xx) Thinking Deep: Seneca Undersea

(1) The MacInnis Connection

It all started in the most casual way imaginable one evening in 1972 and turned out to be one of the most demanding, high-profile, original programs in the Ontario college system. Newman Wallis was making his annual pilgrimage to the El Mocambo to meet York University professor, Dr. John B. Ridpath and enjoy an evening of jazz conducted by the neighbour of their childhood, Rob McConnell. This time they had invited old pal, Dr. Joseph B. MacInnis, himself a devoted jazz aficionado, to join them and to reminisce about the old school days over a few beers. That afternoon, Wallis had received a call from old university crony, Captain R. Bruce Stock, formerly adjutant to Governor General Georges Vanier and now, in early military retirement, Sales Manager for Arctic Canadian Continental-shelf Exploration Services Co. Ltd. (ACCESS).

Knowing well what Seneca did and hearing of the gathering that evening, Stock volunteered an idea that would surely have seemed preposterous to someone unfamiliar with the Seneca record of risk-taking. Said Stock, “Why don’t you guys get into the training of marine technologists…MacInnis knows what I mean.” Seneca was just into the occupation of its new King Campus. It actually had a site with a lake. The subject did come up that night and MacInnis did indeed volunteer to sit down with Stock and hammer out a concept for a training program…of some kind. In addition, MacInnis had two submersibles, unlike any others, which had to be parked somewhere safe and, ideally, where they would be attended to. These were Subigloo and Sublimnos, already the subject of televised undersea documentaries. King, indeed King’s Lake (Johnda, as it was then named), would be an ideal site for them….especially if there were an academic program. So it was that MacInnis and Stock sat down to formulate an assortment of feasible concepts which could bring the College and the undersea community into closer co-operation …first of all with Wallis and then later just between MacInnis and President Bill Newnham. It is characteristic of the Newnham style of modesty that he would address all of his communications to MacInnis with the words, “To the Big Fish from the Little Fish.”

The most productive kinds of negotiations proceeded…the Big Fish and the Little Fish cheerfully took each other’s bait. The ideas for joint venture were many…and some verged on the thrilling. Only a college with a track record of risk-taking could even contemplate some of the ideas. Seneca considered them all, including:

- *the feasibility of constructing an underwater habitat and a submarine by technology students as a teaching/learning project;*
- *the possibility of developing fish aquaculture ponds at both Finch and King Campuses;*
- *the planning toward the development of an Aquatic Interpretive Centre (a lake constructed as lakes were before man, approximately 30 feet deep with a*

see-through wall and, perhaps, a plastic, walk-through tunnel)…perhaps in conjunction with the Ontario Science Centre which was now opened just down the road in Seneca territory;

- *a series of lectures on oceanography and ocean activities jointly to be sponsored by Seneca College and the MacInnis Foundation. The Foundation boasted such notables as Buckminster Fuller, Pierre Trudeau, Jacques Cousteau, Scott Carpenter, Jon Lindbergh and so many others all of whom were prepared to speak in the Minkler;*

- *preliminary course proposals for variously conceptualized courses in Nautical Sciences, Aquaculture, Marine and Underwater Technology;*

- *the formation of an Advisory Committee, to navigate these courses and projects through, which would include the senior undersea personalities in the world at this time…only just four years after man had strode on the moon;*

- *a five-day, short, intensive course in preparation for the launching of Subigloo for 15 to 25 people of whom minimally 5 to 10 would be professional divers. Subigloo??*

(2) Subigloo.

On a sunny afternoon in July, the youngest commissioned officer in the RCN from WW11, by 1973 the oldest Chair of Liberal Studies, Gavin Christie Clark attended at the Sailors' Pub at Ontario Place in response to an invitation from Alcan Canada to join a press conference which would unveil "Subigloo", the world's first transparent, underwater observation station. Joining Clark for this event were Associate Dean, Dr. Tom Duff; Superintendent of College Services, Gordon Parker; Chairman of the Engineering Technology Division, Robert Thompson and Newman Wallis, Executive Assistant to the President. What they witnessed was an eight-foot, plastic, inhabitable sphere equipped with benches inside and an ample entry hatch at the bottom, all put together through the combined efforts of five Canadian companies in response to an appeal by Dr. MacInnis for just such a facility built to his specs. The two halves of the sphere were held together with aluminum extrusions to which were joined tubular , aluminum legs and the ballast trays. When filled with air, Subigloo would provide underwater researchers with a comfortable observation station offering total visibility in all directions. Constructed without one cent of government assistance, it was simplicity itself.

And it worked. After the press conference (arranged artfully by Captain Stock), Subigloo was disassembled and transported to Seneca College's bus garage where Seneca staff and students worked with MacInnis and his team to reassemble it. Fully assembled, it stood 12 feet high and weighed just over one ton, empty. Soon Seneca faculty were involved in the design of a container ideally suited to hold, to store and to transport Subigloo while others scouted the province for the best location to test it. Within a week, members of the MacInnis group, together with Seneca faculty had moved Subigloo to a suitable site on Georgian Bay where a successful immersion was executed by four divers….and Seneca got to see how it was done. Subigloo's next major destination was to be the floor of the Arctic Ocean where it would contribute mightily to man's knowledge of limnology,

Canada's polar sea and the effects of manned undersea exploration in frigid extremes, all the while permitting first-hand study of undersea biology in the Arctic and some geological explorations.

At Resolute Bay, Subigloo would be the focus of an extensive investigation on human performance and on diving equipment. MacInnis, with the help of Seneca, was going where no man had gone before. Well, almost no man. In the summer of 1971, Seneca's MILE Program had already been to Tuktoyaktuk, on which occasion, Ziba Fisher, Newman Wallis and Ralph Barrett had been escorted several miles under the Beaufort Sea through the tunnels where the Innuit maintain their cold storage. An Arctic MILE '73, was already planned and arranged through MacInnis. And many other initiatives were beginning to flow from the relationship.

(3) In-depth Seminars

The Depths and Heights of Human Research. On July 11-13, 1972, a most unique seminar was conducted at Seneca by Dr. Joseph B. MacInnis. Co-sponsored by Seneca and by Undersea Research Ltd., the seminar targeted upon the subjects of aquaculture, underwater technology, the history of man's penetration of the underwater world and on the feasibility of underwater habitation. The final assembly of Subigloo crowned the three-day inquiry into the undersea world and of the relevance of marine technology to Seneca College which was now taking the whole field very seriously. But, MacInnis, himself a photographer and poet of some considerable attainment, was the whole show. Then, through the joint sponsorship of the MacInnis Foundation and Seneca College, research turned its attention upward with An Evening With Scott Carpenter in the evening of October 11, 1972.

Recently retired as a U.S. Naval Officer and the very first astronaut to transfer from the space program to the "Men-in-Sea" program, Carpenter came to the seminar with his crusading zeal for inner-space exploration, his highly technical understanding of undersea frontier problems, his electrifying film footage and his brand new wife. He compared both scientifically and in human terms the challenges and similarities of outer and inner space exploration and advanced the most telling arguments to support his total commitment to the planet's last frontiers and oceans. It was Carpenter who had served as Deputy Commander of the 600 foot research mission, Sealab 111…and his vast experience in this field introduced the most persuasive arguments for the urgency of the need for water conservation, the development of all levels of competence in ocean technology and industry and the gravity of most firmly establishing, asserting and affirming sovereignty over Canadian waters…a challenge which no prime minister of Canada, before or since, has had the courage to address head on.

(4) Marine Technology Advisory Committee

Consistent with the goal of the College to mount professional course offerings in Underwater Technology, the inaugural meeting of an Advisory Committee was held at the College in the early evening of October 11, 1972 as an intensive, business prelude to the Carpenter presentation in the Minkler

Auditorium. The meeting was chaired by Seneca's Dr. Tom Duff and brought together, from the many sides of the industry, besides MacInnis and Carpenter:

- *Peter Broadhurst, Managing Director, Perry Submersibles, Cooksville*
- *Ben Davis, Consulting Engineer, Giffels, Davis and Jorgenson Ltd.*
- *Roger Hutchins, Vice-president of Engineering, Huntec (70) Ltd.*
- *B.F. Murphy, Chief Engineer, Foundation Company of Canada Ltd.*
- *W.A. Neale, Vice-president and General Manager, Dominion Welding Engineering Company Ltd.*
- *J. Neil, Director of the Water Quality Branch, Ontario Water Resources Commission*
- *B. Rand, Perry Submersibles, Cooksville*
- *Captain R.B. Stock, Sales Manager, ACCESS Company Ltd.*

It was very early pointed out at the meeting that the industry recruits technologists and engineers at three levels, depending on requirements. Electronic technologists are engaged as field technicians. They are trained in the shop on a certain type of instrument and then are sent out to sea to take care of equipment. Engineering geologists are recruited at a more senior level as field project managers. The actual sea training is an important part of the employee's education and, at this point in time, there was no institution that they knew of in Canada then producing this type of person. A general and basic training in physics, mathematics and electronics was felt to be necessary together with reasonable skills in English, with report-writing skills. In identifying those aspects of Marine Technology that would be the most important to study in any kind of a course in this field, they pointed to land survey techniques, marine geophysics, acoustic techniques, the study of sediments, problems of recovery from the sea, oceanography, the principal known methods for exploring the sea…and some optics.

Pursuant to the recommendations from the Marine Technology Advisory Committee, a number of proposals then went forward from Seneca College to the Provincial Consultative Committee on Engineering Technology. Courses were proposed, with the support of compendious documentation, in Aquaculture Technology, Mechanical Technology (Underwater option) and Civil Technology (Underwater option) for openers. The Applied Arts Branch was then put on notice of the intention of the College to come forward at an early date with a proposal for a program in Resources Engineering Technology (Marine Option) and a full slate of professional offerings under the general head of Marine Technology.

There would be some adaptations and some skillful fitting of the tessera to fit the jigsaw but, the bottom line was that Seneca was going to the bottom in a diving bell. By this time, with the approach of 1973, Seneca College could boast a small air force and some microlite aircraft, a full fleet of sailboats and canoes, two new highway coach buses, 1200 cross country skis and an arsenal of firearms at its shooting gallery. Now it was receiving two submersibles and the prospect of a full inventory of diving gear making it one of the best equipped powers in the western hemisphere. As the new frontier bubbles up before the educator of the 21st century, she would do well to

heed the parting words of intrepid pioneer Joe MacInnis, “See you on the bottom…and think deep!”

(5) A Course Approved…the Only One

In the early spring of 1973, approval was finally granted from the MCU for a one-year program to train personnel in the techniques of underwater life support systems, the collection and evaluation of underwater data and the implementation of underwater programs that were related to science, engineering and recreation. This course, requiring medical fitness on the part of any applicant with diving and mechanical aptitudes, rightly foresaw abundant employment opportunities in petroleum and gas research and development as well as resort recreation, hydra-archaeology, ecological and biological investigation as well as in the construction industry, police work, public service recreation programs and the teaching of diving for leisure time purposes. So far as those watching from Seneca were concerned, the Ministry could have stopped its long career inventory at the point on underwater construction.

Of all of those who had been watching developments on this front, none had been watching so carefully as Peter Struk, then Executive Dean at King…and Seneca’s Mr. Builder for many years to come. Taking MacInnis’ advice, Struk had truly been thinking deep. This kind of course was his cup of tea...and he was going to make it happen. And by the Fall Semester of 1974, it was in full swing with newly recruited Course Director, Bob Landry firmly at the controls. The object was to supply private industry and government employers with as many as possible highly qualified deep-sea commercial divers. And now it had a name: Underwater Skills, a name which has endured through 2001. Two semesters in length, the course exposes its students intensively to the practices of the underwater environment and the skills required to cope with and then to endeavour to tame that environment as they relate to rivers, canals, lakes, seas and the most perilous of ocean environments. Graduates were looking forward from the very first day to prosperous careers in the oil and petroleum industries working on off-shore drilling rigs or searching for new fields in exploratory underwater teams.

Positions were also justly anticipated for the skilled diver in the investigation of ecological ocean and lake balances, the study of underwater conditions of south sea structures and in marine construction and salvage. Carrying 25 students over the academic year meant that the quota of 55 students for academic year 1974-75 had already been oversubscribed. Landry’s original team was hand-picked, tough, dedicated and world-wise, especially in matters nautical. It included Vince Patcheson from Naval Air in Dartmouth, Don Farraway and David McVey. Together they worked toward a goal of expanding the program’s “classroom” and “in-field training” to keep pace with the new oil rigs at that time working off both coasts of Canada as well as in the Arctic and the North Sea. By any standard, Underwater Skills (UWS) was one of the most highly demanding and comprehensive technical programs then offered at Seneca, or indeed at any college anywhere.

