". At the same time, I was becoming more alarmed about the developing crises in the natural environment as highlighted in Rachel Carson's 1962 book, The Silent Spring. This, coupled with a developing desire to work in academia, led me in 1966 to enroll at Western once again, this time in a PhD program in electrical engineering, engaged in an environmental engineering project in two-stage electrostatic precipitation for air cleaning. We had no sooner made this decision to return to student life when we discovered that Judy was pregnant with our second child! The research project resulted in some patentable results and a successful defence of my PhD in the spring of 1969 when I became the first student to graduate with a PhD from Western Engineering.

Having served as a Lecturer during the last year of my doctoral work, upon graduation I did the unconventional thing at the time and accepted the offer of an Assistant Professorship at the University where I had completed two of my degrees. This was a decision I have never regretted.

What followed was a successful and satisfying 50 year career involved in teaching, research, and administration.

As a teacher I taught the normal range of undergraduate courses including, electric circuits, electromagnetic theory, and machines. However, my favourite subject was an optional fourth year course in Direct Energy Conversion that I developed and taught for over 30 years. This course discussed the issues associated with societies' reliance upon fossil fuels and looked at alternative renewable sources of electric energy. In other words, what is currently known as Green Technology.

As an academic working in a collegial environment, I was expected to shoulder my fair load of administration. As a result, over my career I served one five-year term as Assistant Dean (Undergraduate Affairs), and two five-year terms as Chair of the Department of Electrical Engineering. Stimulating and satisfying activities for sure but in dealing with a group of very clever but often independent thinkers, the analogy of trying to "herd cats" was never far off.

However, my main preoccupation soon focused on research. The work with electrostatic precipitation introduced me to a class of industrial electrical applications that relied mainly upon electric field effects (measured as voltage) and negligible magnetic field effects (measured as current). In other words, high impedance devices, which are inherently very energy efficient. Along with several colleagues we developed a specialization at Western which became the Applied Electrostatics Research Center. Over the years from the 1960's through to 2018 I worked on a series of applications that included, industrial scale one-stage electrostatic precipitators and ozone generation, electrostatic crop spraying, electrostatic painting, electrostatic powder and abrasive grit coating, and especially electrophotography (laser printing). Our laboratory became well known as one of the few in the world specializing in all these areas. As a result, we established many research collaborations with other universities and corporations throughout the world. This involved a lot of international travel during much of which Judy was able to accompany me. I retired in 2004 as a result of the mandatory retirement rules in place at that time but continued with research and graduate student supervision

as an adjunct research professor, finally hanging up my proverbial "slide rule" in 2018.

Our work received much recognition over the years but one of my happiest moments was to receive the 2016 Richard Harold Kaufmann Award from the Industry Applications Society of the IEEE recognizing contributions to Industry. This was a wonderful affirmation to me as an academic that my efforts had made some significant practical impact.

On the personal front, Judy and I have been blessed with three wonderful and talented children, six grandchildren and, as this is being written, are looking forward with great anticipation to the birth of our first greatgrandchild.

We are forever grateful for the opportunities provided by the Athlone Fellowship. It enabled us to pursue further education and work experience, required us to be independent, provided broadened life and cultural experiences and enabled us to meet new, interesting people, many of whom have remained lifelong friends.

G S Peter Castle, May 2024

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#### Doug Chapman, Athlone 1968, UMan

B.Sc. (Electrical) 1968, University of Manitoba – Gold Medal Winner Ph.D, University of London, 1973; Diploma of Imperial College, 1973 P.Eng. (Senior Member), Fellow of Engineers Canada

At the urging of Dr. Al Wexler, at the U of Manitoba, I applied for the Athlone Fellowship and was very surprised and thankful to have received it.

During the summers of 1967 and 1968 I had worked under Dr. Jim Wong in the Antenna Engineering group of NRC (Montreal Road – Ottawa). That experience was great, but I decided that field theory and I were not great fits. One of the courses I found most interesting and challenging in fourth year was the Control Engineering course taught by Dick Johnson, so I decided that study in the area was the best application of the Athlone support. I looked at Swansea, Manchester (UMIST) and Imperial College and ultimately decided that the one-year Master's program in control provided by the Computation and Control Section of Electrical Engineering at Imperial was my best choice.

It is my understanding that the trip to England in 1968 was the first taken by the group by air. In keeping with past years when travel was by ship, we were given a very significant baggage allowance on the Air Canada charter flight from Montreal. Many of us overloaded the Air Canada scales at Dorval. Unfortunately, even though I had lots of LPs and books on arrival in London, the CNR had lost my key suitcase, with most of my clothes ,somewhere between Winnipeg and Montreal – making the first few days in London something of a challenge.

There were several of us from Winnipeg in 1968 – myself, Ken Montgomery, Dave Stirling and Jack Katzberg.

During the first period in London, I felt quite well supported by the Athlone organization and after an initial stay in Nutford House, Ken Montgomery and I crossed Hyde Park and found our rooms in Linstead Hall at Imperial College.

I enjoyed my time in Imperial. For reasons that I cannot now justify, somewhere towards the end of the first term I requested to transfer from the one-year Master's program into the more general and open-ended M.Sc. program. Looking back, I was naïve to give up a good, structured and recognized program for the uncertainty of a program based on selflearning, research and investigation. Sometime later I requested a transfer to the Ph.D. program and spend the rest of my time at Imperial wondering if I would ever finish!

Since the Athlone support only lasted two years, I applied for and received National Research Council of Canada (NRC) support for my third and fourth years. My partial fifth year was supported by my wife Monica.

My work at Imperial was under the direction of Dr. John C Allwright and together we made some slow progress in a range of topics. Ultimately, with his suggestion, I undertook work in an area we called "conjugate gradient (K)" optimization. This was an adaption of the Newton Raphson optimization algorithm using approximations to the cost function Hessian matrix. This proved to be workable and efficient. Years later, when working on power system simulation at Manitoba Hydro (more below) I recognized it as similar to what was termed the Fast Decoupled Load Flow solution.

After one year in residence, I was fortunate to find an unpaid position at the College's Bernard Sunley student residences in Evelyn Gardens. Thus, I ended up in South Kensington for three years, while running an MG TF around London for the last two of them.

In London I met my future wife – we both showed up at a pub neither of us normally went to (The Bunch of Grapes on Brompton Road). After marriage we lived very cheaply in South Woodford – a long walk from the tube station but a reasonable drive from her parents' house in Epping. We only revisited the place in the Summer of 2023 – married 52 years then.

At the end of my degree work, in February 1973, we arrived in Winnipeg, where I had received an offer of engineering work from Manitoba Hydro. While Winnipeg wasn't my first choice (Ottawa was), we didn't have many choices. I believe that I was the first Ph.D. at that company – many

more followed. Initially I worked in an area known as System Performance, where the major emphasis was on the security and performance of the high voltage transmission system. About the time I started, Manitoba Hydro had just begun operation of a major HVdc system (the first of three now in operation in the province). At the time blackouts were a very frequent occurrence because the HVdc system was a significant source of power in the province and our interconnections to the rest of the world were very weak.

Within my first year I moved to a position in Telecontrol Design with a very supportive boss, then within a few more years, I moved to the System Planning Department where I was able to work on control design for generation and gained a lot of exposure to HVdc system issues. My boss there, Clarence Thio, was known by and worked with a lot of international experts in the HVdc field.

During that time Manitoba Hydro, Teshmont Consultants and the University of Manitoba created a small company called the Manitoba HVDC Research Centre as a centre of expertise in the field.

The Electric Power Research Institute (EPRI) in Palo Alto California was interested in developing simulation tools for the planning of multiterminal HVdc systems and I was fortunate to lead the Research Centre's contribution (on a secondment basis) to a multi-year project with input from Drs. Chandra Krishnayya, and Serge Lefebvre and others from IREQ (Hydro-Québec Research) and Drs. Fernando Alvarado and Robert Lasseter from the University of Wisconsin – Madison. There was also input from Teshmont staff. The project was successful and very powerful power flow and stability programs were developed. As the EPRI project was ending a consultant (Keith Adamson) to New England Power, who were developing a multi-terminal HVdc link with Hydro Quebec, used Unix to run our software on a "portable" Compaq computer in parallel with the simulator studies being conducted in Sweden by the HVdc supplier. The results compared very well.

I later worked on a second contract with EPRI to further expand and improve the software we had developed. It is my understanding that the

core model description and solution algorithms are incorporated into software supplied by Powertech (BC Hydro Research).

I was the author or joint author of over 15 publications (but never published my thesis topic material).

When the opportunity arose, I moved within Manitoba Hydro to be the Manager of the System Performance Department, back where I started. I had a very skilled, dedicated, multi-cultural staff that worked with the Manitoba Hydro Control Centre. As the ac system expanded and the US introduced open-access transmission, the work of that department became much more important to the financial health of Manitoba Hydro.

My work in this position involved me in the Mid-Continent Area Power Pool (MAPP) where I was a member of and chaired the Regional Reliability Committee. This in turn led me to some work on a North American Reliability Council (NERC) standards drafting team and NERC work on open-access issues.

During much of my time at Manitoba Hydro I was quite heavily involved with the Association of Professional Engineers (and Geoscientists) of Manitoba (now Engineers Geoscientists Manitoba) working for several committees, then on Council and President. I also spent many years as the Manitoba representative to the Canadian Council of Professional Engineers (now Engineers Canada). The involvement with Engineers Geoscientists Manitoba continues today.

Although I could have tried a university career, I never went far in that direction. I was an Adjunct at the University of Manitoba for many years, working with M.Sc. and Ph.D. students (as an informal advisor and examiner). I also worked with an NSERC Grant Selection Committee (chairing the committee for one year).

After retirement in 2005, I spend a few years not working. Then, in 2006, I talked with a former employee who worked with TransGrid Solutions Inc., a small consulting company with primary expertise in HVdc, in Winnipeg. With that company I spent several years on special assignments to do with

New Zealand, Chile, Newfoundland, Saskatchewan and the Midwest Reliability Organization in northern USA, before retiring completely.

My wife, Monica and I have two sons. Steve and his wife Jennifer (both transportation engineers) have two sons (Ben and Tom) and live in Winnipeg. Mike (an infectious disease doctor) and his wife Maggie (risk management) have a daughter and son (Siana and Alex) and live in North Vancouver.

Since retirement we have done quite a bit of travelling, as opportunities arise. Monica has two sisters in New Zealand and one in England. She also

had a brother in Costa Rica. We have been able to combine New Zealand with Australia three times and have taken other trips through Namibia, Chile and Argentina and southeast Asia. Our "go to"

destination is Grenada, where we have made lots of friends in Grenada, the US, Canada and England.

Looking back, the Athlone Fellowship was the best



Monica & Doug Chapman - Australia - 2019

thing that could have happened in my life – leading to a wife and family, a great set of friends from Imperial College who live around the world, and a very interesting and varied career.

#### Monica and Doug Chapman

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#### Fred Christie, Athlone 1960, Dalhousie – 60 Years Later

The past 60 years have seen many changes since Grace Hogg and I cruised to England in 1960 to start my Athlone Fellowship, to study heat transfer associated with space craft, at Imperial College.

Four years later we lived in Quebec City, proud parents of the first of our two children, Jill–to be followed shortly by Iain. I worked at the **Defence Research Establishment Valcartier** on solid fuel rocket motors, notably the Black Brant space research family and, later, the CRV-7 military air to ground rocket system.

I moved to the **Defence Research Establishment Suffield** in 1978, where I spent 10 years guiding the development of a variety of defence technologies. In 1988 I joined the **Canadian Space Agency** to help develop robotic and AI technologies for spacecraft. Unfortunately, Grace and I were divorced near the end of this time.

I joined **Bristol Aerospace** in 1991 as VP Space, Targets and Technology, and over the next 7 years worked closely with the Department of National Defence and the Canadian Space Agency, to develop many novel products for space payloads, satellites, military and space rockets, and aircraft technologies. During this time Bristol also acquired the aerial targets business from Boeing Aircraft.

By 1994 I was living in Ottawa, and married to Carol Scott. In 1998 I retired from Bristol–a part of Magellan Aerospace by that time–and established my consulting business–**Saamis Technical Management Services [STMS]**.

Through STMS I worked as Technology Advisor to the President of Magellan Aerospace Corporation and as an Associate of ProGrid Ventures Inc. I served as Theme Leader, Space Science and Technology, for CRESTech and as an Adjunct Professor in the Mechanical and Aerospace Engineering Department of Carleton University. I retired and closed STMS in 2012. Carol died of a sudden heart attack in 2013.

Throughout my career in Quebec, Suffield, Winnipeg, and Ottawa I always managed some time each summer at Amherst Shore where my

parents, I and my siblings, and many relatives had cottages, and had had them for 4 generations. It was always a time to re-establish roots and enjoy friendly competition with other families in sports, board and card games. By 2016, Marilyn Dixon–whose husband Don had also died in 2013–and I realized that we had developed a special bond based on knowing each other for over 50 years. For the last several years we've shared our lives in Ottawa, Holtwood, PA, and Amherst Shore.

In addition to family and career activities, I've enjoyed a full slate of Rotary activities over 50 years, initially largely focused on youth activities, both local and international, and then fund raising after I spent several years on the executive of the West Ottawa Rotary Club. Golf and curling have occupied most of whatever other spare time I had.

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#### P. Wayne Clifton, Athlone 1966, UofSask

I am a geotechnical engineer and much of the leadership in our discipline since 1960's has been provided by Athlone Fellows as educators, researchers, pre- eminent practitioners and entrepreneurs who established many of the original geotechnical consulting forms in this country.

I was a 1966 U of S Athlone and attended Imperial College – a life changing experience for me. On returning to Canada, I was senior geotechnical engineer with Sask Highways and Transportation until I joined a consulting firm in 1973 and formed my own firm (Clifton Associates Ltd, now Clifton Engineering Group Inc) in 1978 and employ 250+ in 5 offices in western Canada – including our 2 sons. The skills and life experiences provided by my Athlone experience were foundational to my career success, as they were to many of my Athlone colleagues. I have been privileged to consult on a vast array of challenging projects in Canada and abroad, often in concert with other Fellows.

Anita and I came to Regina (temporarily!!) on our return from England, raised our family here, and are still proud residents these 57 years later – but family and grandchildren in Calgary are calling. While professional life continues to be interesting, we have passed the torch to the next generation to build on what we started.

To Bob Hemmings, I say a special thank you for your efforts in chronicling the careers and contributions of many of the Fellows – it is an important history of the contributions of so many talented engineers during a time when the country desperately needed those skills. I particularly appreciate you making your documents available – I will certainly download and preserve a copy.

#### Wayne Clifton

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#### **Bill DeCoursey, Athlone 1951, UofA**

W.J. Bill DeCoursey, BSc Chemical Engineering, U of A 1951 Athlone Fellow 1951 Ph D Imperial College London 1955

I worked in **Sherritt Gordon** nickel refinery in Fort Saskatchewan, Alberta for 3 or 4 years for practical experience. Then took a year of classes at MIT.

I taught Chemical Engineering at the **University of Saskatchewan** 1960 to 1993.

I retired in 1993. I have lived in Saskatoon for about 60 years.

In 2018 I moved with my wife into a retirement residence (with about 50 people). And now I'm 90 years old!

Contact information:

#### Bill DeCoursey, September 2020 – Athlone 1951, UofA

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#### Fred A. DeLory, Athlone 1953, McGill

Submitted by Bob Hemmings based on a 'Lives Lived' memoir prepared by members of the Canadian Geotechnical Society (based somewhat on an obituary published in the Toronto Star, October 8, 2022).



Fred DeLory

On September 29, 2022, the Canadian geotechnical community lost F.A. (Fred) DeLory, Professor Emeritus, **University of Toronto**. Fred was born in Georgetown, PEI, on June 7,1925. He died in Halifax, NS, at the age of 97, on Wednesday, September 28, 2022. He was the devoted husband of 62 years to June (Garrett) DeLory.

Between 1943 and 1945, iFred served in the Canadian Army rising to the rank of Lieutenant. After the war, he attended McGill University and graduated in 1948 with a bachelor's degree from the Department of Civil Engineering. Fred

worked in construction for five years, first in Trail, BC and then Kitimat, BC.

In 1953 and 1954, Fred took advantage of the Athlone Fellowship program to study soil mechanics at Imperial College in London, UK. Upon being awarded his diploma (DIC), he continued studying at Imperial College towards his PhD, graduating in 1957 under the supervision of A.W. Skempton. Based on Fred's PhD thesis, Skempton and DeLory wrote their seminal paper "Stability of natural slopes in London Clay", published in the proceedings of the 4th International Conference on Soil Mechanics and Foundation Engineering, London, 1957.

On returning to Canada, Fred worked for a short time with an engineering firm in Niagara Falls (H.G. Acres?). In 1958, he joined the faculty in the Department of Civil Engineering at the University of Toronto, becoming Professor Emeritus when he retired in 1990. Between 1973 and 1988 Fred was Chair of the Division of Geological Engineering within that department.

Fred served as one of the original Associate Editors of the Canadian Geotechnical Journal for Volumes 1-5 (1963-1968). He served as the Editor of that journal for Volumes 6 and 7 (1969- 1970).

Former students and colleagues at UofT remember Fred as being a clear, helpful and patient instructor, highly dedicated to teaching and well-liked in the department. He had a good demeanor and a dry sense of humour. Many of his students remember his somewhat entertaining habit in the classroom of continually buttoning his jacket when he faced them, and unbuttoning his jacket when he wrote on the blackboard.

In the early 1960s, he was known to the relatively small geotechnical community in the Toronto area as the one who imported live lobsters from



Fred & Steamboat in Toronto Harbour

PEI and cooked them for that community's annual get together.

In the early 1970s, Fred restored a 60-year-old Connecticut steamboat and frequently sailed it in the Toronto Harbour. As another project, he bought a long length of surplus cast iron fencing from the City of Toronto Parks Department, and adapted and installed it around his swimming pool at his Toronto home.

Among other projects, after retiring Fred volunteered as a driver for Meals on Wheels in

Toronto for 17 years. He moved to Halifax in 2008. Survived by daughters, Kathryn (James) Steele, Deni DeLory (Dan Macadam); siblings, Cullen (Barbara) DeLory, Bernice (William) Melanson; niece, Nicole DeLory; as well as numerous other nieces and nephews. Predeceased by brothers, John, Dr. Maurice (Mike), Richard, Stephen; and sister, Sheila. By personal request, no visiting or service to be held. Private family burial took place in the St. James Parish Cemetery, Georgetown.

#### Fred DeLory, Athlone 1953, McGill

#### Rod Desborough, Athlone 1965, Dalhousie (Mt Allison)

#### Background

- Canadian University: Mount Allison University for pre-engineering and NSTC (TUNS and now DalTech as the Dalhousie Engineering School)
- Engineering Discipline, year of Graduation: Bachelor of Engineering, Honours Mechanical, 1964
- Athlone School, year of Graduation: Imperial College, Master of Science, Thermal Power and Process Engineering, Mechanical Department, 1966
- Position on retirement: Chief Project Manager, Refining Projects, Americas, ExxonMobil Research and Engineering, Fairfax, Virginia, USA

#### What the Athlone Fellowship meant to me

I haven't given much thought until recently when I was asked by Bob Hemmings to write a few words regarding what the Athlone Fellowship meant to me and my life after the two years in the UK.

Initially I thought this would be a very few words but the more I reflected on that time decades ago, the more I came to realize there was lots to write about so here goes.

Working in the Heat Transfer Lab at Imperial College surrounded by some of the best mechanical engineering minds, both staff and fellow grad students, probably in the world, including grad students from Russia who were attracted by Dr. Spaulding's work and writing, was an incredible experience.

For my second year of the Fellowship I had made arrangements through Imperial Oil, my Canadian employer when I was awarded the Fellowship, to spend that second year at Esso Petroleum's Fawley Refinery which at that time was one of the largest in the world. My Division Manager at Imperial Oil was a personal friend and work associate of a Director of Esso.

People at Esso Petroleum, whom he contacted on my behalf, and helped obtain my placement at Fawley. I had worked for Imperial Oil for about 15

months before leaving for the UK and during that time realized that in an Oil Company the excitement was all about Chemical Engineering that also aligned well with my academic interests in thermodynamics and heat transfer. This led to my Degree in Thermal Power and Process Engineering.

The second year built on the academic year by enrollment in a Chemical Engineering course at the Refinery and then being assigned to the Technical Department to prepare design specifications for new process facilities.

On return to Canada I re-joined Imperial Oil in Sarnia and continued as a design engineer for Process Facilities and so a direct application of my Athlone education and experience.

My career had a focus for several years on facilities planning, design, detailed engineering, start up and operations but eventually moving to management of large capital projects for Imperial Oil and later ExxonMobil. I now realize that the Fellowship experience really was significant although I didn't realize it at the time.

A work process in ExxonMobil, as well as other organizations, are peer reviews of projects at key stages of development. In ExxonMobil Research and Engineering I helped develop the peer review processes which at the time we called Cold Eyes Reviews. My last position prior to retirement was on loan assignment from Imperial Oil to ExxonMobil Research and Engineering as Chief Project Manager for ExxonMobil's refining projects in the Americas that required oversight of work processes including leadership for Cold Eye Reviews. These reviews are completed at the major milestones of project development including early feasibility and facilities planning phases. During my participation in these early project stage reviews I was able to understand and contribute to the Chemical Engineering aspects of these phases of a project. I attribute that understanding in large measure to my earlier Fellowship education and industrial experience.

The opportunity to spend a year in London and a year at Langley near Fawley and the New Forrest is something my wife and I consider as priceless. The adventure of sailing on the Cunard liner *Franconia* from
Montreal to Southampton with our fellow engineers was unforgettable in many regards including cheap beer going down the St Lawrence and sea sickness the day following. The viewing of our living accommodation options in London, as provided by the British Council, was a shock.

Fortunately, we were, with the help of a previous year Athlone, Earle Lockerby, able to find a very acceptable bed sitter with a shared bathroom and fridge. Although we had moved from a two-bedroom townhouse in Sarnia with our newly purchased furniture and appliances, we discovered that the opportunity to live in London more than made up for the change in accommodations. We took advantage of being in London including the theatre and all the historic sites and Museums. The landlord for our bedsitter was the Queen Mother's Master of Ceremonies, or "announcer" for lack of a better term. He was the person that called out the names of the guests as they proceeded along the receiving line for the Queen Mother. As a result, we had some first hand in sight to the Royal Family. Attending the Garden Party at Buckingham Palace also gave us an additional perspective My wife's own work experiences in London, as a nurse and helping in the kitchen in the Innholders Guildhall in the Old City were truly unforgettable and will always be treasured.

We did without a car while in London but purchased a used Austin Cambridge for the second year which was in turn sold to an incoming Athlone at Fawley. The car enabled us to explore the UK and Scotland. We traveled as often and as far afield as we could afford, and had family and friends visit. Most important of all our first son, Lane, was born in Southampton.

We grew to love the UK and have returned several times and still think it is just great. The Fellowship Program was well "engineered" and executed with discipline, a well-oiled machine as I recall. It is unfortunate that today's graduates don't have the same opportunity to get a real feel for a country and what it has to offer whether culturally, academically or in business. Young folks today do travel much more so than when I graduated but travelling on a vacation doesn't quite give you the same exposure as living, studying and working in another country for a year or so. I believe there is a missing opportunity, a "gap" in learning, for

Canadian undergraduate engineers since there is nothing that replicates the Athlone Fellowships.

#### Rod Desborough, Athlone 1965, Dalhousie (Mt Allison)

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#### Robert Murray Duncan, Athlone 1960, UMan

#### (byBarbaraDuncan)

Murray was born in Winnipeg and grew up in Transcona, MB. As a boy, he played both piano and trumpet, and rose to the level of Eagle Scout. As a teenager, he was a Sea Cadet and spent his summers on Vancouver Island.

Murray studied Mechanical Engineering at the University of Manitoba, winning an Athlone fellowship to complete his Masters in Thermodynamics at the University of Birmingham.

It was in the UK that Murray cemented his love for autos. He, and friends he made while in England, built and raced a variety of sports cars.

Murray said that while some fellows brought back a wife when returning from the UK, he brought home a car he built. His father met him at the dock, and they had a leisurely road trip back to Winnipeg.

Following university, Murray worked for General Electric in Peterborough, ON. It was in Peterborough that he met his first wife, Katherine. Shortly after their marriage, Murray accepted a position at the Atomic Energy Control Board of Canada (AECB) in Ottawa. They moved to a rural area near Ottawa, restored a stone home, and raised four children.

Murray excelled at diplomacy and was offered the post of Scientific Advisor for the Canadian ambassador to the United Nations. He and Kate packed up the children and moved to Vienna. It was a wonderful experience for the family and Murray made many life-long friends within the diplomatic and scientific communities. Murray was offered an extension to his service, but after two years, he and Kate decided to return to Canada where the children could have a more normal childhood experience.

He continued to work for the AECB in the area of nuclear regulation and was the senior advisor to the president when he retired in 2004. Murray and Kate enjoyed their retirement, dividing their time between Bobcaygeon, ON and Scottsdale, AZ.

It was in Arizona that my then husband and I met Murray and Kate. We were acquaintances rather than friends, sharing brief conversations while enjoying coffee and donuts after church services. Kate passed away in 2009 and my husband died in 2010.



Murray continued to return to Scottsdale for the winter months, and we began to spend time together, finding that we had many common interests. In retirement, Murray began building and flying model airplanes, a hobby

he loved and pursued both in Canada and Arizona.

We also did a lot of boating and fishing from our home on Pigeon Lake in Bobcaygeon, ON (north of Peterborough). We had access to the Trent-Severn Waterway, and enjoyed frequent over-nights on the water. We loved to travel and took many road trips with Murray introducing me to the beauty of Canada from British Columbia to Nova Scotia, and me, in turn, showing him the wonders of the Southwest US.

We also did our part to keep the airlines happy with our frequent trips between our two countries, and travel abroad reconnecting with many of Murray's friends and col- leagues from his years in the UK and Vienna.

In 2012 we attended Murray's 50th Anniversary Reunion at the University of Birmingham. We spent several days taking in the sights with a group of his classmates, then extended our trip, visiting other parts of the UK and then continuing on to Portugal, Italy, Denmark, and Vienna. I had been to Europe previously, but it was wonderful to see it again through the eyes of Murray who had lived there.

#### Murray Duncan, Athlone 1960, UMan

By Barbara Duncan

#### Gary Elfstrom, Athlone 1968, UBC

Then and Now (2020)



Carol & Gary, then

I interrupted my Athlone stay in London for a quick trip back to Vancouver to marry Carol, to whom I was engaged the year before I was awarded the fellowship. We then had quite the adventure living and working in London as I attended Imperial College. My PhD was awarded in 1971 after a three year whirlwind period of experimental research, the speed partly due to pressure from the Royal Aircraft Establishment to start showing results in return for funding a new state of the art hypersonic wind tunnel. That experience served me well in the real world of aerospace engineering where things can change on a dime.

My post-doctoral position at the University of Tennessee Space Institute was one of those short-lived attempts to work in aerospace south of the border. It did allow me to start fulfilling a plan to work in all three market segments: university, government and industry. In fact, one position naturally led to the next: after seven years at the National Aeronautical Establish of the National Research Council (NRC) in Ottawa, DSMA International, which built the supersonic wind tunnel there lured me to join them and "see the world", which I did for twelve years in Toronto until its demise in 1993. I became a founding member of the successor company, Aiolos Engineering Corp; this led full circle to university – no sooner had Aiolos built the automotive climatic wind tunnel for the University os Ontario Institute of Technology in Oshawa, I was seconded there to help set up the business. To this day, the consultancy has rewarded me with the opportunity to mentor students and staff alike.

Carol and I somehow managed time to travel in England, Wales and Ireland during my time at Imperial College, and we established a lifelong

friendship with my Imperial student Graham Coleman and his subsequent family, including cruising together.

My continued connection with NRC allowed me to fulfill the circumstance broken promise of the Aeronautical Dept. of Imperial-to become a rocket scientist. While working at DSMA, NRC personally enticed the company through me to bid on a spacecraft acoustic test facility in The Netherlands; the success of this project later led to Aiolos building a beyond-the-state-ofthe-art facility for NASA's Glenn Research Center in Cleveland. I use this story to tell students it doesn't matter what you start out in, providing you don't flinch if a crazy new direction comes your way. I also use it to say that a small country like Canada really can make innovative contributions in the world, no matter how seemingly small they may seem.

Carol has travelled with me, partly the result of my work and partly for



Carol and Gary, 2019 50th Wedding Anniversary

pleasure, including Australia, Austria, Greece, Switzerland, New Zealand, Serbia and several states in the USA. More recently, this included trips to fulfill my bucket list of visiting cities in the countries of my Scottish and Swedish ancestry. I have had the good fortune of world-wide travel on business, as the market of both DSMA and Aiolos is 95% export!

Interestingly enough, the advent of Covid-19 brought to a halt several

years of record-breaking overseas business travel for me. This did not result withdrawal symptoms; instead, it afforded me the time to spend more time with my offspring and their families. So, nowadays my longest travel is a 1.5 hour drive from our home in Mississauga to son in Simcoe located in Norfolk county and to daughter in Orillia located in Simcoe county—say that several times!

<u>Note</u>that Garypassed away suddenly on September 18, 2021, and will certainly be missed by all his fellow Athlone Fellows. He was very helpful to all he met, and I am especially grateful for his enthusiasm for all things Athlone, and was of great assistance to me in my development of my **History of the Athlone Fellowship**. [RLH]

The following is a brief note from his wife, Carol:

#### Remembering Gary Macdonald Elfstrom

August 14, 1944 - September 18, 2021

Gary passed away in hospital this fall following a very short battle with Mesothelioma (a fatal lung cancer from an unknown exposure to asbestos). He lived life to the fullest and was very active and healthy right up until a few weeks before his death. He was appreciative of the opportunities that the Athlone Fellowship gave him to further his education and career. He was active in many professional organizations and gave freely of his knowledge and time to mentor students and colleagues alike. He will be missed greatly by everyone who knew him and it is a huge loss as he still had so much more to give

Gary was a wonderful husband to me for fifty-two years and our children and grandchildren could not have had a more kind, gentle and loving father and grandfather. The world could use more people like Gary. He lives on in all our memories.

