This is the story of how a group of visionary believers in the transformative power of information technology at UNB (a small Eastern Canadian university deep in the great North Woods of Outer Canada) led their university, city, province, region, and occasionally even Canada and the whole world, into the information age.

This book is dedicated to the memory of Dana Wasson and Dave Macneil, two true pioneers.

Editor: Bev Bramble

Foreword by Frank McKenna, former Premier of New Brunswick and active supporter of innovation through digital technology.

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Foreword

By Frank McKenna

Every now and then
I run into a friend
That tells me that they're travelling 'cross the country end to end
They tell me 'bout their plans
And where they're going to
When I ask about New Brunswick
They say, "We're driving through"
And I say, "Driving through?
You can't drive right through!
Oh the woods may be thick
And the highway may be new
But that don't mean that you should drive right through."

Lyrics by David Myles: *Don't Drive Right Through* from his album *Live at the Carleton*. Used with permission.

New Brunswick was traditionally a rural province where most of the population made their living farming, fishing, or working in the woods. It was often called the "Drive Through Province." Tourists would drive right through on their way to Nova Scotia, Prince Edward Island, and Newfoundland without stopping. But times change and today NB is more widely known as the "e-Province." Today the provincial economy is much more diversified and the majority of our citizens live in cities and towns. And a growing number of our people make their living as information and communications technology (IT) entrepreneurs and workers in support of businesses large and small.

Among those IT workers are an amazing number of visionaries, entrepreneurs, and innovators. Thanks to the internet, it is now possible to work here on the east coast of Canada amidst the unspoiled beauty of this province surrounded by its rivers, fields, trees, and seas while participating in the global economy as easily as if you were in New York or London.

How did this "miracle" happen? *Pioneers on the Information Highway* tells the largely untold story of how IT came to the University of New Brunswick (UNB) in 1958 and how a group of visionaries there, many of them fresh off the farm, used computers to transform higher education. At the same time these leaders were instrumental in positioning NB to participate in transforming every aspect of life on our planet, be it government, health care, banking, whole new fields like cybersecurity and e-commerce, or our traditional strengths: farming, fishing, mining, and forestry.

At UNB the revolution started in 1958 in Canada's first School of Engineering, in an old gymnasium, deep in the Electrical Engineering Department, with the purchase of a small but expensive digital computer. Faculty members in that unit and a few other professors elsewhere on campus realized that the future was digital technology and programmable computers. They also realized that the way to bring computer technology to campus where funds were in short supply was to partner with industry – organizations like NB Power that shared their vision for the future and desperately needed access to a big computer as well as a skilled IT-trained work force to implement that vision.

To meet the growing demand for computer cycles from businesses large and small as well as provincial and federal government departments, UNB soon purchased a large mainframe computer and opened a Computing Centre serving the needs of not just its own campus but also all the province's universities via the NB Educational Computer Network, the first such network in Canada. It was the first of many UNB IT firsts documented in this book.

Universities were largely unchanged over the first 500 years of their existence but UNB changed dramatically following the introduction of IT. In just a few short years, thanks to the fathers, forefathers, and pioneers of computing who "paved the highway," every aspect of campus life was impacted – teaching and learning, research, libraries, administrative units, and most importantly, the student experience.

But that is just the beginning of the story. The whole IT industry was in a state of constant and accelerating flux as innovators brought waves of new technology to the market that were not only faster and smaller but also far less expensive. UNB had to keep re-inventing itself and played a major role regionally, nationally, and internationally in one of the most important innovations of our time: high speed networks including the internet.

Today NB is in an enviable position. We have everything we need to develop and attract the intellectual capital we need to put and keep our small province and our region on the leading edge of technology in a shrinking world and bring prosperity to our citizens. NB is a safe place to raise a family. It is an affordable place to live. The quality of life is wonderful – no long commutes to work and you are never very far from nature. We have high speed connectivity to the rest of the world. And we have a technology eco-system that supports our IT initiatives.