As well as training students exhaustively in the principles of underwater skills and safety, the Landry team ensured a basic grounding in engineering and technical skills along with the ecological and biological principles which relate to the underwater environment. Nothing less would do! Subjects offered from the early days included: Marine Physics and Chemistry, Marine Photography, Applied Diving, Mathematics, English and Communications, Aquatic Science, Diving Mechanics, (the use of all kinds of) Underwater Tools, Structures and Principles of Underwater Construction and Salvage, Diving Systems, Submersibles and Habitats, Mixed Gas Diving, Surface Support Systems, Data Recording, Advanced Photography and Electronics. And these were only the basics. As Landry pointed out, “There is just no limit to how much these characters should know. Imagine learning to be a pilot. Now, imagine doing it far underwater… and then getting out of the plane and trying to build a footing for a building.”

Landry’s aim for the upcoming year was to acquire increased facilities capable of training the students in safety techniques and in the use of underwater tools at depths far greater than the course originally provided for. After that first year, they were using three student-installed tanks (two were 10 x 10 x 18 feet in depth and another was 20 x 4 x 8 feet deep) in order to teach the basic principles of underwater salvage and installation and maintenance of oil rigs. All the while, the picturesque, 42 acre Lake Seneca offered an ideal setting for simulated Arctic training conditions during the winter as well as the testing of equipment and the building of underwater habitats, all of which were being carried out at the time by faculty and students under the auspices of the upcoming Arctic !V Expedition.

It has been for some time a well-acknowledged fact that the future of Canada rests, in no small measure, on its oil reserves and on Canada’s ability to access them. It has also become increasingly evident that the preponderance of that oil is to be found in the great seas and oceans that surround the great land. Highly trained and skilled commercial divers would be needed (still are today in great abundance) to play a vital role in such extraction of oil reserves from the Arctic floor. When Landry was hired, he was given strong marching orders. Never to quail in the presence of a challenge, Landry was moving the bar up. He was setting higher standards for the College than it had set for him. He intended to keep his entirely unique program one step ahead in the training of professionals who could meet the demands of Canada’s future. In the event, he and his team were already training them well enough in 1974 to meet the current standards over a quarter of a century later. And, over that span, his graduates could be found in responsible roles on almost every major oil rig in the world, earning wages that would chasten the average university graduate…and daily risking their lives in the deepest part of the deep.

(6) Arctic 1V Expedition

Shortly after the ice had broken in Ontario and the Spring Semester of 1974 came to a close, five students and two faculty from Seneca’s King Campus Underwater Skills program joined the Arctic !V Expedition to Resolute Bay, N.W.T., under the direction of Dr. Joseph B. MacInnis. This would be a two-

month undertaking designed to study diving techniques and equipment in northern waters. Participating in the expedition was Larry Bell of WATER Associates of Tobermory. In support of his own study, Bell had released about 100 gallons of oil under six feet of ice in Resolute Bay and watched as the ice floated into two 8 foot square wooden booms attached to the underside of the ice cover. This exercize was the first stage in the study of the effects of oil spills on Arctic ice and would prove to be the forerunner to a similar and subsequent study conducted in the Beaufort Sea in the fall of 1974 by the federal Department of the Environment. Assigned to assist Bell in his work were Scott Spearn, Ron Saranic, Bruce Gallinger and Gerry Whent, all students from the Underwater Skills program. This team cut a 4 x 5 dive-hole in the ice as well as an observation shaft large enough to hold one man.

The divers then installed the booms on the underside of the ice on either side of the observation shaft. The first boom was used to study the effects of currents on the oil while the second boom was for a variety of other studies, particularly if the oil washed out of the first boom. All told, the Seneca students, along with Landry, spent 14 full days and nights in the Arctic. They were joined for nine days of this productive research probe by Executive Dean Struk who forwarded his account of things.

> *"We managed to chop three holes through the ice, installed the dive tents and located Subigloo at the bottom, complete with two sea-shells (communication booths). The Seneca students did just an outstanding job, working approximately 10 hours per day, never complaining about the nature of the gruelling work and managing to partake of five dives apiece. All of the personnel associated with the expedition were simply amazed at the performance of our students…their ability to dive, their knowledge of the equipment and their incessant high spirits."*

From the ocean floor, at the North Pole, a written testimonial to the Seneca student participation was forwarded to President W. T. Newnham by expedition leader, Dr. Joseph B. MacInnis on May 2, 1974:

> *The staff and students from the Seneca College Underwater Skills course have just now departed our Arctic !V expedition in Resolute. Their presence will be deeply missed. The success of the first two weeks of Arctic !V..and our ability to operate two parallel missions…was, in many ways, due to the untiring efforts of the team from Seneca. You can all be justly proud!*

(7) Sublimnos and SPID

These were two of the pioneering submersibles in the field of undersea exploration. SPID was a portable and inflatable dwelling which had been on loan from Edwin Link of the USA to the MacInnis Foundation which MacInnis arranged to have loaned to Seneca for their training. SUBLIMNOS was an undersea habitat, designed and financed by MacInnis himself. In the early stages of the program, MacInnis had met with Robert Landry and King Campus Dean W. Roy McCutcheon to discuss the possibility of establishing Sublimnos at the King Campus as an underwater laboratory. Sublimnos was

an inexpensive, permanent, shallow -water habitat which was placed in the Great Lakes on June 24, 1969 with four basic objects;

- *to provide a functional underwater platform to improve scientific investigation of our natural and plentiful freshwater environment;*
- *to provide a test location for all underwater equipment;*
- *to introduce and to educate as many divers as possible to the concept of underwater living;*
- *to assist in the process of catalyzing Canadian "man-in-sea" technology.*

It was located in 30 feet of clear fresh water in Little Dunk's Bay, near Tobermory at the tip of the Bruce Peninsula about 200 miles northwest of Toronto. Sublimnos itself was a small, twin-chambered habitat which provided a day-long work capability for two (and up to four) divers with a feasibility of overnight accommodation for short periods. The upper chamber was 9 feet tall by 8 feet in diameter and filled with compressed air at ambient pressure. Access was afforded through a 35 inch hatch in the floor of this chamber. A central overhead "view bubble" and four view-ports provided 11 square feet of viewing area. The living chamber was constructed of quarter-inch rolled steel and insulated with 1½" of spade polyurethene.

Within this chamber there was a circular bench, shelving, a floor, a removable hatch, a hot water manifold, a hot water radiator, temperature gauges, food, water, tools, air valves, lights, desks and a clock…as the vehicles essential components. In the lower ballast chamber there was roughly 10 tons of iron ore ballast sitting on a cross pair of outriggers for vertical stability. The living chamber was affixed to the ballast chamber by four 4-inch channel beams with the chamber separation distance being approximately 3 feet. The Sublimnos underwater station was leased to Seneca College by the MacInnis for three years at the nominal rental of $1.00 per year, subsequent to which the lease was re-negotiated on an annual basis…in return for which Seneca would maintain, store and utilize it for instructional purposes. At first a very new and untried occupation in Canada, the commercial diving program initiated by these pioneers at Seneca College developed a very quick and high-visibility recognition in the undersea sphere and within two years, careers rich in adventure, income and future possibilities were made available to a great many young men and young women with the temerity and the aptitude to address such a challenge.

(8) Donner Project

The 1974 Resolute Bay expedition to the Arctic with the MacInnis was a scientific first. As an expedition, it was the third in a series of five. Seneca students and faculty had contributed much to its great success and had benefited inestimably in their confrontation with a hostile environment. Further participation was projected for future expeditions and for continuing study in the precarious balance of nature, survival and sovereignty in Canada's North. In support of these objectives, and mindful that to undertake further such ventures would require supporting funds beyond the

ability of the College to provide, Gavin Clark made an approach to the Donner Canadian Foundation for assistance. The stated goals of the Donner Foundation included a pledge of support on a one-time-only basis to successful applicants whose projects were designed to enhance the following:

- *Legal and penal reform in Canada;*
- *French Canada;*
- *Canadian and foreign policy;*
- *The native peoples of Canada; and*
- *Canada's north.*

The grant submission was studied and developed by Peter Struk and Newman Wallis. It was entitled The Seneca Exploration Arctic (SEA) Project, targeting objectives 4 and 5 (above) requesting a sum of $36,470.00 of which $6,000.00 would be earmarked for the training of native Canadians in Underwater Skills In order to enhance their employment opportunities in the North as exploration inevitably increases with time in the resource rich barrens. With only one stipulation, the entire request was approved by Donner; The federal government would have to be approached to absorb the $6,000.00 training cost through Canada Manpower. This sum would indeed be added to the initial grant if it were not forthcoming from Ottawa. It was another first for Seneca and another active link with the MacInnis Foundation which was so helpful in the early development of this course which has sent so many highly trained divers so far afield…and so deep.

In an unforeseen move, perhaps not so surprising in light of the record of delinquency at the federal level historically when it comes to making opportunities available to its Innuit peoples, the College received a communication form the Commissioner of the Northwest Territories, Stuart M. Hodgson advising the College that the N.W.T. government would not be able to support, on its own or through Manpower, the training of native divers. " Although there will be a need in the future for native peoples with this skill, the present employment opportunities for divers in the N.W.T. are too few to warrant the expense involved in the training of native people in this trade and thereby raising their expectations with no guarantee of employment following their training." In light of the fact that every single Seneca graduate from this course in 28 years found employment, including the native students that Seneca sponsored through Donner, there emerged some sense of a political agenda still unclear to the educators at Seneca College. However, faced with this demurrer, the College proceeded on its own with Donner to facilitate this signal opportunity for Canada's northern peoples.

(9) Underwater Symposium

On May 25 and 26 of 1974, Seneca College hosted the intensive underwater symposium, Industrial Diving Orientation at the King Campus in Eaton Hall. The sessions were overseen and several delivered by Robert Landry, formerly

of Underwater World, Toronto and now UWS Course Director. Part of the theme dealt with the fact that the day of the old “dirty foot” diver was in the past and the industry and the art and science of diving itself had come a long way in addressing the issues posed by Canada’s continental shelf, thereby presenting major opportunities for the commercial diving community.At this very time, offshore drilling rigs were being put in place (which were of unimaginable size and complexity) with eventual capabilities of drilling the deepest parts of the deepest ocean. The demands for more and more petroleum production were pushing scientists and engineers to the very limits of their abilities trying to design and fabricate not just suitable drilling systems but diver support systems.

An inventory of the skills required by the modern and effective diver was exhausting; but it affirmed the wisdom of the Seneca curriculum. They required not only the old-fashioned stamina so valued in the past, but also the ability to make reasoned engineering and scientific judgments and evaluations virtually on-the-spot and then have the patience to translate this information into readable, useful reports. And of course the job embraced all of the standard underwater tasks of welding, cutting, pipe-fitting and photography. The skills required by the underwater community as the millennium approached were such that it was now easier to teach an engineer to be a diver than to teach a diver to be an engineer.

Even back in 1974, a good, active diver on an offshore drilling rig could earn about $250.00 per day in 1974 dollars, about $150,000.00 per year in 2001. Work on the Great Lakes represented about 1/3 of the pay with work ranging from making scientific evaluations to sandbagging a pier. Employment for Seneca graduates in this field with one of the many commercial diving organizations was very good in light of their training. However, the speakers emphasized that you do not graduate, don the equipment and set the underwater world on its ear. You can expect to work for a good year or more as a surface tender for another diver, learn the system and the style of the company employing you and then, ever so gradually work your way into increasingly more sophisticated dives as your confidence builds and that of your employer in you. The recommendation from the professionals in the field was that a would-be, career diver should be from 19 to 25 years of age to get started, mindful that a good diver’s productive years are generally over by age 45 much like any professional athlete.

The Symposium showcased a number of the leading figures in the undersea field including a team from Ocean Engineering International (considered the largest commercial diving organization in the world at the time), startling film footage from Dr. MacInnis on the 600 foot saturation dive off the Bahamas, Dr. Hal Koch (senior official from the Diving and Civil Institute for Environmental Medicine) who lectured the assemblage on decompression, mindful that Seneca was about to become the first college in Canada to acquire its own hyperbaric chamber and a contingent from the Canadian Forces who described the new (in 1974) deep diving submersible and lock-out system being developed by Canada.