Carol Elfstrom

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#### Gary Elfstrom, Athlone 1968, UBC

#### Robert (Bob) Evans, Athlone 1970, UofT

I was in the last group of Athlone Fellows, and travelled to the UK in 1970. I had just finished my M.A.Sc. degree from the University of Toronto Institute for Aerospace Studies (UTIAS) following my B.A.Sc. in Mechanical Engineering from UBC in 1968. I elected to spend the two years of my fellowship pursuing a Ph.D. degree at Cambridge University, which I completed in the newly opened Whittle Laboratory (dedicated to jet engine research) in 1973. During my time in Cambridge I met, and then married, my wife, June, who had been working as a nurse in Addenbrooke's hospital in Cambridge. Our daughter, Kate, was born in the UK and is now a family physician in Sidney, B.C. where we also now live. After completing my Ph.D., I spent a year in the research department of the Central Electricity Generating Board (CEGB) in the UK. Having



Bob Evans

grown up on Vancouver Island, the pull back West was strong, and we moved to Vancouver in 1976 where I initially worked for the B.C. Energy Commission, before returning full-circle to UBC as a Professor in 1981. Our son, Jonathan was born during our time in Vancouver, and he remains there today where he works for Early Music Vancouver.

#### Achievements

At UBC I primarily taught thermo-dynamics and fluid mechanics, and eventually served as Associate Dean of Engineering from 1992-1994, and then as Head of the Department of Mechanical Engineering from 1994 to 1999. As I had long-standing interests in clean and sustainable energy issues, I oversaw the development of the newly established Clean Energy Research Centre at UBC in 2002, and served as the inaugural Director of the Centre. During a sabbatical leave back in Cambridge, where I had completed my PhD, I wrote a small book, entitled *"Fueling Our Future an Introduction to Sustainable Energy"*, which was published by Cambridge University Press in 2007. I'm immodest enough to note that this was subsequently short-listed for the 2007 Donner Prize, which is

awarded annually for the best book on public policy by a Canadian author. As a result I have continued to give presentations about clean energy to a wide range of audiences during the years since publication.

One of the enduring memories of my time in the Whittle Laboratory in Cambridge has been the official opening of the lab by Sir Frank Whittle, the inventor of the jet engine. I wasn't expecting much from this event, but was absolutely transfixed by the talk he gave, without notes, about the design and development of his original engine. I vowed then and there that one day I would really have to learn more about this brilliant engineer. One of the fascinating things about Whittle was that he had very little formal education before entering the RAF as a "fitter", or a mechanic as we would say now. He excelled at every stage of his career, however, and unusually he was allowed to move up into the role of an officer without much formal education. During his time as an officer cadet he outlined his ideas for a radical new form of engine, and was encouraged to put his ideas into practice. The RAF also recognized that he would benefit from a more formal education at this stage, and sent him as a "mature student" to Cambridge to complete the last two years of the engineering syllabus there. While doing this, and working to perfect his engine design, Whittle was able to complete his degree with first-class standing. I was so taken with Whittle's story that I vowed to one day learn more. That "more" meant that I spent a sabbatical year going through all of his personal papers lodged in the archives of Churchill College, where I had lived as a post-graduate student many years before. This has been a very long "labour of love", and I'm pleased to say that I have just completed a biography of Whittle, entitled "Air Commodore Sir Frank Whittle – the man who invented the Turbo-Jet". This will be published by Pen and Sword books in October, 2024.I must say that the Athlone Fellowship made a huge difference in my career prospects!

#### Bob Evans UofT Athlone 1970 evans@mech.UBC.ca

#### Bob Frindt, Athlone 1960, UofA

#### (Biography by Gladys Jane Frindt)

Professor Robert (Bob) Frindt died 2017, age seventy-eight. He was born in Edmonton, Alberta. In 1960, after being awarded a B Sc in Engineering Physics (honours) from the University of Alberta upon which he received an Athlone Fellowship 1960 to 1962 for Canadian Engineers to study Physics at St. John's College, Cambridge. In 1962 he was awarded a special scholarship from the National Research Council of Canada to complete his PhD at St. John's College and was admitted to the Degree of Doctor of Philosophy in 1963. From 1960 to 1963 under Dr. A. D. Yoffe at the Research Laboratory for the Physics and Chemistry of Solids, in Cavendish, he studied optical and electrical properties and the defect structure of dichalcogenides , with emphasis on the properties of crystals having thicknesses of a few unit cell layers.

**1963–**on the recommendation of Cambridge University he was awarded a Senior Studentship by the Royal Commission for the Exhibition of 1851 (These prestigious Fellowships are awarded for doctoral-level research programmes to selected exceptional graduates with the potential to make an outstanding contribution to industry.) and, also in 1963, was awarded Henry Humphreys Prize for research in Natural Sciences, St. John's College, Cambridge. On the completion of this work in 1964 Bob decided to return to Canada taking up a position at the National Research Council of Canada, Ottawa.

Bob then choose an academic future at Simon Fraser a new University on the west coast of Canada in Burnaby, BC becoming a Charter Faculty member of the Physics Department. SFU opened in 1965 with about 2500 students. 2015 SFU celebrated it's 50th Anniversary with an impressive 30,000 + undergraduate, graduate and Ph D students. For 39 years in Physics at SFU, Bob taught every undergraduate and most graduate courses. He was Director, Faculty of Science Workshops for many years. A condensed matter experimentalist, professional engineer as well as a physicist, he played a variety of roles within SFU's School of Engineering Science of which he was an associate member for two decades. He supervised graduate and PhD students as well as publishing a large

number of papers and registering many patents. Valued for his technical judgement, Bob served on many committees such as NSERC, CRC, and the BC Science Council, He was external PhD examiner for the Universities of Cambridge, England and Waterloo, Ontario. From 1993 – 1998 he was the Physics Chair with a faculty and staff numbering over 100.

**1977**–in Celebration of the Silver Jubilee of Her Majesty the Queen, the Government of Canada invited Young Canadians who achieved Excellence in the Arts and Sciences to a Dinner in Ottawa. Bob was one of the two invitees from British Columbia.

**1978**–Natural Sciences and Engineering Research Council (NSERC) strategic grants program – the Canadian Government awarded Bob and his research team \$105,000 spread over three years to study lightweight extra powerful batteries essential to help transform electric cars into a viable transportation alternative.

St. John's College was a very special place to Bob and Gladys Jane because they were married in Cambridge 1963 and held their wedding reception in the William Wordsworth room of St. John's.

**2004–**Bob and his wife Gladys Jane retired to Victoria, BC Canada where they continued to enjoy their love of opera and gardening.

**2006–**Bob and his wife Gladys Jane were invited to a Reception at Buckingham Palace for Alumni of The Royal Commission for the Exhibition of 1851 in the presence of HRH Prince Philip, Duke of Edinburgh, President of the Commission.

Again, **in 2016**, The Royal Commission for the Exhibition of 1851 invited Alumni to Buckingham Palace however Bob was too ill to attend. At age 15 Bob was diagnosed with Type I (Juvenile Diabetes) which he lived with and managed for 63 years. The Joslin Diabetic Center, Boston MA awarded Bob a Certificate of Achievement and the Joslin Fifty-Year Medal to recognize the remarkable achievement of those individuals who have lived with insulin-dependent diabetes for fifty years or more, a tribute to Bob for conscientious and courageous attention to the many difficult details involved in successfully living with diabetes over these years.

While in England he married Jane (Bidne), his wife of 53 years. His first son (Robert) was also born in the UK. The Frindt family returned to Canada in 1965, and lived for many years in the Vancouver area, where their second son (Tim) was born. Bob and Jane enjoyed travelling and opera, combining the two on numerous trips across Canada, to the USA and the UK.

Characterized by his faith, quiet love of God, honesty and integrity he is greatly missed. Bob is survived by his wife Gladys Jane and sons Robert and Timothy.

Bob Frindt, Athlone 1960, UofA

#### Monique Frize, Athlone 1967, U of Ottawa

#### **Canadian Academic And Biomedical Engineer**

**Monique Frize**, **OC**, née **Aubry** (born 7 January 1942), is a Canadian biomedical engineer and professor knowledgeable in medical



Monique Frize

instruments and decision support systems. Notably, her scientific research and outreach efforts led her to receive the prestigious distinction of Officer of the Order of Canada.

Born in Montreal, Quebec, she received a Bachelor of Applied Science (B.A.Sc.) degree in Electrical Engineering from the University of Ottawa in 1966–the first Canadian woman to graduate from this program at the university. From 1967 to 1969, Frize was an Athlone Fellow as she completed her Master of Philosophy (M.Phil.) degree in Engineering Medicine from Imperial College of Science and Technology in London. In 1986, she received a Master's of Business

Administration (MBA) degree from the Université de Moncton. She received her Ph.D. Degree from Erasmus Universiteit in Rotterdam in 1989.

#### **Career in Industry**

Monique Frize worked as a clinical engineer for 18 years, starting at L'Hôpital Notre-Dame in Montreal, Quebec (1971-1979) before becoming the Director of the Regional Clinical Engineering Service in Moncton, New Brunswick. While in Moncton, she became the first Chair of the Division of Clinical Engineering for the International Federation of Medical and Biological Engineering, 1985–1990. She is currently Chair of the Council of Societies (2015-2021) for the same Federation.

#### Career in Academia

In 1989, Frize was appointed the first holder of the Nortel-NSERC Women in Engineering Chair at the University of New Brunswick and a professor of Electrical Engineering. In 1997, she was appointed Professor in the Department of Systems and Computer Engineering at Carleton University, and Professor in the School of Information Technology and Engineering at the University of Ottawa. She is currently a Distinguished Research Professor and Professor Emeritus at UOttawa. She is also a founding member of the International Network of Women Engineers and Scientists (INWES) and was President from 2002 to 2008 as well as being President of the Education and Research Institute (ERI) from 2007. In 2018, in collaboration with Library and Archives Canada and the University of Ottawa Library–Archives and Special Collections, as a member of INEES-ERI, which is now CIWES (Canadian Institute for Women in Engineering) and Science) which she has presided since 2007. She led an initiative to develop a center of expertise to document the history of women who have contributed to science, technology, engineering, and mathematics (STEM) in Canada.

#### Scientific Research

Frize's research interests include medical imaging, medical decision support systems, medical technology management issues (clinical engineering) and technical services for hospitals in developing countries. Dr. Frize has supervised over 50 theses of Graduate students and published over 200 articles in referred journals and conference proceedings.

Monique Frize has received numerous awards and honors throughout her career. In 1992, she was made a Fellow of the Canadian Academy of Engineering In 1993, she was inducted into the Order of Canada in recognition of being "well known in the field of biomedical engineering" and for being "a role model and an inspiration for women seeking careers in science". She has received several honorary degrees from the University of Ottawa, York University, Lakehead University and from Mount St-Vincent University. She received the Gold Medal in 2010 from Professional Engineers Ontario and the Ontario Society of Professional Engineers and

she became Fellow of Engineers Canada in 2010. In 2013, she was awarded the honor of Fellow of the Canadian Medical Canadian Medical and Biological Engineering Society. She became Fellow of IEEE in 2012 and Life Member in 2015, and Life Member of the IFMBE in 2015.

Monique is an author of several books, available through this link to the UofOttawa Press: <u>https://press.uottawa.ca/catalogsearch/result/?q=frize</u> Two of them are:

<i>"A Woman in Engineering—Memoirs of a Trailblazer"</i>	"The Bold and the Brave—A History of Women in Science and Engineering"

Monique (Aubry) Frize is married to Peter Frize and they have a son (Patrick Nicolas).

Monique Frize, Athlone 1967, UOttawa mfrize@gmail.com

#### Tom Gladney, Athlone 1964, UofT

BSc Industrial Engineering, 1963, UofT

MASc Operational Research, 1964, Northwestern

My experience as an Athlone was perhaps a bit out of the norm from that



of most of my colleagues, all of whom I believe used their fellowship towards obtaining an advanced degree.

I originally took that route too, and was accepted into Imperial College London to study Operational Research. But, in the early days at that school I discovered that most of the course material, contrary to what the university calendar had stated, was material that I had already

studied at U of T and Northwestern!

Much to the annoyance of the faculty head, Russell Ackoff, one of the founders of operations research, but with the support of the Board of Trade who ran the Athlone, I left Imperial College.

The Athlone Fellowship also provided an option for expanding Canadian engineers' knowledge with industrial experience instead of academic studies. I then took the former route, and through the auspices of the Athlone folks, joined the internal management consulting division of Unilever, the huge British/Dutch conglomerate in the foodstuffs and soap/detergent businesses all over the then free world.

That turned out to be a wonderful and fun learning experience. I worked with an experienced management consultant, who taught me a lot about how to help others....and I got to apply my computer (computers were

new then!) and operational research learnings to solve real business problems!

One now amusing sidelight of my time at Unilever was that my boss was horrified that the Athlone paid me only six hundred pounds a year. He felt that one could not be a professional management consultant on a such meager income. When the Board of Trade adamantly refused to pay more, my boss 'augmented' my monthly business expense accounts, which I did not argue with....a first lesson in 'where there is a will there is a way'!

Having married Lorna, my wife of now 60 years, the day before we left for

England in September 1964, we enjoyed the social and cultural experiences offered by living in London and accessing the rest of the British Isles and the continent as part of our two years of me as an Athlone Fellow.

Looking backwards at 1964-66, I can truly say that everything about our Athlone experience was amazingly wonderful.



Tom & Lorna - 1964

#### Tom Gladney tgladney@gmail.com

Location: Toronto (but Ajijic Mexico in the winter)

#### Brian Grover, Athlone 1961, UMan

My personal story starts with these Fun Facts and a Question:

- Athlone is a small town in IRELAND with a population now of about 25,000.
- The Earl of Athlone (1874-1957) was the 16th Governor General of Canada (1940-1946).
- My middle name is Irish (Patrick).
- Was it purely my good luck that I become an Athlone Fellow?

Surprisingly and happily, I was one of the two graduates selected by the Athlone selection team at the



Brian, in Victoria

University of Manitoba in 1961. Our award results were published in the local newspaper. My longtime friend Oskar Sigvaldason was the third Athlone Fellow that year from Manitoba. He had graduated ahead of me and was an already a practicing engineer. Oskar was awarded an Athlone Group B Fellowship, for those who had already graduated and were at work (the awards being made on a national basis).

In mid-1961 this 22-year-old was not yet a serious traveller. I had never had a passport and had visited only four Canadian provinces and five American states (mostly with my dad). However, my summer jobs, as a potential future engineer, had been in rural Manitoba and rural Alberta, so at least I was beginning to explore places away from my home, and gradually becoming semi-independent.

My personal Athlone experience began on September 8, 1961 in Quebec City. There, near the Plains of Abraham (where the British army had defeated the French for the control of Canada in 1763), 41 of us young

engineers were introduced individually to Canada's Governor General, Georges Vanier. Then we went aboard the Cunard ship "Ivernia", which took us across the Atlantic Ocean to the port of Southampton in southern England.

It is now obvious that my overseas experiences, thanks to the Athlone Fellowship, had a profound impact on the rest of my life. However, it was not such a good deal for the British treasury, who financed me for two years at 1,680 pounds sterling per year (which worked out in that era to about five Canadian dollars per day)l. Who can recall that "Europe on Five Dollars a Day" was a popular travel book? Thus, that fellowship had enabled me to see most of the UK, and much of Europe, at almost no personal cost, during the two years that I was an Athlone Fellow.

Contrary to the hopes of the creators of the fellowship scheme, I don't think that I ever made decisions that resulted in engineering purchases from the UK. I did, however, buy a new Volkswagen Beetle in 1962 from the VW factory in Germany (for about \$1,600), thanks to a loan from my dad. That enabled me to drive myself and various friends to many different places throughout Europe. What a welcome treat. However, the left hand drive VW (bought primarily for future use in Canada), forced me to learn to drive on the "wrong side", while in Britain.

I really didn't have any interest in getting a further qualification in any kind of engineering when I arrived in the in the UK in September of 1961. (In other words, I really didn't know what I wanted to be when I grew up). So the Athlone Fellowship management enabled me to try out several different kinds of engineering tasks during my first year there. This story tries to explain what I learned.

As an aside, I was always very well treated by the British civil servant (Mr. J. F. Palmby) in London, who looked after most of the practical arrangements for Athlone fellows like me. He was a rather short man. After we got to know each other better, he answered a personal question about his own career. Without boasting, he explained that he had been a Royal Air Force pilot during the Second World War. He explained that only relatively small people could fit into the tiny space in the cockpit of the

British fighter airplanes (Spitfires), which fought so courageously and successfully in that war. His humility gave me invaluable insight into some of the cultural differences between Brits and Canucks.

There are many kinds of careers in which civil engineers like me could work. Incidentally, CIVIL engineers are so-called because the word "engineer" previously referred to men who could create and operate historical engines of war, like battering rams and ladders (for entering castles from the tops of their high walls). When such skillful people were called upon to do civilian tasks, like roads and buildings, they were called "civil" engineers, to differentiate them from military engineers. The titles of other kinds of engineers (mechanical, electrical, etc.) all evolved later.

As I didn't have a clue about which field I wished to work in for my future career, I asked Mr. Palmby to allow me to try out several different kinds of work during my first year in my fellowship. In the two previous summers, I had worked in Manitoba Hydro, so I thought I might be interested in a further career in electric power generation. Thanks to Mr. Palmby's support and connections, he was able to arrange five different work experiences for me, with two quite different employers, all in the first year of my fellowship.

For the first half of the first year (September 1961 – March 1962), I worked with English Electric Company (EEC), a British company which was supplying turbines to my recent employer (Manitoba Hydro). Then in the second half of that year (April – September 1962), I worked with the engineering consulting company of Binnie and Partners.

#### PART ONE: English Electric Company (EEC)

#### A) North Wales

I was tasked with installing equipment for "pumped storage," which was quite a new concept then, in the tiny town of Blaeneau Ffestiniog in North Wales. There I was amazed to learn that the majority of the people in that Welsh village (most of whose surname was Jones) could speak Welsh but could not speak or read English!

As an unexpected bonus during my experience in North Wales, a young Ghanaian engineer, Louis Caisley-Hayford, worked there temporarily when I did, also thanks to UK support. He had previously earned his master's degree in nuclear engineering, during postgraduate studies in Manchester. The Trawsfynydd (Welsh name) nuclear power station was then under construction, not far from where were working at Blaeneau Ffestiniog.

One weekend Louis and I walked past the security guard and into the halfbuilt Trawsfyntdd nuclear plant, anonymously (apart from Louis being black), alongside other workers on the shift change. Once inside the halfbuilt plant, I was given a very skillful explanation by Louis about how a nuclear power station could create and deliver electricity. (Many years later I met Louis in his homeland of Ghana, where he was the very important general manager of the prestigious Volta River Authority).

#### **B)** Scottish Highlands

EEC had supplied several water turbines and generators to hydro- electric plants in the Scottish Highlands, so I spent several weeks in the tiny village of Strathpeffer (west of Inverness), ostensibly to learn about operations and maintenance. However, those plants were so tiny (due to small rivers and flows) that there was little for me to learn that could be relevant in Canada.

Nevertheless, I did learn about some interesting Scottish traditions in that long ago Christmas season, when I was beginning to get homesick. Christmas in the highlands wasn't much fun, since the Scots didn't celebrate much then. My big surprise was participating in my host highlanders' version of the New Year ("hogmonay" in Gaelic). Until 11:59 PM we watched boring television. But at midnight, each adult took a "dram" (modest small amount) of straight Scotch whisky in a glass, clinked each adult separately, saying something which sounded like "slange ava" (meaning Happy New Year), and downed the whisky in a single gulp. After each adult had been individually toasted, we took our own bottle of Scotch to nearby neighbours and repeated this process. And so on, and on, and .....! Very quickly we were all very happy, and even

more drunk. After much staggering and one fall, I managed to get back to my "digs" and stumbled into bed. Much later that day I awoke with a horrible headache. What a primitive way to start a new year!

Also, in the highlands I learned about their stunning absence of true democracy. Much of the local lands around Strathpeffer were owned by a rich lord (Laird MacDonald Buchanan, as I recall, probably the owner of the whisky distillery of that name). He had inherited the title and all the associated assets. He owned the local rivers, so that nobody except him (and his chosen people) could catch fish. Also, all the farmers were serfs, living in houses owned by the Laird, who could evict anybody he chose. I found this system (likely limited to Scotland) to be shockingly undemocratic in (maybe not so democratic Great) Britain, in the 20th century.

#### C) West England

The major factory making EEC hydropower equipment was in the city of Netherton (near Liverpool), on the west coast of England, where thousands of people were employed. There I learned how the factory manufactured the very large equipment used by Manitoba Hydro. Interesting to observe, but of zero interest to me re a future career.

However, I was struck by the class distinctions at lunch time. There were three separate dining rooms for the many hundred employees. As an outsider (but not an EEC employee) I could enter any of them. Executives and white-collar staff ate in a dining room which had tablecloths, waiters and a choice of meals. Middle class workers entered a cafeteria line and selected their meals, then found a table to eat with friends (like my previous experience in Manitoba Hydro). The hardcore workers, often in rough and dirty clothes, due to their work, entered another dining room where they had to bring their own cutlery and ate not-so-fancy meals).

#### D) Rugby

In the town of Rugby (where the British game of that name was created), I spent a brief time learning about making and testing miniature turbine systems, in order to design the most appropriate, full size equipment for specific hydroelectric power plants. That aspect of the business also didn't appeal to me.

As I was anxious to get some sporting fun, however, I asked new friends there about playing rugby. They watched me throw a rugby ball overhand with one arm, as we do in Canada (where the ball is slightly narrower in diameter) and invited me to play. In the dressing room I waited for the padded equipment to be provided, as in Canada. But there wasn't any! We all went out on the field and played a game in shorts and a tee shirt (plus sports shoes). I managed to throw the ball from the sidelines to my team mates reasonably well, but otherwise it was a disaster for me. I never could figure out how scrums worked, and passing the ball with two hands didn't work well for me. Many, many bruises on me after my Rugby sojourn.

#### PART TWO: BINNIE AND PARTNERS

My second half year of practical assistance was an assignment with Binnie and Partners, a London-based firm of engineering consultants. Their office was nicely situated on Artillery Row in Victoria, close both to Parliament and to Green Park. But once again, I was not thrilled with the nature of my work, mostly looking into pore water pressures in the massive Mangla Dam (then being built in rocks and earth in Pakistan), which Binnies was designing. However, I greatly appreciated the opportunity to work and live in England's capital city of London. But I was glad to leave Binnies, after my work term was completed.

#### PART THREE: LONDON SCHOOL OF ECONOMICS (1962-63)

When it came time to decide what to do in my second year of the Athlone fellowship, I had chatted with Mr. Palmby and asked if I could attend the Business Administration program at the London School of Economics

(LSE). In 1962 that was the only business school in all of England. I was happily surprised when I learned that my preference was quickly accepted (possibly the first time for any Athlone Fellow).

My 1962-63 year at LSE was possibly the single most interesting year in my life, and greatly influenced the rest of my career. Its location in central London was excellent for me. At that time, I was living in a residence called London House (full of overseas post graduate students from former British colonies, like me). Queen Elizabeth II once came to visit us there, obviously working to strengthen Commonwealth bonds. London House was near the Russell Square tube station and was also just walking distance away from the LSE. So I got some healthy walking, to and from LSE each day of classes there.

One delightful aspect of the LSE business school was that the very interesting professors did not make great demands in terms of assignments or homework. Compared to engineering studies, the work at LSE was negligible and pleasant. Also interesting were my classmates. Our LSE class included 21 students from seven countries – but only a single Brit, and no women! (Interestingly, seven of us who attended that year still communicate monthly. We had a reunion once and are currently considering another one, 61 years after we departed from LSE.

While studying at the LSE, I also earned a little bit of cash by teaching weekly at a night school in the Hammersmith region of London, where my (mostly Nigerian) students were taught a little bit of science by this civil engineer. The modest cash stipend from this once weekly teaching gig managed to meet most of my cash requirements at the pubs. And I learned that teaching can be pleasant for both teachers and students, especially if the teacher has an accent which is new and interesting for the students.

It didn't hurt my future career that my marks at the end of the LSE program were good (based on a few exams, for which none of us studied very hard – again, unlike my engineering experience). I was surprised that I obtained the highest marks in our class!

In 1963, at the end of my two years of the Athlone fellowship, I put my Volkswagen car on a ship going to Montreal, and I flew there myself. I

drove solo from Montreal to Winnipeg, where I was in debt to my dad (for my Volkswagen purchase) and needed to find a job.

Waiting for me in Winnipeg was a lovely Kiwi lady, Rosemary Bain, to whom I had taken a shine in London. She was probably ready to get engaged, but I wasn't, so after some tears, Rosemary flew away from Winnipeg, back home to Christchurch in New Zealand. And I resumed my engineering career.

#### POST- ATHLONE CAREER EXPERIENCES

#### PART ONE: MANITOBA HYDRO (1963-1965]

With little difficulty, I was hired by Manitoba Hydro for permanent staff late in 1963. I had enjoyed summer jobs with this organization in 1960 and 1961, so we knew and respected each other. Although I hoped, eventually, to work in the field of power system planning, my logic at that time was that I should first know plenty about the operations and production aspects of power system companies, prior to working as a planner. So that was the kind of work that I undertook initially.

A very good-looking secretary in Manitoba Hydro, Priscilla Matthes, learned that I had just spent two years in Europe. She and three girlfriends (including Norwood neighbour Linda McDonald) were planning to do a similar trip themselves, so Cilla (nickname) asked me whether I had any advice to share. Happily, I was able to give her some helpful suggestions about travelling at minimum costs in Europe. She and her girlfriends then resigned their jobs and departed Winnipeg. (With hindsight, Cilla took my heart with her).

Meanwhile, I had been attempting to get a job in a developing country, to broaden my own experience (having already appreciated living in Great Britain and having visited several countries in Europe). I had asked Canada's federal government if they could consider me. (In that era the Canadian International Development Agency, or CIDA, had not yet been created). Its predecessor, the External Affairs department of the Canadian government, interviewed me about my experience. They eventually

decided that the newly independent government of Kenya would welcome me, and the Canadian government would pay for all my expenses. I said thank you very much, resigned from Manitoba Hydro, and prepared to move to Kenya.

But first I flew to Europe and caught up with my girlfriend Cilla. We travelled together for several weeks in northern Europe, staying in youth hostels and other low-cost facilities. We got along well in this process, and I soon realized that I was truly in love with her. Somewhere in Denmark I asked her if she would like to visit Kenya at any time. She said yes. So I asked her to marry me. Happily, she said yes again!

Cilla and I returned to London, and we married there on November 13 in 1965. (We had decided to get married away from home because our families were of different Christian religions, and we were afraid that they might somehow interfere with our marriage plans.) After our honeymoon in Paris, we flew back to London, and then to Winnipeg, to collect all the stuff which we expected we might need for the next two years. Then we flew to Kenya, via London.

External Affairs officials in Ottawa were stunned to learn that I was taking a wife to Kenya, since I had not mentioned that possibility in any of our conversations. But after I provided our recent marriage certificate, the bureaucrats relaxed, and we young Canadians proceeded to Kenya.

#### PART TWO: KENYA GOVERNMENT (1965-1969)

We arrived in Nairobi on Christmas Eve of 1965. The Kenyan population was then about nine million. By 2024, Kenya's population had reached about 60 million. (Populations in Canada, for comparison, grew from about 19 million in 1963 to 40 million in 2024). Note the very much greater growth rate in Kenya, which has created many associated problems there.

Neither Cilla (age 21) nor I (age 24) had ever been in Africa (apart from my own very brief visit into North Africa, from Gibraltar). Nevertheless, we were as happy as could be when we arrived in Nairobi. It was like a

second honeymoon. Eventually our first two children were born in Kenya: Colleen in 1966 and Barry in 1968.

During our first few months in Nairobi, Kenya's capital and largest city, I was getting a technical briefing from the water ministry, whose managers were virtually all expatriates from Britain. Then I was assigned to work in Mombasa, which is the port city for both Kenya and adjacent Uganda (which borders Kenya on its western side). A railway line had been built from Mombasa to Uganda in 1903. (Uganda was apparently the initial target of the British colonizers, due primarily for its rich, tropical agriculture.)

Mombasa is the second largest city in Kenya, at sea level, near the equator. In other words, hot as hell, and humid too. Getting acclimatized to the very debilitating climate in Mombasa was an obvious challenge. (So had winters been in Winnipeg, but my previous lifetime had conditioned me to adjust to those four seasons!). After several bouts of heat stroke in Mombasa, I was amazed at how I eventually and naturally adapted, partly by dressing in light clothing, and mainly by doing EVERYTHING at a more moderate (slower) pace in the tropics.

My job was to oversee maintenance of the critical infrastructure which supplied Mombasa with drinking water. A large diameter pipeline, made of prestressed concrete (due to a postwar scarcity of steel), supplied water to Mombasa from the water source at the Mzima springs, which was about 150 miles away. That pipeline was probably the longest gravity pipeline in the world. The actual source of the water was the Mzima springs in the in the internationally acclaimed Tsavo game park, famous for its many wild animals. The person in charge of that pipeline (me) had a nearby cottage available permanently, near the Mzima springs. That cottage was reserved for any visits that might require lengthy maintenance. Naturally my family (and frequently friends) enjoyed free visits to watch awesome wild animals around Tsavo in equatorial Africa.

One can only imagine how pleasant it was to be living in a tropical paradise, in a seaside home along the sandy shores of the Indian Ocean, plus accessing a second cottage, available in a game park, about a three-

hour drive away. From Mzima springs we had a clear view of Mount Kilimanjaro, nearby in Tanzania to the south of Kenya. That dormant volcano is the highest mountain in Africa (at 5,895 metres, about three miles high).

The regulations of the Canadian government at that time encouraged Canadians in "hardship" postings like Kenya to take a vacation to a less demanding country after one year in the tropics, for "rest and relaxation". Over the Christmas season in 1966-67 we chose to visit the town of Solden in Austria (along with infant daughter Colleen, recently born on August 9, 1966).

Although both Cilla and I had done a bit of downhill skiing around Winnipeg, we weren't good skiers. However, we certainly enjoyed the change of climate in Austria that December, after the persistently hot and humid weather in Mombasa. Unfortunately, Cilla had a skiing accident near the end of our Solden respite. She fell while skiing and broke her leg. When we returned to Mombasa, she wore a plaster cast on her leg.