UNB continues to be a leading-edge school and to play a critical role in providing the underlying IT skills and infrastructure as well as the entrepreneurs that are required to transform not just our economy but our whole society. *Pioneers on the Information Highway* details how IT changed one industry. But it stands as a model for other industries to follow into the exciting future that awaits. We owe the pioneers at UNB a huge and heart felt thank you. *Frank McKenna, Fredericton, NB, December 2022*

A Brief Bio of Frank McKenna, from the McKenna Institute:

Frank McKenna is a politician, ambassador, lawyer, and businessman whose relentless pursuit of New Brunswick's best interests has been a constant across the remarkable trajectory of his life and career.

As Premier of New Brunswick from 1987 to 1997, he advanced a contemporary vision for New Brunswick predicated on state-of-the-art technology, progressive programs, and pride. New Brunswick became a global leader in e-government and achieved national acclaim for its technology prowess.

Frank was the first premier in Canada to have an email address and a computer in his office. An early adopter, he has long understood the power of technology to make us more connected, successful, and contemporary. During his three terms in office, he advanced a revolutionary vision of moving New Brunswick to a knowledge-based economy based on "bandwidth and brain-width."

He holds degrees from St. Francis Xavier University and University of New Brunswick Faculty of Law, where he earned a prestigious Lord Beaverbrook Scholarship and graduated second in his class.

Introduction

This is the story of how a group of visionary believers in the transformative power of information technology at the University of New Brunswick (UNB), a small eastern Canadian university in the great north woods of outer Canada (the Maritimes) led their university, city province, region, and occasionally even Canada and the whole world into the information age.

This book was not supposed to be written. The authors Greg Sprague and Janice El-Bayoumi, both retired University of New Brunswick Computing Centre (UNBCC) employees, were members of a team that in 2014 set out to collect information about the history of the UNBCC and the people who worked there. The goal was to gather everything we could find, digitize it, and then make the data collected available through a website. The team was not interested in writing a history book but welcomed anyone so inclined to feel free to use the data we gathered and take on that task.

Later, however, at the encouragement of the current and two former UNB presidents: Paul Mazerolle, Eddy Campbell, and John McLaughlin respectively; and Professor Emeritus in History Steven Turner, Greg and Janice agreed to creating this book.

The goal of this book is to convey what the computing and work environments were like from the point of view of the pioneers who were there at the time, in their own words where possible. It is not a typical history that provides a single narrative. It is not meant to be read cover to cover. The intention is to enable readers to focus on what interests them the most. As a result, it often provides accounts of the same events from quite differing perspectives which, in the authors' minds, make them all the more interesting.

We encourage readers to provide additional stories and material for our website http://hit.lib.unb.ca. This site also contains additional photos and other material not included in this book. We challenge readers to write and record their own stories for posterity. It has been a blast.

We would like to sincerely thank all those who helped make this book and history project possible.

Enjoy!
Greg and Janice, 2023

About the authors

Greg Sprague

Greg was born in 1946 and grew up in the potato fields of New Denmark, NB, Canada, a Danish community established in 1872.

He graduated from UNB with a BSc (Math, Physics) in 1967 and went to work for IBM in Montreal. He joined the UNB Computing Centre in 1969, the first person hired to develop administrative systems at the university.

He left UNB to become an IT Manager in industry and then consulted in Africa before returning to UNB to obtain an MSc in Computer Science. After graduating he rejoined the UNB Computing Centre where he worked as a systems programmer, Manager of Operations, and Manager of User Services before taking a job as Director of Computing at Susquehanna University in Pennsylvania, USA.

On his return to Canada, Greg served as Assistant VP Academic at UNB and taught in the Business Faculty. He was appointed the Director of Computing Services at UNB in 2000. His final position before retirement was as a research officer (information privacy, security, and trust) with the National Research Council of Canada's Institute for Information Technology.

Greg enjoys fly fishing, canoeing, bicycling, tennis, photography and exploring the great outdoors. But most of all loves "hanging out" with his wife Linda and their children and grandchildren.