All those in attendance the proceeded to Lake Seneca (as it now is) for a demonstrator of the newly perfected “pinger-locator”. Lake Seneca, which became an optimal training lab for the students, is a eutrophic lake with a high density of nutrients and minimal visibility typical of the moraine kettle lakes. The pinger is a sort of sonar which emits signals in a 360 degree circle. The locator ties a small water-earphone to the pinger signals such that, the louder they get the closer the diver is to the pinger and thence to whatever it is attached to, which may be an expensive or strategic piece of equipment which could never be observed in a zero-visibility environment. Regular symposia such as this brought the many facets of the undersea community together often….to the great benefit of everyone, helping to propel the course and its many supporters along most productively.

(10) Oceans Canada: A Nation looks to the Sea

On Saturday, November 11, 1974, in co-operation with the MacInnis Foundation, the Minkler Auditorium was the gathering place once again for a technical symposium that attracted marine and undersea specialists from the ocean floors of several continents. The goal was to update and demonstrate Canada’s newest capabilities in the deep sea field with specific attention being given to the commercial and industrial use of Canada’s marine environment together with a comprehensive, scientific review of man’s impact above and below the ice sheet covering Canada’s Arctic. Chaired by Capt. R. Bruce Stock, the symposium featured a kaleidoscope of divers and scientists from so many, sometimes barely related disciplines.

Among these was W. Larry Bell of the WATER Association Limited, the man who had recently released a volume of petroleum beneath the Arctic pack…and Douglas Elsey from the Department of National Defence (D.C.I.E.M.) who traced in detail the objectives and the succeses of the Arctic 4 expedition to which Seneca had so considerably contributed. Canada’s overall ocean policy was examined by H.L.Smith from the Ministry of State for Science and Technology and shipping in Canada was outlined for the audience by Capt. W.J.A. Stewart, Director of the Canadian Coast Guard. Martin Colpitts of the Oceans Industry Division came to discuss the whole marine industry in Canada and military diving in Canada was covered “in depth” by Lt. Commander Fred Cox from the Department of National Defence. Other speakers on this occasion would include Dr. E.F. Rootes from the Department of the Environment, R. Mason from the MacInnis Foundation, L.M. Edelstein from the Ministry of State for Science and Technology as well as Dr. A.R. Emery from the Royal Ontario Museum.

A most lively discussion on commercial diving in Canada was conducted by Phil R. Nuytten, the President of Can-Dive Ltd. and Vice-president of Oceaneering. The evening sessions featured a truly remarkable film festival chaired by Dr. Joseph B. MacInnis. It included presentations by Phil Nuytten in a 1,000 foot deep dive and then J, Donville under the North Pole. An electrifying display of Arctic portraits was displayed by Ernie Brooks from the famous Brooks Institute and then a feature entitled “Call Them Killers” was presented by Ches Beachill the foolhardy expert on “killer” whales in Canada. After the conference was over, the well known Canadian publishing house of

those times, MacClelland and Stewart, hosted a reception at the Ontario Science Centre to celebrate the publication of Dr. MacInnis' new book , "Underwater Man" and the opening of the exhibit, "Subigloo" showcasing the first ever sea-manned polar undersea station, in all of which Seneca College, and now an increasing number of its students, had taken a hand.

(11) Project S.C.O.R.E.

It was just one remarkable first after another for Seneca's Underwater Skills program. SCORE stood for Scientific Co-operative Operational Research Expedition in which an international team of scientists and technicians would be coming together in support of the several objectives of a diving expedition off the coast of Freeport, Grand Bahama Island. Commencing in April, 1975, teams of scientists and engineers actually lived at a depth of 60 feet below the surface (right in the Bermuda Triangle) ½ mile off the coast in the Habitat aptly named Hydro-Lab owned by Perry Submersibles and operating under grant funds from the National Oceanic and Atmospheric Administration, a division of the U.S. Department of the Interior. During several one-week missions, scientists investigated areas of interest along the vertical wall of the Bahama trench where, at depths of up to 300 feet, studies were conducted of the oceanographic, geological and chemical characteristics of this unique reef environment.

Of particular note, the team completed the collection of data for an environmental atlas of the entire Coral Reef complex and were able to determine the distribution and effects of pollution and toxic materials on the deep reefs. In addition, engineers and physiologists undertook a full evaluation of all of the new deep-diving techniques as well as man's adaptation to Nitrogen Narcosis (the bends) during the deep air dives. It was the purpose of these prolonged deep air diving techniques to help in revolutionizing coastal zone resource development world wide. For the full project, the primary life support systems were the deep diving Johson Sea-Link Submersible and its mother ship, the 132' R.V.Johson, along with the underwater stations, Hydro-Lab and Subigloo…all of which hardware represented, at that time, the latest and most sophisticated underwater technology available anywhere.

Appointed to be the Director of Support Services for the mission was Seneca Underwater Skills Course Director, Robert Landry, with the logistical support being provided by Seneca students. The UWS students were involved first of all in the initial set-up and construction of the habitats (Hydro-Lab and Subigloo) plus various other equipment requirements during the month of March preceding the mission itself. Then, in April, they served as safety divers and support labour through the day-by-day running of the mission itself…at all times under the control of the programs operations Director, Bob Wicklund. They were never extended beyond their trained capabilities. Agencies from far and wide participated in the actual SCORE Project itself , including: the New York Museum of Natural History; the SCRIPPS Institute of Oceanography; the US National Bureau of Standards; the US Naval Undersea Center; the Virginia Institute of Marine Sciences; the US National Marine Fisheries Service; the Smithsonian Institution, Universite de Nice (France);

University of California; the University of Washington Applied Physics Laboratory; the Florida Department of National Resources and the University of Kiel (Germany).

So, the Seneca students were in tall (deep) company. Landry reflects on the SCORE Project, “Not only were the students exposed to the most advanced technology pertinent to their careers, they also had the opportunity to participate in a highly disciplined schedule, side-by-side with the most renowned professionals in the world.” The students had to pay their own air fare; otherwise, most of the students’ expenses were borne by the SCORE Project while on site at Freetown. It was the sense of the Seneca faculty that this type of advanced experience (as well as the earlier ARCTIC 1V and Donner experiences) offered to students invaluable exposure to subjects many times greater than anything possible in the classroom together with the chance to see the very best of the professionals up close in action. And they would be able to enhance their resumes mightily with reference to their involvement in these once-in-a- lifetime ventures. Of all of the existing diving technician programs in the world at the time, Seneca’s was the only one invited to participate.

(12) Candive Ltd.

Vancouver, B.C., June, 1988. After graduating from the Underwater Skills program at King Campus, Darcy Lepinski travelled to Houston, Texas, for a 2-month course on underwater vehicle training., working on remote control vehicles and submersibles. On successful completion of this course he was hired by Candive Ltd. , based in Vancouver. “ They had enough divers,” recalls Lepinski, “but they needed an electronics technician and somebody to work on underwater vehicles. I ended up doing that and still spent as much time diving for them. I team up with my supervisor and we work in the underwater survey division. Most of the jobs are off-shore at oil rigs. I had always wanted to be in diving,” he goes on. “I worked in construction for three years and finally decided I had better get to it. Seneca is the only program of its kind in Canada and perhaps one of the best in North America (not counting the US forces) and it has a top reputation in the industry. So the Seneca credential in this field is like gold. For me, there is a great future in this business. I’ve already been offered supervisory positions with Candive and doors are always coming open to me. Sometimes things slow down a bit when low oil prices cool things off at the oil rigs. But they always pick up. And that’s just the oil rigs.”

(13) Diving Pool

A source of considerable consternation to the engineers charged with the safe and insurable design of Garriock Hall was the determination of the College to install, on the ground floor of Garriock, a standard swimming pool with a 12- metre, cylindrical diving tank at the bottom near the east end of the tank, complete with a viewing window enabling instructors to observe the effectiveness of student divers who, at such depths, would perform underwater skills such as welding. One autumn evening in 1979, the celebrated guest speaker of the Friends of Seneca Association (to be held in

the main pod of Garriock Hall) was to be the then Minister of Colleges and Universities, close confidant of the Premier and himself an RCAF veteran of some repute, Hon. James Auld, by now very much a friend of the College in his own right and a gentleman known for his great good humour and his derring-do.

It was the suggestion of Director of Public Relations, Gerald Quinn, that the planned tour of the relatively new campus building for the “Friends” could be made more memorable if, when they found themselves assembled around the pool, a fully outfitted diver would surface, take off his diving helmet and be revealed as their intrepid MCU Minister. Auld arrived early, agreed to the plan, had a few drinks and immersed himself in full diving regalia for the long wait for the tours to arrive and the cue to rise quickly to the surface. A most able and entertaining banquet speaker, Mr. Auld had to be helped from the podium that evening. He had been rendered entirely inarticulate by the combination of the few drinks, the long wait, the air pumped into the suit and the depth. It had been, it was learned, a very close call. He, and the College administration had learned the hard way that the microscopic precautions insisted upon by the UWS faculty were well founded.

(14) Diving Barges

Fully equipped and moored off the south shore of Lake Seneca are two diving barges used by the UWS students summer and winter. The depths of the lake are accessed through a “moonhole” in the floor of the cabin on the barge to enable student divers to suit up and experience their earliest exposure to conditions in the murky deep and to perform a number of rudimentary functions that will initiate them to the complex skills of the highly trained deep water divers they will become.

(15) Georgian Bay

Off the shores of this great Canadian inland sea is where the UWS Program has installed its third barge (Seneca Diver 11) and deep diving facility. The site, at Colpoy’s Bay, provides the depth of water required to meet the national and internationally established standards to support certification for an Unrestricted Surface-supplied Diver. Seneca Diver 11 is equipped with a decompression chamber, a wet bell, an underwater work platform and a full diving plant, including a diver’s hot water system. The barge itself measures 15 metres by 10 metres and is currently anchored in 55 metres of water enabling deep dives far in excess of those possible at Lake Seneca. As a rule, students will spend two full weeks at the facility, living in the housing provided by the College. During that period, a minimum of two nights will be spent standing “anchor watch” in an effort to train the students in every auxiliary aspect of the industry. The students have the opportunity to demonstrate their abilities while operating the support craft, the many types of machinery, the decompression chamber and the dive station panel. The program itself includes 34 weeks of extensive training which begins in October and concludes in June each year with the majority of the time being spent at the King Campus. It has most aptly been likened to the training of construction workers in every aspect…excepting that the construction is

being conducted under the most inhospitable circumstances, deep into the great oceanic frontier which bears our most treasured resources.

Included in the extensive (and everchanging) inventory of equipment requirements, there are three dive barges with support vessels; two decompression (hyperbaric) chambers; surface and underwater cutting and welding equipment, pneumatic and hydraulic tools and an eclectic array of surface-supplied diving helmets and band masks; a wet bell complete with the associated operating hydraulics; a hot water unit with hot water suits and all manner of related deep-air diving and supporting equipment. A fully outfitted shop facility is maintained on campus at King for the instruction and practice at welding, cutting, the repair and maintenance of equipment, rigging and instruction in the proper use of a kaleidoscope of simple and sophisticated tools. Lectures in general are carried out in the regular Garriock Hall classrooms and the students make ample use of the abundant resources available to them in the campus' computer labs and the Suddick Resource Centre.

(16) Hyperbaric Chambers

Still the rarest of commodities in a province where their many salubrious uses are only now becoming widely recognized, these have been available to the U.W.S. program both on campus (in the pool area) and on the Georgian Bay barge, Seneca Diver 11. These are maintained and utilized by students who must learn the proper use of them. Graduates of the UWS program receive a certificate in Hyperbaric Chamber Operations. Although the uses of Hyberbaric Chambers and many and exotic and gaining more popularity than ever for therapeutic purposes, they are an essential feature of life in the undersea world and, at Seneca, the chambers are confined to these purposes.