In Mombasa we had employed three staff: cook (Okech), who had much more experience in making food than young Cilla: yard maintenance guy (Jeremiah), whose main job was to locate and eradicate snakes, and also cut down mature coconuts from the palm trees in our yard; and an experienced lady (Majumah), who helped Cilla with coping with our infant Colleen. Our staff trio were aghast to see Cilla return from Europe, after about two weeks away, in her cast.

Explaining her actual situation to our Kenyan staff, at the equator, was virtually impossible. All these mature Kenyans were illiterate, but had never seen or understood very cold weather, with its snow and ice. The concept of skiing was accordingly impossible for us to explain. (I tried to explain the winter climate in Austria by comparing it to the freezer part of our refrigerator, but that attempt failed).

Nature worked its usual magic and Cilla gradually recuperated well, although the heat inside her cast must have been quite unpleasant. The cast was eventually removed by our expatriate doctor in Mombasa.

I am proud to recall that I took a week off work in 1967 to climb to the summit of Mount Kilimanjaro – a long, tough, three-day hike (even though we hired local porters to carry most of our stuff, including drinking water, food, sleeping bags and heavy clothing). Several friends and I who undertook this arduous hike (including chums we had met previously while skiing in Austria).

We understood there were snow and ice visible at the peak of Kilimanjaro. We suffered several problems while getting to the top: heat stroke, sunburn, vertigo and frostbite, not to mention very sore feet, all on the way up. One of my hiking friends had been a British commando, but he was flabbergasted when he couldn't light his cigarette at the top of Kilimanjaro. There was simply too little oxygen, three miles above sea level!

I decided to call that tremendous climb, to the volcanic rim of Africa's highest mountain, as my personal celebration of Canada's 1967 centennial.

Walking down from Kilimanjaro to its base in a single day was no cinch either. My blistered toes and scorched skin, as well as my unshaven face, made me very ugly and scary. When I returned home to Mombasa, my infant daughter Colleen cried and ran away from me.

After two pleasant years in Kenya, we flew home to Winnipeg for a vacation during the Christmas season in 1967-68. We passed through London. While enroute to the Heathrow airport we saw some cows grazing in the fields. Infant Colleen was dazzled by these unusual (to her) animals. "Are they little elephants?" she asked innocently.

We began our extensive 1967 Christmas vacation in our hometown of Winnipeg. Many relatives were thrilled to see us happy, healthy and unusually well-tanned. My sister Jane's daughter Tracey DeLeeuw had been born about two months before Colleen, so these two first babies of our generation were highly appreciated by my large family. It was a wonderful Christmas experience, especially because Cilla and I had already decided to return to Mombasa for at least another year there.

But first we wanted to visit Cilla's parents, John Matthes and his second wife Alvina. (Priscilla's birth mother Pauline had died, soon after Cilla had

been born). John Matthes worked as a yardman for the Canadian Pacific Railway and was then working on Vancouver Island. He helped our little trio to get affordable (maybe even free) seats on the CPR train from Winnipeg to Victoria BC. A photo we all recall was sweet little Colleen, very well-tanned, sitting innocently in the dome car, in a cute blue outfit, watching western Canada whiz by.

After that delightful visit home in Canada over the 1967-68 holiday season, our little trio returned to Mombasa. Our second child, Barry, was born there on May 28 in 1968.

One day in Kenya in1968, when I was working somewhere away from Mombasa, an education expert from the World Bank (who happened to be a Canadian), met Cilla on our beach (located right beside the Shanzu Hotel). They chatted and the guy asked Cilla where we expected to live next. (Obviously we Canadians were only in Kenya temporarily). Cilla explained that we didn't have such a plan yet, but she must have mentioned my credentials and experiences. Immediately the visiting education expert suggested that I should consider working in the World Bank, an organization about which neither Cilla nor I had ever heard mention. But that whetted our interest, big time.

#### PART THREE: WORLD BANK (1969 – 1976)

In 1969 we returned from Kenya to Canada. While my wife and two infants were having a vacation at Victoria Beach on Lake Winnipeg, I flew to Washington DC and invited myself for an interview at the World Bank (officially named the International Bank of Reconstruction and Development, or IBRD). I was soon hired as a staff member of this very large institution, which at that time had approximately 5,000 employees. I was 30 years old, one of the youngest professional staff members.

Without a doubt, my London School of Economics background helped me, since the primary interviewer was himself a former LSE professor. (The technical interviewer, who thought that I was a bit inexperienced compared to most of the IBRD staff members, was less in favour of hiring

me. But I got the job nevertheless.) We moved to the Washington DC region in late 1969, initially renting a home in the Bethesda neighbourhood in Maryland.

My work in the World Bank required frequent, long-distance travels to faraway countries, typically three of four trips annually, each of several weeks duration. My periodic, long absences obviously put much stress on Cilla and our young kids.

One clever strategy which IBRD used to help retain staff members was to encourage them to bring their partner along occasionally on business trips. The Bank offered to pay travel costs (only) for a staff member's spouse on any trip, after the staff member had been away from home for 200 days. If the staff member had been away for 300 days or more, the World Bank paid all the partner's costs (travel and living expenses) on the trip. Those sensible perks enabled Cilla to join me on two different trips, visiting wonderfully interesting countries in Europe, Asia and Africa, which we much appreciated.

I had really enjoyed working at the World Bank for seven years, during which time out third and fourth children were born: Sharon in 1970 and Steven in 1975.

#### PART FOUR: R.L. WALKER & PARTNERS (1976-1986)

My wife Priscilla and I were quite clear that we did NOT want our children to grow up in the United States (although many other staff members, especially those from less affluent countries, were less interested in returning to their home country). Instead, my young family and I returned to Canada, because a World Bank colleague had told me about an impressive consulting firm in Ottawa. This was high praise for the firm of R.L.Walker and Partners, since IBRD staff were usually quite underwhelmed by most consultants.

In Ottawa we bought a modest house at 949 Mountainview Avenue in the western part of Ottawa. For the next ten years I was a full-time partner in this small consulting firm, working primarily in developing countries, and

once again spending approximately one quarter of my time away from home. However we were now living in Canada again, and our four children were being educated within Canada.

Until I had joined R.L. Walker consultants, I was unaware that the organization was not exactly thriving in 1976. The group had been formed in 1971 because of the war that year between India and Pakistan. A major project underway before that war was suspended, as soon as East Pakistan became the independent country of Bangladesh. That unexpected war had destroyed a major project underway – supported by Canadian government – and left many experienced Canadian consultants without any work or income.

Five years later (in 1976, when I expressed interest in joining the firm), several original members had already departed, due to lack of work. The remaining four partners (three engineers and one economist) were finally beginning to attract new business. Although I had expected the firm to help me to locate potential clients, the reverse was the reality. I became the single best part of the firm's business development activities (as well as its youngest partner). I persuaded two separate provincial organizations to hire our consulting firm for major tasks.

The first major assignment was in Manitoba, where the New Democratic Party (NDP), led by Premier Ed Schreyer, had won the 1973 provincial election. The NDP guided Manitoba Hydro to actively create hydropower projects along the Nelson River in northern Manitoba, as well as the high voltage power lines needed to deliver the electricity to users in southern Manitoba. In 1977 the next provincial election was won by the Conservative Party (led by Premier Stirling Lyon), which demanded an independent assessment of recent power plant decisions. I learned about these political/technical issues when visiting Winnipeg to see whether our consulting firm could help.

Because I was a former employee of Manitoba Hydro, as well as an LSE graduate with seven years of experience in the World Bank, I had easy access to the provincial staff members dealing with their substantial challenge. They promptly agreed to hire our firm for this challenging

assignment. However, my partners needed the work badly, so the newest partner (me) was compelled to find separate tasks for myself.

When visiting the Alberta capital of Edmonton, I learned that their provincial environmental staff were coping with a task beyond their capacity. The Slave River, which flows north across the boundary with the Northwest Territories, has high volumes of water flowing downhill – an excellent opportunity for a hydro-electric power plant. However, the provincial government insisted that only Albertan companies should do the necessary analyses. It was easy to persuade the Albertan decision makers that the Walker consulting company was certainly capable to oversee this multi-year assignment. So, our Walker firm was hired and we opened a temporary office in Edmonton.

While my partners were being kept busy in domestic assignments which I had won for us, my own work continued to be for clients like the World Bank and Asian Development Bank. In other words, plenty of tasks far away from home in Ottawa.

#### PART FIVE: CANADIAN INTERNATIONAL DEVELOPMENT AGENCY (1986-1994)

In 1986, after ten years as a consultant, I decided to leave that business and work in the Canadian International Development Agency (CIDA), where I knew that the current head of the water supply section was about to retire. My goals were to travel less and to help the federal government do a better job in its overseas work in my field. However, the policy of the Canadian government was that all managerial positions could only be filled only by bilingual staff, after a formal competition. I was confident that I could succeed in any competition, but only after I became more adequately bilingual.

When growing up in greater Winnipeg I had lived in Norwood, in the nominal francophone part (St. Boniface). I had studied French in junior high school to learn that language (albeit taught by an anglophone, who had travelled briefly in France and aspired to be fluent - but failed). I had

also studied Latin slightly while in high school at St. Paul's College, which also gave me some insights to Canada's second language. However, I knew that I couldn't pass any serious language test without further preparation. So I asked a francophone friend, whom I had met previously in Kenya, for help. Madeleine Gosselin was a terrific language coach, who knew well the government's requirements. After many hours of her assistance, spread over quite a few months, I felt ready to take the federal language test for French. And I passed!

Then I applied to work as the CIDA manager for water supply and sanitation. I was successful. So my work location changed slightly. Instead of working in an office on Sparks Street on the Ottawa city side of the Ottawa River, my new office in the federal government building was located less than a kilometre away, on the Quebec side of the same river. However, there was a down side. I was now working in a government bureaucracy, where most decisions were made either by politicians, or by civilians responding to political decisions. I didn't enjoy the compromises which were frequently necessary. I managed a professional staff of about five people, all nominally competent. (But none of them could have earned a job with the World Bank).

As previously, I travelled occasionally, to oversee projects being financed by CIDA.

Our domestic life was terrific. Our four children were maturing and progressing well in their own lives. When I went overseas on business trips, Cilla could join me occasionally (albeit at our own costs, unlike my prior situation in the World Bank). Our family life was good.

But we got quite a shock in 1993, when Cilla's repetitive stomach pains were diagnosed as ovarian cancer. That meant that she had to undergo repetitive chemotherapy, which had strong side effects, which set her back severely. Nevertheless, we decided to consider finding a job for me which was more satisfactory than working in CIDA.

#### PART SIX: WORLD BANK (1994–1999)

After eight years with CIDA, we returned to the Washington DC in 1994. The salary was superior, and winter less severe. I didn't have to hustle for my next assignment, as I was the global manager of the Water and Sanitation Program of the World Bank and United Nations Development Program.

We rented a nice house in the District of Columbia (DC) on Ninth Street SE, enabling me to ride my bike to and from the office, or take the newly built metro train to work in foul weather. Good friends (Wackman and Lanouette families) lived nearby. We also enjoyed attending a nearby RC church, attended by a predominantly black congregation. The sermons were awesome, and the music even better!

Being cursed with ovarian cancer was a real bummer, but Cilla coped well after her regular chemotherapy sessions. With no kids to manage, she was able to join me on extended trips: in Africa in 1996; and South Asia in 1999.

Finally, in 1999 (just before my 60th birthday), I retired permanently, 36 years after saying goodbye to the LSE.

#### CONCLUSION

Now aged 85, I will never forget how crucial my Athlone Fellowship was in my very satisfying life. I have lived and worked in the capital cities of four countries (England, Kenya, USA, and Canada) on three continents. I have visited at least 70 countries, while either working or traveling for pleasure. But I remain convinced that the best country on our planet is definitely CANADA  $\oint$ 

#### CONTACT INFORMATION

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#### Lawrence P. Haberman, Athlone 1960, UMan

I started my education in Winnipeg with the usual public school education and a subsequent B.Sc. in Civl Engineering from the University of Manitoba. Following graduation I worked for Imperial Oil supervising the expansion of a marine terminal tank farm. Upon completion of this project, I worked for the City of Winnipeg Engineering Department as a design/ inspections engineer.

Subsequently, under the sponsorship of the Athlone Fellowship, I obtained a DIC in Engineering Hydraulics from Imperial College – following which I furthered my education at the hydraulics laboratory of George Wimpy & Company.

I returned to Canada in 1962 and was employed by Manitoba Hydro to participate in the initial investigations of potential hydro projects on the Nelson River, and in the result – appointed as civil engineering coordinator for the construction of the Kettle Generating Station. Following this period – and under a CIDA contract for three years – I served as an advisor/ design engineer in the Kenya Water Development Department. At the completion of this contract, I returned to Manitoba Hydro in system planning and subsequently in Corporate Planning. During this period, I also served as the Executive Secretary of the Manitoba Water Commission and was seconded to the Tritschler Judicial Inquiry and the Manitoba Department of Energy and Mines.

Later and following my appointment as ADM, Energy Division, Manitoba Energy and Mines, my career led to Natural Resources Canada, where I provided management services to assist in the organization and regional delivery of national energy technology transfer and demonstration programs. Following this undertaking, I became the Executive Vice President of the Manitoba Research Council with responsibility for organizational and outreach matters. I subsequently provided management services through my own consulting company.

While my experience has been varied and at times complex, the Athlone Fellowship was one of the more important events in my life. This experience was shared by my wife, and subsequently by my three children and two grandchildren.

Lawrence Haberman, Athlone 1960, McGill

#### Bill Hanuschak, Athlone 1960, UofM

#### PRELUDE

This farm boy (after growing up with horses, cattle, tractors, model A's and combines) had no idea what to expect after enrolling at United College for pre-engineering (grade 12) at the advice of the foreman at my summer job at the CPR shops who actually advised me to quit and go back to school!

My first year experience at United (now UofM) was very enjoyable and impressive and with the encouragement of my big brother Ben and help from a Tribune bursary I enrolled at UofM to continue on in civil engineering after summer employment up north with a taste of geological surveying in the Flin Flon area with a GSC exploration/mapping crew.

My next four years in engineering at UofM were also very enjoyable and quite a learning experience particularly during my summer jobs with a Federal Topographic Survey mapping crew, a CNR field crew for a new rail spur with a bridge and curved tunnel for Steep Rock Iron Mine in Atikokan, and finally with Shell Oil as their field (engineer) for a 30 mile access road to a new oil well site through virgin territory in northern Alberta to be ready for bringing in drilling rigs in only 4 months. Good summer jobs were plentiful in the 50's as y'all know and Shell Oil assigned me as the only one available with civil and survey experience (albeit: with only 3rd year) in their Edmonton Office that was filled with mechanical and geological engineers. This last summer job really gave me a taste of responsibility, however, I felt quite important equipped with a set of aerial photos, my new theodolite, my new trailer, and new company vehicle complete with a two way radio for "over and out" communication while checking on progress of the 3 separate contractors each building a 3 mile stretch.

However, my years at UofM college life filled with summers of interesting new experiences were nothing compared with the adventure that was to come in my next 2 years in England, after being doubly fortunate to receive both a gold medal and Athlone Fellowship after my final year.

#### LIFE AS AN ATHLONE

My two years in England as an Athlone were beyond expectations and full of life learn- ing and broadening experiences that I never imagined.

After taking a leave of absence from my initial job with Crosier Greenberg Structural Consultants I boarded that flight that took us to that sprawling metropolis of London. Our initial reception and accommodations near Marble Arch were excellent with a dietary experience especially for breakfasts!

This happened to be within walking distance of **Sir Wm Halcrow and Partners Consulting Engineers** on Park Lane who I chose to work with for my 1st year. After a few weeks of boarding with extended family I settled in at a flat near Lancaster Gate shared with fellow Athlone Mike Ward also from Winnipeg. He had chosen Imperial College located across Hyde Park from us while Halcrows was also in walking distance.

Our life batching in this flat was most interesting with such things as plugging the fire-place gas meter with shillings and laying out newspapers for table cloths and setting up temporary drafting boards.

My life working at Halcrows was also interesting as I was fortunate to be able to spend three months in each of different divisions of my choosing so I chose railways, marine, power stations, and finally their structural division where I had the opportunity of working under a prominent Australian engineer on the design of a tubular steel welded cantilevered trusses over the stands at Wembley stadium.

At each of the divisions my superior and mentor was the head engineer so that I was able to get a good grasp of the overall picture of each project we worked on. The Railway division involved a tunnel under multi tracks from one side of the station to the other at Ashford Kent. I soon learned that being inventive with a design was not always appropriate as we had to abide by British Railway Standards for everything we did. This goes along with England's strong emphasis on tradition and history in everything (even in engineering) which I learned to greatly respect from my time in England. Having a morning and afternoon break and chats with

comrades when the Tea Lady came around was a nice example of office tradition.

Any design done by a junior engineer would be sketched out and by traditional practice given over to a professional draftsperson or tracer who would put this on linen with ink for final review! This was in the days before computers and AutoCAD. I still did calculations on my slide rule which is hard to imagine now.

I was also fortunate to associate with colleagues from many other Commonwealth countries as Halcrows were an international firm with offices in every continent.

One project I worked on was a dock structure in Ghana with African engineers and another was a concrete power station in Buenos Aires were text for all drawings was translated into Spanish. Lunch hours were fascinating as we often roamed the mews at Mayfair for an interesting cafe or went with international colleagues to the cafeteria at the Indian or American Embassy. Special occasions such as farewells to someone leaving would be at one or other fascinating pubs. I participated on one such occasion when I was given such a great send off that I missed my tube station and got on a train heading in the wrong direction – however this is another story.

During that first year after hours and weekends were spent exploring all over the London area with Mike Ward, getting around by tube, bus, train or a lot of walking. After a few months we both invested in vehicles when I purchased a Peugeot scooter and Mike got an aerial leader motorcycle. We managed to go further and further a field exploring different historic sites and cathedrals. One such weekend trip was to Snetterton to see a car race the next day, however, we ended up having to sleep on a park bench as all B&Bs and hostels were taken. This was OK except for that town hall bell near us that kept tolling every half hour.

I had trouble keeping up with Mike especially losing him at roundabouts. Later on I purchased a used big Mark VII Jaguar as I couldn't resist a bargain being from Winnipeg where if you buy something big you get asked if you got a good deal. I soon found out why most Brits would stay

away from these big cars due to the high cost of petrol! Nonetheless it got us quickly to interesting places and events further out such as up the M1 to watch the Grand National at Aintree where we managed to watch the race at famous Beechers Brook.

My first year socially in London was very significant and life changing as this is where I met my future wife Hazel from Kent at the Lyceum Ballroom. Dating put a damper on my weekend travels exploring England with Mike!

After work I would often hop on the tube to meet with Hazel at a neat little coffee bar on Kingsway where she worked for an advertising agency. I ended up proposing just prior to the end of my first year .

My second year began when I left to move into Chad Hill residence near to the University of Birmingham where I embarked On a Masters concrete research program under Prof Dr. Brock. Academically this was also very fortunate timing wise as I had access to a brand new lab with state of the art heavy testing equipment, concrete mixer, etc to carry out large full size load tests of beams to failure. This was further enhanced by having a series of tests of pre-stressed beams carried out by undergrad students as part of their lab program but was also one of my interests.

My first few months in Birmingham were hectic as every weekend I would

make a speedy jaunt down the M1 in the fast lane to London to see Hazel. My studies and research were interrupted that late fall for our wedding at a local church in a small village and reception at her houseonly her family. We took off for our honeymoon in a newly purchased red VW bug on a two week tour thru Europe. This was



Bill & Hazel - 1962

another eye opening experience visiting France, Spain, touching on Switzerland, Germany and Austria then back thru France, Belgium, and Holland before boarding the ferry for Dover.

We again lucked out on our return by renting a beautiful 1 1/2 story house on the Cadbury estate in Bournville complete with a long yard with a rose garden backing onto a commons. Garage even had a large pile of coal that lasted for our stay. Very hospitable landlord who treated us to several dinners at his house.

The remainder of my time in Birmingham was spent concentrating on my research project and my thesis. Really enjoyed life there often visiting with Mike's brother Max and family who worked at Jaguars in Coventry. Went on several tours with them to pretty villages and sites in the Cotswolds, one of my favourite areas.

At the end of my 2 years in late fall of 62 we packed up our VW and drove to Liverpool where it was loaded onto the Carinthia on which we sailed back to Montreal after a rough crossing of the North Atlantic. Watched our car unloaded then after signing off required documentation for import tax exemption got and drove to Winnipeg with a stop off to visit friends in Ottawa.

#### CAREER

My career on return to Winnipeg was more mundane and not as spectacular eventful or significant as that of other Athlones but here is a summary of highlights of my engineering career.

Rejoined Crosier Greenberg on my return to Winnipeg. Gained fantastic experience under mentorship of Arnold Crosier (a transplant British engineer) particularly with post tensioned concrete and lift slab construction of mid rise structures which he pioneered in this area. In addition to this he gave me the responsibility for design of many build- ing types such as schools, hotels, apartments, churches and office buildings. Became a junior partner after 7 years .

With strong desire as an entrepreneur to control my own career I left in 1973 to establish my own practice to focus on opportunities I saw south of the border in Mpls/StPaul area as nobody was specializing or promoting the use of post tensioned concrete with which I had experience. After securing some initial projects with poured in place post tensioned concrete slab construction became somewhat recognized as an "out of town expert" which has led to literally hundreds of major projects in this field thru upper Midwest States over the next 35 years. Gained some degree of recognition on hi-rise concrete structures with PTI (Post Tensioning Institute) awards on two 30 and 50 storey post tensioned concrete projects at the Riverplace development in Minneapolis and mixed use square block development at Gal tier Plaza St Paul. This led to a PTI sponsored lecture tour I presented on post tensioned concrete design and construction in several major cities of Canada and the US.

Unfortunately, my practice required a lot of commuting at clients request and expectations. Soon got my million mile certificate from Northwest Airlines (now Delta). Work was done the Winnipeg where I felt rooted with involvement in my family and 3 sons school activities, etc.

I also participated with our Manitoba Chamber of Commerce and Winnipeg Chamber of Commerce as chairman of the Civics Bureau. Had several stints on our Manitoba Association of Professional Engineers serving on Consulting Engineers Committee and at one time chairing a committee responsible for publishing our Fee Schedule for Client or Architects – a no-no now! Also served on a several technical committees such as a CSA committee publishing Testing of Masonry Assemblages, a review Committee for the CPCI Metric Manual, and participated on a PTI committee for a number of years for publication of their PTI manual for Design of Post Tensioned Slab Structures.

I was honoured with a merit award from our Association of Engineers. Our office ran with a staff of 12 to 20 employees over the years till about year 2000. During this period we got a taste of some major fast tracked projects end experience working with firms like Kajima, Morse Diesel, Mortenson, PCL, Kraus Anderson and BorSon as construction managers.

At the same time we maintained local work in Winnipeg that accounted for about 40%.

Later I branched out to Edmonton and Calgary in the 80s headed by talented engineer associates who happened to want a transfer there following their wives career moves. Unfortunately we were forced to close Alberta branches in less than 7 or 8 years as their local real estate market crashed with the ups and downs of the oil business. We did maintain a Minneapolis "forwarding" office shared with local Architectural firms we worked with, including **Miller Hanson Westerbeck**, and the famous **Ralph Rapson** a number of years.

#### PERSONAL

On the personal and family side my wife has presented me with 3 fine sons Clive, Paul and Blair who all attended university in engineering programs. They are all in their 50s, eldest Clive had a variety of careers unlike his dad with stints in the construction management field and computers etc with periods in Minnesota, LA, here with me in Winnipeg and now living in Vancouver.

Middle son Paul started off with real estate and his own small residential subdivision then has worked with me as general office manager doing a fine job keeping me and clients in line.

Youngest son Blair graduated from USF in Tampa and has been working with Walter P Moore Structural Consultants since graduation and marrying a Florida girl. WPMoore are a prominent 600 to 700 person US

firm with offices in most major US cities. They have two beautiful daughters, Hanna and Aly, our only grandchildren of whom we are equally proud– both in college.

Blair's engineering career has far surpassed mine as he



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Hanna & Aly, granddaughters

progressed from project engineering, to branch manager, to shareholder, director, airport specialist, marketing, and now head manager of their Structural Division responsible for over 350 engineers scattered in their various offices. He now lives in Great Falls, a suburb of Washington DC. Some of the major projects he is involved in (like the 10 billion dollar or so Kennedy Airport expansion) are hundreds of times larger than I ever handled, so he has more than followed in my footsteps.

Although we have lived in Winnipeg all these 58 years we have moved 7 times in and around the City with 4 in rural suburbs. One such move was to a 3 storey house in the village of Oakbank which I built mostly myself with help from the boys some 28 years ago. As a structural engineer I felt I had to do this at least once. It was built as a 3 storey with design resembling a prairie grain elevator in homage to one nearby that was torn down. Unfortunately, as we get older, a 3 storey doesn't work well especially if master bedroom is on the 3rd floor, and laundry room in the basement. For past 27 years we have lived in a bungalow on 5 acres at the end of a cul-de-sac backing into Birds Hill Provincial Park.

Hazel comes from Kent so we have made a number of trips back to England and the continent enjoying each trip especially countryside like Dorset where we visit friends. In many winters we would fly to attend a convention or seminar (usually in a warm place) as I maintained involvement on some committees and membership with USA technical organizations such ACI, PCI, PTI, and ASCE of which I am now a life member. We also have owned some 7 different motor homes over the years each one getting larger. We have made many trips in a motor home over the years, typically in late fall or early spring, on a 3 week vacation tour down to Florida and a circuit to Atlanta or Washington DC to visit our granddaughters.

Unfortunately, our travels have now stopped due to age and health issues in addition to the restrictions due to Covid 19. Hazel has had a number of operations recently and with hip replacement is not very mobile. Our current motor home has been sitting for almost 2 years. Fortunately I am still healthy thanks to my pacemaker I've had for ten years.

I have been trying to retire for ten years now but am still at it, as clients won't let me quit and keep asking me to have one more dance. Truth is I enjoy my work and get a lot of satisfaction from it. Currently working mostly from home as I am also Hazel's caregiver. Health has become a major issue for us as we age. Ironic thing is that I have worked on design of over 50 seniors projects over the years in the US including health campuses with independent living, assisted living, personal care, and hospital care including Alzheimer's wings, however, hope to not have to end up there.

My structural engineering career has been very satisfying and rewarding. Part of this is no doubt due to the education and experience with an international or global view that I received in my two years as an Athlone for which I am truly grateful. This opportunity was in fact life changing for me in a very positive way in helping me to give my best in my engineering contribution to society as well as broadening the scope of my personal life.

Many thanks to the Earl of Athlone, The British Board of Trade, the British Council and of course Mr. Palmby.

The world would be a much better place if programs like this could be continued in engineering, and other fields.

#### Wm. Hanuschak, P. Eng., FCSCE, Athlone 1960, UMan

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#### R L Bob Hemmings, Athlone 1962, UofA

Micheline and I were married in Victoria, BC in 1971, and have lived what



Bob & Micheline, 1971

we might call a very interesting and enjoyable life, living in many different places, starting in Trois Rivières Québec, Mississauga Ontario, Pierrefonds Québec, Niagara Falls New York, Columbia and Anderson South Carolina, Birmingham Alabama, Niko Japan, Toronto Ontario, Brockville Ontario, Arden, North Carolina (where we waited for 11 months for the desired apartment to open), and then Asheville NC, in the Grove Arcade Apartments, then a few weeks in Bangor, Maine (awaiting the opening of an apartment in a "luxury apartment building" that didn't happen), and now, hopefully

our last location, in a fine apartment building in

Camillus, a small town within the City of Syracuse, New York State.

We're still not feeling like we're getting old, although I was born in 1940, in Edmonton, Alberta, with the same birth day as that of the Hudson's Bay Company (May 2nd). Micheline is less old than me. We're both in good health, considering, although I, a never smoker, had a brush with lung cancer in 2023, resulting in a left lower lobe to be removed.

Being an Albertan, a first child with parents who both went to UofA (Dad in Medicine, Mum as a Dietician), it seemed natural that I went to UofA myself. I studied Chemical Engineering there, and then went on to the UK with an Athlone Fellowship.

When I was still finishing my Athlone studies in Chemical Engineering at Imperial College, and receiving my PhD and DIC in 1965, I met a fellow Canadian lady, Carol Ashby who was related to one of my Sports-car Club members in Sidney, BC. Both Carol and I felt the romance of our being in London, so we married, and had child, Robert Henry who was born in Wimbledon, England, where he now lives (in Leeds, as a Professor at Leeds University), along with his wife Amelia (also a professor), and son Morris.

I had a successful interview with **Atomic Energy of Canada Ltd.**, so that after graduation I could then start my life as a nuclear power mover (but not a shaker) in this fascinating power technology. My first posting was to Pinawa, Manitoba, where AECL was testing an organic cooled, heavy water moderated reactor with natural uranium fuel.

Circumstances between Carol and I resulted in separation and divorce. A short time later came my next move. It was to Trois Rivières, Québec, for commissioning of a new (to Canada) reactor type: a boiling light water cooled, heavy water moderated, reactor. It was there where I met my Micheline. In the years from then to 2005, I was initially a nuclear process engineer, who enjoyed visiting many countries as part of my job. It expanded to nuclear decontamination, waste handling, adapting Canadian technology to US nuclear plants, waste and chemical process design, and finally working on the conceptual design of the fusion reactor known as

ITER, and now being constructed in France. I retired in June of 2005.

We've done a lot of traveling since my retirement, while we lived for about 10 years in Brockville, Ontario, and since July of 2015, we lived in Asheville, NC, and in May of 2021 we moved to Camillus, NY.

We've traveled to every state in the US except the 2nd smallest one, Delaware, and every



Bob & Micheline, 2022

province in Canada. We've also done a good deal of cruising, about a dozen cruises, including Mexico (our first cruise), Alaska (twice), Greenland, Iceland, Tahiti, the Panama Canal (twice), the east coast of North America, the Caribbean several times, New Zealand (actually a "Cruise by air), Tahiti, and Europe several times. And we would have cruised in 2020, too, but canceled because of the Covid-19 virus. And we did a "railroad cruise" on the Rocky Mountaineer. We've really enjoyed our traveling lives.