Janice El-Bayoumi

Janice moved to Fredericton in 1979 right after graduating from Utah State University with a degree in elementary education. She has lived in Fredericton ever since. Her father was raised in Shanghai, China and her mother on a wheat ranch in Walla Walla, Washington. Growing up she lived in Venezuela, Guatemala, and New Jersey. All those varied backgrounds and experiences certainly influenced the person she became. Her main contribution to this book has been transcribing and editing the many oral and questionnaire interviews of IT pioneers. What wonderful memories it brought back.

Janice started working in IT in 1981 when she was hired as a programmer for an office supply company selling dedicated word processing machines — this was before PCs came on the scene. She had completed only one university level programing course which she took just for fun.

Greg Sprague hired her to work at Computing Services in 1989 to assist Brian Cassidy with the account administration of student labs and to train UNB faculty and staff to use WordPerfect. The use of student computer labs, PCs and word processing had begun to expand across campus. She also provided technical support to users. Over time her duties changed. Eventually she led the Client Services team which

provided Help Desk and on-site technical support to the community, managed the ITS website, trained users on many topics, managed all accounts, procured computers and other technical equipment and more. At one point she managed more than half of all ITS (Information Technology Services) employees plus numerous part-time student employees. When Steve Rosenfeld became Acting Director of Computing Services, he promoted Janice to be his right-hand person, with a title something like Acting Assistant Director of Computing Services. She returned to her role as Director of Client Services when the new Associate VP-ITS was hired. In 2008 she was recruited to be the Acting Director of the Centre for Enhanced Teaching and Learning, to fill in for the Director's leave. In 2009 she returned to ITS with the title of Director of Quality Assurance and Process Management, which she held until her retirement in 2018.

During her entire IT career, she always thought that her lack of formal Computer Science education was her secret weapon. It really helped her bridge the distance, in an authentic way, between the technology and the many users she served. Although she enjoyed writing in high school and university, she was pretty rusty at it by the time Greg asked her, in the mid to late 1990s to write a proposal to reorganize the Help Desk. What a disaster! But Greg provided wonderful support on that writing venture and from then on, she did lots of writing as part of her various roles at UNB.

Bev Bramble, Editor

Bev was born and grew up in Maugerville, NB, just east of Fredericton. He has two degrees in Education and came to UNB as an Instructional Designer in the Teaching and Learning Services (TLS) unit of the Centre for Enhanced Teaching and Learning (CETL) after a long career in e-learning design in the private sector.

His responsibilities at UNB included keeping abreast of educational research on effective teaching methods at a time of the digital technology transformation of teaching and assisting faculty as they implemented these methods. He was also involved in research into effective educational methods that was conducted at UNB.

Bev retired in 2020 and when not editing keeps active biking and scooting on the Fredericton walking trails, working his way through his personal library, learning French and how to play the piano, working on food insecurity initiatives, and trying to be a good grandfather.

(L-R) Authors Greg Sprague and Janice El-Bayoumi and Editor Bev Bramble

Acknowledgements

The authors would like to thank all the IT pioneers who agreed to be interviewed as part of the UNB HIT project. This book would not have been possible without your input. We wish that we could have included even more UNBCC employees, UNB faculty and staff members from both campuses, students and former students, NB/PEI ECN (Educational Computer Network) directors, external customers, and others in our book. We reached out to as many UNB IT pioneers as we possibly could in a sincere attempt to give credit where credit was due, but we have no doubt failed to recognize every important individual who contributed to this UNB success story.

There were pioneers we were not able to reach – some had passed away; some were too ill to be interviewed and others we simply couldn't track down. If we missed you or someone you feel deserves recognition, we apologize profusely. In either case, please contact the authors and we will add your name and story to those already listed on the HIT website.