If there were ever an academic program with a rich and unpredictably variegated future, it would have to be Underwater Skills. As the Aviation Program, it not only probes the unexplored frontier where mankind has been chastened from going; it is a course of study the likes of which regularly reminds the student…and, perforce the College… that one single mistake and the college career, and everything else that is good, beautiful and true, is abruptly and irreversibly over. In this light, the equipment, the hardware, the facilities, the pools and barges and all of the peripheral materials required to teach this course and to serve the practitioner are all as vital as the curriculum itself. Seneca has been blessed with a fortuitous early history, a consistently conscientious faculty, a record of remarkably impeccable observance of the rules and limitations of the facilities…and a downright sacred respect for the deep blue sea.

xxi) The Atrium Campus: Where Management Meet to Eat

In late 1978, now sorely shy of space for its many and varied operations, the College began to lease space in the recently constructed and lavishly appointed Atrium Building, the prime tenant of which would be the North York outlet of the Metropolitan Toronto Board of Trade on the south side of Sheppard Avenue immediately west of Victoria Park Avenue. This facility would house the offices of Financial Services under Geza Alexin (with a staff, at this time, too numerous to name), the Conference /Seminar Centre under J. Clifford Wilson (with Roy A.F. Neale and Mary DeLuca) and the loosely allied Centre for Executive Management Studies (C.E.M.S. referred to by one cynic as the College of Eloquent Medical Services) under Dr. Ronald F. G. Campbell and including Dr. Carl Hartlieb, Dr. Robert Soucie, Dr. Donald MacRae and Dr. Harry Crawford.

In support of the most vital objects of networking, intimate meetings, early fundraising and the isolation preferred for budgeting and accounting practices, this was an optimal location only eight minutes by car from the main campus on Finch. It would serve the College well until the appreciably more attractive, one-year-renewable, leasehold rates at the recently available Fairmeadow Campus would result in the vacating of “The Atrium” in 1982. While Financial Services proceeded to a new home at Fairmeadow with almost limitless space, the other functions moved over to the Dufferin Campus and joined with their natural partners in the Business and Industrial Training operation at that most suitable site. Long after these teams had vacated, those many Seneca administrators who had taken out “memberships” found this site to be an ideal place to do the fabled, expensive and highly over-rated business lunch..and to plan their retirements.

As it turned out, the need to join the Board of Trade in order to inhabit this facility would lead to a great many potentially valuable contacts and an increasing interaction with the Toronto Board of Trade…with all of its educational pretensions. Regrettably, only the Conference Centre (and, to a lesser extent, the Friends of Seneca Association) would put these contacts to much lasting use as the years wore on. It was almost as if the senior team at Seneca was gunshy about closing a deal. At any rate, the Atrium…and then considerably later the Board of Trade connection…would become a matter of history.

xxii) Fairmeadow Campus: With Mr. Alexin in Mr. Cameron’s Neighbourhood

What was to become the Fairmeadow Campus of Seneca College was located in a former elementary public school in the Yorkminster section of North York, south of 401 between Yonge and Bayview at 17 Fairmeadow Avenue in North York (M2P.1W6). In early 1982, when the rent was jacked up more than 50% on the premises occupied by Seneca in the Atrium Building on Sheppard Avenue, an arrangement was quickly made to lease this most

favourable property from the North York Board of Education since it had been declared redundant. Children of Seneca faculty, such as those of John Choat and Robert Cameron, had attended Fairmeadow in its prime; but when children grow past public school age and parents remain in the neighbourhood, the schools inevitably have to confront endlessly reducing school populations in such communities. Such was the fate of Fairmeadow. Here would be housed, among others, the Ontario Real Estate Association Certification Programs, Seneca Telecollege and Media Services, Human Resources, Professional Development, College Accounting, Finances, Payroll and Purchasing and a number of seminars and Continuing Education offerings.

The school itself was in excellent condition (excepting that the fixtures, bathroom facilities, door handles, desks and coat hooks were installed with 5 to 12 year-olds in mind…a situation earlier addressed at Lawrence Campus). Four rooms and the principal's office were ready for occupancy by September of 1982, with the balance to be made available shortly after Hallowe'en….including telephone service. The initial lease would be for one year…on a renewable basis. And renew it they did….eight times. The physical plant comprised 32,100 sq. ft. and sat on 6 carefully groomed acres with reasonable parking on Fairmeadow Avenue and around and beside the building itself. A small part of the building was renovated to accommodate the Suzuki Music School so deftly and conscientiously managed by Jan Nagai. More or less simultaneous with this move was the formation at the College of a robust new thrust into rethinking the institution in light of developments in technology and communication underscored by the (recently published) BILD documents. Seneca called its response ARRR (for Academic Review, Research and Renewal) which drew most of the educated imaginations out of their numbing routines and into brainstorming project groups aimed at ruminating the recent past and kick-starting the foreseeable future.

On September 20, 1983, the first meeting of ARRR was conducted at Fairmeadow which would become a welcome and regular venue for this restructuring initiative. By the following September, the Media Services Department (Rick Rigelhof, George Tomev, Mark Olearo and so many others) had completed its move to the Fairmeadow Campus in order to work more closely with the increasing number of ARRR projects and to assume hundreds of coveted, dedicated square feet of studio space from whence would usher the popular Seneca Telecollege which continues to be aired, sporadically, to this very day. It is from this site that the Accounting, Budgeting, Payroll and Purchasing team of Geza Alexin would manage the College finances over a vital decade; that the tribulations and delicacies of Employee Relations (variously managed by Patricia Stoll, Catherine Rellinger, ephemeral Adeline Jack, marvellous Melvin Fogel and, through it all, Jane Wilson) would be addressed through the cataclysmic period following the addition of a Standard Workload Form to the Collective Agreement. Drawn to this site would be the eagle-eyed auditor, Neil Hunter and his enthusiastic acolyte, Keven Wray to conduct a most exhaustive "Operational Review"…and to evaluate all of the College's many "ancillary" operations.

It was hardly the newest of campus locations: it was destined to enjoy a shelf life of less than a full decade. But it was where all of the new things for the 1990's were hatched…and where the determinations were made that the time had come for many Seneca practices of twenty years' duration. As the final renewal of the lease ran out in August, 1991 and those who had come to know Fairmeadow so well and with such affection prepared to point their wagons southeast toward a new site at 1380 Don Mills Road, the words of College Bursar, Patrick Bruce are well remembered as he vacated the site and rounded the corner to a new era, " Farewell, Fairmeadow; the tomb of the unknown accountant."

xxiii) The Swinging Sheppard Blues

(1) Lansing, Ontario

In August of 1860, Joseph (one "p") Shepard would erect a three-storey building at the crossroads of a very small hamlet which later would take the name of Lansing, Ontario…way up north of Toronto. It would be one of the very rare all-brick buildings on Yonge Street in that era. By 1866, it housed, among other things, the local Post Office. This fact, along with its being located directly across the road from the Golden Lion Tavern, contributed to this crossroads site becoming the major intersection in the ever so gradually evolving exurban community that would one day rejoice in the status of the township, then Borough, then City of North York…finally to be gobbled up in the great maw of Metro Toronto, but not before firmly establishing itself as Toronto's new "uptown". In 1923, the Shepard building was purchased by George and William Dempsey…and Dempsey's Hardware came into being.

Through all of the years of North York's vertiginous growth, you knew you were in Lansing when you arrived at Dempsey's, the landmark hardware on the northwest corner. Thirty years later, just recessed in from the diagonal, southeast corner, a one-storey brick factory was installed and would come to accommodate the toy and sporting goods manufacturing base of the Cowie family until, in 1967, Seneca College would lease, renovate, occupy and open its doors to students on this site that would be declared the (two "p"s) Sheppard Campus…where it more or less all began. The crossroads of Yonge and Sheppard still form the major axis of downtown North York. The neighbourhood is now a showcase of some of the largest and most progressively designed buildings in Ontario, housing government, business, malls, restaurants and hundreds of upscale shops…all served by the immediate presence of a subway outlet with the only east-west underground nexus north of Bloor Street, fifteen miles to the south. Dempsey Brothers, the treasured landmark recalling the era of the Shepard settlement and the Golden Lion (meeting place of the conspirators with William Lyon Mackenzie), were bricks-and-mortar artifacts indelibly engraved on a marvellous Ontario pioneer past and a more recent Seneca pioneer past. Ultimately, and as a reminder of how little store so many regimes accord to history, each of these minor monuments would be sacrificed to "progress". In the case of Dempsey's, those at Seneca who cared…in small but mournful numbers… got to watch.

Then, the oldest building left on that magic and inestimably valuable corner area, was Seneca College-Sheppard Campus, purchased outright at last during the Newnham regime (as a potentially, fabulously valuable asset) and then sold, to cover the costs of the exciting new Seneca@York edifice, in the late 1990's. And so, in and around the heartland of old North York, there is no longer a Seneca presence of any kind….where once there were as many as seven sites…bristling with Seneca activity. But, for thirty long years, it was the ever deteriorating, legitimately sentimental home base…It was the log cabin in which humble old Seneca was born and it deserves to be remembered.

(2) People, Programs and Memories

Although the Sheppard Campus of Seneca College would never again regale itself with the pioneer esprit de corps that had characterized life at Seneca's first proud, albeit dowdy, station, the site (and its nearby satellites) housed all of the people, the programs and the memories that were Seneca in its robust infancy. Before it became the staging area for all moves east (to the grand new Finch site), it was, in its own awkward way, a sort of time capsule for an era that was withering on the vine before the very eyes of the thousands who made Sheppard their place of work and of study for as long as they did. It was an era of paper, typewriters, secretaries who reported slavishly to often inflated "bosses", outmoded routines and practices, traditions and, most superficially, fashions. It was an abrupt transition zone…from Ivy League, desert boots, cords, boat-necks, bellbottoms and miniskirts to granny glasses, macrame and tie-died psychedelic jeans. It was the time of wardrobe expressionism from cool to protest, from vanity to humility, from shiny glabrous to shamelessly hirsute, from buttondown to studiously shabby…almost overnight.

And, at Seneca, it happened first at Sheppard. Sheppard was the bellwether. This was a time…the last time… that was palpably pre-computer. To the extent that any academic institutions "had one", Seneca always did and, for a long period (for there was no reasonable alternative then) it would be an IBM. main frame computer, increasingly revered at the time as the Khabba at Mecca and serviced by a legion of dervishes called keypunch operators managed by a cabal of puppetmasters called programmers. It was utilized almost exclusively for administrative purposes at the time and a small program had been set up to instruct in the fine art of "data processing" and then "computer studies" …which would shortly change and accelerate at an alarming velocity. Back then, before the Sheppard Club was introduced so very conveniently right across the road, faculty, staff and students alike would make their way after classes to the Algonquin Hotel, six blocks north on Yonge Street and this base venue became, for the first five years of Seneca's existence, the watering hole of choice for a multitude of Senecans searching for a college style of life.

It was not unusual in those days. The age spread was minimal between so very many "older" students and so many faculty just out of university a couple of years with high hopes and lots of energy….restrained by nowhere nearly the prohibitive driving or behavioural regulations of the present time.

It would not be until the late 1970's when, under the direction of Bill Newnham, Norman Williams would negotiate the final acquisition of the full Sheppard property from the Cowie family…and Seneca would have itself an investment site. Meanwhile, it had to be occupied; however, everyone knew that, despite the deep sense of nostalgia attached to it (like mawkish refugees from the Irish potato famine, "it is where we got our start"), the moment Bill Newnham vacated Sheppard for his new office at the rudimentary Finch site, Sheppard had…at that moment…become a satellite.

Then, one by one, the other administrators, then programs and the key services would join him until virtually the entire full-time post-secondary operation of the College had fled down the road…leaving, for Sheppard the central role to play in that other mode of education which, in those times, the College would be referring to as "Community Education" under the inexhaustible Douglas R. Sherk. Community Education, in those days, was perceived of as an umbrella sheltering all that was not full-time post-secondary and notably including what would soon become Continuing Education, Business and Industrial Training, Occupational Training, Remedial, Developmental, Apprenticeship, Academic Upgrading and College Preparatory…all found their way under this rubric…at what was then and always the most accessible Seneca site.

(3) Community Education

As we have witnessed earlier, in the etching of the grand Seneca panorama, that interwoven congeries of things which could be found subsumed under the catch-all Community Education would promptly commence their own process of fragmentation as both legislation and the efficacy of delivery cried out for those little acts of autonomy that resulted in at least three self-standing, self-sustaining mother lodes of academic activity all springing almost fully grown out of the womb of Sheppard and generating activity so plenteous in numbers and so productive in revenues that, while the rest of the late-starting Seneca College got its full-time program legs, the College at large could already, by 1970, start braying "We're number one!" The three heads that emerged from Community Education were Continuing Education, Business and Industrial Training and Occupational Training…about all of which whole chapters have already been written. Continuing Education (hereinafter CED) would be the first to vacate inasmuch as a sprawling and central office area for this college-within-a-college had already been earmarked in the Finch-Phase Three blueprints…and they were among the first to occupy.