We had two children, and both were married and had children:

- Our daughter, Isabelle, lives in Dundas, Ontario with her husband, Bailey, and 2 children (a boy and a girl). She followed closely to her father's footsteps, earning a mechanical engineering degree from Waterloo, a Master's degree from UTIAS, and a PhD from the U of Auckland.
- Our son, Rich, lived in Germany, with his wife from Hungary, and their twins (George and Grace) and a younger girl Sofia. Unfortunately, Rich died of colorectal cancer in February, 2023 at the age of 46. He was working as a consultant to NATO training there, based on his USAF background and his graduation from the USAF Academy in Colorado Springs. His wife continues to live in Germany with 3 children, first came twins (boy & girl), and then another little girl.
- Altogether, we have 5 wonderful grandchildren.

We are now living in a very fine apartment building in the small town of Camillus, within the City of Syracuse, NY. This is the 15th home for us since our wedding in 1971.

We moved from Brockville, ON, on the banks of the St. Lawrence River, for the clean air in the Smoky Mountains, which lift airborne particulates over us as the prevailing winds sweep generally eastward. This creates a pocket of clean air in Asheville, cleaner than in the funnel-like St. Lawrence River valley, which was carrying airborne particulates which made it hard to breath. But when Asheville changed its character to one that tolerated racial and criminal activities, we moved here to Camillus, where the prevailing winds and surface configuration don't sweep the airborne particulates right onto us, as it did in Brockville.

We're doing very well indeed, enjoying our life, with me doing a bit of writing (mainly about The Athlone Fellowship, and my personal memoirs), enjoying good food and music, and keeping contact with our scattered family and friends.

And, quoting from my initial thoughts when reviewing the Athlone program, I had written the following:

"For as many of the Fellows as I was able to contact, the Program was exceedingly successful. It brought new experiences to 810 well qualified Canadian engineers, experiences that most would not have otherwise happened. For many, like myself, the Athlone allowed them the pleasure and privilege of visiting the heart of the British Commonwealth, and also the benefit of earning an advanced degree from a prestigious British university, or acquiring unique engineering experience at a leading British engineering industry. In addition, all the Fellows had the opportunity to see and to live the British experience during those two redevelopment decades following the end of the Second World War.

"In my own case, being an Athlone Fellow provided me with professional opportunities that certainly would not have been open to me without it. With the words "Athlone Fellow" on my resume, I was more interesting to more industries than I would have been otherwise. And the Athlone experience, especially at Imperial College, was an experience during which I learned how to learn, which is reflected by my attainment of my PhD and DIC from Imperial. Further, with that experience I was able to make a success in the many aspects of my career, mainly in the field of nuclear power engineering, from R&D through design, to commissioning, to operations, to waste management, and to decommissioning–including both neutron fission and fusion reactors."

#### Bob Hemmings says: "Thank you, Athlone Fellowship Program!"

**Bob Hemmings–Athlone 1962, UofA** 

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#### Steve Hrudey, CM, AOE, Athlone 1970, UofA

First of all, a sincere thank you to Bob for creating and managing this collection of Athlone Fellows accounts for posterity.

As a member of the final cohort of Fellows who traveled to the UK in September 1970, I am pleased to recount how the Athlone Fellowship launched a remarkably diverse and rewarding professional career for me. I have no hesitation in recognizing that the international exposure that the Athlone Fellowship provided to me was fundamental to creating the exceptional path that I have been so very fortunate to have followed.

The 1970 Athlone Fellowships were launched amid some substantial Canadian history. Our cohort was called to Montreal in mid-September for a charter flight to London. Our departure was preceded by a reception on September 14, hosted by the British Board of Trade Commissioner, James Cross. While we were starting our term at Imperial College, on October 5, 1970, James Cross was kidnapped by the FLQ from his Montreal home and was held for 59 days during Canada's October crisis before being thankfully released unharmed.

On a personal basis, I benefited enormously from my MSc in Public Health Engineering at Imperial College, Department of Civil Engineering because of the addition of a new faculty member, Dr. Roger Perry who had just completed a post-doctoral fellowship in Chemistry at the University of Birmingham. He became my career mentor while rapidly transforming the Public Health Engineering graduate program at IC into an international leader in environmental health research. Although I had only opted for a 1 year Fellowship, I accepted an offer to work another year as a research assistant on a contract Dr. Perry acquired from the British Department of Environment. This allowed me to remain for an additional year in London, joined by my future bride, Elizabeth.

We had met at Jasper Park Lodge in 1968. She worked there for the summers of 1968 and 1969, while I had worked there for the summers of 1966 and 1967. Elizabeth was raised in Ralston, Alberta, the residential community for the Suffield Defence Research Board (DRB), until her Dad, the DRB Administrator, died in 1965 and her family relocated to Ottawa. In

the summer of 1972, we were married by the Honourable Stanley Knowles, before traveling to Victoria where I worked for the B.C. Pollution Control Branch. We moved to Edmonton in the summer of 1973 where I worked for the Environmental Protection Service, Environment Canada with Elizabeth working at the Alberta Provincial Laboratory of Public Health.

In September 1975, I joined the Department of Civil Engineering, University of Alberta, becoming the second Faculty member of their Environmental Engineering program. After 13 years in Engineering, I was fortunate to negotiate what does not



Steve and Elizabeth, wedded in the summer of 1972

normally happen at a university, an internal transfer to the Department of Public Health Sciences in the Faculty of Medicine and Dentistry, where I founded the Environmental Health Sciences program which has subsequently evolved to become the Analytical and Environmental Toxicology Division of the Department of Laboratory Medicine and Pathology, where I have been Professor Emeritus, since retiring in January 2008.

Dr. Roger Perry, as my career mentor, encouraged me to take advantage of my MSc to register at the University of London for an external PhD which I was able to perform in Alberta and defend in London in the fall of 1979. This came about after we had started our family, with son Steve in December 1977. He was followed in April 1980 with son Peter and daughter Jessica in January 1984 – our sons graduating from Engineering (BSc Co-op, 2001, MBA, 2009 and BSc 2002, PhD 2006). Our daughter declared that we had enough Engineers in the family and chose Pharmacy (BSc 2007, MHSc 2014) where she won the graduating class Gold Medal.

Son Steve now works for Epcor in Edmonton (married to Christine, DVM with sons Henry and Walter and daughter Hazel). Son Peter works for Apple at its Cupertino, California headquarters (married to Nicole, MSc SLP, with sons Nolan and Sam). Daughter Jessica works for the Faculty of Behavioural and Movement Sciences, Vrije University in Amsterdam.

Over a 33 year academic career, followed by another 16 years and counting before retirement. I was fortunate to have many remarkable experiences, including many visits back to Imperial College. My last formal visit to IC was in March 2002 to attend the dedication of the newly refurbished Environmental Engineering and Science labs named after Professor Roger Perry who died unexpectedly, far too young, in 1995. I had been serving as the Chair of the Grants Selection Panel, Priority Area on Environmental Security, Scientific and Environmental Affairs of NATO which was charged with promoting western science among former Soviet bloc countries. I had expected to see him in London on a return from a NATO meeting in Prague in October 1995, but he died weeks earlier after returning from a trip to Egypt.

Following several trips to Australia, I was fortunate to arrange a sabbatical leave in 1998-1999 with a nationally-funded industry-cooperative research centre on drinking water quality housed at South Australia Water in Adelaide. This led to major involvement in Australia's restructuring of its national drinking water guidelines, adopting a performance-based quality management system. This effort became coordinated with the World Health Organization restructuring of international drinking water guidelines that introduced the Water Safety Plan framework for achieving a similar performance that, as of 2017, had been adopted in 93 countries in every region of the world.

Despite having spent 25 years dealing with a wide range of environmental health risk issues, drinking water safety became a dominant feature of my research and professional publications. That focus was cemented after a public inquiry under Justice Dennis O'Connor was called into the fatal drinking water outbreak in Walkerton, Ontario in May 2000. I was invited to serve on the Research Advisory Panel to the Inquiry that documented the causes of this disaster that killed seven residents and made over 2,300

ill and that developed a strategy for ensuring safe drinking water in Ontario. This experience led to me co-authoring a 2004 book with Elizabeth, published by the International Water Association, which outlined the causes and outcomes of over 70 drinking water outbreaks in 16 affluent countries which resulted in over 70 deaths and hundreds of thousands of illnesses in the previous 30 years. We followed that with a 2014 book, published by the American Water Works Association, which provided 15 case studies of major outbreaks and four close calls that detailed the timelines and causes of these public health failures. These cases provided the basis for teaching dozens of risk management training courses for water professionals in Canada, Australia, the U.S., the U.K. and New Zealand.

In 1996, I was appointed by Provincial Cabinet to serve as an administrative law judge on the Environmental Appeals Board, a tribunal that hears appeals of regulatory decisions of the provincial environmental regulator. In 2005, I was also appointed as the first non-lawyer to serve as the Chair of the EAB for five years, a position reporting directly to the Minister of Environment. The progress of my diverse, interdisciplinary career can be traced back to the exposure I received from the Athlone Fellowship and the perspectives about addressing complex problems I received from my mentor, Professor Roger Perry.

I was also privileged to be elected in 2012 to serve on the governing Council of the Association of Professional Engineers and Geoscientists of Alberta and later elected to serve as APEGA President in 2016-2017. The foregoing experiences contributed to an award of the Alberta Order of Excellence in 2017 and Member of the Order of Canada in 2019.

Finally, my last book - "Public Health Risk Assessment and Risk Management for Safe Drinking Water" - has been published online for free download at https://doi.org/10.62592/MNDH2138

And here is a recent photo of the Hrudey family:



#### Steve Hrudey, Athlone 1970, UofA

steve.hrudey@alberta.ca

#### Ron Johnston, Athlone 1962, UofA

#### After the Athlone

A part of my story is how I came to receive the Athlone. I worked hard in my 1st year of engineering at the UofA and slacked off in the next two years. My application for the Athlone was not too strong with my grades from the 3rd year and I was not awarded it. In the fourth year we had a new Prof by the name of Dr. Edward Jull. I was very impressed with him due to his excellent grasp of material and clear understanding and presentation of it. He was quite shy in the lectures but that was not a problem for me. He had recently come back from the UK on an Athlone Fellowship (awarded in 1957). I wanted to emulate him if possible.

That did eventually happen in a number of ways. A few years after that Ed Jull joined UBC. Ed had followed the example of his older brother George (also an Athlone fellow).

I joined **Canadian General Electric** in Toronto on a training program (June 1961) and worked on a number of projects in different departments. My favourite was tuning up TV transmitting antennas. My most disliked project was checking to see if some of the manufactured CGE equipment met military specs. During that last project I decided to phone up UofT to apply for the Athlone even though the deadline in the previous years was a couple of months away. I was told that the deadline that year had just gone past. However the Prof in charge told me that if I got my application back in right away he would accept it. I had the interview and I was accepted.

I started at Imperial College with intent to study antennas but IC was not strong in that area. Ed Jull had gone to University College which was very strong in EM and antennas. I joined Professor Boothroyd's group which consisted of about 50% Canadians to study transistor circuits. Prof. Boothroyd then became Dept Head at Queens University Belfast and 3 Canadians, an Indian, a Thai and a South African grad student all moved to QUB. My research was slow for two years and then I changed topics and right away I started to get good research results.

In the first winter in the UK (1962) I joined an Oxford and Cambridge hockey team to play in Poland and Czechoslovakia. We did not win any games but it was quite the experience to visit inside the Iron Curtain. It also felt very good to come out from the Iron Curtain. I learned 5 decades later that Ed had played for a similarly organized hockey team while in the UK.

After graduation, I joined **Northern Electric R&D Labs** (later Nortel) in the fall of 1967. I had a paper published in the Proc IEEE in Feb 1968. I was surprised to see that Ed Jull had an article in the same issue.

On Jan 1, 1970 I joined the **U of Calgary** Electrical Engg Department. Fred Trofimenkoff , Gord Hope and Om Malik (all Imperial Grads.) were already in the Department. Towards the end of the academic career I became Dept. Head during which time we roughly doubled the size of the Dept., 22 academics were recruited from July 97 to June 03. We introduced Computer Engineering and Software Engineering BSc degrees at that time.



and I decided with the help of a long time Departmental friend (Gunnar Berg) to buy a lot and have a "cabin" built on a Georgia Strait island known as Savary Is. I was told that Ed Jull and his wife had a "cabin" on an island closer to Vancouver than our island. We invited Ed and Anne up to our cabin and after that they returned the invitation and we visited them on North Thormanby Island.

With more available personal time, my wife

Ron & Ed Jull 2005

#### Ron Johnston, Athlone 1962, Uof A

rhjohnst@ucalgary.ca

#### Edward V. Jull, Athlone 1957, Queens

"You've got to apply for graduate work in England" said my older brother and mentor George. He had just returned From London with a fresh PhD to a job in Ottawa with the Defense Research Board and was visiting me at Queen's University in Kingston. I was then in my third year of engineering physics, the same degree he had taken at the University of Alberta. He went abroad on an Athlone in 1951 and did his PhD in electron optics under Denis Gabor. "But whatever you do, don't let Gabor persuade you to work with him". Now Denis Gabor, who later won a Nobel prize for holography, was whom George worked with in setting up a holography lab at Imperial College in London. The reason for this strange advice from my brother is that Gabor tended to play the long shots in his research projects. As a result, there were many failed PhDs amongst his students. George was one of the lucky ones.

Since I had worked on antennas at the Radio and Electrical Engineering division of the National Research Council for a year prior to receiving an Athlone in 1957, I chose to work on microwaves and antennas at University College in London under the supervision of John Brown. He was a mathematician, like many of the leading figures on the field at the time. He would visit me every few days and write down a few equations, which I would spend the next few days trying to decipher, before his next visit. But I managed to get transferred from a masters to a PhD program after two years and, with support for my third year from an NRC scholarship, completed my PhD in three years.

Outside of University College lay all the attractions of London and the Continent. Over Christmas I played with touring Oxford/Cambridge ice hockey team composed mostly of American and Canadian students at Alpine ski resorts. Fellow Athlones Ian Gartshore and Mike Campbell also played with me on the Oxford/Cambridge team. They actually paid us to come and we survived playing international rules. But we agreed to play the US army team by "good old" North American rules and emerged hardly able to field a team, due to broken ribs, etc. My own lifelong souvenir of the game is a missing front tooth from an errant puck.

After finishing in London, I had planned to return to NRC in Ottawa to work on antennas but was requested to teach a course in microwaves at the University of Alberta. This offered me a chance to spend weekends at home in Calgary, so I accepted. Edmonton is where I met Ron Johnston, who was a star student, and who has some kind words to say about me.

Back at NRC in Ottawa, I shared an office with an applied mathematician, Al Hurd, who taught me some of his tricks like the Weiner-Hopf technique, which encouraged me to believe I should do postdoctoral work in applied mathematics, but where? I heard that they were looking for



Anne and Ed, 1965

people at the Laboratory of

Electromagnetic Theory of the Technical University of Denmark in Copenhagen. So I applied there and promptly got an offer, which I showed to our divisional director D.W.R. McKinley and asked if I could have two years leave. He said yes and later told me I could go on outside duty to work in Denmark for two years. I shall be forever grateful to him for this for it led to my meeting my wife Anne Kjellberg on a flight from Copenhagen to London, to my shifting my research to plasma physics at the Royal Institute of Technology in Stockholm for the last 6 months, and soon after my marriage to Anne in Sweden in 1965.

From 1965-72, Anne and I lived in Ottawa. I was back with the Division of Electrical Engineering of NRC, sharing an office with Al Hurd, both of us free to work on problems of our choice involving electromagnetic theory and antennas. An ideal position, for as long as we produced publishable

material, we were not interrupted. I also taught graduate level courses at Queen's and Carleton universities, which resulted in lecture notes leading to a book on "Aperture antennas and diffraction theory" and led me back into teaching, so when a position at UBC opened up, I applied and got it. Anne and I have lived next to UBC in Vancouver since 1972 and raised 4 children all with a penchant for international travel: Victoria, a diplomat, Charlotta, a lawyer, Walter, a Colonel and Philip, a veterinary neuro-



Anne and Ed, 2016, in Italy at Son Philips' wedding

surgeon. They currently live in Ottawa, Rome and Brasilia and among their families, we have 8 grandchildren.

Perhaps the greatest professional honour I have received was to be the first Canadian elected president of the International Union of Radio Science (URSI) 1990-93. This may have been due to my tenure as vice president of URSI (1987-90), when I managed to greatly enlarge URSI's Young Scientist program. As a result of these contributions to the field

of electrical engineering and the promotion of international cooperation in the radio sciences, I was awarded the Queen Elizabeth II Diamond Jubilee medal in 2012.

All the good fortune in this chain of events I owe to the award of an Athlone Fellowship.

#### Ed Jull, Athlone 1957, Queens

#### Jim William Kranias, Athlone 1961, UofA

In 1912 my father sailed from Greece, on the Cunard Ivernia, to immigrate to Canada. In 1961, as an Athlone Fellow, I sailed on the Cunard Ivernia, albeit a new build, from Montreal to Southampton. It was the tales of the "old country" and the allure of travel that inspired me to choose the Athlone Fellowship over scholarships to the University of Toronto and Yale.

The journey was exhilarating. From the long train ride from Edmonton to Quebec City to the reception at Governor General George Vanier's second residence at the Citadel, every moment was filled with anticipation.



Oskar Sigvaldason and Brian Grover aboard the Ivernia

Meeting fellow '61 Athlone Fellows and the choppy Atlantic crossing added to the excitement, which culminated in our orientation at Nutford House.

#### Life at London House



Formal opening of new dining wing at London House. Left to right, foreground: Colonel Sprunt, the Queen, Jim Kranias

Our next stop was London House, a post graduate Commonwealth student residence where Queen Elisabeth II was our patron. American post graduate students were also welcomed, recognizing the USA's significant role in WWII. Many of the acquaintances I met on the crossing also moved into London House, including Oskar Sigvaldason, Brian Grover, Hector Hebert and Bill Matthews, who became friends during and after our time in London.

#### Academic Pursuits at Imperial College

At Imperial College I enrolled in the Electrical Engineering department, under Dean Dr J.H. Westcott and my supervisor, Professor D.Q. Mayne. A seasoned Athlone Fellow advised against digital research, which involved night shifts on the

University of London's Atlas computer. I opted for an analogue process control project on non-linear feedforward systems.

The labs were closed during evenings and weekends. Rallying a group of Athlone Fellows, we met with Dr. Westcott and requested extended lab hours. He declined, emphasizing the importance of immersing ourselves in London's rich cultural scene. Point well taken!

Apart from the live music, theatre and museums, I joined the Imperial College ski club, learning to ski on a £100 all-inclusive trip to Sölden, Austria. In the summer, a classmate from the University of Alberta and I embarked on a month-long EuroRail tour of central Europe. This sparked my love for travel, influencing many future decisions.

Initially, I aimed for a Ph.D. from Imperial College. After two years in the lab, I decided that I was better suited to a working career in the electronics business. My advisor also thought so! A summary of my thesis was published in CONTROL, a UK engineering magazine on automation.

#### Return to Canada and Career with IBM

Before returning to Canada, my fiancée, Heather Brooks-Hill, and I, along with another couple, toured southern Europe. Driving through central Europe, Yugoslavia, and Greece, we visited my extended family in the central mountains of Greece. This emotional journey continued to Athens, Italy, and back to London House.

Back in Canada I was recruited to IBM by Phil Lemay, also an Athlone Fellow. After my marriage and six months of IBM training, I began my career in the computer business, first as a process control tech and then in sales for the large computer complex at Ontario Hydro. However, Heather and I yearned to return to England.

#### Assignment in England and IBM Achievements

Thankfully, in 1968 IBM found me a two year assignment at their Hursley lab, near Winchester, where I was an instructor for the 6 day intensive IBM Executive computer concepts course for senior European executives. The course was held in the ballroom of Hursley House, a gorgeous 18th century mansion, whose property was once owned by Richard Cromwell, the son of Oliver Cromwell. During the second world war it was requisitioned by the government to rehouse the design and production departments of Vickers Supermarine and the ongoing design of the Spitfire.

This dream assignment allowed us to live, with our family of three daughters, in the idyllic English countryside and enjoy winter skiing in the Alps.

On our return to Toronto I was responsible for sales to the universities in central Ontario and was chosen as president of the annual Hundred Percent Club, primarily for selling one megabyte of memory for one million dollars!! The rapid evolution of technology is hard to imagine, as only one simple iPhone photo now exceeds 2 megabytes of memory. For the next 8 years I progressed through the standard IBM practice of a biyearly series of different areas of greater responsibility, primarily in sales management, in the field and at headquarters.

#### DMRConsulting

DMR, an early information technology consulting firm, was established in 1973, in Montreal, by three IBM senior managers. In 1975 they recruited me, as a partner, to open a Toronto office. At the time the term start-up was not common, but I guess I can say that I was involved with a startup. If your first office is the local coffee shop and pay phone, does that count the same as starting a business in your garage?

During the next 10 years the Toronto office grew to 100 consultants and was recognized as one of the 'go to' consulting firms. We dealt primarily with strategy, project management and some programming. We were most proud of helping to design the banking network that led to the introduction of the interbank ATMs.

In 1980, after a divorce, I continued living with my four daughters. However, by the mid 80s, with my daughters becoming more independent, my wanderlust got the best of me. I pursued a foreign assignment in Boston, as Vice President of DMR's eastern US business. It was a tough slog, with a different culture and no previous contacts, which are so important when hiring. There were many successes but not the hyper growth I was used to.

Next stop was Ottawa, where I managed a large office of 300 consultants and programmers, managing several large federal government projects. Five years later, at a headcount of 500, I was burned out, so decided to ask for a transfer to Europe.

#### Life Abroad

After less than two years in the London office, DMR was purchased by Amdahl, who was primarily owned by Fujitsu. I resigned and decided to stay in the UK as an independent consultant. However, I needed a European Union (Greek) passport, which would take two years.

To fill in the time, I left for the Côte d'Azur for six months of immersion French. In my last month I met Agnès, who was to help me with my French and I would help her with her English. The bonus was that she was single. The rest is history.

After a few months in Canada at the cottage, I travelled, with my extra small suitcase, in south east Asia for six months. I met up with Agnès in Singapore after an amazing two weeks volunteering on a dolphin research

project in New Zealand.

Back in the UK, with my European passport, I consulted for a few years, assisting North American firms doing business in Europe.

When business was slow I travelled extensively with

Agnès: a safari in South



Jim, Hoch-Hoch, and Agnès

Africa, a small ship cruise in the Antarctic, and visits to the Mendoza wine region, Peru and Ecuador on separate voyages. We were married in London in 2005 and later moved to our charming Bastide and olive grove in the countryside north of Cannes.

#### Return to Canada

With my four daughters and many grandchildren in Canada, we moved to Ottawa in 2012. During the summers, I enjoy spending time at the cottage with my daughters and their families, and playing golf when in Ottawa. In

the winters, we now live in my wife's apartment in Cannes.

#### Acknowledgement

I extend my gratitude to the British Council for the invaluable Athlone Fellowship experience, which profoundly influenced and enriched both my personal and professional life.

#### Jim William Kranias

University of Alberta Engineering Physics, B.Sc. 1961 Athlone Fellowship, Imperial College, M.Sc., DIC, 1963 jimkranias@yahoo.com Belvedere Crescent, Ottawa, K1M 0E5

#### Bob Landine, Athlone 1962, USask

I begin my Athlone Impact story by showing my letter of appreciation to the British Government for developing the concept of the Athlone Fellowship. Although just a bit late but it gave light to my thanks as an indication of the importance of the Athlone Fellowship to me. My letter of August 2019 follows:

#### Letter of Thanks to British Board of Trades for Sponsoring the Athlone Fellowships

Rt. Hon. Elizabeth Truss MP

Secretary of State for International Trade, King Charles Street, Westminster, London SW1A 2AH

Dear Ms. Truss:

I am writing this letter of thanks in appreciation to the British Board of Trade as I walk into the sunset of my life, acknowledging it is something I should have done years ago.

As I recall, after the war, the Board was of the view that Canadian Engineers may not be getting the best education and proceeded to do something about it. It established the Athlone Fellowship programme to annually sponsor forty Canadian Engineers from across Canada to do further study in Great Britain. It was for two years with all expenses paid, plus a nice stipend (approximately equal in amount to my wife's earnings as a nurse in Whittington and St. Stephen's Hospitals). The programme offered the flexibility for each engineer to spend the two years in industry, or in university, or a mix of one year in industry and one year in university, which is the programme I followed.

Studying, working and living overseas in England (London) for two years was a great and gratifying experience that changed my career, and our lives, for the better. I can't speak for all the Athlone Fellows, but of those whom I know, it seems safe to say that after returning to Canada, they soon occupied well-paying and responsible positions.

I now know that 810 Athlone Fellowships were awarded over the years

from 1950 to 1970, the final award year. That makes 1620 man-years of philanthropic money from a Board in England to help Engineers in Canada.

This is humbling and almost unbelievable to me. Consequently, I am happy to send a big and heartfelt thank you to all the fine people who ran the Board of Trade after WWII.

Closing on a lighter note, I trust we helped your economy a bit by visiting England dozens of times over the years since returning to Canada in 1964.

August 27, 2019

Sincerely,

Robert (and Debra) Landine PhD P.Eng (retired)

And I also credit the results of the studies and experiences of the Athlone Fellowship itself, led to my successes in my life, recognized below:

#### **Engineering Award of Merit**

Presented to Dr. Robert C. Landine, P.Eng.

For many years New Brunswick has lost many of its best and brightest minds to opportunities elsewhere. This year APENB is pleased to recognize someone who reversed the flow, who moved to New Brunswick and helped to create exciting opportunities for dozens of New Brunswickers.

Robert Charles Landine was born and educated in Saskatchewan. He received Bachelor's and Master's degrees at the University of Saskatchewan and, following a year of post graduate studies at Imperial College in London, England, on an Athlone Fellowship, completed his Doctorate studies, also at the University of Saskatchewan.

After short stints with the City of Saskatoon and the Government of Saskatchewan, Bob, in 1969, accepted an offer to teach civil engineering at the University of New Brunswick in Fredericton. He has maintained ties with the University ever since by teaching

courses, presenting special lectures, working as a project advisor providing research ideas and supporting and hiring many, many UNB graduates.

In 1973, Bob was asked to join ADI Limited on a full time basis. He flourished in the consulting environment, taking a small group of locally based municipal engineers and transforming it into one of the largest teams of environmental and municipal engineers in Canada with an international project list exceeding sixty major wastewater treatment systems.

There are many components to success. Bob's intelligence, honesty and commitment to excellence are perhaps the most obvious aspects of his success. However, the people who have worked with Bob (and most of his team have stayed with Bob for many years), will attest that his success has been the result of his vision, tenacity and hard work.

Because of his vision, ADI has been a pioneer in wastewater treatment research, development and commercialization. He and his team hold several patents and have been leaders in anaerobic wastewater treatment technology. To support his vision Bob has maintained an extensive, ongoing research program at ADI and, at last count, had authored or co-authored over 100 technical papers.

Bob's tenacity is well known to his colleagues, clients and competitors. He has overcome many obstacles: Bob might have been slowed or detoured but rarely has he ever been stopped. A setback is to imply a message to work harder.

It is hard work that has defined Bob's career. Few people have worked more hours or travelled more miles in pursuit of their vision. For him being an environmental engineer has been a calling, a commission: far more than an 8 to 5 job but also much of his recreation and relaxation. Many of these traits may seem out-of-step with today's society. But are they? Engineers and engineering are facing heavy challenges: what better way to face them but by working hard, using our intelligence and education, not being

discouraged and having a vision of the way things should be. They have certainly worked for Bob Landine.

#### ADIGroup Makes \$600,000 Donation to UNB

ADI is coming home to UNB. The global engineering company that was born at the University of New Brunswick in Fredericton nearly 60 years ago is honouring its longstanding relationship with UNB by making a major gift to the university's Forging Our Futures Campaign. ADI Group Inc. is making a commitment to a new professorship and a graduate scholarship in industrial wastewater treatment - the combined value of which is \$600,000.

"This is an outstanding donation by one of Atlantic Canada's premier engineering firms," said John McLaughlin, P.Eng., UNB's president and vice-chancellor. "It's made all the more special because, to us, ADI is like family." We've been partners in research and education for almost 60 years.

"This professorship and scholarship are the start of a new era in our relationship with ADI."

ADI Group was founded in 1945 by a group of UNB Fredericton civil engineering professors. As ADI has grown, so too has its relationship with UNB. It has been a prime collaborator in research with the faculty of engineering. In fact, the majority of the professionals who work at ADI are UNB graduates.

"Giving back to the university means a great deal to our company," said Hollis Cole, P.Eng., CEO of ADI Group Inc. "We started here, have remained committed over the years, and today are continuing that commitment. It is important to maintain excellence in the field of engineering which helps to secure the future of our company, our industry, and the future of New Brunswick."

In a unique arrangement, Robert Landine, P.Eng., a world-renowned industrial wastewater management specialist, will be seconded to UNB Fredericton for five years. He will join the department of civil engineering as the ADI Industrial Wastewater Research adjunct professor.

Dr. Landine is president and chief operation officer of ADI Systems Inc., a subsidiary of ADI Group Inc. He is an acknowledged world expert on process design and analysis for industrial wastewater treatment. With ADI, he has worked on wastewater treatment projects in Canada, the United States, Latin America, Europe and Asia, at food processing plants, breweries, dairies, and other beverage plants, and also in the pulp and paper sector. Dr. Landine is no stranger to UNB. In the 1970s, he was an assistant professor of civil engineering. He taught environmental engineering courses and conducted research in pollution control.

Dr. Landine will join UNBF's accomplished Wastewater and Environmental Engineering Group, which specializes in the study of hydrology, soil and groundwater, water quality management, contaminated soils and aquatic sediments, wastewater treatment, and solid waste and hazardous waste management. Currently, the faculty of engineering is working with the ADI Group under Dr. Landine's leadership on a \$1.2-million study to develop a new and innovative biology treatment process for industrial wastewater, funded in part by the Atlantic Canada Opportunities Agency through the Atlantic Innovation Fund.