The following people warrant special thanks:

UNB Presidents

- Paul Mazerolle (2019-)
- Eddie Campbell (2009-2019)
- John McLaughlin (2002-2009)

The UNB HIT Team

- Dave Macneil (Co-chair)
- Greg Sprague (Co-chair)
- Terry Arnold
- Brian Cassidy Jr.
- Brian Cassidy Sr.
- Janice El-Bayoumi
- Peter Jacobs
- Kirby Keyser
- Peter Ruddock

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- Melissa Dawe
- Rik Hall
- Angus Hamilton
- Clint Hamilton
- Susan Montague
- Rashid Minhaz
- Janet Moss
- Lorraine Nolan
- Steve Rosenfeld
- Ruth Shaw
- Steven Turner
- Brent Wilson
- All those who agreed to be interviewed

Those who Submitted Stories

- Terry Arnold
- Virendra Bhavsar
- Alan Burk

- Brian Cassidy
- Mike Ircha
- Glen Jordan
- Andy Pope
- Mike Richard and Maurice Gallant
- Andrew Sprague

Beyond UNB

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- Mary Ogilvie, NB Land Registry Information System
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- Colleen Booker (Sprague)
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- UNBCC users who worked as partners with our staff discovering ways to make UNB an ever better university through the use of appropriate IT solutions.
- All those beyond UNB who agreed to be interviewed.
- Janice's husband Mohamed for the many hours he spent keeping their old computer running so she could use it and of course for his ongoing encouragement.

Chapter 1: Introducing the UNB History of Information Technology Project (HIT)

The idea behind recording the history of information technology at the University of New Brunswick (UNB) first took shape in a discussion between two retired UNB Computing Centre (UNBCC) directors, Dave Macneil and Greg Sprague, over coffee in January of 2014. They decided it would be a good idea to document the history of the Computing Centre while their memories were still relatively reliable and before all evidence of the “early days” was shredded or otherwise discarded. Note that Dave and Greg subscribed to the philosophy that retired people should only take on projects that would be fun, interesting, and had no pressing time deadlines that might interfere with sailing or fishing trips.

Over the next few weeks, they came up with an outline for the project that included lists of the UNBCC employees with brief bios, computer purchases and upgrades together with their costs as well as “speeds and feeds” (performance characteristics), and artifacts including photos, newsletters, annual reports and budgets, phone books, and user manuals. This information could then be compiled as a self-published online history document and made available to anyone who was interested, mostly current and former UNBCC employees. How hard could writing some kind of a brief history be?

After a few more discussions it became apparent to Greg and Dave that they could start collecting the lists, but they really had no clue as to how to go about writing the document and that it might be good to talk to someone who did before they got too far down the road. They decided to contact Steven Turner, a professor of the history of science in UNB’s History Department.

Steve listened to their idea to write a history of the UNBCC, and said it was interesting, even exciting, but he thought they were tackling what was easy, not what was important. He suggested they needed to write a history of information technology (IT) at UNB and talk about the campus-wide impact of IT on teaching, learning, research, administration, libraries, and student life. Steve also asked some questions that the “history book” needed to address. Where did the large amounts of money needed to purchase computers come from at a time when funding was so difficult to obtain at universities which tend to be financially ultra conservative and risk averse institutions with many units competing for the very limited dollars available? What new jobs and job classifications were created? Where did the skilled IT people come from? Who on campus supported this IT revolution? Who opposed it?

Professor Turner wanted to hear about the battles and the blood on the floor.

At their next coffee klatch Dave and Greg agreed that Steve Turner was correct, but did they want to go down that road? It was beginning to sound like hard work and a job that might even require some financial support should they be so silly as to go ahead.

They decided to bounce the HIT idea off one more person, former UNB President John McLaughlin. John loved the idea and thought the story needed to be told, but he added another totally different perspective. He wanted the document produced to focus on how the IT revolution at UNB impacted not only life on our own campuses but also how it fostered innovation in the City of Fredericton, the province of New Brunswick, Atlantic Canada, the whole country, and the rest of the world. John wanted us to document both the political and socioeconomic impacts.