They had to be there. Initially, over half of the CED offerings were largely replications, for credit, of what was already given during the day on a full-time basis and, in so many instances, even the instructors were the same. But, their base was Finch. As time wore on, every Seneca Campus became a CED campus "after hours"; but, the base would remain at Finch/Newnham for all of the obvious reasons. Then, as the legislation and the regulations defining Business and Industrial Training (hereinafter BIT) more clearly than ever differentiated the commercial and industrial clientele for which the college would get paid for upgrading managers and mounting cost-shared

on-the-job training programs in, very often, clerical and executive situations, it became obvious that more sophisticated surroundings would behoove the nature of their enterprise and BIT would escape Sheppard under the guidance of Robert J. Cameron, for the rarified atmosphere of the newly leased premises at Dufferin and Finch…1000 Finch West, referred to in this volume as the Glass Menagerie.

This relegated to Sheppard what some would disdainfully regard as "blue-collar" education; as the low end of the training spectrum; the one that largely relied on federal government agency referrals for its income…the conundrum known for some highly productive Seneca years as the Occupational Training Division (hereinafter known as simply OTD). It derived this name from the fact that its principal ('though by no means sole) mission was to administer the skills and program delivery sections of the federally mandated Adult Occupational Training Act…a balancing act of quick fixes and rate dickering, of teacher finding and room allocation at the Rubic's Cube level of complexity.

To cite erstwhile Dean of Development, Richmond Grannan, *"Every new week was an adventure into the unknown. We would get word, sometimes with 24-hour turn-around time, to have a class for 16 of this or 30 of that or 10 of the other…and I would have to telephone teachers on my long list and ask them a) Can you teach this? b) Can you be on deck to teach it tomorrow morning at 8:00 a.m.? Oh, we got it done alright…don't forget that this was before the union came in…but it was gut-wrenching almost every Sunday night. And all of our students were out of synch with each other; because the programs, for which the feds were prepared to pay, were for all different lengths of time…and a great many were continuous intake…all based on employment needs and perceptions derived from statistics which may have been ill-researched, may have been obsolete or may have been just plain erroneous. But we pushed on with a happy heart because, at the end of the day, we knew we were bringing the promised land a little more within reach for some frankly very needy students. It kept them off the street, it gave them dignity and it even gave a lot of them a leg up and the first traces of a marketable craft or skill. But, man oh man, it was an administrative nightmare. We used to collapse over coffee at the end of the week and say there had to be a better way!"*

Well, coffee for Grannan, anyway! It was into this scenario that Stephen E. Quinlan was enlisted from his course directorship in the Business Division at Finch Campus on January 1, 1970. Already a proven administrator with the sort of accounting bent that was sorely needed for this position, he would carry OTD through its vital years and do great credit to himself and the College in the process. When, several years later, a Financial Administrator college-wide was required following the departure of Mr. Irving Bronfman, it was recommended to President Newnham that few, if any, at the College had become so well acquainted with the refinements of academic funding as Mr. Quinlan…because that job at Sheppard Campus was the trial by ordeal for anyone wanting to live or die on the barricades of high and convoluted college-level financial procedures. If you could balance that budget and make that campus pay you were clearly ready for the big show.

(4) A Handful of Occupational Training Programs

In the OTD operation at Sheppard, a handful of interesting programs were given. Throughout the CAAT system as a whole, the ever-reliable "CAAT Charts" of system-wide course offerings showed over 200 skill areas being provided at the various colleges, most numerous at George Brown and at those colleges with pre-CAAT histories as Institutes of Technology (Mohawk, Algonquin, St. Clair etc.) Seneca did not really want to put its emphasis on this area; but, demographically, it was serving a population too vast and had made itself too readily accessible to ignore these programs. At any rate, it had more federal members of parliament touching its mandated area than any other college in the big land. So, it made the effort. But, Sheppard Campus, mainly, would be that effort.

As the federal government flopped around through that hectic period featuring the consecutive regimes of Trudeau, Clark, Trudeau, Turner and finally Mulroney…all in fewer than five years and each with a differing blueprint for "Jobs! Jobs! Jobs!" (Mulroney actually ran on that platform slogan) the rules of the OTD game changed like a magic lantern show…until, when the smoke cleared, the Occupational Training Act had been replaced by the National Training Act (NTA) which, research would demonstrate, was actually lifted from the United Kingdom during the ephemeral Turner era and, albeit astute, was severely ill-suited to the Canadian economy. But…there it was.! Enrolments in OTD programs of all kinds would be made through the sponsorship of a person's own (governed by residence) Canada Employment Centre (formerly CEIC). If, and only if such a person, whose application would be assessed by a Manpower "counsellor", was found to qualify under the National Training Act for support, would sponsorship be accorded under specific terms. The alternative was for such a person, who failed to so qualify or who elected to forego the qualifying procedure, to enrol, along with those who did qualify, as a fee-paying student (at the rate, in those times, of $14.50 per week) in a program and for a period of time of his or her own choosing….if he or she could show that he or she had attained his or her 19th birthday on or before the first day of the classes for which the enrolment was being submitted.

All courses provided for the continuing enrolment of students throughout the year and were fully "individualized" ….a similar commitment to which all 15 Ontario universities had given up so many years before. Students were then assured by the literature that they could proceed at a rate of study best suited to their own personal abilities, circumstances and "styles of learning". With the exception of students electing to enroll in English as a Second Language (E.S.A.L.) or Basic Training for Skill Development (B.T.S.D.), the academic admission requirement for all of these OTD students was completion of Ontario Grade 10, B.T.S.D level 3…or "the equivalent, to be assessed". Study formats were specifically designed to address the needs and vagaries of "adult" learners and extensive use would be made of various testing devices to diagnose the learning needs of individual students. As observed by the president of the time, *"This is marvellous, high-minded stuff'; but, in this economic climate, it's a tricky way to run a railroad."*

(5) Business and Commerce

Among the programs offered under the rubric of “Business and Commerce”, nine of the eleven given at Sheppard were also offered at King when King was finally under way. Only the so-called “Computer Programming” course and “Secretary-Medical” would be confined to Sheppard. In the case of the Computer course, it would be because, in those days, there were no microcomputers and because King did not have a main frame…actually, ever. This program was devised to give a working knowledge of computer concepts, installations, peripherals, physical characteristics and applications using a minimum of two widely used computer languages and tying all of this into concepts and applications for related subject areas such as business communications, mathematics, accounting and keyboarding. The Secretary-Medical course was identified as having a marginally reduced market. It was designed to provide training in all the aspects of the skills and knowledge required to be of value in a medical office…including those of medical terminology, reference texts and dictionaries, medical office practice, typewriting, machine transcription, word processing, business communications and record keeping….all precursors to computer operations which would, one day soon, embrace all of these.

Other programs included “Accounting Assistant” aimed at office systems designed to ensure complete records of financial transactions; “Bookkeeper-Typist” for maintaining the records of a phase of a business establishment’s financial transactions with limited bookkeeping skills and operation of basic office machines; “Clerk-Typist” which allowed graduates to perform clerical work where most of the duties involved use of a typewriter; “Commercial Refresher” which upgraded the students’ previously acquired shorthand, typing and/or bookkeeping skills; Secretary-Machine Transcription (Dicta-Typist) aimed at purveying those skills necessary for the transcription of letters, reports or other recorded material using transcribing equipment and a typewriter up to accepted business standards; “Secretary-Legal” directed at those preferring to work in a Canadian legal office requiring shorthand, transcription typing, word processing, legal terminology and standard legal office practice; “Secretary-Shorthand” which promised to produce graduates proficient in shorthand, letter and report transcription, using shorthand notes or recording equipment as well as instructing at other miscellaneous skills typically required in the ever-changing Canadian business office; “Word Processor-Operator”, a relatively new concept at this time and already long outmoded, in which word processing operators were to be trained such that they could understand the concepts of WP, be aware of the various ways in which memory devices, information storage and display were represented on the then available hardware, practise office-simulated applications on the equipment using source information presented in a variety of ways including transcribed material and learn basic maintenance and safe-keeping of WP hardware and software; and, finally, “Office Systems Operations” (called O.S.O) which was designed to prepare graduates who had both academic and office skills to pursue careers in the electronic office in a variety of capacities.

Of all of these programs, this one, barely recognizable in its 21st century trappings, survived the 30 years. All of the students back then at Sheppard and elsewhere, began in a core program before branching off into their choice of three streams…Word Processing, Accounting, which could lead into the first year professional accounting examinations and Management Systems Operations which provided specific knowledge and proficiency in the use of computer-based applications relating to support functions involving scheduling, sampling and statistical and financial projections. At this time, desktop publishing had not broken through. Through all of its rebirths and changes of venue over all of these years, the quietly competent Diana Watts has been the midwife of record who has kept this course up with the times…by keeping herself up with the times.

(6) Technical Skills

Sheppard featured five basic programs at the level of Technical Skills, four electronic and drafting. The course in "Drafting" prepared students for drafting positions from the junior to the intermediate level with special emphasis on practical applications closely related to the changing trends in the industry. All Seneca OTD Drafting students would have to first complete a program in basic drafting as prerequisite for entry into at least two areas of specialization: mechanical process piping, tool and die design and architectural, structural and/or electrical design drafting. The Process Piping program provided a knowledge of basic drafting as prerequisite for a more detailed study of process piping itself plus related areas such as basic electrical, instrumentation, structural steel and so forth. A graduate of this program would be acceptable as a junior to an intermediate draftsman in several industries, such as the chemical and petro-chemical, the food-processing, the steam generation and the beverage manufacturing industries. What remains of this program in its modified form endures at the Centre for Precision Skills Training at the Jane Campus particularly as applies to the metal-turning trades.

The four programs in electronics all instituted a basic level of training in digital electronics, electricity and logic circuitry in the Sheppard Campus electronics laboratory. Among the four, "Electronics-Radio, Hi-Fi and T.V. Servicing" enabled the students to acquire considerable experience in the use of all types of electronic test and diagnostic equipment with emphases upon the servicing of electronic equipment, radios, hi-fidelity equipment, monochrome and colour television, including digital applications still in use today. It would also enable a great many of the enterprising denizens of that campus to get their television sets repaired for (relatively) free on the logic that the students had to have something to work on…the same unassailable logic that applied to the highly respected automechanics program at Centennial College where it was most helpful to know someone.

"Electronics-Mobile Radio" placed the emphasis on the diagnosing, locating and repairing of faults as well as servicing a comprehensive range of radio transmitters, receivers and associated equipment, fixed and mobile, including digital applications…all at a time when the C.B. radio was all the rage and some time before the explosion, on the scene, of the current profusion of

cellular telephones; “Electronics-Digital Equipment and Systems” placed the emphasis on diagnosing, locating and repairing faults as well as servicing equipment containing various families of digital circuitry all very much a part of our electronic environment to this very day; and “Electronics- Cable Television Service and Maintenance” which focused its training on the installing, maintaining, trouble-shooting and repairing of cable television systems which consisted of customer service equipment, antenna site and trunk distribution equipment. This latter course included concerted attention to customer service styles and techniques and a basic knowledge of the regulated procedures for this trade.

Other “technical” OTD courses were available around the College. Finch/Newnham offered a course in “Machine Shop” which trained students on the newly introduced Numerical Control to be general machinists before these functions fled to the Jane Campus. The Leslie Annex offered a program in “Industrial Maintenance Mechanic” to diagnose, locate, repair and systematically maintain a variety of plant and production equipment in an efficient manner. This course introduced a most unique specialty in its focus exclusively on equipment for the bakery industry. And at King Campus, A program was introduce unlike virtually any in the country called “Hyperbaric Chamber Operator” which required a Seneca U.W.S. Certificate (or equivalent) and professional diver training for entry and which instructed in the complexities and safety measures associated with a recompression chamber…which King happened to have (in fact, for a bit, it had two). As well, for awhile, “Underwater Skills” was available as an OTD offering for those contemplating careers and certification in Commercial and Industrial offshore deep diving. However, the course lent itself more suitably to the rigours of a full-time day diploma program and, for awhile, wavered back and forth between these two definitional styles.