"The opportunity to develop new technologies and work with graduate students is very appealing to me," said Dr. Landine. "I am currently working on researching and developing the next generation of industrial wastewater treatment technology, which is an excellent example of applied knowledge for UNB graduate students. It is important to further the knowledge base in this growing field where waste is typically both challenging and expensive."

The ADI Industrial Wastewater Treatment Scholarship, valued at \$15,000 annually, will be awarded to a graduate student pursuing studies in industrial wastewater treatment. This is the fourth undergraduate
scholarship at UNB to be funded by ADI.

In February 2004, UNB celebrated the 150th anniversary of the first engineering lecture in Canada. Since then, more than 9,000 engineers have graduated from UNB's faculty of engineering, which ranks among the top 20 per cent in North America.

"With Forging Our Futures, we're building the UNB of tomorrow," said Dr. McLaughlin. "This early pacesetting donation is an inspiration for other engineering companies that have benefitted from the power and strength of the faculty of engineering. This campaign will secure the faculty's international reputation as one of the great engineering schools, and create a centre of excellence for research and an industry resource."

Forging Our Futures is the most important development campaign in UNB's more-than-200-year history. It will make strategic investments in students, faculty, facilities and programs. The campaign will strengthen UNB's position as a national university that is fundamentally important to the economic, social and cultural wellbeing of the province, the region and the country. Forging Our Futures is expected to be formally launched next year.



Debbie and Bob, 2024

All this success I attribute to my background and education, especially the Athlone Fellowship.

My wife, Debbie, and I are thankful for the impact that the Athlone Fellowship has had on our lives.



Debbie and Bob, 1960

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#### Garry Lindberg, Athlone 1960, UofA

Good wishes to all of you during this Covid time. Sixty years ago we were all excited, planning for our great adventure. It is fun to think back to those days. Regrettably, we could not have the several day party aboard the ship but we all were able to enjoy Nu-tall House, with cold hard toast and the stewed gooseberries.

#### Garry

I was raised on a farm in central Alberta (near Hoadley) and was one of the first from the area to attend University. Bob Frindt and I were the two 1960 Athlone fellows from the University of Alberta, both in Engineering Physics. I told the Athlone interview panel that I wanted to do graduate work and fortunately the committee suggested Cambridge, a truly amazing experience. Fred Leckie was an excellent thesis supervisor and I finished my PhD thesis in just over three years.

I also had the good fortune to be a founding member of Churchill college, a new college that opened its doors in 1960 with 26 graduate students. Rowing became a passion together with as much travel as possible, often on the cheap.

To return to Canada, I chose an 18 month term position at the Structures and Materials Lab. of the National Aeronautical Establishment of the National Research Council of Canada (a mouthful) and ended up staying in government for nearly 35 years!

There were three parts to my career. The first part focussed on research, continuing some of the numerical analysis work started at Cambridge. In 1974 I had a career–changing opportunity as the Government Project Manager for the "Shuttle Attached Remote Manipulator System" for the Space Shuttle, now better known as the CanadArm. Our small project office managed all the interfaces with NASA and the other international partners, worked with the other government departments involved in space activities, and managed the contracts with Canadian industry who designed and built Canadarm. This was a challenging and exciting time.

This led to my work as Director of the National Aeronautical Establishment, the Executive Director of the Space Division of NRC and then as a founding Vice-President of the newly created Canadian Space Agency, established in 1989 and headquartered in St Hubert, on the south shore of Montreal, Quebec. I retired in 1997. I have been pleasantly surprised to receive a number of honours including the Order of Canada in 2018.

In 1970, I married my soulmate, Daryl Stewart, and we have had a very happy life together. We have two sons and both couples now live in Ottawa, each with two children. I attach our Christmas 2019 picture of the whole clan. Work provided many opportunities for travel and I was often able to add on vacation travel with Daryl.

In retirement, we continue to enjoy travel. I also enjoy a poker group who focus more on drinking single malts than playing serious poker, and occasionally play guitar in another group.

Each summer we live at our small cottage on the south shore of Nova Scotia (near Bridgewater and Lunenburg), enjoying fresh fish, Greek's Lunenburg County pudding, pickled herring and many friends since Daryl is from the area.

In Ottawa, I spend a lot of time volunteering for our local community association, and have become an amateur "planning expert".

2020 was a significant year for us, 60 years after graduation from U of A, 60 years since I went to England, fifty years of marriage and 80th birthdays are on the horizon. We are grateful that we are both in good health.

Both the Athlone fellowship and the University of Alberta have greatly enriched my life and provided the basis for a wonderful career. I feel very fortunate.

As a six year old, walking a mile to and from the one room Harmonium school with nine grades, I had little idea of what life would become. It has been quite a journey.



The Lindberg Clan

#### GaryLindberg, Athlone 1960, UofA

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#### Earle Lockerby, Athlone 1964, Nova Scotia Technical College

In the fall of 1964 I was in the final year of a Bachelor of Engineering (Chem. Eng.) program at Nova Scotia Technical College (NSTC) in Halifax. This institution later adopted the name Technical University of Nova Scotia, and eventually became part of Dalhousie University. I had previously obtained a B. Sc. (chemistry) and an Engineering Certificate at Mount Allison University in Sackville, N.B. I had also met my future wife, Heidi Neumann, there. It was in November, 1963 that I learned that I'd been awarded an Athlone Fellowship, along with two other students from NSTC. I was engaged to Heidi and we decided to get married before my departure for England. Our last two weeks in Canada were busy ones indeed.

We were married on August 29 in Shawinigan, PQ and drove to Prince Edward Island on the first leg of our honeymoon. We stayed a few days at a cozy cottage by the sea, making a side trip to Amherst, NS, where I was best man at the wedding of my university roommate of five years. We took the train from PEI to Quebec and caught the *Empress of England* at Quebec City for our voyage to Great Britain. For the first time we met the other Athlone Fellows of 1964. The transatlantic crossing marked the second leg of our honeymoon.

It was a beautiful sail down the St. Lawrence and all was well until we had gotten through the Strait of Belle Isle and onto the open Atlantic. Throughout much of the crossing, the ship experienced heavy seas churned up by a hurricane. For the first half, I was deathly seasick and for the other half of the crossing, it was Heidi who was sick – our first experience of mutual caregiving! We disembarked at Greenock, Scotland and took a train to London with some other Athlones. We were billeted in a student's residence for several days while we got our bearings, received some orientation, and looked for accommodation. The British Board of Trade was quite helpful with this and within a week we found a flat in Barnes, a suburb of London in the county of Surrey.

By bus, or a combination of bus and underground, it took about 40 minutes to get from our flat in Barnes to Imperial College in South Kensington, where I was enrolled in the Masters program in chemical engineering. This school was considered to be the "MIT of Great Britain." Attending Imperial College required some adjustments from the routine of university attendance in Canada. I found my study program to be much less structured. I had classes but there were few exams and course assignments along the way. I recall that one of my professors was the eminent Kenneth Denbigh. Another was Roger Sargent. One pleasant surprise at Imperial College was the institution's liberal attitude toward alcoholic beverages on campus. The Student Union building had a wellstocked bar and one could spend some pleasant time over a pint with fellow classmates. This was quite a contrast with my university experience in Canada – particularly at Mount Allison University which at that time was affiliated with the United Church of Canada and had strict policies. I developed an appreciation for cider at the "IC Union" and still enjoy the occasional cider!

As far as my research/thesis project was concerned, I was pretty much on my own with not a great deal of guidance. There were few markers by which to gauge how one was doing. This was a little unnerving, but I got used to it. Getting through this successfully was a confidence builder that served me well in later life as I made a career for myself in Canada. No doubt it gave me confidence with regard to other undertakings in life. I was successful in obtaining my Masters degree in about a year. I decided not to go on for a Ph.D. because I did not have the financial resources to spend one or two years at university beyond the two years covered by the Fellowship, even though my wife had a secretarial job. I decided to take a second masters degree, this time in Operations Research and Management Studies (similar to "industrial engineering" in Canada).

It was exhilarating to be in London at that time. The cultural scene was very youth-centric. Roger Miller's "London Swings Like a Pendulum Do" was a popular song. Carnaby Street was a world fashion leader and "Twiggy" was a popular, internationally known model. The "Mods" (on their motor scooters) and "Rockers" (on their motorbikes) battled for

supremacy in Southern England, including places like Brighton Beach. Heidi and I felt that, in London, we were living at the crossroads of the world. When Winston Churchill died, we attended the street vigil.

On week-ends we took every opportunity to see and experience London – Portobello Road, Kew Gardens, Westminster Abbey, St. Paul's Cathedral, St. James Park, Covent Garden, Hampton Court Palace, Hyde Park, concerts at Albert Hall, Smithfield Meat Market, great museums, stage plays in the theatre district, and the list goes on and on. We enjoyed buying produce at the greengrocer at streets markets such as the one in Hammersmith. The Canadian embassy and the British Board of Trade were very good at ensuring that the Athlones received formal invitations to various important receptions and functions at places such as Lancaster House – usually providing opportunities to socialize with other Athlones and prominent Brits. A highlight for Heidi and me was attending the Queen's Garden Party at Buckingham Palace. The Canadian Embassy sent out a weekly or monthly newsletter about happenings back in Canada, so that helped to maintain some connection with "home."

Heidi had emigrated with her parents from Germany to Canada in 1952 when she was 11 years old. In 1964 we spent our first European Christmas together by travelling by train (and boat across the English Channel) to Saarbrücken and Stuttgart in Germany to visit some of Heidi's relatives. In the fall of 1965 I purchased a small, well-used car (an Austin A35) from a Canadian who was leaving London to return home. With increased mobility and with my university endeavours being relatively unstructured and flexible, Heidi and I found the time to do some touring in some beautiful areas of Great Britain – the delightful Cornwall and Devon, the lovely Cotswolds, the picturesque Lake District; and in Scotland, Loch Lomond and the Trossachs. We also did some touring in Holland during tulip time, and in Belgium and France.

In early 1966 Heidi became pregnant. Since it would be late summer before I would receive my second masters degree, we decided to stay in London for the birth of our first child. This provided me with time to search for a job in Canada. Being an Athlone Fellow, I'm sure, was a substantial asset in my quest for employment. I received offers from Imperial Oil, Shell

Canada and Atomic Energy of Canada (AECL) and actually had an interview in London by an AECL representative who was on other business in England.

Our daughter was born on October 11 and five weeks later we flew to Montreal (no more days of seasickness). We settled in Deep River, Ontario and I began what would turn out to be a 30-year career with AECL. Deep River was the main town site for employees working at AECL's Chalk River Laboratories and was reputed to have more people with postgraduate degrees per capita than any other place in Canada. From British Board of Trade publications aimed at Athlone Fellows past and present (including lists of "alumni"), I was able to discover that upon my joining AECL there were at Chalk River somewhere between half a dozen and a dozen Athlones! (I can't remember the exact number). It was in Deep River where our second daughter was born in 1968.

My career with AECL took me to other company locations – Ottawa, Mississauga, Fredericton, and Port Hawkesbury, N.S., and even half a year in Switzerland I have now been retired for 22 years. As I look back over these many years, I ask how my life and career were influenced by my experience as an Athlone Fellow? On the professional side, this is not a question that I find easy to answer. I have already alluded to my studies in London helping to develop confidence and ability to take on new workrelated challenges and to adjust to new circumstances. No doubt it also gave me added ability to adapt to major changes in living conditions as a result of career moves, living in Mississauga being very different from living in Deep River, for example. And, clearly, having Masters degrees in two different branches of engineering was beneficial to my career and to career advancement.

I find it easier to describe how the experience of living in London and travelling in Great Britain and on the Continent during my Athlone years has influenced my personal life. For one thing, experiencing life in England for a couple of years imparts an understanding of how young a country Canada is. So many British and European institutions, buildings, etc. go back many centuries in time – not infrequently, more than a thousand years. I firmly believe that living in another country, particularly one that

is quite different from the one you've previously lived in, is a great mindexpanding experience. It helps one to gain a perspective, often a worldly perspective, that is generally not acquired by people who don't experience extended periods of residency in another country. Living in England made me a more cultured person and developed in me an appetite for travel.

Canadians who live abroad for a few years gain a much better understanding of Canada than those who never have this experience. Canada is a multi-cultural country, but has strong British roots. I happen to have grown up in part of Canada (PEI) that has strong British roots and my ancestry is largely English, Scottish and Irish. I believe that my two years in England sharpened my understanding of both Canada's British roots and my own roots.

I am very thankful, and consider myself very fortunate, to have had the opportunity to study in England on an Athlone Fellowship.

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#### Gordon Lorimer, Athlone 1964, UBC

I worked at AECL, as a Summer Student, in 1963 and 1964. In 1964 I knocked on the door of W. B. Lewis and asked him if I could re-float his Y-Flyer (sailboat) and use it during the summer. He agreed. It was a source of great fun and gave me a distinct advantage over all of the other, mainly male summer students in courting the local girls.

I went to England in 1964 on an Athlone Fellowship to do a PhD in Cambridge. My supervisor, Dr. Robin Nicholson, became Professor of Metallurgy and Head of Department in Manchester in January 1967 and he offered me a lectureship if I came with him. No problems with little things like job interviews then.

My Ph.D. project, on aluminium alloys, involved transmission electron microscopy. The Experimental Officer in Manchester who was responsible for maintaining the electron microscopes was Margaret Jackson. She was more interested in politics than her work at the university and, eventually, Robin and I insisted that she leave the university and pursue a career in politics. Margaret did this and eventually became acting leader of the Labour Party; she had married her agent and is now Dame Margaret Beckett. Robin Nicholson became Chief Scientific Advisor to Margaret Thatcher (even though he was a strong supporter of the Labour Party) and left the academic world and became a knight, Sir Robin Nicholson.

I stayed at Manchester University for my entire career, and eventually became a Professor and Head of Department. In 1969 Robin Nicholson asked me to give assistance to Pam Champness, a lecturer in Geology, with her electron microscope. Pam and I were married on the 4th of July in 1970 and we worked together on many interesting projects, including the first moon rock returned to earth by the Apollo astronauts. We had two children and now have 4 grandchildren. Pam and I still live in the same house we bought in 1970.

> Gordon Lorimer, Athlone 1964, UBC 5 Fairfax Ave., Didsbury, Manchester, M20 6AJ 44 7989231741 and 44 161 434 1896 gordon.lorimer@manchester.ac.uk

#### Si Seaforth Lyle, Athlone 1960, McGill

It is a challenge to try to summarize 60 years in a few paragraphs. But here is a try.

The Athlone Fellowship had two lasting major impacts on me. The opportunity to meet Joan and unparalleled cultural experiences beyond anything I would have had in Canada.

Joan and I are in good health. We met in London in 1961, and married in 1962. Joan was studying piano at the Royal Academy on a Canadian scholarship. We have two children, a daughter who graduated from McGill as an electrical engineer, and a son who graduated as a mechanical engineer. I started work in Hamilton in 1962, and was transferred to Boston in 1976 at which time we bought a house in Sudbury, MA just outside Boston. That was home until 1999 when I retired and we decided to down size with a condo in Framingham, MA, and a condo in Naples Florida. When grandchildren started to appear on the scene we shifted living conditions again in 2009 buying a cottage in the Summer Village Resort in Westford, MA, and buying a house in Naples, FL. We spend 5 months in Summer Village to be near the grandkids, and the rest of the year in Naples.

Since starting to work in 1962 I have had two careers. One career in the operational world of business, with jobs ranging from CEO of a startup, to being a senior vice-president in a multi-billion dollar international company. The other career was in venture capital, starting my own company in 1991 and partnering with a person in Paris, France, focused on helping French companies obtain financing and in some cases relocating to the United States. My working years involved much traveling through Europe, South and Central America, USA and Canada. Fortunately in many cases Joan and the kids were able to travel with me making the trips a good mix of business and pleasure.

These careers would not have been possible without my involvement with the administration of Imperial College. My first meeting with my research supervisor changed everything. He informed me that Imperial College did not have a digital computer and therefore I could not continue the research

I had done for my Masters Degree in Engineering at McGill. All was not lost as I had met the President of the Students' Union as our rooms were on the same floor in Beit Hall and he suggested that I should chair the College's annual charity fair, and do whatever possible to increase the revenue. My break with tradition was to charge non-students admission and to have a special opening to justify the admission. Since I had contacts with the Royal Theatre group at Sloane Square Theater, I arranged to have Mary Ure, then a very well know stage actress in the west end of London to open the fair. This created my first introduction to the workings of senior managers in college administration and City of Westminster politics. The tradition (and that counts for a lot in the UK) was for the Lord Mayor of Westminster to open the Fair. Sharing the opening with an "actress" was not exactly the Lord Mayor's or college administrators' desire. Fortunately I won them over and everything was set for the grand opening. Three days before the opening Mary Ure called me from her hospital bed to say that due to illness she could not open the fair but had arranged for an up and coming actress to take her place. That actress was Vanessa Redgrave and being beautiful, tall, and having striking red hair she won over the Lord Mayor who ended up very pleased to open the Fair with her.

As a result of the success of the Fair the Union President suggested I should run for his job since the student body wanted a change from the "old-boys club" running the show. I was elected and before I even met the rest of the council, Sir Patrick Linstead the Rector of Imperial College informed me that the college, the Union, and the architectural firm hired for the design of another residence on Princess Gardens, had been in total disagreement over the project for the past two months and he hoped that as the first foreign president in the history of IC that I would not make it worse.

I quickly learned why the Union should be involved as the Union owned all of the student residences, a boat house on the Thames, multiple sports fields around London, and sports equipment ranging from soccer balls to glider airplanes, managed the restaurants and bars on campus, and the best part had a 15,000 bottle wine cellar.

Being new to the three way argument I suggested a compromise that with some selling was accepted. Sir Patrick was so pleased and surprised he said he would introduce me to a London that few saw. He was true to his word. Joan and I were invited to attend multiple Guildhall Dinners and events, over 40 University of London black tie events, was made a member of the Imperial College Advisory Board, invited to a special ball with Princess Margaret as the hostess, and invited to accompany Prince Philip in the dedication of a building in London, to name a few. At these events we met the UK elite. We were considered the young outsiders from the colonies which led to interesting discussions as most of them had very unrealistic views of Canada.

One of Sir Patrick's special arrangements was having me selected as one of two students to be the Queen Mother's Escort for the University of London's Foundation Day that started at Westminster Abbey in the morning and ended with a formal ball in the evening. As protocol has it, that was the first time as a commoner I was allowed to talk to the Queen Mother. She thanked me for attending to her, pointed me in the direction of



the bar, and left me to meet other London and university dignitaries.

These are some of the highlights of my Athlone years. Not what I expected, but I did receive a unique UK perspective, and the opportunity to meet and become acquainted with persons I would have never met otherwise. I will never forget those two years and they certainly gave me a solid base for 37 years in the world of commerce.

To close on a personal note—60 years of change!

#### Si Lyle, Athlone 1960, McGill

#### Bill Matthews, Athlone 1961, NS Tech

B.Sc. Chem Eng. NS Tech 1961 (now Dalhousie) M.Sc. Birmingham UK, 1962 LSE/DBA, London, 1963

My Athlone Odyssey began at Nova Scotia Technical College, Halifax N.S. in early 1961. My faculty adviser, Prof. Jim Harris, advised me that interviewers for the selection of Athlone Fellows were coming to town and that I would be recommended as an interviewee. I was successful in the selection process and Prof. Harris, an Imperial College Grad, recommended that I consider the 1 year M.Sc. program at the University of Birmingham. I checked it out and decided to follow his advice. My original plan was to choose a work internship during the second year of my fellowship.

It was just a short hop by train from my home in Saint John N.B. to Quebec City where we met the Governor- General, Sir George Vanier, in his residence at the Citadel. Following this reception we embarked for our adventure in the old country September 8 on the Cunard liner "Ivernia". It was a bit of a rock-n-roll sail to Southampton due to us encountering the tail-end of a hurricane; this caused the voyage to extend from a normal 7 days to 9 days, but we didn't mind – it just extended the party a bit.

Following is an image of one of the Ivernia menus. It was a "Gala Dinner"; as you can see we weren't exactly suffering under our Tourist Class accommodations. You will also note that I had all my table companions at this gala sign the menu. The only person I recall is Paul Krawczuk with whom I shared a stateroom. After landing He went off to Imperial College in a Masters program that related to Gas turbines and I went to Birmingham . I caught up with Paul in my Second year when we were both at London House. Later on, in Montreal, Canada, as I will recount, we hung out off and on for a couple of years.



In Birmingham, pursuing my M.Sc. Chem Eng, I immediately got into the swing of things, both academically and socially. I initially had digs in Edgbaston, not far from the campus, and acquired a cheap "push bike" which got me around. My classmates were great friends. I fell in with a few Welshmen from my class and their pals from other faculties. The custom was to eat some supper at the UNI refectory and then do some study work in the campus library most nights until about 10 pm and then retire to the campus pub for a pint and a rousing choral sing until 11 pm closing. I learned to belt out quite a few Welsh airs, some of which I've remembered to this day.

Come Christmas break that year I managed to make it over to the RCAF/ NATO Air Base in Marville, in NE France near Belgium, where my older brother, a Sabre pilot, was based with his wife and young family. The Holiday season was really nice, particularly the New Years party in the Officers' Mess, where, among other delights, they had a special deal on



Muet et Chandon champagne at 25 cents a bottle. The corks were really flying while we welcomed in the Year 1962.

Back in Birmingham I buckled down with my studies until Easter break when a Quebecois buddy and I, André Duval, doing postgrad metallurgical Eng. at Brum, took a little auto touring trip through the West Country. He had an aging but fit MG open roadster and it served us well as we went from one BnB to the next from Somerset through Devon and Cornwall to Penzance and back home. Here we are at Land's End. I'm on the right.

After my return from Easter break, in addition to focusing on prepping for final exams, I worked out a research topic appropriate to my thesis commitment. I ended up with "High Pressure Vapour-Liquid Equilibria", using some leftover distillation equipment which I managed to modify to fit my needs.

I successfully completed my final exams and then started with my experimental work on the distillation equipment. In midsummer there was a break period and I latched on to a cheapie "night flight" to Barcelona (£29, return). My target destination was a hostel "Casa Campello" just north of Alicante. My 3rd class rail got me there for about a buck and the hostel cost a buck fifty per week. That's how long I stayed, soaking up some sun and sea, then back to the thesis work in Brum.

There was a long weekend a bit later in the summer (August Bank Holiday) and I decided to hitch-hike over to Wales and youth hostel for a couple of nights while I looked around. I visited with one of my Brum classmates and his wife in Swansea, South Wales. The 2nd day I made it up north to Harlech where I checked in to the hostel there. The last day I spent a few hours touring nearby Snowdonia and then continued on to pick up some rides back to Brum. I was fortunate to pick up a great ride near the Wales/England border that got me all the way back in time for tea.

My original objective was to do my 2nd year in a work program relating to my Chem Eng. studies. The Athlone administration officials couldn't seem to find me a place in the Chemicals field due to a recession in the industry. I had heard good things about the 1-year business program (DBA) at the London School of Economics and Political Science. I immediately pivoted to try to get a placing in this course and was successful. I submitted my Brum thesis in early September and headed immediately to London to start the course at LSE. I had to live in a room in Belgravia for a month while my application for the London House residence came through. LSE was a revelation for me, as was my life at London House. Besides enjoying the rich variety of studies in the program there, I made good friends at both LSE and London House. LSE was definitely a place for political activism. There were a couple of interesting speaker rallies in the auditorium during the Fall term. The international issue of the season was

the Cuban Missile Crisis. I attended a couple of "hot" sessions in the LSE auditorium during the Oct 16 - 29, 1962 period of the crisis. Fortunately for the World the Russians "blinked first".

December 14, 1962 I returned to U. Birmingham for the graduation ceremony where I received my M.Sc. Chemical Engineering Diploma. I had a chance to meet some of my former classmates and catch up with their lives. Here is a photo of the happy group. I'm 2nd from the right.



A few days after my return to London, my Mom and Dad arrived from Canada to spend a few days touring the historic city before we all headed over to France to spend Christmas with my older brother and family near the Marville NATO airbase. My parents and I returned to London in the New Year, and they caught their flight back to Canada, while I resumed my studies at LSE.

The work at LSE went well, but even more so did my research on the City of London. Those informal investigations flourished, what with West End plays (up in the 3 bob gods), the pubs for a bit of socializing and singing, the dances with the fair sex, visits to the various markets, e.g. Billingsgate Fish before dawn. I think I got top marks on "London".

After finishing my term at LSE/DBA at the end of June, 1963, I checked out of my London House quarters to take up an assignment in Paris with Shell France ("Shell Berre"). This was a temporary assignment of 2 1/2 months in the Department of Economic Studies of Shell, arranged through the International Economics and Business Students Association (AIESEC). While in Paris, I also had an opportunity to acquire spoken French, since this was the 9 to 5 working language; I also enhanced the learning process by contracting 5 days-a- week evening classes at the Alliance Francaise for several weeks. During my stay in Paris I spent a long weekend hitchhiking to the NW Departement of Brittany. Besides just seeing the countryside and meeting the people, my co-objective was to have a look at the Rance Tidal Power Station (l'usine marémotrice de la Rance), a power generating station located on the estuary of the Rance River in Brittany, between Dinard and St. Malo. It was still under construction but there was an excellent information kiosk there. It finally got going in 1966 at 240 MW peak power and average output of 57 MW for the past 58 years.

In mid-September 1963 I finished my term with Shell and left Paris on a

solo hitchhiking/hostelling tour of Europe. This took me to all the countries of Western Europe as well as to East Germany/East Berlin – 15 countries ranging from Lund, Sweden in the north as far south as Positano, Italy in the south. I ended my tour in Liverpool at the end of November / 63 to catch the Cunard liner. Sylvania, back to Canada.

I started permanent employment, January 1, 1964 with Imperial Oil (Exxon Canada) in their Montreal, Quebec Refinery. Apart from my professional duties I had time to socialize and



Janet & Bill, December 1964

met Janet Ramey of Fredericton, N.B. in the spring of 1964. Janet and I were married in Fredericton in December 1964.

I worked in Refinery Planning, Process and Mechanical/Maintenance Engineering functions at the Montreal refinery until 1967, when I was transferred to the Imperial Oil Central Refinery Planning Department in Sarnia, Ontario. I was engaged in investment studies and facilities planning for the 9 refinery Imperial system until early 1969 when I accepted a position in the Amuay refinery of Creole Petroleum in Venezuela (Exxon Venezuela).

Janet and I spent 5 happy years in Venezuela – 3 years at the Amuay refinery complex on the Caribbean coast and 2 years at the head office in Caracas. In Amuay we lived in a coastal Carib idyllic environment where I had my sailboat which I acquired, along with 8 other work colleagues who each brought in the same model. We organized weekly regattas every Sunday in which we competed in 2 separate races 1-man and 2- man. Janet was my crew in the latter, even when she was kinda big, expecting our youngest. The extra weight helped with our heeling performance in strong winds.

In Amuay I was Senior Refinery Operations and Investments Planner and, among other projects, I did all the cash flow analytical work on a major expansion of the largest refinery in the world from 500,000 barrels/day to 700,000. This involved me in a lot of communications with the head honchos in the Exxon New York City head office, but it was approved very quickly, particularly for a project that would be some \$1.5 billion in today's dollars. Amuay was a strategic supplier of heating oil, diesel and fuel oils to the US Northeast. I also got to spend a week in NYC regarding the project as well as touring the offices up there.

In early 1972 I was transferred to the Caracas head office as Senior Analyst in the Supply & Coordination Division of the EXXON affiliate. My main responsibility there was coordinating the medium-term supply and financial forecast of Creole. In the meantime Janet kept busy with the family, Tanya, b.1966, John b. 1969 and Linda, b. 1971, as well as in volunteer charity work in Venezuela. In conjunction with the latter, inter

alia, she was editor of the main fundraising vehicle for her organisation "The English-Speaking Guide to Caracas".

By mid-1973 I was getting a bit restless about my future in the EXXON organization. I knew my employment with them was sound, but with the Creole affiliate due to be nationalized by the Venezuelan Government by mid-1976 I knew I would eventually be relocated somewhere else in the EXXON universe. Following some reconnoitering back in Canada during my 1973 holiday leave I made contact with officials of the newly-founded Energy Policy group in the Department of Energy, Mines and Resources (EMR), Ottawa. Energy Policy, including oil and gas was becoming a focus of governments worldwide and was given extra impetus by the Arab Oil Embargo of 1973-74. Many experienced oil industry people were being recruited to man the programs and plans being established. In early 1974, I was offered and accepted a position with the Canadian Government in Ottawa as Adviser in charge of Oil Supply Planning in the newly-formed Oil Policy Directorate of EMR . My duties included the provision of policy advice to the Minister and senior officials regarding Canadian oil supply and total energy matters and direction of the activities of the Oil Supply Planning Division. After about 3 years as a civil servant I could sense that the planning and programming phase was beginning to wane, the industry people were drifting back to industry and I had no desire to be a 20 or 30 year civil servant.

In response to a contract offer from a previous colleague in EMR who had left and started private consulting in 1976, I left the Canadian Government in 1978 to fulfill my duties as a private consultant in a UNDP- financed comprehensive energy planning project in Guatemala. This gave me a secure leg up for about one year to sufficiently establish my international consulting practice in downstream oil & gas, based out of Ottawa. As it turns out I had more time, as the Guatemala project expanded and lengthened by another 2 years. I bid on 1/2 the expanded project and won; I then had enough budget to hire staff to be based full-time in Guatemala and I spent about a week there every month for 2 years to direct the project. In the periods I didn't have to be there I made contact with prospective clients in International Development/Financial Institutions

like the World Bank, pertinent divisions of the United Nations and our own Canadian International Development Agency. I managed to land several fill-in projects during this time which also strengthened my practice, since I had publicity and repeat business.

Some 45 years, 130 projects and 72 countries later I was still at it until last year. Year 2002 was typical, with projects in Bangladesh, Argentina, Guatemala, Peru, Kenya and South Africa. My practice has primarily involved the technology and economics of hydrocarbon production, trading, transportation, processing, utilization, pricing and taxation. In recent years the main focus of my work has been in the area of petroleum sector reform, restructuring, liberalization and privatization.