With considerable trepidation, Dave and Greg allowed the scope of the project to creep and the UNB HIT project was born.

The next step was to form a team of like-minded individuals to share the burden. They had to be people who were excited about the project but who were also easy to get along with. Retirement was too sweet to be spent in long meetings with those who loved to argue and preferred talking to doing.

The original HIT team consisted of Dave and Greg (co-chairs) plus four retired long term Information Technology Services (ITS) employees: Kirby Keyser (Manager of Administrative Data Processing), Brian Cassidy (Systems Programmer), Peter Ruddock (user support) and Terry Arnold (Account Administrator and resident historian). In addition, two then current ITS employees were recruited to complete the team: Janice El-Bayoumi (user support) and Peter Jacobs (telecommunications engineer). Note that over the years the UNB Computing Centre changed its name three times: first to the Computing Services Department, then Integrated Technology Services and finally to Information Technology Services.

The team quickly agreed on a mission statement and a list of goals.

Mission statement

The project team drafted a mission statement, "…to create an archive (both physical and online) documenting the impact of information technology on all aspects of campus life including research, teaching and learning, administration, libraries and the student experience. In addition, the social and economic impact of computing at UNB on life in New Brunswick will also be documented."

The HIT team listed eleven project goals:

- Write a history of the UNB Computing Centre including not just the technology changes (hardware, software, networks) but also the people who made it happen as well as the challenges that had to be overcome. Document both the successes and the failures.

- Identify the early adopters of technology and interview them to capture their stories.
- Collect and catalog material (artifacts, articles, photos, video, etc.) related to the history of information technology at UNB before it is too late.
- Populate a website that will be a resource for those who want to further analyse the material collected, as well as a blog for those who want to submit stories and anecdotes.
- Document the social and economic impact of computing at UNB on life in New Brunswick.
- Capture the impact of technology on all aspects of campus life – research, teaching and learning, administration, libraries, administration, and the student experience.
- Document the partnerships that were established with industry, government and educational institutions in the region.
- Publicize the many provincial, regional, national and international awards and accomplishments that resulted from the strategic use of IT at UNB.
- Identify the entrepreneurs and spin-off companies that had their roots in computing at UNB. Also identify leaders in many segments of society whose knowledge of technology had its roots at UNB.
- Extract some lessons learned over the years that can be applied as rapid technology and disruptive change continues unabated into the foreseeable future.
- Encourage other units at UNB to undertake similar projects.

After reviewing these goals, it was decided to nix any ideas of writing a book, at least in the short term, and that the priority should be collecting information and making it available via a website. Writing a computer program, no problem. Doing some research and writing a document then posting in online, harder but doable. Writing a history book, no way! That was well beyond our area of expertise. It was clearly urgent that we identify the pioneers and interview them before it was too late. Video interviews were obviously the way to go. If someone outside the HIT team wanted to write a book, they could fill their boots. We had other priorities.

It was also clear that the team would need additional help: a webmaster, someone who knew something about creating an archive, and a person with the knowledge and equipment to shoot and edit the video interviews. In addition, we would need online storage space, physical storage space, a work room, a campus unit to host the website, and some money.

Dave and Greg met with then UNB President Eddie Campbell who was intrigued by the project. They presented him with a wish list and a budget. He in turn committed to finding physical space on campus as well as $5,000 to fund the project, most of which

would be spent on shooting and editing videos. Melissa Dawe, Director of Strategic Projects and Senior Advisor, Office of the President, became our liaison with President Campbell.

The next hero who came to our rescue was UNB Dean of Libraries Leslie Balcom. After listening to Dave and Greg give their HIT sales pitch, she offered the services of her webmaster Brian Cassidy Jr. and the Harriet Irving Library's (HIL) Archives and Special Collections unit as well as a URL (hit.lib.unb.ca). After meeting the head of Archives Fran Holyoke and Archivist Patti Auld Johnson, we were introduced to a new-hire, digital archivist Christine Lovelace. Both Brian and Christine agreed to join the HIT team.