(7) Basic Training for Skills Development

Also available at the Sheppard OTD site was the program Basic Training for Skill Development (BTSD) which was designed to enable “adult” students to acquire the necessary academic skills to enter directly into a skills-training course (which may or may not be at Seneca College) or into some level of employment. For some time, Sheppard had housed the variations on this theme in the forms of “College Preparatory” and “College Qualifying” programs as academic legs up into the system for those who had, for whatever reason, lapsed in their earlier academic careers. The very popular “English as a Second Language” (ESL) programs would be farmed out from the home base at Sheppard to the Lawrence and then the Glen Rush Campus sites as they were established and, in most instances, Richmond Grannan would be sent ahead to fertilize the soil and lay the groundwork for the introduction of these programs. In this latter case, opportunities were always available for students wishing to write the widely-recognized TOEFL or the Michigan tests. All of this is now centred at Seneca in the most successful English Language Institute (see the International Section).

(8) Floral Design Program

In the late 1970's, the Occupational Training Program at Sheppard Campus would launch an exciting new and refreshingly different course of study with its introduction of the Floral Design Program under the direction of the gifted Tom Colin, formerly the general manager and chief designer of Eunice Denby Flowers. This course touched every aspect of the retail florist industry in a happy blending of creative art, practical expertise and business sense. The floristry students would study the basics of design, including some of the international styles of flower-arranging but with special focus on the North American styles suitable for the local market. Wedding bouquets, corsages, boutonniers, pew markers, aisle candelabras, table arrangements, one-sided and all-round reception table arrangements, funeral sprays, blankets, hearts, gates ajar and casket sprays, hair flowers, body flowers and wristlets would be among the many designs and arrangements the students would become familiar with in this artistic program addition to a campus that needed a little dressing up at this time.

On the retail side, the course would cover sales, telephone merchandising, visual display merchandising, communications, small business management, purchasing, record-keeping, customer relations and holiday planning. Naturally, the elements of botany would play an intrinsic role in floristry and so, besides some considerable immersion into the fundamentals of biology, students would also be trained in plant and flower identification. Then as a practical learning experience, these students were required to care for a variety of indoor plants which were placed along the corridors of the Sheppard Campus and which, as a collateral benefit, added colour and harmonized with the campus environment. During the process of the program, two individual weeks would be spent by the students in florist shops in practicum mode. On top of this there were filed trips to the Ontario Flower Growers Association (the Clock); wholesalers of flowers such as Dales and Hofland; wholesalers of vases and containers such as Iveys, including a trip to Reeves in Woodbridge; the Hamilton Botanical Gardens and Ben Veldhuis in Dundas, Ontario…all of which was intended to provide the most varied exposure to a total overview of the industry to students who would be making floristry their career.

The course managed by Colin would receive the full and enthusiastic support of the retail industry: Flowers Canada; United Flowers by Wire and Florists Transworld Delivery Association. As fate would have it, Colin himself (in conjunction with Flowers Canada) was in the practice of delivering seminars to professional florists on special topics of practical interest…and the Seneca students would participate in the organization and the presentation of these seminars. Before the program was very old at all, the Seneca students under Colin had created table arrangements for the Garrison Ball at the Harbour Castle Hotel and for the Creeds Fashion Show at the Sheraton. They created two flower floats for the CNE, the Royal Winter Fair and did all of the Christmas decorations for Eaton Hall at the King Campus…that year and for so many years to come. Seven years into this most popular, 16 week, occupational training program (by this time officially named Retail Floristry) would strengthen its hand with the recruitment, in addition to the celebrated Tom Colin, of Norman Disch, described as "on e of the most creative and innovative designers in Canada today".

At that time the manager of the prestigious King Edward Florist, for which he had designed all of the interiors, Disch had been active in the industry and in the education of floristry for many years, having taught at the Toronto School of Floral Design and had been made a member of the American Institute of Floral Designers. He shared with Colin the goal of extending and transforming the program to the point where it would be a full time diploma offering. Known affectionately to Senecans as “Mr. Flower Power”, Colin would retire on June 21, 1991 and pass the bouquet to Disch under whose quietly competent stewardship the program would continue to grow and flourish until it made its way, at last, out of the moribund Sheppard Campus…at which time an unknown student would lay a little commemorative wreath as the flower show moved on down the road to Newnham and became a one-year certificate program… still regarded as the best in the business.

(9) OT Administrative Head Office

For all of these programs, the Sheppard Campus would be head office for administrative purposes and only the endless changes in the rules and the absolutely bewildering roster of federal legislative alterations would drive Seneca from a full-blown moral commitment to the many and varied important educational and training areas contemplated by OTD and relegate them, at last, to satellite status among the system of program types orbiting around Continuing Education which was based at what became Newnham Campus. In the earliest incarnations of OTD at Seneca, Sheppard would be the model for the OTD courses at King, Finch and Leslie…and the Lawrence Campus would be virtually an outgrowth of Sheppard with especially heavy traffic between the two sites…to the point where it became difficult to tell where some faculty were ultimately based.

The balancing act and the miasmic administrivia associated with this complex corner of the educational world would call for the very best from those managers who would undertake OTD and its affiliated programs. From the moment that Robert J. Cameron and his dear friends Bob Allison and John Hazlewood departed Sheppard for 1000 Finch West (see, in detail, the Glass Menagerie) Stephen E. Quinlan would assume full control of the entire campus operation. He would do the hiring, the negotiating and set the tone for the campus and the style of OTD for some years to come, long after he had moved forward in 1973 (for a year?) to Finch to become Superintendent of Financial Services. He would be served through all of the earlier years by Barbara Silver who would later find her own place in the Seneca firmament handling the legal and real property programs through CED at Newnham Campus. But, in those early years of OTD, Silver would usher one after another managerial candidate into Quinlan’s office until a full complement had the place running like a clock.

Of all of the managers recruited by Quinlan, the one who would prove the most durable, with the patience of Job and a talent for bureaucratic minutiae, would be Lt. Col. (ret.) Herat B. “Tami” Tamitegama, a Sandhurst graduate who would handle all news with equally impassive tranquillity. Tamitegama

would mysteriously vanish one day, many years hence; but, for ever so long, he became the enduring anchor of OTD as the downwardly, laterally and upwardly mobile players came and went and made their administrative contributions to Sheppard. And they were many. Most successful among them was Richard A.G. Mackie with his B.A. from U.N.B. and his years of "solid service with the bank". A man of strong convictions and refined appetites, Mackie would inherit the OTD and the Sheppard miter from Quinlan, learn all of the management techniques related to federal seat purchases and apprenticeship training and then parlay this arcane knowledge into a successful application for the presidency of Assiniboine College in Brandon, Manitoba. Before he had completed his presidential tour of colleges across Canada, Mackie had become the Chairman of the Board of the Association of Canadian Community Colleges and wound up a remarkable career by assisting the government of Pakistan for several years with their post-secondary educational strategies before retreating to his beloved Quispamsis, N.B. for an early and well deserved retirement.

Following Mackie on the cross-Canada college tour would be William McCracken, recruited as Assistant Chairman of College Preparatory who would vacate Seneca for Centennial College which was closer to where he was raised as a child and which elevated him to jack-of-all-administrative posts before his flight west with Mackie. For awhile, OTD reported to the Dean, Finch/Sheppard which was, however briefly, the late Dr. Ronald F.G. Campbell and, for a much more protracted period, Fr. Frederic W. Etherden who promptly assigned the day by day management to the "big guy", Peter Struk. Douglas Sherk had been there at the creation of OTD and was there again at the creation of Lawrence Campus when much of Sheppard activity found its way to that newly leased site in 1974. For some considerable time at Sheppard, the Registrar for OTD, a most exacting task, would be Dr. Peter Bartram who would later join McCracken in his journey down, down to Centennial…before returning to the Seneca that had made him, to teach in Government Administration for the balance of a many-faceted career. On and on they came and went, usually to less taxing, better paying billets at Seneca with assured parking spots.

Geoffrey Jackson made the trip down from Claremont every day for years to manage the always demanding Technical Skills. Never once did he fail to come to work adorned in his trademark bolo tie…then return to his dogs and his birds at his country retreat. His reward was an all too brief visit to the role of Chair, Engineering Technology at what had become the Newnham Campus. Then he was retired. But, to know Jackson was to remember him. Also passing through on their stairway to the stars were Fr. C. Ralph McKim, late of Fiji, whose itinerary would take him next to King, then to the International enterprise of Ranjit Kumar and, at last, to Nigeria where so many productive years were spent before retirement near Peterborough and a life of quiet reflection. David Whalen was never better than when he was recruited by Quinlan to be the Course Director of College Preparatory…except on that day, some years later and following his brief interlude as Executive Assistant to the President, when he held an entire audience rapt and captive for over an hour with his recitation of an Irish story at the College's St. Patrick's Day gala in 1982….and, later, a personal audience with Nikita

Khrushchev. Maureen Callahan and Sandy Sandomierski both got their start in ESL at Lawrence shortly after it had imported much of the OTD content from Sheppard.

The career of Sandy, much beloved by students and colleagues alike, would be snuffed out prematurely and abruptly by the most pernicious of diseases while Callahan would come to challenge Wayne F. Norrison for the bragging rights to claiming the most (and most varied) administrative offices and portfolios in the College's history. Whenever there was a Seneca Shuffle, there would be Callahan, reviewing her wardrobe for a new managerial role among the pantheon of stars administering Seneca from year to year. Her odyssey took her through Glen Rush, Caledonia, Human Resources, EASL, Dean of Technology, Special Assistant to the Vice -president, Dean and grand maven of the fledgling School of Communication Arts and, inevitably, right on out the door to the vice-presidency first of George Brown College and then…and currently…of Sheridan College….ever on the reasoning that the unexamined life is not worth living. Fr. Clement Kambeitz too would find roots at both Sheppard, where he became a central figure in the Mackie team and at Lawrence, where he seemed right at home.

In and out and on and up would go Dan Phillips, basically an academic whose itinerary through Seneca demonstrates some artful broken field running…and he is still doing it. Then there was the baby of the Paupst family from Dundas Ontario, young Terry who was the tallest person Quinlan would ever hire. It was well settled that Paupst was very good with people and, in a twinkling, he had become the Director of Student Liaison and then Student Services. So well liked was Terry Paupst that, some years after he had left Seneca for greener pastures, Stephen Quinlan, by now Seneca President, would lure him back to Seneca for still another kick at the can….this time as Director of Marketing.

Of all those who took the Sheppard bit in their mouths, none was so destined to make a lifetime undertaking of this and other forms of "adult" education and retraining than Fr. Richmond "Dick" Grannan from St. John N.B. Now in vigorous retirement (for Grannan knows no other way) he would become Dean of Sheppard., Dean of Lawrence, Dean of Continuing Education, Dean of Liberal Studies and soulmate to all in quest of justice at a tough often ambitious college. He carried the valise of occupational training in its many disguises (OTAB, Futures, NTA, jobs Ontario, WITT etc.) from campus to campus from season to season. He opened up north Yonge Street, Spring Garden, Markham, King; he serviced almost every Seneca Campus with its aliquot share of Developmental Studies and, as this is being written, he is still a member of the C.I.A.C. which serves this vast area with employment-training decisions and partnerships.

As this vibrant little campus moved into the heyday fiscal year 1975/76, the success of the Occupational Training Division (OTD) would continue to tax the resources of the Sheppard Campus to the limit. Overall growth in OTD, which was pledged to assist unemployed adults through short (fewer than 52-weeks) full-time programs in which they received upgrading and/or skills training, had realized an overall increase of 408% since 1970. During the

period April 1, 1969 through the projected date of March 31, 1976, instructional day increases would proceed from $73,331.00 up to $281,917.00. Translated into student numbers, this would mean a growth in diploma equivalent student numbers to 1,719 in this area alone. Highly sophisticated and innovative learning systems in all divisional program areas had done much to ensure this success.