Janet, in addition to being the anchor person for both family and business (office administrator for the consulting practice), found time to complete a B.A. at Carleton University, Ottawa 1982 (major in Spanish and Law), as well as being active in our local jazz support organization, Jazz Ottawa, where she served as editor of the newsletter and president for several years. She has also had time to travel with me on a few trips related to business – to all the countries of Central America, Dominican Republic, Jamaica, Peru, Bolivia, Uruguay, Argentina, Brazil, Senegal, Thailand and a few stopovers in London and Paris. In 2003 through 2006



I had a series of consulting assignments in Bolivia. Janet accompanied me on one of these trips in November 2003. In addition to her sightseeing around La Paz while I was at work, I took a few days off so that we could tour the Lake Titicaca region. We hired a car, driver and guide and set forth. The highlight of our

excursion was a stop at the workshop and museum of Paulino Esteban, the famous craftsman builder of the balsa/reed rafts of Kon-Tiki, Thor

Heyerdahl fame. Paulino's establishment was located at the Southeastern, Bolivian shore of Lake Titicaca. The photo upper left shows Janet and I with Paulino at his workshop & museum, Lake Titicaca.



Janet & 2 Cholitas

Photo left shows Janet and two "Cholitas" in front of the main Cathedral in La Paz as Janet borrowed and donned one of their bowler hats - Got a laugh!

Janet and I have three children: Tanya Cox married to Chris and presently living on assignment in Panama City where Chris is with UNEP, with three offspring – Aidan 31, now a seasoned

journalist in Canada, Jason 26, working as a Geomatics/Land Surveying Engineer in Ottawa and Layla 22, finishing her B.SC. in Environmental Studies next year at Dalhousie U. in Halifax.

Son, John has been living in Taiwan for 20 years where he teaches English (as a second language) at a University as well as 2 private schools. He earns enough to follow his 1st love – surfing, still a stoked dude at 55. He has a daughter, Evelyn 20, who, after High School in St. Andrew's-by-the-Sea, NB, is now working in Calgary, AB.

Daughter, Linda Matthews-Gonzalez, married to Rodrigo from Chile (Ernst & Young Finance), but family now living in Toronto. Linda works in Marketing and Communications. They have two offspring: Sebastian 16 and Alysia 13.

Janet and I enjoy semi-country living out here in the "burbs" of Ottawa. My wee dog, Lily, takes me for a walk every morning before breakfast. That provides some minimum fitness but more importantly relaxation in the fresh air, socializing with neighbours, friends and dogs. Here on

"God's little 1/2 acre" I manage to extend my fitness by managing the lawn, garden beds and trees not to mention some weights and stuff on my pool deck. The problem I have had is deep winter: I usually attend a gym regularly through the harsher 6 months or so but, with these respiratory viruses gallivanting around, I'm reluctant to test the indoor activity; I have, however, continued my daily walks using a weighted backpack and have established a little fitness circuit in my house. I'm not sure any of this makes me live longer, but it sure seems longer. ??

Many sincere thanks to the Athlone Fellowships for enabling much of this fabulous ride and inspiring the rest!

#### **Bill Matthews**

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#### Gregory Malcom McNeice, Athlone 1964, UWaterloo

B.A.Sc - Civil Engineering, University of Waterloo, 1964 PhD - Structural Mechanics, University College London, 1967

#### How the Athlone Fellowship impacted my life Background

In high school (Sudbury Ontario), except for math and science I was an abject failure. I hated school except to play basketball as a guard and an accomplished "dribbler". I crawled through that forest and in Grade XII at the usual "exit interview" with a guidance teacher – he told me about a little college that wanted to become an engineering university. His words were "Since you are so poor in all art subjects, you would make an excellent engineer!" In 1958 I entered Pre-Engineering at Waterloo and the rest is history. First in the class from year I to IV and was recommended by the dean for the Athlone Fellowship. Two Waterloo professors – both graduates of Cambridge – recommended University College in London.

The dean explained the Fellowship purpose that included a focus on industrial experience and not just academic. In the Waterloo co-op program I was fortunate to have all ten work terms with the Foundation Company of Canada in the Sudbury area. They were being purchased by an English company at that time and they told me that if I wanted to work in Europe they would recommend me.

At the Athlone interview I was asked the usual "What is your plan if you were to be awarded the Fellowship?". I was honest and told them that I wanted a PhD first and would consider staying in England if the offer from the company was a good one. I guess they liked my answer. So off my wife Margaret and I went to Jolly Olde England – What?

#### The Trip - Sudbury Ontario to London England, and Athlone experience

Following the reception in Quebec City and meeting the other Athlones Fellows from the West, we boarded the Empress of England and headed out to sea. Included here are a few pages out of a memoir that I had compiled. These may bring back some memories to other Athlones, especially those in 1964.



There were 42 Athlone Fellows and 10 wives. All of us travelled by train to London where we were given temporary accommodation at the Nutford House, a student residence center. We stayed there for 6 days until Sept. 22. While there were attended various receptions and briefings. We were given a list of rental accommodations for the London area and other parts of the British Isles. The staff assisted us in contacting some of these private homes.

Besides the various speakers outlining industrial and university centers in Britain, the most significant event was Her Majesty's Government's invitation to Lancaster House, hosted by the Parliamentary Under-Secretary of State for Commonwealth Relations. Lancaster House dates back to 1815 and was once part of the St. James Palace. It is located close to Buckingham Palace. It was a nice reception and we enjoyed being recognized, pampered and entertained.





Lancaster House - St. James

#### List of Receptions in London - 1964 to 1966

In addition to the various receptions that we attended before boarding the Empress of England, we were invited to a number of parties and receptions during the two years that the Fellowship covered our stay. Here is a list of them that we attended. The most significant one was the invitation to the Queen's annual Tea Party at Buckingham Palace. This event is highlighted in more detail outlined in the slides to follow.

- 1. Parliamentary Under-Secretary of State for Commonwealth Relations at Lancaster House - September 22, 1964
- 2. Canadian Women's Club Annual Student Party at The Royal Over-Seas League Dinner & Dance - March 5, 1965
- 3. Her Majesty the Queen Afternoon Party at Buckingham Palace July 7, 1965
- 4. Mr. Leo Russel Evening Party at Wexham Springs July 16, 1965
- 5. Vice Chancellor and Lady Creed at Senate House, University of London October 11, 1965
- 6. Canadian Universities Society of Great Britian at St. James Place November 12, 1964
- 7. Canadian Universities Society of Great Britian at St. James Place October 21, 1995
- 8. Athlone Fellowship Conference at The British Council Center at Garden Springs March 30, 1966

&



Upon arrival, we were escorted to an entrance at the front of the Palace. We walked across the court yard and up the red carpeted entrance through the official reception area, then out the back of the Palace into the Gardens. Attendees were lined up into two parallel lines. The Queen and Prince Philip strolled between the two lines and at random came over to talk to the visitors. Although we were not singled out, both passed within three feet of us. It was truly a special event and I was so proud to have Margaret with me - it was the highlight of our entire time in England and something that we shared with our Athlone friends and many others for some time after.

#### **Career Significance**

Having been awarded the Fellowship and from the announcements in the local paper, I received a deluge of congratulations from sources that I never thought of. The Foundation Company offered me employment in Toronto but I had decided that, with a PhD, I would be smarter to seek an academic career.

As I alluded to before, the London based construction company offered me a position. With two infants having been born in England and living in a totally different healthcare settings we decided to return to what we were more comfortable with. Even though we had family visit us in England we were more focused on returning to live and share our family life in Canada.

During the closing days following my thesis defense one of the Waterloo professors who had encouraged me to attend UCL called me to tell me that his Cambridge colleague at Yale University was preparing to offer me a postdoc appointment. He was about to receive a large grant from the US navy dealing with the finite element analysis of stresses in one of the new atomic powered submarines. I was prepared to accept his offer since we would be returning to North America and eventually back to Canada. My PhD was all on FEM (Finite Element Method) which was developing at that time and being presented at a number of conferences in the US and Britain. However, one month before we were to depart for the US, the grant was reduced considerably and the offer could not be guaranteed. Since that news was known back at Waterloo, the department offered me a faculty position which I gladly accepted. So I returned to my alma matter in the fall of 1967. I remained on the Civil Engineering faculty for 25 years until 1993. I enjoyed four sabbaticals, all in the USA as my research interests changed to bioengineering. In 1993 we moved to the US to accept a position in Bioengineering at Clemson University and The Greenville Hospital System in SC. I retired in 2000.

#### **Overall Experience:**

In short, as I look back through my retroscpectoscope, if it hadn't been for this Fellowship and that astute guidance teacher – in reverse order – I would likely be flipping hamburgers at McDonalds. The experience in England not only gave me a totally different view of academia but more importantly, it taught me about another country and its people as to their customs, ceremony, compassion and concerns. It gave me an education on the realities of life in a country that some of my ancestors had emigrated from. By the end of the three years my wife and I had gained a very valuable insight into the world we live in. That in itself, was an education that I had never sought or thought about. It also allowed me to compare and assess what my country was like – pluses and minuses – so as a family we could move forward in life with satisfaction and confidence that we had made the right choices. It was a gift for which I will forever be indebted to.

#### **Closure:**

I trust that this writing serves its purpose in demonstrating the significance of the Athlone Fellowship program as applied to my case. Who knows what my career would have been without receiving the award. I do know that without it, I would not have learned so quickly about the benefits of being a Canadian. I say that in no disrespectful manner to the English, but facts are facts. Attitude? Case in point: Shortly after arriving in the Chiswick area, I went into the "Off License" to get some Watney's Lager and as soon as I opened my mouth the gentleman serving me said in somewhat of a negative tone - "What part of America are you from?" Knowing the significance of the question, I responded "I'm from Canada." His tone changed abruptly to a very pleasant one and said "Oh I thought from your accent you were one of those Americans – well welcome!" He then asked me where in Canada and when I mentioned Toronto Ontario, he asked me if I knew his cousin (??) who lived in British Columbia, he thought but wasn't sure!

Now – although somewhat extreme – that exchange was a random one but it was not uncommon for me to sense that attitude throughout my stay in England. This exchange is reported here for a purpose. It relates to the fact that the Fellowship ended as it did eventually. My view at that time was that it was a noble thing for England to try and help an ex-colony to enhance it's engineering and industrial base with the hope that there would be more connection and trade between the two countries. But with this somewhat superior attitude that the English had that was evident even at street level, it was clear to me that they were missing the boat. As we knew at the time, Canadians we were far more connected in trade and engineering advancement with the "Americans" than any other country including mother England. So I was not surprised to see the program end. The fact was and remains to this day that England cannot afford, either financially or technically to offer Canadians, whether engineers or other professionals, a gift as the Athlone Fellowship was, without changing is purpose to meet the realities of the "New World". It is my opinion that every country in the world has at least one specific and unique feature that can be shared and offered to others. If it (including England) were to realize that and concentrate on that alone, the world would be a much better and safer place in which to live.

#### Greg McNeice, B.A.Sc., PhD

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#### Andrew Nellestyn, Athlone 1965, RMC

Andrew is a 1965 graduate of the Royal Military College of Canada as a Chemical Engineer. He has enjoyed a distinguished career as a senior military officer, multinational corporate executive, municipal politician, professor, diplomat, author, documentarist and community volunteer.

He was named in WHO'S WHO IN ATOMS for his contributions to



Andrew Nellestyn

nuclear medicine and is a recipient of the Professional Engineers of Ontario Citizenship Award. Andrew is a former EVP AECL CANDU<sup>TM</sup> and President of the Organization of Military Museums of Canada. He is a member of the Order of St John Canada, and the Order of St



George Canada and served as its Grand Master.

Antique sports-car restoration is among his varied hobbies.

1967 Austin-Healey Mk III

Andrew now resides in Brazil where he pursues his passion in heritage properties restoration, one of which is the Missãos Jesuiticas São Miguel UNESCO World Heritage Sites.



Brazil WWII National War Memorial and Military College Porto Alegre



Missão São Miguel

Dr. Nellestyn has enjoyed a rewarding and extensive career as a senior military officer, diplomat, municipal politician, senior corporate executive (Chairman, CEO, CFO, COO, Sr EVP Sales and Marketing), professor, author, archeologist, physicist, chemical engineer, project manager, economist, community volunteer and philanthropist.

Dr. Nellestyn has extensive international business, finance, technology transfer, M&As, IPOs, financing and joint venture experience. He has worked with JV partners in China, Japan, SE Asia, Africa, Europe, the Middle East and Latin America. He graduated from the Royal Military College of Canada with honours, was awarded the prestigious **Athlone Fellowship** for study in the UK and was named to Who's Who in Atoms for his work in nuclear medicine and nuclear power reactor design and construction.

Dr. Nellestyn received the Professional Engineers of Ontario Citizenship Award and was named an honourary citizen of Egypt by President Anwar al Sadat for his contributions to Egypt's economic development and reconstruction. Dr. Nellestyn served as a national economic and energy advisor to PM Trudeau. He has and continues to serve on several Boards of Directors in the capacity of Board Chairman and Chairman of the Audit, Governance and Compensation Committees. He is Chairman and CEO of Andel Inc. Consulting Services (Management, Security, Economics, Finance, Energy, Development).

Dr. Nellestyn is Co-Producer of the documentary series The Veterans (http://vimeo.com/channels/theveterans), book publication team member of Afghanistan: A Soldier's Story 2002-2014 (www.afghanistanacanadianstory.ca) and a former Membership Coordinator Conference of Defence Associations, Andrew also served as an advisor to the Trent University/Sir Sanford Fleming Community College Geospatial Centre of Excellence. He is a member of the Ottawa Chapter Professional Engineers of Ontario Government Liaison Program Committee. He is the former Chairman of the Board of Rebounders Ottawa, Children's' Hospital of Eastern Ontario/Ottawa Hospital.

Dr. Nellestyn is an acclaimed expert in economics, finance, security, defence, energy, management, ICT, geopolitics, international affairs, development aid and reconstruction. He enjoys a vast network of contacts nationally and globally. He is an advisor to governments and international institutions.



Co-edited by Andrew Nellestyn

Andrew Nellestyn, Athlone 1965, RMC

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#### John Nilson, Athlone 1960, USask

#### (By Lenore Nilson)

I am writing this as John's memory is failing him. We were married in 1959 while John was completing his Masters degree at the University of Saskatchewan studying the upper atmosphere and the aurora.

When he received the Athlone Fellowship, he knew he would have to change his field of study. Luckily one of the professors at Saskatchewan knew of someone who would take him on as a student, Professor Denis Gabor. As an aside, gDenis Gabor eventually received the Nobel prize for inventing holography.

When we arrived in London, we both went to Imperial College to meet Prof Gabor. He immediately wanted to know what I would be doing and took me to the library when he insisted the librarian give me a job. Prof Gabor could be very intimidating and neither I nor the librarian had any say in the matter. But it was wonderful for me to have a job so easily.

John's project took a little longer to get established, and he found Prof Gabor was not an easy man to work with. After 4 years, John reached a conclusion on his project which wasn't quite what Prof Gabor wanted. His professor wanted the final conclusion rewritten and it was touch and go whether John would walk away from the whole thing. But he was allowed to present his thesis to the outside examiner while Gabor kindly waited until John had finished, then give his views on the conclusion. Not wanting to come right out in from of Gabor, the outside examiner did tell John he believed his results. So ended a wonderful time at Imperial College.

One additional thing which added greatly to John's enjoyment was his cello. He joined a small chamber orchestra and met a wide circle of friends. We joined the Putney Gramophone Society to further our enjoyment of music. And took in as many operas, concerts, plays and musicals as we could. Lenore kept a scrapbook and has every programme all organized and catalogued.

And of course, there was the opportunity to travel. We had an Austin A40 where we could sleep in the back and camp. Our trusty vehicle took us many times to the continent as well as exploring the UK and Scotland.

On returning to Canada, John joined the research labs of RCA Victor in Montreal. It was an exciting time to be there with Expo 67, where I think almost everyone we knew in Canada and several from the UK stayed with us during the 6 months it was on. Then there was the FLQ crisis, another interesting time. But John could see the writing on the wall for the demise of RCA Victor labs so took a chance on a new startup high tech company in Ottawa, Lumonics. He was employee number 4 as Technical Director. We packed up our children, Peter then 3 and Erica just 1, and bought a house in 1971 in Ottawa - which we still live in today! The early years were hard work, but very exciting watching the company grow and flourish.

By 1987 John felt it was time to take a break, so took a leave of absence and he and another friend headed off to Europe to compete in 3 long distance ski races (Loppets). Quite a grueling schedule with a race each weekend with travel between - France, then Sweden (which was a 90 km race), then finally Finland. After recuperating at home, he decided to leave Lumonics and start his own consulting company. But not before we took a couple of exciting cycling trips–one to Peru and another to China. We also took our bikes to New Zealand and Australia for 3 months and cycled, bused and flew over much of the two countries. But it was time to settle down again and over the years he has had many unique contracts–a few months in California with Lockheed Martin, a fascinating stay at a University in Saudi Arabia, time in Brazil and several trips to South Africa were some of the more interesting ones.

During this time Lenore was involved in a small travel agency and often met John in various countries to join him in exploring somewhere new. We usually rented a car and headed off. Through her work she was able to explore Ecuador and Peru and later led many trips to those countries including the Galapagos, with John always along. We had a couple of trips to South East Asia and even led a group in Thailand, Cambodia, Laos and Vietnam. But the main excursions were to South Africa and Namibia where we had many trips, always adding on another country like
Botswana, or Tanzania or Zanzibar and John had his 70th birthday in Timbuktu! We also had a great opportunity to visit Jordan and Syria before the recent troubles there, as well as Egypt and Turkey.

We also wanted to explore our own beautiful country and took a ferry up the west-coast, then by bus on to the Yukon where we rafted on the Alsek river, then on to Dawson City and eventually Inuvik and Tuktoyaktuk. More recently we had the opportunity to twice join an expedition ship visiting the eastern Arctic and on to Greenland. Our past few holidays have been less adventurous, but still very enjoyable walking in Europe and Bermuda.

Before the recent Covid problems, we enjoyed exercise classes and volunteered at the local food bank. We still walk and spend time at our cottage in the Gatineau hills. So no complaints–without the Athlone fellowship John may not have had the opportunity to further his education and also develop our love for travel.

### John Nilson, Athlone 1960, USask

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### Arthur Plumpton, Athlone 1962, McGill

Before the Athlone Fellowship of 1962 became a dream during the first half of my final year in metallurgical engineering at McGill University, my parents gave birth to me in Montreal in February 1939. My mother had desired that I arrive on Valentine's Day, but I appeared several days later.

My father, educated at the École Technique school in Montreal East (although not French speaking, his mother, immigrating from Britain, insisted on establishing their home there in the early 1900s, in view of the plenitude of nearby parks for her future three young sons) was soon engaged with the RCAF during the war. My mother, of Irish heritage, had moved with her family to Montreal from their fishing village in Newfoundland for a better life, after many of her family had disappeared at sea.



Photography Exhibit in 2016 Arthur and Nicole

I met Nicole, later than most do in meeting their lifelong partners, at the age of 42. Before that wonderful encounter, I spent six years in the UK, of which two were in British industry (secondary metal production and a nuclear research facility) prior to and following my PhD program in the Nuffield Research group in Extractive metallurgy of Imperial College. Like other fellows who remained in Britain beyond the two Athlone years, the British experience enriched my young life. The university research more than satisfied my curiosity for the unexpected and unpredictable, although occasional headaches accompanied the

learning process. Off campus, I gained an understanding of British social life and issues and the personal outlooks and priorities of my new friends, providing an agreeable spin-off of the Fellowship.

During the Fellowship program, Mr. Vic Palmby of the Home office was my most amiable contact who organised industrial visits within England, which I gladly made, aboard my \$300 yet almost indestructible 1937 MG, trips that often encountered the then pea-soup fogs prior to the introduction of more smokeless fuels. Living in London further added to educational benefits, with frequent exposure to the progressive London theatre world (during the era of the Angry Young Men writers) and a very rich classical music scene.

One of my professors later joined the chemical engineering faculty at the State University of New York at Buffalo before transferring to MIT as professor of metallurgy. I followed him to Buffalo as a post-doc for a year in 1968. These were turbulent times, with troubles at Kent University and an activist Students for a Democratic Society at Buffalo. My experimental activity on solid state diffusion of nickel was balanced by a part time activity at the university's public radio station, where I conceived a program ("Crosstalk") that brought to a discussion table researchers and practitioners in different fields of human activity who shared a common objective. A few examples of topics from the several broadcasts included a mechanical engineer engaged in prosthetics materials research and design with a medical doctor and an electrical engineer collaborating with an avant-garde music composer and his mentor John Cage to creat a musical amalgam of computer generated and multiple harpsichord sounds.

Following my year in Buffalo, I joined the International Nickel company research laboratory in Mississauga, Ontario, developing processes for pyrometallurgical extraction and refining, which enabled a desired industrial experience. In 1972 I felt a desire to return to my home province of Quebec and joined the newly formed Centre de recherche industrielle du Québec (Quebec industrial research centre) in Quebec City.

Prior to that important relocation, I learned in 1971 of a competition in Toronto to acquire a new producer for the "Ideas" radio program of CBC. Although I arrived very late in that process, I received a lengthy interview from the executive director who was intrigued by my Buffalo experience and the recordings of the Crosstalk program. I came within a hair of an opportunity to create programs on contemporary thought, but the post

had been effectively committed to a Laval University professor, who was also seeking a possible change of career. An alternative CBC posting in national news in Winnipeg was available, but I chose instead to prepare my bag for Quebec to continue a career in metallurgy. The **Ideas** series was nonetheless conceived of hard rock. It persists to the present day.

Major turning points that occur during one's life yield significant unanticipated benefits. My decision to move to Quebec was later justified as it allowed me to meet within the following decade Nicole, my lovely partner in life. She has brought much joy to our lives during the past 40 years.

Stepping back to 1972, a former year Athlone Fellow, Dr. Pierre O. Perron, graduate in metallurgical engineering of Laval University and initial head of the materials division, became my superior. My initial task was to orient the research services for industry of a small group in chemical metallurgy. After a year or two the new research centre decided to favour research in directions increasingly related to small and medium size industries in which research personnel were often absent.

Between 1974 and 1976, I was engaged in projects or in leading research groups in chemical and mechanical engineering related mainly to the food processing and forest based industries. Following a short course in food technology at MIT, I lead or assumed technical responsibility for implementing innovative projects that included apple juice clarification (a patentable novel application of dissolved air flotation of fine particles), improved industrial size breadmaking machinery for the benefit of a Quebec manufacturer, high throughput automated production of tree seedling semis applied to provincial reforestation, and a collaboration with university researchers on a novel process for the production of economic texturised protein alternatives to meat.

Despite the pleasures of adventure in less familiar fields of technology, my intention of pursuing an extractive metallurgy career was revived in 1976 by joining the Quebec mineral research centre (CRM, Centre de recherches minérales, since renamed COREM). The following 20 years afforded a variety of research and managerial challenges within the organisation. Two

of my fellow researchers were an exceptional Japanese pyrometallurgist and a Québécois mineral processor who had refused a Rhodes scholarship upon graduation in order to remain in Canada. Such companions and collaborators were a very positive influence, spurring my involvement in many projects, including an extensive research program at pilot scale to develop an eventual 80 million dollar plant for recovering value components of spent pot liners (electrowinning cells for aluminium) to eliminate a prior environmental problem, the development of a process to neutralize waste sulphuric acid during heap leaching of asbestos residues, alternative process technologies for recovery of niobium and rare earths from pyrochlore ores and various applications of mineral processing to secondary processes in aluminium production, including materials recycling and research on a novel approach to rapid cooling of electrolysis bath crust undertaken with a university chemical engineering professor.

Personal and collaborative research work allowed the preparation of several dozen conference papers and journal publications during my 20 years at the centre. In 1983, I joined MetSoc, a materials and metals society within the Canadian Institute of Mining and Metallurgy, to co-organise an international conference in Quebec. This began my period of ten years on the MetSoc board and overall responsibility for two additional international meetings, including the first international fine particles processing meeting in Canada in 1988, with the collaboration of several international societies and the presentation of more than 95 communications.

In 1996, my Japanese colleague and I each decided to accept an early retirement offer from CRM. We had both come to Quebec City in May 1972 and were looking then for new horizons. We both remained in extractive metallurgy research. Meguru continued writing advanced communications for which he had already an esteemed international reputation, whereas a few weeks after retiring from CRM I accepted an offer of a former fellow president of MetSoc to join his Ontario based metallurgical services company, Lakefield Research. Initially involved in laboratory evaluation of processes for their international clients much of the year, my role over time evolved into one of a consultant during the

winter and spring for SGS Canada, the new owners of the 400 employee Lakefield site. During the years leading up to the pandemic, Nicole and I would rent lakeside cottages as our Lakefield accommodation each year and enjoy paddling our traditional Canadian cedar canoe for an hour or so after work each day during the springtime.

We have gained many good friends in Peterborough and Lakefield and feel privileged to have discovered and lived in another mainly rural part of Canada. With only two or three months of such activity in more recent years, I finally hung up my lab coat in January of this year (2024).

In 1979, we acquired an abandoned and partly restored old stone farmhouse from the French period on Île d'Orléans near Quebec City. It has been our home for the past 40 years once I had restored it to a reasonable dwelling space. Restoring it to its near original state has been an enjoyable adventure that has been extended since 2000 to also restoring a former nineteenth century bakehouse now utility shed and a



Nicole and Arthur after restoring heritage bake house in 2020

small French barn that we adapted with a wooden floor and lighting to



French Style Barn and Colonial Style Farmhouse Restored by Nicole and Arthur Plumpton Île d'Orléans, Québec

serve as a seasonal modern art gallery beginning in 2002. I opened the gallery each year until 2019. We have had much pleasure collaborating with many fine artists.

Nicole is also very active in various textile based crafts, recently creating braided rugs, as well as cultivating her many flower and vegetable gardens.

Both of us are originally city folk who have chosen the spirit of country living. The winding down of my metallurgy consulting has allowed more time for personal pursuits. There are many less known places within a 500 mile or so radius of us that we are now exploring one by one. Yearly trips overseas (mainly to France and neighbouring countries) in the past ten or so years have opened our minds to our European cousins. Personal projects are a continuing pleasure, as they stretch our abilities and experience and no doubt contribute to our well-being. In part, they centre on our few grandchildren and two great grandchildren.

Ongoing pleasures that we hope to continue to pursue include the conservation of natural areas on our island, exploring local history, attending music concerts, bicycle outings mainly on rail trails, a project to conserve and rehabilitate heritage barns and their farmland, completing our on-site restoration projects, and observing and presenting our world via an artist-photographer's lens. In many ways the former Athlone program prepared me for that.

# Arthur Plumpton, Athlone 1962, McGill 2209 chemin Royal, Île d'Orléans

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#### Robert (Bob) Roden, Athlone 1961, UofT

My life has taken many unexpected turns over the years. No close relatives had ever attended University. My parents assumed I would go to work after High School. However, Fred Burford, my Grade 13 Math teacher at Humberside Collegiate in Toronto, advised me to apply for the Engineering Physics course at the University of Toronto, and that turned out to be a pretty good fit.

During my final year in Engineering, several of my classmates applied for 1960 Athlone Fellowships, and four of them–Steve Chisholm, Bob Ross, Ron Taborek, and Murray Woodside–were successful. My focus had been on graduating and getting a job, but Professor J. Tuzo Wilson, the head of the Geophysics Department at UofT, persuaded me to work on a Masters Degree, starting in the summer of 1960.

As my Masters work progressed, I received feedback from my Athlone classmates, and in particular from Bob Ross, who was also my roommate at Delta Tau Delta Fraternity. I applied and was accepted for a 1961 Athlone Fellowship, along with my classmate Ted Davison, who had also stayed on at UofT for a Masters Degree. Not knowing what to do next, I asked Professor Wilson for advice. He recommended me to Professor Sir Edward Bullard, the Head of the Department of Geodesy and Geophysics at Cambridge University.

I finished my Masters Degree at the University of Toronto in May 1961, just in time to start a summer job in the Geosciences Research Department of Texas Instruments in Dallas. Sailing from Montréal to Southampton in September provided an excellent opportunity to meet all of the 1961 Athlone contingent, with the added experience of the North Atlantic remnants of a hurricane.

I had applied to three Cambridge Colleges, and I was accepted by Churchill College, where I became good friends with two 1960 Athlone Fellows–Garry Lindbergh and the late Frank Maine. Churchill College had just opened in 1960, and we were exposed to brilliant scholars from a variety of disciplines. The founding Master of Churchill, Sir John Cockcroft, had won a Nobel Prize for his pioneering atom-splitting

experiments! "Teddy" Bullard put me to work on some theoretical calculations and modelling experiments dealing with variations in the Earth's magnetic field. I expected to spend at least the required minimum of three years on my PhD research, but that was not to be. Early in 1962, I became a father. I had been warned that the Athlone funding was not intended to support a family, and that was certainly true. My application for a National Research Council Fellowship to cover my third year was rejected with no explanation. As the end of my 2-year Athlone term was approaching, I was in debt, I wasn't sure that I'd be able to complete my PhD, and I didn't know how I was going to continue supporting my family (or even get them back to Canada).

Good fortune smiled on me! I received an unsolicited job offer from Texas Instruments that included a very attractive salary, and travelling expenses from Cambridge to Dallas for me and my family. Cambridge University agreed that I could count my year of graduate work in Toronto towards the three-year residence requirement. Professor Bullard advised me that I should keep working, and that by August 1963 I should have enough material for my thesis. The preparation and submission of the thesis could be done anywhere and on my own time!

In September 1963, I began working for Texas Instruments as a Research Geophysicist. I had always intended to fulfill my commitment to return to Canada after the Athlone Fellowship, and I hoped I wasn't "letting down the side" by taking a job in the USA, but I felt I had no viable alternative. At TI, most of my work involved projects in seismology, funded by the US Government, and aimed at improving the technology for detecting underground nuclear explosions–a development considered to be a prerequisite to the signing of a nuclear-test-ban treaty. Once again, I was in the company of many brilliant people, including several PhDs from MIT. TI was happy to have me stay late in the office typing my thesis. Professor Bullard arranged for two Cambridge graduates in the Dallas area to conduct my oral examination/thesis defence, and by the spring of 1964 I had my PhD.

In late 1966, Bob Ross once again entered the picture. He provided contacts with two prospective employers in Ontario, both of which led to job offers.