The final hero was Joy Cummings-Dickinson, head of Media Services at UNB. Joy made her media production coordinator Heather Marmura, as well as the well-equipped Media Services studio, available to the HIT project. Heather's enthusiasm and experience with video interviews was exactly what we needed and when she agreed to join us, our HIT team was complete.

We moved into our space in a married students' residence which we furnished with items from campus surplus (a table from the Dean of Engineering's office) and our own homes (shelving from Dave Macneil's basement). Next, the team started contacting current and retired UNBCC employees looking for relevant material that has been saved from the shredder by far sighted staff members. Then we began the process of moving these items to the HIT "office," rummaging through boxes of material, and creating an inventory. BTW it was critical that at least one member of the team owned a pickup truck.

We were fortunate to find a complete set of *Compilation*, the UNBCC newsletter published from 1968 to 1993. Another valuable find was a copy of the UNB-written user guides (known as CLs, which stood for Computer Literature) to the software and in some cases hardware available to UNBCC users. Finally, UNB graduate student Lorraine Nolan created a timeline of the most important events at the Computing Centre covering the 1950s through to 2009, under the supervision of Janice El-Bayoumi.

Other key inventory items included photographs and slides, a listing of artifacts in the display cases outside the Computer Room on D-Level, Head Hall, and copies of the UNB departmental telephone books printed annually on paper until the mid-90s. The phone books were very helpful when compiling a complete list of the UNBCC employees over the years.

Our collection also included books, computer room floor plans, vendor manuals for hardware, software, and communications products installed at UNB, personal computers both laptop and desktop, an acoustic coupler in a wooden case, old terminals, IBM Selectric printer golf balls, papers from the estates of Dana Wasson and Laurie Mersereau (former IBMer), minutes, budgets, proposals, pens, coffee cups, card decks, newspaper clippings, papers published in conference proceedings, annual

reports, and material related to the New Brunswick/Prince Edward Island Educational Computer Network (NB/PEI ECN).

One very special item was the Sun workstation operated by HIL librarian Steve Sloan named “DeGaulle,” UNB’s first web server. Other special finds included a letter from Dana Wasson to “Brain” Cassidy offering him a job in 1968 as a programmer analyst and Richard Ward’s hockey sweater from the year the Faculty of Computer Science ice hockey team won the UNBF intramural hockey championship.

And last but not least, we obtained a very rare document: a history of the Very Amateur Hockey League (VAHL) written by Terry Arnold (UNBCC account administrator and former computer operator). The VAHL was noon hour hockey at its finest. It operated out of the Lady Beaverbrook Rink using surplus Varsity Red Devils gear provided by Vern Saunders. The league attracted UNBCC staff plus faculty members including Dana Wasson himself, administration staff, students, external customers, and former UNB varsity hockey coach Pete Kelly who once scored a Stanley Cup winning goal for the Detroit Red Wings.

Over the next two years we shot thirty video interviews with UNBCC staff from both campuses, individuals from the Faculty of Computer Science (FCS), most other faculties, the libraries and administrative units, as well as ECN members, UNB graduates, successful entrepreneurs, and external customers.

We created a generic interview script for the videos which we then customized for each interviewee and forwarded to them prior to the interview. When the interview video was edited, it was sent to the interviewee for approval before being posted to the web. Most interviews were done in person in the Media Services studio in D’Avray Hall; however, a few were conducted via Skype. Heather Marmura asked the questions, her staff operated the equipment, and an HIT team member sat in to ask follow-up questions.

Our meeting with UNB Archives was another learning experience. They were excited to accept and catalog HIT items in digital form, however they had no space to store physical items. And they were not interested in artifacts unless they were unique to UNB so things such as IBM manuals, even though near and dear to the hearts of HIT team members, were discarded. These items could be found elsewhere.

Much to our relief we learned that we did not have to design our own collections database. There were already published standards covering this subject. Archives also assisted with thorny issues such as copyright, ownership, privacy, and item donation forms.