These systems were designed to promote, as fully as possible, an entirely individualized learning package and to permit students to enter programs according to the method of “continuous intake”. According to Chairman of the period, David Whalen, students were proceeding on individually prescribed, self-paced programs and achieving performance objectives, post-test analyses and comprehensive achievement monitoring. The teaching systems had undergone many modifications and the faculty role had increasingly become that of teacher/facilitator…not the first time this concept would find hospitable ground on this Campus. At the same time, many community needs would continue to be met through the five basic program areas of OTD. These included: Basic Training for Skill Development (BTSD), Business and Commerce (B&C), College Preparatory (CP), Technical Skills and English as a Second Language (ESL/EASL). In the late 1960’s, the College had begun to study the develolpment of a program for the training of personnel in the electrical distributor field. Originally called Electrical Distribution Sales, by the time it got up a full head of steam it came to be known as CEDA Training Program, marking the beginning of what the experts in this field refer to as “a permanent vehicle for the training and recruitment of counter men, telephone men, sales people and all of the other positions that must be filled in the distibutor’s operation. The facilities for mounting this course of study were provided by the College through OTD …although the actual course itself was conducted by the Canadian Electrical Distributors’ Association. Its Course Co-ordinator, Peter Thompson (who had retired after 40 years of Northern Electrical Distribution… NEDCO) would oversee an instructional staff which was provided by the relevant manufacturers.

They would provide lectures and demonstrations on lighting, panel boards, conduit lamps, switchboards, wiring devices, electrical heating, fittings and raceways. Drawn to this most interesting of programs were students generally ranging from 20 to 22 years of age from various distributors across Metro. The students were actually hired for the course and they came to literally represent new recruitment for that industry’s work force. The students would be paid by their distributor /employers while undergoing the Seneca training process. As for the program itself, it was designed to give maximum exposure to as many different learning situations as possible in the most compacted time period. Lasting 24 weeks all told, the course would begin with 12 weeks in the classroom followed by 5 weeks of touring various plants…during which both observation and demonstration by participating manufacturers would strengthen their understading of the classroom instruction. Then there would be 7 weeks of work under the direct supervision of a real work situation in distributor operations.

In the last stage of this course, the progress and development of each student in the program would be scrupulously monitored and evaluated …and

reported…by the supervisor. In support of this unique academic opportunity, still another facility. Set alongside the east end of the already congested Sheppard Campus was a teaching trailer, some 40 feet long and 10 feet wide, with chairs on the inside, in three lengthwise rows with an aisle between the second and third for the lecturer to pace…as pace he did…from 9:00 until noon and 1:00 until 3:00 every day without remission until the classroom work was duly accomplished. The students ultimately would begin mainly by identifying product groupings and editing orders before moving up a level. They virtually all got careers out of this. The principal manufacturers providing lectures and otherwise participating in this program included: Polygon; C.G.E. Lamp; Great Lakes Electrical; C.& M. Lighting; Holophane; Canadian Chromalox; Federal Pioneer; Cutler Hammer; and Crouse-Hinds. It was typical of the elastic versatility of college programs of that era and the tight interdependence that grew between the College and itis industrial partners…so many of which relationships were never followed up or maintained as they might have been.

(10) A Legion of Support

A legion of support was always available to the team managing Sheppard, many of whom (like the faculty) would come to serve the College in so many other productive capacities as the years wore on. Fred Clack and William F. Utton led a buildings crew that included the names of Pallota, Dix, Johnson, Daniels and so many others. For years, Janine (Cooper) Hill set the standard for how the role of campus nurse should be performed and contributed appreciably to the general morale of a campus where morale prevailed. Ann Schienfield and Ms. R. Kazdan joined Daphne Massey in the campus library and it has been suggested that the much respected Stanley Tipping who handled AV requirements exceeded in age any Seneca employee then or since while Christine Turnbull was among the youngest.. Mrs. A. Faux was in the bookstore and Ms. D. Regimbal managed the switchboard. Counsellors came and went; but Priscilla Cole and Eva Lederer lingered on at Sheppard to bring continuity to this most essential…and sadly unsung…of services at a campus focused on occupational training .

Included among the many names related to the vital clerical and administrative roles that kept the campus humming over these years were Mrs. I.M. Bisterfield, Linda Carder, Barbara Gates, Wonita Hansen, Corrine Lim Shiu, Mrs. J. Peters, S. Scandrett, P.A. Schell, L.E. Wall, Mrs. H. Wilson, Marian Wagner, Wendy Whitear, Carol Wypich and so many over short and long durations, coming and going at a site so bristling with activity that it was easy to lose count. And, notable among them, it was in this pressure cooker that the long Seneca contribution of Leigh (Turner) Hobson would have its beginnings, serving seemingly everyone in sight in the most elementary of clerical positions after graduating from the College and culminating, some 30 years after she first arrived at Seneca, as the mother of two outstanding Seneca graduates and herself the operational head of Resource Development and the Seneca Foundation and the Seneca representative on YSISTI, all based at the newly opened Seneca@York. She would take an early retirement, coterminous with Mr. Quinlan in midsummer, 2001; however, just as Barbara Silver, her career at Seneca would span

divisions and decades and reflect the kind of commitment and common sense that actually made the place work.

(11) The OT Faculty

As with any such institution, it was the faculty who brought the campus its intrinsic culture, its energy, its bond with the students …and who made Sheppard swing. In the very early days of the College, during a discussion at the embryonic Sheppard, in response to an inquiry of Dr. Bill Stoddart, Dean of the College as he then was, as to why he sported a little beard, he would stroke the beard and earnestly reply that he got the idea on a recent trip to California where the plentitude of beards in that state (after whose colleges Ontario's had been roughly modeled) was at its peak. In answer to the same question, he had been told, "We feel we relate better to the students with a beard…or they with us!" This, not surprisingly, at the tail end of the turbulent sixties. A review of the faculty picturebook from the year 1975, when Sheppard was in its fullest, trendiest bloom, would reveal that every single member of the faculty complement of College Preparatory and Developmental Studies would be sporting the fullest and most fashionable of beards, vandykes, handlebar moustaches and shoulder-length hair. At Sheppard, it truly was the Age of Aquarius. John R. Bell, Bruce G. Berman, John Hill, John Holland, Art Merifield, Albert Scarlett, John Whidden, Derek Webster, Edward J. Montgomery… all managed by the hirsute likes of Mackie and Quinlan.

It was a faculty group that would spread all across the College in the years to come as the mandate of occupational training was rendered more and more obscure by the funding sources. It has regularly been debated in the groves of academe that the instructors with the proven teaching touch should be the ones visited upon the students who needed them the most. For one brief fleeting era, this was happening at Sheppard. In the fields of Science and Technical Skills the students were favoured with the likes of Brain Adams, Wayne Orr, John Cannon, Stuart Evans, George Hrischenko and Victor Knickle along with Al Scarlett in Electronics, Biologists Berman and Earl Levi, Brian Gaherty, the irrepressible Dr. William Quansah, Hans Wolfe, and the instructors of Drafting, Tom Jones, Norman Jones and Alan J. Johnson. The popular and anecdotal Roderick Graham, so long managing food services for the College, would bring his mastery of Dining Room Services to a decade of students. In addition to the aforementioned beards, OTD was delivered in its several forms by Barbara Young, now safely retreated to the Turks and Caicos, Jean Ahlvik, Helen Trainor, the late and sorely missed Douglas Harris, no-nonsense Course Director Albert B. Thornton, Gail Swen, Paul J. Nash, Mary Milne, Judith Hunter and, still on board these many years after, David Jackson. English, English as a Second Language and Liberal Studies in its many inventive manifestations were purveyed to the passing parade of Sheppard students by faculty who would hop, in many instances, back and forth from Sheppard to Lawrence.

It was generally conceded that if these faculty were not committed beyond the call of duty, instruction in the other subjects would be, to that extent, more difficult. Included among these were Course Directors Brenda

Bergmann and Beryl Wood, Florrie Chacon, Joanna Bechtold, Marilyn (Wilson) Welsh, Ned Coholan, Gene Damas, Carol Williams, Sylvia Taba, L. Spomenka Paric, Katherine H. Maydell, Anne McIlroy, Neil Naiman, Josef Stavroff, Janet MacKenzie, Marguerite LeMay, Richard N. Kirkup who taught the students how to stuff a turkey inside out, Stanley Jubas, Ted Heacock whose Seneca career would touch five decades, the tireless Elizabeth Holmes, Rose Grotzky, Rose Gopin, Jacqueline Desnoyers, Stephen Williams and the aforementioned Webster, Whidden, Montgomery and Bell…to name a conspicuous few. The bulk of the student body at Sheppard would find their way into the classes of the teachers of the many Commercial subjects. And they were a most dedicated and memorable group. Included among them were Course Directors Allan J. Garth and Marguerite Vail, Wendy Banfill, Malcolm Worden, Pat Bell, Winston Chen, Kay Vanstone, Eric Pilkey, Edna Reside, Heather Richards, Olive Riddell, Daphne Caldwell, Peter Crichton, Blanche Madore, Irene Tilston, Carol Surette, Maggie Ringling, Janie Rossel, Pat Saso, Mary Stark, May Thompson, Linda Shapiro, Rebecca (Latif) Pembry, Gordon Nore and Cameron J. Peet, Joan Cunnington and Earla (Taylor) Burke who would both give so much to the Seneca Retirees in the years to come, John Hill, Denise Griner, Margot Barnett and a trio of commercial professors who made it their business to remind the battle weary administrators that Sheppard Campus was something more than simply work, work, work…Terri Beauchamp, Diana Watts and Velma (MacMillan) McNulty.

(12) Academic Upgrading and College Preparatory

Academic Upgrading/College Preparatory, as an enduring artifact of the robust Sheppard Campus of the seventies and early eighties, is still offered by the College…nowadays at the College sites at Newmarket, York Gate and Eglinton Avenue East. It still tests and interviews all applicants who are upwards of age 19 to determine entry level and program suitability and is sponsored free of charge by the Ministry of Training, Colleges and Universities to focus on English and Mathematics skills aimed at achieving college-level eligibility on a continuous intake basis. Career counselling and some instruction in computer skills are offered and limited funding is available for trainee costs related to child care. The dedication to this high purpose by Seneca faculty at these far-flung campus locations remains undiminished, as one would have every reason to suspect. It is one of the things that markedly distinguishes the colleges from the universities and it is done with an aptitude and a care traceable back to these evolutionary years at the Sheppard crucible. It is still the way out and the way up for literally thousands of somehow or other disadvantaged Metro Torontonians and, as ever, none does it better than Seneca College. However, the old gray mare, she ain't what she used to be…thirty long years ago.

(13) The Seneca Shuffle

The Seneca Shuffle, a perennial game of musical chairs, locations, offices, positions, people and programs was conducted again in 1984. As the all-College memorandum would declare, in justifying such moves, with due regard for the best interests of each program, and in consideration of the space restrictions and enrolment fluctuations at this dynamic College, the

Seneca Board of Governors has approved the following changes of location for a number of academic programs; including:

- *Out of Sheppard: Post-secondary Secretarial Studies (later Office Administration) to Newnham*
- *Office Systems Operations (OSO) to Newnham*
- *Drafting to Newnham*
- *Basic Training in Skills Development (BTSD) to Lawrence and to Jane*
- *Into Sheppard The Centre for Independent Learning (CIL) from Newnham Annex*
- *The Canadian Forces Community College Program (CFCCP) from Newnham Annex*

(14) Centre for Independent Learning

And so it was that the Sheppard Campus would be occupied with a most zealous vigour by the avant-garde Centre for Independent Learning (CIL), piloted through the seventies by the rich and fertile imagination of William R. Riddell. CIL transformed Sheppard, all too briefly, back into a full-time post-secondary institution with diploma programs ranging from Tourism and Business Administration to Early Childhood Education…all delivered in a mode which pre-empted the invasion of the microcomputer and made its advocates look like prophets. It lent itself optimally to the objects of the Canadian Forces Community College Program, which would operate from this site…and it would virtually pioneer self-directed, flex-time, guided education. But…the computer storm was getting the wind up and further changes would, perhaps sadly, sweep it away. Its unique style, its highly motivated team and its indelible impact are reviewed in much greater detail elsewhere in this tract. Suffice to say …it was optimal for CFCCP; it was well ahead of its time; and it entirely scooped the concepts currently reflected in the Centre for Distributed Learning. But, it must be always remembered that in all educational institutions at all levels there is an eternal procilvity to re-inventin of the wheel. Everybody seems to do it.