I accepted a position as Assistant Professor of Computer Science at the University of Waterloo. That must have been something of a leap of faith on the part of the University. While I had lots of "seat of the pants" programming experience, I had never taken a course in computer science. With all the Centennial celebrations, 1967 was a really exciting year to be returning to Canada. Waterloo was about to install an IBM /360-75, the biggest, fastest computer in Canada at the time, and my colleague Bob Ross was the IBM representative on the Waterloo account. Working under the direction of Wes Graham, the Director of the University Computing Centre, I was involved in various ground-breaking initiatives including: the /360 WATFOR compiler, conversational computing, real-time computer control of experiments, "cafeteria-style" computing for students, a dedicated user-support function, and an APL time-sharing system. Carl Køhn, a 1964 Athlone Fellow, was one of my colleagues at Waterloo.

From 1971 to 1973, I served as Chairman of the Mathematics and Physics Department at the Sudbury, Ontario, campus of Cambrian College of Applied Arts and Technology. I learned later that John Koski, the President of Cambrian, was an Athlone Fellow from 1951. Cambrian then consisted of three campuses, at Sudbury, North Bay, and Sault Sainte Marie. Ontario's Community College system was only a few years old, and the job was challenging. Air pollution from the nickel smelters led to aggravated health problems, and I concluded it was time for a change of pace.

In 1973, I moved back to the Toronto area, taking a job as a Numerical Analyst with Ontario Hydro. My duties involved designing, developing, and maintaining application software to support a variety of engineering and business functions across the Corporation. I really enjoyed the opportunity to exercise my mathematical and programming skills, initially working on my own, and eventually managing teams of up to 40 analysts and programmers. One of the highlights for me was a short-term assignment in Kuching, Sarawak, Malaysia, writing specifications for a Management Information System for the Sarawak Electricity Supply Company. My wife, Susan, who also worked for Ontario Hydro, was able to join me in Kuching, and we thoroughly enjoyed exploring Sarawak, Singapore, and Peninsular Malaysia. I fully expected to stay with Ontario

Hydro until age 65, but in 1993 Hydro initiated a massive downsizing, and both Susan and I accepted generous exit packages.

After leaving Ontario Hydro, we both took some time for travelling, home renovations, volunteer work, and temporary work assignments. In 1996, I took on a job as a Principal Consultant in the Toronto Branch of Keane Canada, Inc., a software-consulting firm based in Boston, Massachusetts. My assignments generally fell into two categories:

<u>Year-2000 Remediation</u> –modifying clients' software systems to handle 21st-century dates correctly; and

<u>Application Outsourcing</u> –managing maintenance and enhancements to clients' portfolios of application software. That job ended in 2001, when Head Office decided to close the Toronto Branch.

Meanwhile, in 1998, Susan started full-time work with the Toronto International Film Festival, a job which also lasted five+ years.

Since 2003, Susan and I have both been retired full-time, and we are busier than ever. We enjoy looking after our house, our garden, and our golden retriever. We belong to six local historical societies, two travel clubs, and the Toronto Field Naturalists, and we are active with our church. I am currently President of the Swansea Historical Society. For exercise, we walk, swim, cycle, ballroom dance, and square dance. We are avid photographers, and we like to travel to new and exotic places whenever we can. At the time of writing, Susan has visited 90 countries and I have visited 63 countries. We have also visited numerous islands and most of the Canadian Provinces and US States. Our travel plans are now on hold because of COVID-19. Our latest adventure, a tour of Laos, Vietnam, and Cambodia, scheduled for March and April 2020, was cut short just after our arrival in Laos, when the Vietnamese and Cambodian borders were closed, and the rest of our tour was cancelled. We really enjoyed our brief stay in Laos, but Vietnam and Cambodia must remain on our bucket list for now.

#### Robert (Bob) Roden, Athlone 1961, UofT

#### Bob Ross, Athlone 1960, UofT

September 20, 2020 will mark 60 years since the 1960 fellows and wives flew to London together, to begin their Athlone adventures. A physical reunion is not possible. If one could be held, a common question would be: 'How are you doing these days?'.

A brief reply: Doreen and I are both in excellent health. We have been blessed with good health throughout our lives.

We were both born in 1938, which I believe was a good year to be born. We have enjoyed 'the best of times' in many ways. For example, it was very easy for a young engineer to get a good job in 1960, and he also had the opportunity to apply for an Athlone Fellowship. The Athlone Scheme (as it was called) would end 10 years later.

We still live in Toronto, in the house we bought in 1975. (Another example of a 'the best of times' – we could afford a house in Toronto in 1975.)

I retired from IBM Canada in 1992, with 32 years of service, and have now been a pensioner for 28 years. After almost 8 years of consulting work, I retired fully at the end of 1999.

The past 20 years have been filled with volunteer work, family history research, writing family history books, cottaging, fishing, bird watching, golf, running etc. Unlike many of you, Doreen and I have not done much travelling in recent years.

Many of these activities have slowed down or ended now. I have 'retired' from my volunteer work. Arthritic knees meant the end of running. My main remaining activities are golf, bird watching, creating family-related photo books, and organizing reunions. Doreen still participates in Art Classes and Ivy Society meetings. It doesn't take as much to keep us busy as it once did.

We were married in London in September 1961, so anniversary number 59 approaches. For some of you, it will be number 60 – Congratulations !!

A couple of photos below – from a recent photo book.



Bob & Doreen, Sept 1961



September 2019

#### **ROBERT B. ROSS**

Bob passed away suddenly, after a wonderful life. He was predeceased by his parents, Bruce and Edith Ross, and his siblings, Murray, George and Camille. He is survived by his brother Ted, his sister-in-laws Marion, Eleanor, Catherine and Heather, Murray's girlfriend, Joyce, and his nieces and nephews. He leaves behind his beloved immediate family, including his devoted wife of nearly 60 years, Doreen, his daughter Mary and her husband John, and his grandson, Michael. Bob received an Athlone Fellowship for post-graduate studies in Engineering, after completing his degree in Engineering Physics at U of T. He followed in his father's footsteps and was an active volunteer with 3T5, for which he received a President's award. He worked in senior management at IBM Canada for 30 years, where he won an Excellence Award for Quality Measurement and was a World Leader in Computer Systems Sales. As well as being scholarly, Bob was athletic. He enjoyed golfing and fishing immensely. He was a conservationist and a keen birder, who volunteered to promote a safe habitat for wildlife. He enjoyed a long and happy retirement, spent with his friends and family. Because of COVID-19 restrictions, a private funeral has already been held, and a celebration of life is planned at a future date.

### Bob Ross, Athlone 1960, UofT

#### Ian Rowe, Athlone 1964, UofT

Mentoring Innovation BSc UoT Engineering Physics 1958 MaSc UoT Electrical Engineering 1960 PhD & DIC Imperial College, EE 1967 Fellow, Canadian Academy of Engineering

#### ON BEING AN ATHLONE FELLOW, MY STORY

I am proud to be an Athlone Fellow. There is a certain camaraderie that has lasted over the years. For example, four of us are Life Members of the Hamilton/Waterloo chapter of the Institute of Electrical and Electronic Engineers. There is no question that for more than a decade we four have driven the agenda, found speakers, and contributed to its success. Regrettably, age related conditions have led to two of them to no longer participate.

In 1964, there was no intention on my part to continue to a PhD. I had a satisfying and successful developing career that fast tracked me to the position of Manager of Electronics in the Special Products Division of deHaviland Aircraft. The principal program was the development of an infrared scanning system for the long-range detection of incoming Russian bombers. The challenge that I faced was to improve range. It was clear to me that conventional transistor front-end amplifiers contributed Nyquist noise that reduced range performance. Fortuitously, field effect transistors (FETs) were under development. Being majority carrier devices, their noise contributions were extremely low. My novel solution was to build a transconductance preamplifier with a FET front end to drive current mode amplifiers1 then turn it over to the techs for field testing. I heard nothing more.

A number of weeks later, the former Chairman of the Defence Research Board, Dr. Ormond Solandt, now deHavilland Board member, came into my lab with an astounding offer: The members of the Board of Directors of deHavilland Canada wanted me to go for my PhD! Later, I surmised that my novel design had placed deHavilland well ahead of the competition.

The terms were most interesting: deHavilland would match any admission award to whatever university I chose, anywhere. Moreover, it would keep me on the payroll, at reduced salary, so that my family would not lose benefits. My mentor, UoT EE Prof. Gordon Slemon, recommended Imperial College (IC) in London and apply for an Athlone fellowship. As the Fellowship also paid an allowance for families, it would be matched by deHavilland. I met with the Athlone selection committee and was awarded an Athlone B fellowship, thus ensuring that we were well looked after.

There were Fellows from different years in the Department of Electrical Engineering at IC which eased getting assimilated into the UK way of life. Being an Athlone Fellow and receiving the support(1) and perks(2) provided by the Board of Trade was also appreciated. And our numbers overcame any feeling of being alone in a foreign place. For all of this I am grateful.

Interceded when I was called for jury duty.
E.g. bargain-priced seats at Albert Hall.



Night Computer Run

### Ian Rowe, Athlone UofT '64 ianrowepeng@gmail.com

### Don Shields, Athlone 1955, USask

### What the Athlone meant to my Career

I would not have had the career that I did without the Fellowship. In my 4th year civil engineering at the U of Sask, each student had to present a final year thesis. I was struggling to find a topic when a classmate came to me and said "Don, I need someone to work with me on a project for a thesis. Would you join me?" I agreed. The geotechnical engineering prof Benjamin Torchinsky was our mentor. He wanted us to study expansive clays in Regina, clays which were causing havoc with building foundations as they wetted and dried with the seasons. Peter Granger and I won the Canadian Construction Association Prize that year.

This serendipitous request by a fellow student, led me to study Geotechnical Engineering at Imperial College that same year (1955) when I received the Athlone Award. There I was introduced to the relatively new discipline of Soil Mechanics under the aegis of Alex Skempton, who was knighted at the end of his life. I am of the age (85+) now that I categorize myself as a 2nd wave geotechnical engineer. Skempton was 1st wave.

en.wikipedia.org/wiki/Alec\_Skempton

The D.I.C. was seen to be the equivalent of a master's degree in Canada, so my DIC opened doors to jobs when I returned home. Of equal value, were the personal contacts. It was at Imperial that I met Larry Soderman and Ken Peaker. They were both intertwined with me in my subsequent career, and were essential elements.

Google: CGS Larry Soderman and CGS Ken Peaker.

Geotechnical engineering was my life. And I enjoyed every minute of my career. My relationships with other geotechnical engineers from around the world were always open and supportive. For 30 years, I had a working relationship with the French Highways Administration - always to our mutual benefit.

### Enough said: **Donald Shields, Athlone 1955, USask** donaldhshields@gmail.com

#### Oskar T. Sigvaldason, Athlone 1961, UMan

#### Early Years; Growing Up

I grew up on a farm in the Interlake Region of Manitoba. I attended a classic country school with a total of 20 students in Grades 1 to 10, all from the neighboring farming community. We had one teacher that taught Grades 1 to 8, and then we took Grades 9 and 10 by correspondence. I then moved to the Town of Arborg to live with my grandmother, to attend high school.

It was only in Grade 12 that the thought of attending University emerged as a potentially serious option. My parents were very supportive, but this was a departure from normality, as it had always been assumed that I would take over the farm, as I was an only



Oskar

son. At that time (early 1950's), relatively few students from rural communities attended University.

The first hurdle was to obtain language accreditation, as I had not taken a language option while being in the correspondence program. I attended summer school at the University of Manitoba, where I took four years of high school French in six weeks. With a passing mark of exactly 50%, the decision to enter engineering was assured.

#### University Education and early Career

I entered the University of Manitoba in 1955 and graduated in Civil Engineering in 1959. I did not apply for an Athlone Fellowship in 1959. Instead, I went to Alberta, where I worked for Brown & Root (now part of KBR) in engineering and construction of oil and gas projects. In 1961, I applied for an Athlone B Fellowship, and was accepted.

I spent the next four years at Imperial College, completing a Ph.D. in Concrete Technology. The first two years were funded by the Athlone

Program, with the subsequent two years funded by a National Research Council scholarship.

On my return to Canada, I joined H.G. Acres consulting engineers (later renamed Acres International). I worked with Acres for 38 years, with the final nine years as President. With Acres, I had the opportunity of being a member of engineering teams for several of the largest hydro-electric developments in the world. These included the Churchill Falls project in Labrador, the Gordon M Shrum (Bennett Dam) project in British Columbia, the Alto Anchicaya project in Colombia, Project Manager for the Karnali (Chisapani) Project in Nepal (for dedicated electricity export to India), and the Three Gorges Project in China (Advisory Board representative).

#### **Career Evolution**

During my early career in Acres, I became very interested in the emerging role of system planning and decision theory for defining optimal integrated development programs. This was also a time that environmental considerations were assuming increased importance in development programs. An arrangement was made for me to join the staff of Harvard University for one year, to pursue post-doctoral studies in systems methodology, economics, environmental science, and water resources. This coincided with Acres securing a special project with Environment Canada to apply "system methodology" for planning of river basin systems in Canada. This coincided with passage of the Canada Water Act in 1970.

This opportunity eventually became a launch pad for application of this approach and methodology for many different river systems in Canada and the U.S. This quickly expanded into Acres international operations with major assignments in Thailand, Sri Lanka, Nepal, and South Africa. Some of these projects were funded by international agencies, such as the World Bank and UNDP.

This general approach was quickly adopted in other sectors, including planning of integrated energy systems, and long term electricity supply planning. Planning capability was developed in Acres for preparation of comprehensive integrated investment and strategic development plans.

These were applied for development of short- and long-term energy plans for Indonesia (Island of Sulawesi), Pakistan, Bangladesh, Kenya, Tanzania, Ghana, Ethiopia and Sudan.

#### Post Retirement Career

Since retiring from Acres (after merger with Hatch) in 2004 (twenty years ago), I have remained professionally active. Much of the activity has been focused on corporate governance. I have been especially privileged to act as Director for approximately 25 publicly traded companies, private corporations, regulatory agencies, government agencies, University (Brock), and advocacy organizations. These include, as examples, Countryside Power (publicly traded on Toronto and New York exchanges); Electrical Safety Authority; Fortis Ontario; Professional Engineers Ontario; Ontario Jobs and Investment Board (invitation by Premier Mike Harris); Energy Council of Canada (Chair for two years); Toronto Region Board of Trade; Canadian Electricity Association; Canadian Hydropower Association (Founding Director); Hatch; and Acres International Group.

My other post retirement activities have focussed on deriving cost-effective solutions for greenhouse gas (GHG) mitigation. In 2013, I was invited, by the Canadian Academy of Engineering, to manage a project for deriving optimal national strategies for Canada to meet its globally committed reductions in GHG emissions. The agreed approach was based on application of "systems methodology", using a Canadian version of IEA's (International Energy Agency) optimization model, for deriving optimal economic solutions. The results of this 2.5-year project are documented in a Report "Canada's Challenge & Opportunity: Transformations for Major Reductions in GHG Emissions". Following completion of this project in 2016, I have continued to be engaged in advocating for the benefits of comprehensive integrated planning for deriving optimal economic strategies for achieving economic growth, GHG mitigation, and transformation of energy systems, in Canada. This has included assessment of studies for various federal and provincial departments and agencies.

These initiatives on the planning side have been complemented with advancing critically important technology initiatives that will be essential

for Canada to meet its mid-century GHG emissions reduction target. These have included, as examples, gas-fired combined cycle generation with carbon capture, use and storage (CCUS); orderly evolution of the hydrogen economy; the changing role of the forestry sector for economic growth (including export), GHG mitigation, and carbon sequestration (with longlife harvested wood products); and enhanced opportunities for naturebased solutions for carbon sequestration.

Currently, I am Chair of the Future of Engineering Committee for the Canadian Academy of Engineering, Director of the Energy Council of Canada (continuously, since 1993), and provide consulting and director related services though my wholly owned corporation, SCMS Inc.

#### **Personal Aspects**

I have been very fortunate in having a cohesive merged family. I have one son, Thor, from my first marriage. He and his wife, Maria Sarraf, live in Washington, D.C. (both are economists), and have three children. After Thor and Maria graduated from McGill University, they both pursued postgraduate studies in London, England; Thor for Ph.D. studies at LSE, and Maria for a second master's degree in environmental studies at University College. Their oldest, daughter Yara, just graduated from UCLA with a degree in environment science and environmental engineering, while the other two (boys) appear to be destined for careers in finance and computer science.

My wife, Giancarla Criveller, has three children and five grandchildren, all full grown. Two of her grandchildren are engineers or in engineering programs. So, as a merged family, we have four children and eight grandchildren, including three "to be" engineers.

We live in Niagara on the Lake, Ontario and enjoy our holiday retreats in Mont Tremblant, Quebec, and Conegliano, Italy.

In terms of health, we have both been very fortunate. We are both active and engaged in various activities, although I eventually had to quit squash at age 79. We still love travelling.

I have a rare disease called amyloidosis (excess production of the amyloid protein which causes stiffening of the heart muscle). I am on medication, which has stabilized the situation, with no side effects. Currently, I am enrolled in a three-year global research program at Toronto General Hospital, with IONIS Pharmaceutical, for testing a completely new drug for reducing production of the amyloid protein in the liver. Early results are very encouraging.

#### Personal Impacts from the Athlone Program

The opportunities provided for me, personally, through being selected for the Athlone Fellowship program, have been enormous. The benefits are in several different forms. Firstly, the process led to significant personal development, especially at an early stage of my life. This has included exposure to different value systems, appreciation of the importance of broad-based education from world class educational institutions (such as exist in the U.K.), and a more worldly appreciation of global challenges and opportunities. Secondly, the Athlone experience has been an opportunity for establishing special long-term friendships which have survived to this day, 60 years! This includes not only with fellow Canadians, but also friends from several other countries. The experience of living in London House for three years was a very enriching process. Thirdly, I have continued to follow engineering and scientific developments at Imperial College, including especially the globally leading Grantham Institute for Climate Change, at Imperial College. And finally, there is appreciation in observing the growing international stature of Imperial College, with global university rankings consistently in the top 10. Along with this very high stature, and corresponding capabilities of other leading Universities in the U.K., the Athlone Program has served to demonstrate the enormous value of globally leading and dynamic educational institutions for shaping national and international evolution, in a rapidly changing and increasingly complex world.

#### Oskar Sigvaldason, sigvaldason.oskar@gmail.com

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### Ben Smith, Athlone 1959, Dalhousie

In April 1964 a new opportunity became available out of the blue. National Sea Products was close to completing the construction of one of the largest fish processing plants in the world at Lunenburg, Nova Scotia.

Management was looking for a plant engineer to iron out the operations which involved a lot of new technology. I was offered and accepted the job and moved to Lunenburg. A year or so later, while acting the fool on a Saturday night, I fell and tried to stop falling by sticking out my right arm. By Monday it was painful so I went to the local hospitals for an x-ray.

The pretty X-ray technician came out laughing at me and asking what were you doing to break your arm, followed by the doctor who said don't see anything too bad so I'll put a bandage on your arm. The next day he called me to say "I'm sorry I missed a break in your arm and you'll need a



Roxie & Ben - 1967

cast!" To make a long story short, a month or so later I needed a date to take to a Junior Chamber of Commerce Valentine party and I called the X-ray technician, Roxie Lohnes, who turned out to be my 5th cousin. She accepted and one thing led to another which resulted in our becoming engaged by Christmas and getting married the following June, 1967.

Our daughter Heather was born the following April. Heather is now a medical doctor, trained at Dalhousie, has been trained

in emergency medicine for practicing in both Canada and the USA, as well as aviation medicine training in the U.K, and is now seconded to Health Canada. She and her husband (me) live in Ottawa and have two beautiful daughters (17 and 15 years old and about six feet tall) who are fluently bilingual.

Our oldest son Robert was born in 1969, has an Industrial Engineering Degree from Dalhousie, an Engineering Management Degree and a Business Degree from Stanford and now has an executive position with a Mortgage Insurance Company based in the San Francisco area. He and his wife live in Marin County, and have an 11 year old son who has dual citizenship. Robert was a good curler as a young man and curled in both the Canadian Junior Championships and the USA Men's Championships.

Our younger son Kevin lives in Halifax with his wife, a 15 year old daughter and 13 year old son, both of above average height and good looking (in my unbiased opinion). Kevin has business degrees from both Dalhousie and St. Mary's, is a representative for a Canadian Furniture Manufacturer and was a good hockey player growing up and qualified several times as a golfer to participate in the World Long Drive Championship which used to be held in Mesquite, Nevada. We are very fortunate to have Kevin and his family only about an hour drive away from our home.

Over the years, I took on additional responsibilities with National Sea Products Limited, first as Chief Engineer, then as Vice President Engineering. The Company grew until it had 26 plants at its peak, including plants in all the Canadian Atlantic Provinces, Maine, Massachusetts, New Hampshire, Florida, Uruguay, Argentina, and Australia. My work involved travelling to all of the above as well as making occasional visits to Iceland, Norway, Sweden, Britain, Denmark, Germany, France, British Columbia, Alaska and Japan.

I retired in the year 2,000. As a resident of Lunenburg, I became very involved with local projects such as:

• the Restoration of St.John's Church which was built in 1754 and heavily destroyed by fire in 2001;

- building the Fisheries Museum of the Atlantic;
- the Restoration of the Bluenose;
- building a swimming pool in the town;
- building a Tourist Bureau for the Town;
- acting on the Foundation Board of the Regional Hospitals, etc.

I still managed to play 18 holes of golf two or three times a week last summer and now curl a couple of times a week. Roxie who began as a student who was sponsored to become an X-ray technician, ended up her



hospital career as the Chairman of the Hospital Board charged with operating all the hospitals in this part of Nova Scotia.

Here we are, being recognized for our volunteer work in Nova Scotia, in April of 2018.

Roxie & Ben, 2018

Ben Smith, Athlone 1959, Dalhousie Lunenburg, NS 634.4859@gmail.com roxiesmithlunenburg@gmail.com

### Roger Stone, Athlone 1961, UBC

#### Trajectory, Tragedy, and Transition

This account from one Athlone Fellow is probably one of the more unusual stories. It's rather long, but you may find it interesting. Anyway, no trees have died to convey it, its disposal will cause no pollution, and you should feel free to stop reading at any point, there will be no test.

#### Trajectory

I graduated in 1961 from UBC in electrical engineering, "Option 2, EE Science", a newly minted version biased towards Engineering Physics. If I ever crack my notebook from a fourth year maths or physics course, I marvel–did I actually understand this stuff? And of course physics has gotten a lot more weird since then, what with particles being in two places at once, etc. I have occasionally used first-year calculus. Most recently, to maximize the volume of a pond with sloping sides using a given rectangle of plastic sheet, to store water for refugee farmers who grow crops on my land. But that is ahead of my story.

At Christmastime 1961 after my first term at Imperial College, my Aussie supervisor, the late Bruce Sayers, told me of a situation that he thought to be a good fit for me.

The Royal College of Surgeons of England, Department of Anaesthetics, had asked IC for an EE grad student to do a project there. They wanted a new type of rapid gas analyzer, to measure in exhaled air the proportion of a gas such as CO2 or an anaesthetic. It was to work by infra-red absorption. Certain devices used in heat-seeking missiles seemed applicable.

I jumped at it, and I spent a very pleasant year and a half at RCS. The development worked, and together with my RCS supervisor I wrote it up in the Journal of Scientific Instruments. I have since thought of improvements I wish I had twigged back then. The development was

taken up by a company in the north of England, where I spent a few months.

Then for a couple of summer months I sailed a 20-foot boat up and down the Atlantic and Channel coasts, ranging from Nantes in southern Brittany to Holland, a few times back and forth to England. It was intended as a sales venture for the type of boat: I speak French, consequent to a school year spent in Normandy as a boy. However I soon learned that, in that era, a French sailor after mooring his boat did not prop up the bar at the yacht club, usually for want of a bar, or indeed a club. He went home. So there was nobody to "chat up", as the Brits say. Sailing as a passion was just taking hold in France. Today the French excel at sailing. Big ocean races start and end in Brittany. The currently fastest sailboat in the world–the "Hydroptère" sails at over 50 knots–was developed in the Baie de Quiberon long after I sailed there. What I also learned was, the nature of the Brittany-Normandy coast with its rocks, fogs and fast currents. Fools rush in, etc. I was lucky.

Then back to Canada. Before Athlone I had worked a summer for Defence Research Board. I was invited to return, which I did–for a year. DRB is mostly about science of one sort or another. An EE was likely to be a service provider. An honourable calling, but not what I wanted.

I spent a few years employed at defence-related companies in Montreal then Ottawa. There seemed to be little hope of returning to medical electronics. I did some on the side, for example making a heart-rate meter that automatically adapted to signal threshold, needing no adjustment knob. Not a big deal, but I was told the nurses liked it. Through a contact I met one engineer at a big Montreal hospital. He spent much of his time fixing equipment. At least at DRB you did some engineering!

I married Margret, and we moved to an old farmhouse near Ottawa, and we had two sons. An activity we undertook was to host some refugees who wanted to raise crops, as they had done back in the jungles of Burma before being brutalized by the Burmese army and forced into UN refugee camps in Thailand, often for many years. These were Karen people (pronounced "Ka-REN"). They grew lots of herbs and vegetables,

including some we had never heard of, on the land I prepared for them. Most were for their own consumption, some sold at farmers' markets. They were cheerful folk considering what they had been through. But when I saw them lunching at my picnic table, I would sometimes duck around the other side of my house for fear they would invite me to partake. The main course was often part of some animal chopped up and cooked, bones and all. Much later on our next property they farm again, same ethnic group, different individuals.

Never a very good fit in a larger company, after a few years I went selfemployed, and never looked back. I found a niche in the growing specialty of power-handling electronics using a technique called "switch mode". If you ever wondered what became of the heavy lumps found in everything that ran from hydro power–those were line-frequency transformers. They have mostly disappeared, like the incandescent light bulb. Now, a tiny lightweight device plugs into the AC outlet and delivers a few Volts of regulated, isolated DC to charge your cell phone or whatever. Upwards from there, most computers, TV's, etc now function without a heavy, costly transformer. It has been one of the quieter revolutions in electronics.

For those interested, here's how switch-mode regulation works. A certain canal horse has a peculiarity: he will only pull at full strength or not at all. The bargee appreciates his horse's work ethic but needs a way to control speed. Dragging something in the water or on the towpath does not work very well, plus it soon tires the horse. Then one day, the bargee hits upon an idea. He trains his horse to step onto or off the moving barge, on command. Now he can regulate speed by the fraction of time the horse spends pulling versus coasting. The "duty ratio", we call it. This works fine–the horse munches hay while the heavy barge gradually slows, then onto the towpath to pull it back up to speed, at full efficiency. And repeat. Horse happy, bargee happy, and only small variations in the speed of the barge.

That's switch-mode control, and it is everywhere now. Using the electrical version of momentum the cycle time is microseconds rather than minutes as with the horse. Simple as it sounds, there are tricks of the trade. Some

you learn by precept, others the hard way from mistakes. Occasionally you innovate. I made a passable living doing all three.

In the early 80's I got a gig from a previous employer. The work was to devise and program automated test equipment (ATE) for electronic modules used in the range- finding systems of US Army tanks. I was to be a resource to younger engineers, for understanding the circuitry. I actually spent more time learning computer skills, helped by bright young lads out of Waterloo University, a bastion of that art. First I had to learn typing.

ATE has been my main pursuit ever since. In 1987 a product of mine won Top Canadian Product Award at the old Canadian High Technology Show. That show, defunct these many years, mostly featured local reps for products made outside Canada, so the award wasn't hotly contested. Later I learned that such an award plus a dollar buys a cup of coffee, but I proudly had a rubber stamp made to adorn the brochures.

Here is how the product idea formed. The ATE for the tanks featured big costly racks of test equipment, controlled from a minicomputer. Each item to be tested needed a hardware interface, built in a frame devised for the purpose, called an "adaptor", the usual name is "test fixture", or just "fixture". Someone had decided on Fortran as the language in which we must write the code, a very poor choice for that purpose. Everything seemed needlessly clumsy and complicated.

I thought, why not put a core suite of simple test equipment in a box, with a simple interface to the computer, a simple set of commands to control it, and simple provisions for the fixture? I hired an excellent younger engineer and together we created such a unit. We called it the PILOT, an acronym for Programmable Integrated LOw-cost Tester. It provided a core suite of test facilities, all controlled via a simple interface to the customer's computer. It had power supplies, signal generators, measurements, switching, and static digital input-output. That suite can address a very wide swath of applications.

Such as this interesting one. Two maintenance technicians at a GM stamping plant in Oshawa had a problem. Someone would bring a module, suspected faulty, from the controller of a stamping machine. It

would take them many minutes to set up and operate manual test equipment, often just to prove that the module was OK–guess again please. Then they bought a PILOT. They built simple fixtures, wrote simple programs, and could now test a module in seconds. Time is critical when giant machines stand idle. But imagine the merriment if they had asked management for a rack full of conventional ATE.

The PILOT commands were abbreviations of plain English, sent as if to a printer, and independent of the computer language used. It replied in kind. The fixture was a general-purpose wiring board that we configured. Each PILOT shipped with a floppy disc (remember those?) carrying a subroutine that the user could bolt into his testing program to handle commands and replies. We did not sell a large number of PILOTs but I was proud that nobody ever phoned for help. That's the gold standard.

We set about doing a second version, to improve the product but also because Windows now ruled the roost. That turned out to be a major problem. The early days of Windows, as I recall, were difficult for our type of activity, and presented something of a moving target. It brings to mind my favourite aphorism: "If you can tell good advice from bad advice, you probably don't need any advice".

Later I got some lucrative business to bail out a local defence-related company that had walked into a trap of their own making. They had won a system contract for the US Navy, by adhering to the cardinal rule in such bidding: be compliant. Whatever the customer wants, yes sir, you betcha! Do not suggest that some other approach or feature might make more sense.

The navy wanted the system to run from the ships' 440-Volt 3-phase power, and balanced please, with power-factor correction. Those stipulations are all a bit technical to explain here but not easy to meet. It required handling around 750-V maximum, the ships' generators being not the best regulated. With very limited space, this was a challenge. The bitbashers (computing types) who wrote the winning proposal had just assumed that they could buy such a power supply somewhere. When this proved incorrect, they looked for a power supply outfit to develop it. No takers: only 28 ships were in prospect.