The HIT project was first presented to the public at a UNB alumni event, Homecoming 2016 in September of that year. Dave Macneil and Greg Sprague presented the project results to date as part of the homecoming weekend program. We also added a UNBCC reunion to the program and set up a video booth to record stories about people’s experiences with computing at UNB. In addition, we took this opportunity to announce that Bob Skillen, VP Development and Donor relations, and

Peter Coates, Senior Associate Director, had helped us set up an account to raise additional funds to underwrite the costs of the HIT project. HIT's debut was a big success so we soldiered on.

In 2018 a work-study student, Rashid Minhaz, was hired to scan our collections including newsletters, CLs, and photos. Thanks to OCR (Optical Character Recognition) we were able to make the documents searchable on our website.

Just as the project was nearing completion but running out of steam, we suffered two enormous losses. In September of 2018 Dana Wasson passed away. We were not able to interview Dana due to poor health but we were fortunate enough to conduct an interview with his son, Brad Wasson. And then in November of 2018 Dave Macneil died very unexpectedly. In September he was winning sailboat races only to have his obituary published a few weeks later. These events spurred our committee on. The finish line was in sight.

Also in 2019 a committee was formed to honor Dave Macneil by renovating the Software Engineering (SWE) lab in Head Hall and dedicating it to his memory. A fund to support an annual SWE prize in Dave's name was also established. The committee included Greg Sprague (Chair), Dean of Compute Science Luigi Benedicenti, Dean of Engineering Chris Diduch, Computer Science Professors Jane Fritz and Ali Ghorbani, Engineering Professor Bruce Colpitts, SWE students Carter Harrington and Alex Demmings, Robert Moss from the Engineering Faculty and Tamara Parry from the Development Office.

In February 2020 Greg gave a talk about the almost completed HIT project to the UNB Retired Employees Association (UNBREA). A number of people came forward with suggestions and "new" stories. It became very apparent that a web project is never really finished. A video of the presentation is available on the HIT website. After the session Professor Emeritus Angus Hamilton questioned Greg on the decision to not write a book. Angus noted that he himself had authored several books during his ninety-seven years and added that "writing keeps me young." Born in 1922, his books included several in his field of survey engineering as well as accounts of growing up on a farm in Ontario and serving as a radar mechanic in WW2 with the RCAF and RAF. Angus noted that writing a book is a lot of work but extremely rewarding and encouraged Greg to reconsider. This caused Greg to give pause and a book outline started to take shape in his head.

About this same time the FCS decided to dedicate a lab in the Information Technology Centre (ITC) to Dana's memory during the celebration of the faculty's 30th anniversary in 2020. Unfortunately, both lab projects were put on hold due to COVID-19 restrictions as were plans to publicize the HIT website and hold an official ribbon cutting celebrating the successful conclusion of the project.

In late 2020 Greg met with UNB's new president, Paul Mazerolle, to make him aware of UNB's IT history and to introduce him to the HIT project. President Mazerolle expressed enthusiastic endorsement for the need to tell this exciting UNB story widely

and supported Professor Hamilton's suggestion that a book needed to be written. Inspired by President Mazerolle's enthusiasm for the project and his encouragement to write a book, Greg caved to the pressure and committed to making it happen.

After some sober second thought Greg realized that if the book were ever to see the light of day without totally ruining his idyllic retirement (tennis, biking, fly fishing, canoeing, snow shoeing, hiking, photography, woodworking, and taxiing four grandchildren around), he would need a co-author. When Janice El-Bayoumi signed on in March of 2021, the die was cast.

Christine Lovelace, Rashid Minhaz (UNB Work Study Student), Brian Cassidy Sr.

Greg Sprague, Dave Macneil, Janice El-Bayoumi

Peter Jacobs, Kirby Keyser, Terry Arnold

Brian Cassidy Jr.

Heather Marmura, Director of UNB Media Services