At this time, to ignite some campus morale and more effectively organize student activities on this site, Kerry Jarvis, recent Recreation graduate from University of Waterloo was appointed full-time Student Activity Co-ordinator, responsible for organizing all student activities on the reconstructed Sheppard Campus and to assist the student government on that campus with its important work. By 1986, following a long and fruitful campaign initiated by SFC President for 1984/85, Jeff Calas and spearheaded by Jarvis, this campus would be able to boast about its new student lounge where students could finally relax, socialize and “have fun” in a pleasing environment of their own. The facility, following months of planning, committee meeting and negotiating with the Dean, formally opened on February 4 of that year by the now campus Dean, Bill Riddell along with Rob Holness, the Student Federation Council President of the years 1985/86.

Hired as Lounge Manager through the FUTURES program was Connie Vernon whose assignment it would be to administer and control the day-to-day operations of the Lounge. A miscellaneous array of services were suddenly made available to the students at Sheppard unlike anything in its recent

past. Students could purchase tickets for upcoming social and recreational events and gain up-to-date information on what was happening genreally throughout their far-flung college. They would have access to booster cables for their cars, calculator loans, use of 3-hole punches and staplers, a change-making machine, pay TV, weekly movies, board games, cards, darts, magazine loaners, monthly special events and video games. Queen's University it was not: but, compared to the previous five years, it was joyously received and raised Sheppard spirit appreciably.

Three years after the highly productive occupancy of Sheppard by CIL , a rumour got loose at the College of such fascinating proportions that it took on a life of its own and generated revised versions of itself until President McCutcheon felt constrained to commit to print one of the College's truly memorable memoranda. For all to read, to get the story straight, he would address the issue of a Sheppard sell-out in the following missive which merits its own place in the annals of a most colourful college:

> *November 15, 1987. Let's put a rumour to rest immediately. The College has not sold the Sheppard Campus…nor does it ever intend to. Situated at the future cross section of two subway lines, this property is recognized far ansd wide as one of the most valuable assets ever owned by the College. For those of you who missed the announcement in the Spring of this year, the College did issue a public call for proposals for the future use of this property based on a long-term lease of the land.*
>
> *Each proposal, however, had to provide space for the College. Over 50 development firms expressed interest and 11 firm proposals were received by the Board of Governors on August 4, 1987. The Board then approved the next phase of this project which will elicit more detailed proposals coming from the three finalists in this competition; being, The Penta Stolp Group, Cadillac Fairview and Inducon. Already apparent is the fact that the College will acquire a substantial amount of rent-free space with the balance of the complex used by the developer. All of the buildings will most definitely revert to the sole ownership of the College at the expiration of the lease period. Most of us will not be around (ie at Seneca) when that happens…but it is a grand opportunity for our College and one that we indeed welcome for everybody will win with this one*

Then, in a follow-up communication to the Seneca community, through the medium of The President's Bulletin, in its December, 1988 issue, McCutcheon would have still further news for the folks:

> *In April, 1988, your Seneca College reached an agreement in principle with the Penta Stolp Corporation to proceed with the development of a new, downtown North York educational centre that would combine with office and retail space on the very site of our existing Sheppard Campus. This project will virtually treble the existing campus space available to this College within the next three to five years and will, at the same time, allow the College to consolidate a number of academic activities that are presently operating out of a series of leased facilities that have no long range future for us. With the finalization of the contracts and legal documents which are already in the very closing stages, construction on this exciting project should commence in the very near future with a projected completion date scheduled for somewhere in early 1992 (see below).*

The deal between Seneca College and the Penta Stolp Corporation (PSC), whereby PSC would build a school for Seneca College in consideration of which, Seneca would "trade" PSC a 99-year lease on the land owned by Seneca, was finally signed on 24 January, 1989, contingent only on the resolution of some rather considerable computations flowing from the the initial agreement that the Federal sales tax (FST) would be applicable and the (originally unforeseen) consequences of the recently introduced goods and sales tax (GST) which would be implemented, nation-wide, effective January 1, 1991…two years downstream. Seneca was eligible, under FST, to receive a refund of the FST paid by PSC in building the school. The overall project price at the time was calculated at $37,335,000.00. the contract price, as it applied to Seneca, would be reduced by all of those features deemed not to be a part of the contract with Seneca. These would include, at 1991 values:

Public Parking	$13,025,000.00
Tower foundations	$1,000.000.00
Retail Space	$2,750,000.00
Landscaping	$175,000.00
City Service and Hydro	$100,000.00
Bonds	$323,000.00
Insurance	$60,000.00
Miscellaneous Permits	$360,000.00
Totalling	$17,793,000.00

which had the effect of reducing the contract price to roughly $20,000,000.00 for the purposes of determining the amount of FST to be included. This would come to approximately $706,000.00 (based on 3.53%). Inasmuch as the public parking and other areas noted above would not, at any time become the property of Seneca, its FST qualification would have to be pro-rated to a sum computed by PSC generally as $820,000.00. Hence, the amount Seneca would have received from Revenue Canada-Excise would have been somewhere between $706,000.00 and $820,000.00 which funds Seneca quite accurately interpreted at the time as being a loss on the deal because these funds would otherwise be available to the College for its own educational purposes. At any rate, the nature of the transaction between the College and PSC was what the law would describe as a "barter transaction"…one in which the College was determined that no actual funds would exchange hands between the parties.

The actual value of the project would be the bare-bones construction cost at $20,560,000.00, GST included which meant that, upon the ultimate sale of the building to Seneca, PSC would have to remit (7/107 x $20,560,000.00 =) $1,345,046 to Revenue Canada-Excise whereas Seneca would receive a tax credit of $260,000.00 ($966,000.00 less $770,000.00 =) $260,000.00 more than they would have received under the FST system. The additional cost to PSC they calculated at (loosely) $639,000.00. So, it was felt by PSC that the (est.) $260,000.00 over contribution to Seneca should be returned to PSC because Seneca should not, in all fairness, receive more under GST than they would have received under the FST system. This would leave a difference of

($639,000.00 less $260,000.00 =) $379,000.00. It was decided that negotiations should then commence to recover at least half of this amount for PSC. Shortly, the press was alerted to the arrangement. It approved wholeheartedly. To quote one of the respected dailies in mid-1989:

One area where there is plenty of opportunity for government to work jointly with the private sector is in the housing and development field. In the ideal situation, one gets the best of both worlds- government rules and regulations protecting and enhancing the overall social goals, coupled with the private sector's efficiency and entrepreneurship. Because the idea is new and relatively untried, many people are unsure and nervous about it. They need not be. A properly structured joint venture can benefit the government and the private sector. But, it is the public that derives the greatest benefit. Penta Stolp, to use one dramatic example, has a deal with Seneca College to develop Seneca-owned lands at the corner of Yonge and Sheppard in North York. Penta Stolp will build Seneca a new academic building in exchange for a long-term leaseon adjoining land on which Penta Stolp will build a commercial office tower. Seneca will retain ownership of the land. Seneca wins by getting a new academic building at absolutely no cost to itself. Penta Stolp gets a new office tower with a built-in market (of students). And the public…in this case, students…get better facilities and underground access to the subway without having to pay any more money in taxes.

In anticipation of the need to vacate the Sheppard Campus while the new building was being constructed on this site and, mindful of the need to address other planning and organizational considerations at the same time, The Profile 93 Task Force had been struck in the Fall of 1988 and, for the better part of a year, met with every Division in the College while skirmishing over the shape the final recommendations should take. (On this matter see the section of Profile '93 in "the Eighties"). By the autumn of 1989, its 47 recommendations had come forward and were duly tabled before the College's Executive Committee while the College and Penta Stolp girded themselves for the great barter contract that would install the majestically visible Seneca Square at the corner of Yonge and Sheppard (for more, see the article on Seneca Square under "Proposed Sites"…. in The Eighties)

Now, negotiations would commence at the same time for the Workers' Compensation Board Rehabilitation Building (suggested name, Oakdale Campus) at the corner of highways 401 and 400. Estimates by consultants at this time (1990) projected full-time student numbers at Sheppard to level off at 800 per annum into 1995 and the Oakdale site to swell, by then, to just under 3,500…thereby solving so many Seneca space problems and discharging so many overdue promises. In late 1990, nagging issues regarding the extension of nearby Doris Avenue, as well as the consequent site revisions had been resolved and the Sheppard site development plan was proceeding apace.

It was estimated that the contractor would take possession of the site in May of 1991 with construction taking two years, the College having early access in the Spring of 1993 and classes beginning in the Fall of that year. And so, while CIL pushed on through this period undeterred by the flurry of activity

mounting on all sides, the College Executive began to devise strategies for "transition". The Site Plan was approved by the City of North York (as it then wass) at its December 18,1990 meeting for the grand, new Seneca-Sheppard Campus (to be called Seneca Square). As a result, all necessary municipal approvals were in place and detail design was proceeding …with the objective of obtainng a building permit by the Fall of 1991. And so…tempus fugit.

(15) Arrivederci Penta Stolp

On St. Patrick's Day, 1991, Seneca College was formally notified by the Penta Stolp Corporation that they would be unable to continue , "at this time", with the joint development project at the Sheppard Campus. Program moves would, therefore, not be required to accommodate construction. At roughly the same time, it was learned that too many conditions and protracted dickering had scotched the "Oakdale deal". So, buoyed by mighty dreams through the whole of 1990, Seneca was back where it started. Out then went the College-wide announcement. "The College will continue to investigate alternatives in order to provide our students with the best possible physical resources to support the learning process." However, despite the hype, the gloss perennially related to the Sheppard location had faded: there was a palpable sense that the College had finally tired of the sad old building . It had become, as one administrator would remark, "The wrong place in the right place."

Never one to miss an opportunity, Vice-president Cyril Flacks, who had handled the transaction from its inception, would be quick to remind Penta Stolp that the contract had included a one million dollar penalty clause for non-completion of the project. The funds were promptly forthcoming and and, in a twinkling, Newnham Campus had a marvellous new, long-awaited, stand-alone, state-of-the-art Child Care Centre. Because Early Childhood Education was, until then, a part of the CIL-Sheppard operation, it would have to follow the new school to Newnham. Riddell and his team had found a new frontier at Yorkdale Campus. Much of CFCCP was actually taking place in or from West Germany. In 1996, the Social Service Worker Program became a part of the grand opening of the Newmarket Campus, leaving the School of Public Administration and the Retail Florist courses…both of whose days at Sheppard were now numbered. All the while, plans for the massive construction undertaking related to the Sheppard subway at the Yonge Street junction, had caused TTC to put Seneca on the alert.

The new 6.4 kilometre line, culminating at Fairview Mall, would carry 17 million riders per year and be fully operational in 2002. The campus would simply not be accessible during the time of construction. In May, 1997, the Sheppard Campus was leased to the Toronto Transit Commission for the duration of the subway construction. At the time of this announcement…this time from Vice-president, Academic, Dr. G. Anthony Tilly…the wording would embellish the news with the following intelligence and a faint requiem. "We will also, during this time, seek offers for its sale or development, with the objective of using proceeds for campus development and redevelopment…..Sheppard has given many Senecans, from the pioneering days to the present, some very happy memories." Then, on August 6 of that

year, “The Sheppard Campus was vacated on June 20, 1997. The School of Public and Legal Administration has moved to the Newnham Campus along with support such as the Learning Resource Centre, Registration and Counselling.”

(16) 30 Years After….Sold!

Around this time, as the original commitment of funds, to support the Seneca@York project, began to slip through the College’s fingers and the fundraising team fell grievously short of hoped-for targets, the final resort was had to that most final of resorts…the sale of assets. In the summer of 1997, the abundantly appointed, 30-year-old Leslie Campus was sold off and the Nursing School was moved to the King Campus. It could hardly escape the notice of the impecunious College that a wholly-owned yet currently unusable building at the corner of Yonge Street and Sheppard Avenue …in what was now Metro Toronto, right plum atop the new $143 million Yonge /Sheppard subway station junction…was going to fetch at least a reasonable penny, if not a pretty one, whose luster was only a little marred by desperation and dilapidation. Bottom line was…it fetched enough (along with the perhaps less well considered evaluation and sale of Leslie Campus). And, at once, a whole treasure trove of founding memories… dating from the summer of ‘67 when George Wootton renovated the old factory for opening day…was forever, in the annals of Seneca lore, gone with the wind.

Footnote

Dianne Burley was named the first female dean of an academic program in the college history in 1976 when the Secretarial Studies Program became a Division. She was first the acting chair when it was part of the Business Division (1974) and then applied for the dean position in the "International Year of Women" (1976). It became the Office Administration Division and she was its dean until 1980.