Now, they had a Problem. Someone recalled my work at another defence company. (I had later been told, it was the only part of that system that the customer–the Canadian navy–had liked). I got the call. I quoted \$100/ hour, in that era a good rate for ongoing work. I later learned that another contract engineer there (who was not bailing the company out like I was) got the same rate, but his agency skimmed half of it.

The company had an in-house engineer who nominally did the same sort of thing as I, but they said he needed "help". That euphemism turned out to mean, I did the job. Later I learned that this poor chap, only in his 60's, had Parkinson's disease. A technician assigned to help me (who told me he enjoyed that more than anything else he had done in recent years) died of cancer while I was there. I think that people in defence-related companies have above average incidence of stress-related illness.

To do the job in time, I had to bypass company facilities. I did my own purchasing, often receiving the goods next morning or the one after. My son who had already laid out printed-circuit boards for me, did the prototypes in a fraction of the time it would have taken via their militaryqualified system, which was not even in-house, it was contracted out.

The project succeeded, partly due to use of some innovative techniques. When the USN wanted about 20% more power, the margin was there, no mods needed.

The proceeds from this fairly lucrative period enabled me to operate a 36-ft sloop back in BC for a few years. I had sailed there as a teenager. I had contracted polio on the way back from France, which left me not much good at field sports, and I developed an abiding love of sailing. The Gulf Islands between Vancouver Island and the mainland are one of the world's premier sailing locales. One year I ran three one-week cruises, sold at auction, to raise money for the (Anglican) Bishop of Ottawa. That was fun. They were consecutive, so I flew out and back just once.

### Tragedy

In 2018 my wife entered a rapid decline due to Alzheimer's dementia. Her elder brother had died of it a few years earlier.

I went through what I suppose many do when a spouse starts down this path. First a kind of semi-denial, hoping that her symptoms were just old age (late 70's). When I had to throw some of our daily Scrabble games so she could get on the score sheet, I knew it was more than that, but I clung to the hope of a long period of amenable daffiness during which I could care for her. I cast about for anything that might help. I read a lot on the internet of course. I took conventional measures. Feed her recommended foods, anti-oxidants and brain food that she liked such as blueberries, walnuts, etc. Try to get her to walk a bit. Try to keep her entertained.

We had moved from our old farmhouse and built a larger house in the country, and I was able to hire a live-in caregiver. This young woman interacted well with my wife even as she exhibited her own failings. (I could never see why there were few applicants for such a situation: the same pay as a care home but with room and board thrown in, and no daily commute). The young woman read somewhere that a doll was a good idea, and brought one. My wife would hold it up, look lovingly at it and tell it "You're so sweet". I found this harrowing. I wanted to say, "It's a plastic doll", but I knew not to. Soon enough, she could say nothing at all.

My engineering mind ran to "fixes". I did not realize how intractable that disease is. Seems like no real progress has been made towards a cure, since Alois Alzheimer dissected that woman's brain in 1906. But what else could I do?

I read a report from a US university that a certain drug, long used to treat asthma, had been found to reverse dementia in lab animals. Reverse, not just arrest. Wow!! I got all excited and persuaded my wife's neurologist that off-label use was justified in her situation. He prescribed it, and I set about to make her the first human trial case. (Sound desperate yet?). But for some reason that quite standard drug could only be prescribed by a US doctor for a US patient. I could not even order it on-line. Someone I knew

procured it for me. I administered the full course, \$4,000 worth. It had no discernible effect whatever. But I had to try.

After an evening lecture at a hospital, I buttonholed the speaker about a new technique I had read about called "focused ultrasound". It had produced spectacular relief for a Parkinson's sufferer, by ablating diseased areas of her brain. For Alzheimer's it was going to breach the blood-brain barrier long enough to pass large drug molecules through. Sunnybrook Hospital in Toronto was going to run trials on Alzheimer patients. I lobbied for my wife to be in the trials. I made a big donation (on my scale) to his hospital to show serious intent, hoping others would do likewise, if we could "franchise" the treatment to Ottawa. Later I learned that the Sunnybrook team were taking a year off to redesign the helmet. Thinking this meant the electronics, I created in my desperate mind a situation where I would do this for them, free of charge, to speed things up. I put in a lot of effort, all for naught. When I went to Sunnybrook to chat up the medical physicist, I learned that they were actually quite happy with their electronics, they were re-designing the helmet itself. But I had to try, as Quixotic as my effort was. (Even the travel itself was a trial. The only locomotive available to Via Rail on that frigid day was frozen, in Montreal. I was four hours late, wondering when Via Rail would figure out how to run a railroad in a cold climate).

It did not matter in the end. Soon my wife was beyond being a candidate for the trials. She became debilitated and non-verbal, and I was very fortunate to check her into an excellent local care home. She died there on 22 June 2019, I was at her bedside. She had been a school teacher, beloved by colleagues and students alike. Over 200 people came to her wake and funeral. After a good 50-year marriage, living alone is not my "bag", as we used to say, so my quest for a female counterpart is ongoing. Not easy at 82.

### Transition

While I cared for my wife and watched her lose her mind, I needed a distraction. *Downton Abbey* and suchlike on my big screen over Netflix were fine, but I soon discovered that nothing diverts your mind like doing something creative, that you are good at. Each night after I would toilet my

wife at 3AM so she would be dry in the morning, she would go back to sleep but I could not. So I got stuck into projects.

I had already begun working with my nephew, Mark, in Victoria BC, by email and telephone. This now became a regular activity. We put in a lot of effort on an electronic diaper alarm for adults. We trade-marked the name "UrinaHurry". The prototype worked well, without a battery even. But we learned that some smart cookie at MIT had invented a cheap RFID tag that responded to wetness. It seemed like a poor bet to invest more money and effort in the face of such competition.

Mark has a little company making underwater acoustic devices, like telephones for SCUBA divers. This is quite technical, dealing with bubble noise in the face mask and multiple sound paths bouncing off the sea floor and surface. For many years Mark had been using PILOTs to test his subassemblies.

So we have undertaken to re-develop the PILOT. I had enough funds left in my company for the purpose–well, as we proceed that remains to be seen. Now there are good ways to work with Windows, and new electronic devices to use. The product concept is still valid, thousands of users still need simple well-integrated ATE for the relatively humble purposes addressed by the original PILOT all those years ago. Or at least, so we are betting!

Meanwhile I have some Karen people farming again, this time on a new property. This calls for some engineering of a different sort, to handle the water situation which in many parts of the world is becoming a major issue.

### The changing world of technology

I think my varied career allows particular understanding of the astonishing changes in electronic technology over the span of that career. Or at least, I know enough to marvel at things that lay people tend to take for granted.

One observation brings an interesting perspective. In our current project we use in several places a microprocessor that costs about \$1.80–yes one

dollar eighty (decimal point correctly placed). The data sheet runs to 605 pages, which tells you something about its capabilities. What a blessing that it exists as an electronic file, nobody needs to print it.

I have given up wondering when the brainiacs who develop integrated circuits will hit the stops in terms of speed, density, complexity, capabilities, value for money, etc. When I started plying my trade, IC's did not exist, we built circuits using individual transistors. Today, the latest IC's from IBM contain 50 billion (yes b-b-billion) transistors, which can rattle away at many millions of operations per second. My first hard drive was 10 Megabytes. I thought, how could I ever fill that up? Today a single photo eats most of that, and few bucks buys a little thumb drive with thousands of times that capacity.

I have been very lucky in the people I have found to help. Nephew Mark in particular, a very smart, hardworking and utterly trustworthy fellow. But others also. A friend is a physicist by training, out of Imperial College no less. He is writing the core software. He reckons to have written about 250 KLOC's in his career. A KLOC is a kilo- line-of-code. I think he invented the term.

Another participant I found simply by talking up my need. I meet regularly with a church-related group of men, lately by Zoom of course. One day they came to just be with me during my grief over my wife. Over coffee I mentioned that I needed someone who could program a device called an FPGA. This is a poor man's version of an ASIC, an "applicationspecific integrated circuit". Sound esoteric? You own several of these if you have a cell phone, car, camera, computer etc. ASICs enable manufacturers to sell you such items at viable prices, but only after investing millions in chip development. Lacking the millions, one can buy a blank that loads its program from storage when the power comes on. That's an FPGA. (I had used one in the US Navy job but the company supplied the programmer, I did not have to learn how). An FPGA differs from a microprocessor, inasmuch as its programming does not tell it what to DO, but rather what to BE, an important distinction. Anyway on that sunny morning on my deck someone sent a text on his cell phone. Now I have a project

participant newly retired from IBM, having previously worked for a manufacturer of FPGAs! It does not get any better than that.

So here I am aged 82, running a high-tech project using some of the latest goodies. Well why not? If the project succeeds I think it will do well in the marketplace. Which, in the circumstances, will be mainly just an indicator of success, a way to keep score. The past few years have given me a special perspective on such matters.

If you read this far, thank you. If anyone would like to chat, my email is shown below.

#### Roger Stone, Athlone 1961, UBC

rogerstone@gmail.com

### Ron Taborek, Athlone 1960, UofT

Ron and Elizabeth were married a week or so before they boarded the aircraft carrying the 1960 Athlones to England.

#### BACKGROUND

As a youngster I helped my parents run their tourist Camp near North Bay, Ontario. I also received my pilot's license at the age of 15. Later at the UofT, I worked part-time at AVRO Aircraft.

I graduated with an Engineering Physics (Aeronautics) degree. While at Imperial College I studied computer analysis of aircraft structures and received a Master's Degree. While in London we bought a car, a 3 wheeler, and travelled extensively in the UK and Western Europe. These trips gave us the travel bug that we never got over.

We returned to Toronto, with an addition to the family, our son, Stephen.

#### CAREER

In my 35 year engineering career I had 3 major jobs of about 10-12 years each.

The first was at deHaviland Aircraft in Toronto. I assisted with the design and sales of Short Takeoff and Landing (STOL) aircraft. I was fortunate enough to be part of a team of seasoned experts, WW2 veterans, which travelled worldwide promoting the STOL aircraft.

The second was with the department of Transport in Ottawa. Here I managed a STOL demonstration air passenger service between Ottawa and Montreal. Later I managed a program to rationalize rail passenger services in Canada and obtained approval from Cabinet for the creation of Via Rail.

The third position was with Ontario Hydro in Toronto. In this case I coordinated a program to reduce Hydro's acid gas emissions and I led a team analyzing options to meet new electricity needs.

The Athlone Fellowship gave me the impetus and the confidence to search, find and complete projects which continued into my retired life.
#### **RETIREMENT PROJECTS**

All my life I have maintained my love of fishing and hunting, travel, aviation and taking on building projects. I continued with these activities through retirement.

In my retirement, I redesigned and rebuilt our house and cottage. I completed work on my airplane, an RV-4, which I flew with friends around Canada and the US, for a number of years.

I had the pleasure of building 2 kayaks, a 3-seater rowboat and 2 sail boats, one for our boys, and a larger one for weekends on the Rideau and the Trent Canals.

#### FAMILY IN RETIREMENT

During retirement, we have taken the time to travel, going to Poland to meet for the first time my Polish relatives and to Germany to meet Elizabeth's family. We were also able to visit many other countries including Brazil, Argentina, Australia and New Zealand.

We are also occupied with our 3 sons and their families which include 13 grandchildren. We moved to Guelph from Toronto to be in the midst of our families. Recently we moved from a house to a condo.

How lucky we have been to enjoy such a life!

#### NOTE FROM RON'S WIFE, ELISABETH:

Ron had died in March of 2024, leaving behind his loving wife of 63 years, Elizabeth Anne Taborek (nee Brunning) and his three sons, Stephen (Lisa), Brian (Kim) and Adam (Mary Margaret) as well as his sisters, Mary K. Taborek, Virginia Sinnott, and Christine Taborek. He also leaves behind 13 grandchildren whom he adored, including Jennifer, Scott and Afton, Hallie, Anayah, Bryson, and Brayden, and Ben (wife Alexandra), Graeme, Stephen Ronald, Angela, Emily and Jack.

#### Ron Taborek, Athlone 1960, UofT

retaborek@gmail.com

#### Scott Taylor, Athlone 1960, McGill

As we all move into the SunSet, the one question I have been asking myself is, excluding the benefits of professional educational development during the 2 years in the UK, what change did it bring to me?

My answer is that it made HISTORY an important part of my interests as a hobby of sorts. The UK of course is very rich in history, and going to Churchill College in year 1 helped to bring it forward.

So here is a book that should interest a number of us. It is about the Cavendish Lab at Cambridge, called: "The Basis of Everything: Rutherford, Oliphant, and the Making of the Atomic Bomb."

Cavendish's glorious class of 1932 (approx 40 persons including staff) had 9, yes 9, eventual Nobel Prize winners one of which was Sir John Cockcroft the first Master of Churchill College and a British expert who worked at Chalk River during WW II.

So much for that commercial but let me register another thought. Is it not something that today 75 years after it was near wipeout at the end of the war, that Britain has truly several of the best universities in the world.

Best wishes and good health to all, Scott.

#### Scott Taylor, Athlone 1960, McGill <u>astaylor@pml.ca</u>

#### Bob Tucker, Athlone 1960, McGill

Greetings from New York

As some of you know, I was the only Athlone of our group to choose Scotland for my time in Britain. Hence, my contact was limited with youbut relied heavily on developing relationships with the Scots. They are a unique and fascinating culture!

I spent hours in their home–sharing our Canadian culture with theirs. We spent many nights into the wee hours, on subjects of their interest; namely separation from England, political insecurity, and the Fabian Society, (Socialist thought).

The experience was rich and rewarding.

On my return to Canada, I was absolutely shocked at how different our cultures were. Montrealers were more interested in discussing how the Montreal Canadiens played on Saturday night, than engaging in any political or philosophical ideas.

But that was nothing to compare with my entrance into New York City–a fast-moving, brutal, and unforgiving culture.

Up to that point, I had never experienced anything close–in either Canada or other cities in the United States. It has now been close to 45 years since I have lived here. I have both prospered and been beaten up badly in these years.

But I have survived, and grown to love NYC with all its assets and shortcomings. I have raised a family of two girls; one of whom is a writer in Brooklyn, and the other in the food service business in Boulder.

I lost my wife of 50 yrs, Jane, to cancer in 2014, and now share my life with a wonderful retired nurse-practitioner here in Manhattan.

My business life here can best be described by two board games: Monopoly and Snakes and Ladders!

My experiences included the following:

1. Being President and a Director of an \$80 million American Exchange company.

2. Owning a company designing, fabricating, and installing wide-span structures, including space frames and domes. Our projects included putting the tops on half a dozen high-rise buildings in Manhattan, designing, (with others), the Epcot Center dome at Disneyworld, ( and providing the shop drawings to Tampa Steel to erect the dome ) and building a structure for the Sultan of Brunei.

3. Building and managing a small electrical contracting business into a firm of 100 Class A electricians doing major electrical and elevator projects in NYC.

I retired early–and have since concentrated on residential real estate projects in NYC and New Jersey.

To me–all of the above is great–but consider being an Athlone, and sharing so many experiences with the group over the years has been one of the highlights of my life.

To see what so many of you have contributed to technology and society in general warms my heart.

I am so proud of our group as a whole! God Bless

### Bob Tucker, Athlone 1960, McGill wrtuckernj@gmail.com

#### Harold (Hal) Wackman, Athlone 1963, UMan

Born : August 23, 1941 in Halifax, Nova Scotia

B. Sc. Civil Engineering, University of Manitoba - 1963

Athlone Fellowship: 1963

Diploma of Imperial College, Hydropower Engineering and Fluid Mechanics - 1964

Post-Graduate Diploma in Business Administration, London School of Economics - 1965.

I was fortunate to be awarded the Athlone Fellowship in 1963, the year of my graduation in Civil Engineering from the University of Manitoba. In that year I was the gold medalist in Civil Engineering, and President of the Engineering Students Union, both of which helped me obtain this wonderful award. I also won a prize for the best graduate thesis, a study of building large dams in the permafrost area of Northern Manitoba.

Spending two years in London during the Swinging Sixties at two prestigious colleges - Imperial College and LSE - was a life-changing experience. Not only did I get two valuable postgraduate degrees, but the opportunity to mix with people of all different nationalities during a time of important economic, political and social change in the United Kingdom had a major influence on the rest of my life - both personally and professionally. I left Winnipeg, and began to meet the world. I loved London, and reluctantly left with a treasure trove of new experiences and memories.

Being based in London provided the opportunity to meet and study with many interesting people, a number of whom became life-long friends. It also was a good location from which to visit the European continent, which I did several times. I also met and dated a variety of young women of various nationalities, which was both interesting and fun. Those connections led me to Austria, Ireland and Italy. I also visited Denmark, Belgium, the Netherlands, Germany, France, Switzerland, Spain and

Monaco, and traveled to much of the United Kingdom, including Scotland, Wales and Northern Ireland. Relatives in Blackburn afforded the opportunity to experience British family life.

Life in London at that time was terrific. Lots of young people looking for a good time, wonderful pubs, excellent theater, James Bond, the Beatles, feisty politics, new fashion and movies, and the whole array of historic and cultural experiences. I loved the pubs. Late in my second year, a few friends and I completed a circuit of pubs around the Circle Line of the Tube (underground transit). The Circle Line Pub Crawl was epic - a half pint at pubs near each of twenty-eight stations, and traveling by Tube between them. Took almost all day, and was memorable and hilarious, and very drunken. Some friends and I traveled around England and Scotland, going to all the pubs we could using a Best Pubs guidebook.

During my travels I went to the Henley Regatta, soccer (football) at Wembley Stadium, cricket at Lords, tennis at Wimbledon (loved that!), a Buckingham Palace garden party, opera at La Scala in Milan, Easter Sunday at the Vatican in Rome, and skiing in Switzerland and Austria. Food in the UK was not so great, but several visits to Brussels and throughout France introduced me to a whole new world of cuisine. And I developed a life-long love for London.

On my return to Canada, my degrees and good economic times meant a number of job possibilities. I combined my engineering and business education by becoming an Engineering Economist at Canadian National Railways Headquarters in Montreal. My claim to fame there was doing an analysis of roller bearings versus friction bearings for freight cars, which led to a change in policy for new equipment for that very large railway company. After two years of a great life in Montreal (which included lots of dating English girls and the World Fair - Expo 67), I wanted to see more of the world. I bought a round-the-world plane ticket and set off to meet an English girlfriend in Hawaii. She and I traveled to New Zealand and Australia together.

I fell in love with Sydney instantly. I cashed in the remainder of my plane ticket. Sydney is a glorious place. I had five wonderful years there with

lots of friends (some of them from my time in London), sailing, surfing, beaching, partying, and working at a terrific job at the top management consulting firm. I learned a huge amount in that job, and again my engineering and business degrees proved valuable. I did assignments in various fields, including packaging, adhesives, fans, pumps, photocopying, banking, home garden products, and tourism. After less than a year, I met and fell in love with a beautiful, fun and adventurous



Lis and Hal, 1973

American woman, Elisabeth who had sailed the Pacific to get to Australia. We bought, renovated and lived in a row house in the picturesque and trendy Sydney neighborhood of Paddington.

After our marriage in 1973, we left Australia for a several months trek across Asia, which was also lifechanging. We spent time in Indonesia, (Bali and Java), Malaysia, Singapore, Thailand, Burma, India, Nepal, Pakistan, Iran, Turkey, Greece, Italy and France on the way to England. I got a job offer in London, but we went to Washington DC, where my wife Lis had grown up, and I was hired by the World Bank as a Financial Analyst in

the Industrial Projects Department. I don't think I would have got that job without those respected British degrees. Our experience traveling on the ground in poor countries inspired me to seek work with an organization whose mission is tackling poverty in developing countries.

From 1974 until retirement in 2001, I had a terrific career at the Bank, handling many varied projects - a huge steel plant and an aluminum smelter in Brazil, copper mining in Peru, tin mining in Burma, coal mining in Thailand and Vietnam, and an array of energy projects in Eastern and Southern Africa, Eastern Europe, the Middle East, Ukraine, and Russia. I

was Chief of various divisions handling projects in industry, energy and infrastructure. Having an engineering and business background gave me credibility and knowledge for dealing with a wide variety of complex situations, and managing engineers, economists and financial types. My colleagues were from all over the world, which I loved. Highlights included managing a large program of energy sector assessments in a wide range of countries, funding a number of electric power plants throughout Africa, leading a major G-7 requested analysis of the closure and replacement of high-risk nuclear plants in six countries in the former USSR and Eastern Europe, negotiating the closure of the partly destroyed Chernobyl nuclear plant in Ukraine with senior G-7 officials, and helicoptering around Siberia to visit a number of large Russian oil companies and plan a major Bank project to rehabilitate the Russian oil sector.

My last job at the Bank was five years as Country Director for Kenya, based in Nairobi. That was the best job ever - interesting and challenging, in a beautiful country. Our life there was fascinating, and we loved it. We played year-round golf on the beautiful courses in pleasant temperatures. We knew an amazing collection of interesting people, and became totally devoted to frequent and adventurous safaris throughout the country, driving a big four-wheel drive Toyota. Lis did some amazing photographic work, selling lots of pictures of Kenyan life and landscapes and wildlife, and donating her earnings to a non-profit that sponsored girls in slums to go to school.

I managed a large staff handling projects in all sectors, including health, education, water, agriculture, roads, energy, HIV/AIDS, wildlife, environment, and public sector management. I became somewhat famous, and was frequently in the media, an interesting experience. I was outspoken about poor economic governance, which was popular with the people and the media, but not with the government. A real adventure involved ceasing lending to the corrupt and poorly managed Kenyan government until they installed a team of private sector executives we put together to run the main ministries. It worked for a couple of years, then fell apart as nasty forces prevailed. I retired early from the Bank because I

knew I would never have another job as good as that in that institution, and I wanted to do some different things and under less pressure.

It had taken me a long time to get used to Washington after our idyllic Australian life, but I loved the worldwide travel and interesting projects and countries and the professional experience at the Bank. I also loved being a manager, and dealing with people from a wide range of cultures, both as clients and colleagues. It was a great career.

While in Washington we raised two wonderful kids, both of whom have grown up to be very capable executives in well-known non-profit organizations - our daughter at National Public Radio, and our son at Conservation International. We are fortunate that they and our four super grandchildren live near us on Capitol Hill in Washington and our country house near Warrenton, Virginia. We renovated two houses on Capitol Hill and built an excellent house and a private 11 acre lake on a forested 41-acre rural Virginia property 60 miles from Washington, where we now spend half our time.

In retirement, with a generous pension, I dove into the non-profit world, helping to establish and be a board member of a cultural and arts center on Capitol Hill (Hill Center), a Western museum inWyoming (Buffalo Bill Center of the West), an international education organization (One World Youth Project), and a conservation organization (WildlifeDirect). That last organization I co-founded in Kenya, with my late good friend Dr. Richard Leakey, the well-known paleontologist and conservationist. He had also been the leader of that team that went in to reform the Kenyan public sector. Retirement also afforded me the time to do a variety of projects and land management at the country place, travel widely with my wife and family, spend time with my children and grandchildren and friends, write a novel on climate change (the Carbon Killers, available on Amazon books), and in the early years, some consulting at the World Bank. I greatly enjoyed writing fiction. I'm now trying acrylic painting, having abandoned water colors years ago.

Unfortunately my international life led to weakening links with Canada. I still have a number of good friends there, but living and working

internationally was my passion, so my ties with the country of my birth grew weaker, and visits there infrequent. I have spent time in over eighty countries, and lived in five of them. I have dual nationality, but the US has been where I have lived for more than half my life. Having our children and four grandkids (all now teenagers) living nearby is incredibly good luck and a true joy. All credit to my darling wife Lis, the best mother and grandmother.

As I said, the Athlone Fellowship was life-changing, and I am forever grateful for that fortunate experience. It led to an interesting career and an enjoyable international life. At eighty-three, I am now writing my memoir, which helps me to relive it all.

#### Harold (Hal) Wackman

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#### Murray Woodside, Athlone 1960, UofT

In 1960 I took the Athlone to Cambridge, and Ann joined me the following year, we were married in Cambridge (in a Puritan church with a stained glass window to Oliver Cromwell and John Milton).

In 1960 I had no idea what I wanted to do as a career, but I have been very happy with what came along. The Athlone was a great start, and the Fellows were a solid friendly group.

We are both very well and somewhat active (Ann more so than me).

1938 was indeed a good year to be born, as Bob Ross pointed out. I had two ideal jobs and never really had an interview, just a couple of friendly conversations. I was at NRC for 6 years, and then at Carleton for 33 years, retiring in 2003, and I still have an office and research grants and a couple of grad students.

Ann also has stayed connected to the Math dept where she taught for a very long time, and she teaches for one term a year, after Christmas. We settled in Ottawa in 1964 and never wanted to live anywhere else,

(although Vancouver was tempting). We still live in our first house, bought in 1968.

We had a family of three boys and now we have four grandchildren. I attach one of my favorite family photos, from 30 years ago, just before the boys left home for good.



Murray & Ann & Family

We have always been keen to travel...four years in Cambridge, then NRC sent me to Russia for six months in the 60s, and we did sabbatical years away in London and Paris with the family, and a bit in Sydney. Since retirement, we have spent the summers at the cottage, June and October travelling, and the winter at home and at the university. The virus looks like limiting travel for a while, now.

We are busy in different ways. Ann has a huge burst of activity in the winter, she loves the classroom. I have a more steady commitment to research projects, and have been doing a fair amount of programming, as a pastime really. And we read a lot...a book club is a nice aspect of that.

My book club exists for books and single malts, about equally.

I have been very glad to get to know you all, including some who are no longer here...all the best.

Distinguished Research Professor,

Dept. of Systems and Computer Engineering, Carleton University

Murray Woodside, Athlone 1960, UofT cmw@sce.Carleton.ca

#### What does this collection of notes from many Athlone Fellows Mean?

As one of our contributors\* put it, much better than I could:

I am certain that similar stories are buried in the lives of many other Athlones. Say it how you want, but we all know that the *Athlone Fellowship program* produced a plethora of Canadian academic and potential business talent that may have laid dormant for sometime without there being the *Athlone* program. The *Commonwealth Scholarship* is the only thing remaining for Canadian university graduates that offers studies in the UK when that is the applicant's country of choice. Of course, we Athlone Fellows do consider the *Athlone Fellowship* to be similar in status to the *Rhodes Scholarship*, but only in concept since the Rhodes is only awarded for study at Oxford. Sadly, there is nothing currently available for Canadian scholars the likes of the *Athlone Fellowship*. It's true that we are still a very *unique group of individuals, us Athlone Fellows*. And this collection of inputs from these Fellows shows just that!

RLH

\*Greg McNeice (with minor alterations by RLH, the organizer).

#### <u>"I Thank you all ... "</u>

... from the organizer of this collection:

Indeed, I do send a very sincere "*thank you*" to all those who contributed to this collection, to all these Athlones who presented me with a variety of write ups, some of which were penned by surviving spouses in a few cases where the Fellow had died before I finished my work. Without their contributions, from a single page to several pages, the reader could not get a better taste of the kind of people these Athlone Fellows were: solid, serious, yet friendly and caring. And I thank each and every one of them. And if, somehow, I missed some of "my Athlone Fellows" who might feel they would want to be included, I ask them to submit their own write up to me, in a format that fits those already included, in a submission in any of these formats: MS-Word, Apple-Pages, text, or pdf, by the end of May 2025. And I'll do another revision some time later in 2025, if I have the willpower and energy to do it.

#### Thank you my fellow Athlone Fellows!



R L Bob Hemmings, UofA, Athlone 1962

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RLBobHemmings is a retired chemical engineer now living in Camillus,



Syracuse, NY. After a busy career involving living in 17 places since completing his education, he has taken up writing.

Upon graduation from the University of Alberta, in 1962, he was awarded an *Athlone Fellowship* to complete his studies in the United Kingdom. He chose Imperial College in London, receiving his DIC and PhD in Chemical Engineering in 1965. Returning to Canada, he joined the Canadian nuclear industry. This brought him all around the world: Argentina, Bulgaria, Denmark, China, much of Canada (of course), Morocco, Taiwan, Korea, South Africa, Mexico, Germany, France, Japan, UK, Russia, Spain, and the USA.

His focus moved from Canadian nuclear

technologies, including working on potential options to Canada's "home grown" heavy water moderated and cooled plants, to those with oil cooling, boiling light water cooling, and the Canadian export model, the Candu-600, Pebble Bed Reactors, and various Small Modular Reactors. And he also became familiar with the US PWRs and BWRs, as well as several other nuclear types, including fusion reactor development with the **ITER Project**, now under construction in France. He also became familiar with nuclear decontamination techniques, and with nuclear and hazardous and mixed waste handling technologies.

He has worked on several other science related projects as well, including:

- initial seismic studies for the Radio Telescope installed near Penticton, BC;
- the construction of the Sudbury Neutrino Observatory near Sudbury, ON;
- the international Fusion project of ITER, on the conceptual design. ITER is now being constructed in France;
- technology behind the production of phosphate fertilizer.

Once retired, he began his writing career, enjoying expanding the short anecdotes of his life experiences, first into his memoirs, then a more serious *History of the Athlone Fellowship* and *Athlone Fellows Today*. In the future maybe into science-based novels. He now spends much of his time completing his memoirs as a *Collection of Personal Anecdotes* and beginning novel writing, and his *Irregular News Report* for Family & Friends.

Bob is a family man, happily married for more than half a century to his wife Micheline. Together they have a daughter, Isabelle, and a son, Richard (who unfortunately died much too early at age 46 from colorectal cancer), and five grandchildren. He has a sister in Saskatoon, Saskatchewan, and a brother in Victoria, British Columbia.

Bob spent his time after retirement with his wife, Micheline, making extensive trips across the US and Canada, mostly by car, but also by train, and often taking cruises around North America, visiting every state in the US, but Delaware, and every province in Canada. The Caribbean, Hawaii, French Polynesia and transits of the Panama Canal were also on our itinerary. We did not neglect Greenland and Iceland, nor Europe where we travelled widely, including France, the UK, Ireland, Spain, Portugal, Germany, Austria, Hungary.h

Bob is an extensive reader, mainly enjoying good and broad technical information, and good novels. And he is looking forward to continued contribution to self-published literature with his memoirs, his anecdotes, and his novels (?), and in continuing the development of his writing skills. And he thanks his experience with the Athlone Fellowship that developed him to the successes he has achieved.