

An Ode To Karen & Tony

The Gallipoli peninsula is a 35-mile finger of land that forms the northern border of the Dardanelles- the straits that connect the Sea of Marmara to the Aegean Sea. The Bosphorus straits, at Istanbul, connect the Sea of Marmara to the Black Sea. Between them, these straits separate Turkish Europe from Turkish Asia. It is commonly believed Western intelligence watch the Bosphorus underwater traffic carefully for Soviet submarine activity leaving the Black Sea en-route to the Mediterranean, but it is the Dardanelles, which neck down from several miles wide to 1600 yards coast-to-coast at Çanakkale and veer sharply north, then east at a depth of only 200 feet, where submarine movement is perilous and where clandestine activity can be monitored with ease and accuracy.

On February 16, 1915, a joint military operation of the Allied Powers commenced a naval bombardment on the Gallipoli peninsula that did not end until April 25, 1915, when Allied troops consisting of elements from New Zealand, India, the United Kingdom, French West Africa, and the 4th Infantry Brigade, Australian Imperial Force, Broadmeadows, Victoria, landed on the western coast of the peninsula near Gaba Tepe and Ari Burnu. The invasion represented an attempt by the Allied Powers to break through the Turkish Straits and take Istanbul (then called Constantinople). The battle plan had been conceived by the First Lord of the British Admiralty, Winston Churchill, who argued that attacking Germany's soft underbelly would halt WW I quickly and open the straits to re-arming and resupplying Russia. By 5 pm, 15,000 ANZAC troops had been repelled and pushed back to the beachhead by the Turkish 19th Division. The battle was a colossal failure: 130,000 Allied soldiers were killed, and 262,000 were wounded. The failed campaign doomed Russia. It led to the Czar's abdication in 1917 and gave rise to a powerful Communist movement in Europe.

In Turkey the campaign is known as the battle of Çanakkale. In Britain it is known as the Dardanelles Campaign. In Australia it is known simply as Gallipoli.

Sir John Monash commanded the 4th Infantry Brigade, Australian Imperial Force, which was held in reserve and did not land until the morning of April 26, 1915. The

Brigade set up on the left center of the ANZAC troops and proceeded to organize a defense in expectation of the Turk counterattack. Monash's corps commander, Lieutenant-General Sir William Birdwood ordered a night offensive on May 2, 1915, which ended disastrously with the loss of many ANZAC soldiers. But Colonel Monash successfully commanded his Brigade during two Turk counter offenses on May 19 and 29, after which the Brigade was sent to Egypt where it joined in the defense of the Suez Canal.

When the Brigade moved to France in June 1916, Sir John was promoted to Brigadier General and led the 3rd Division as it repelled the Germans 80 miles north of Paris, at Amiens. In July, he was promoted to Lieutenant General and commanded troops participating in the July 4, 1916, Battle of Le Hamel, a small hamlet 12 miles east of Amiens on the south side of La Somme's flood plain. During the battle, he had to forcefully argue with the Commander-in-Chief of the American Expeditionary Troops, a General John Joseph Pershing, who demanded Monash immediately withdraw his troops. Later Sir John would say, "The battle was over in 93 minutes... the perfection of teamwork." Some military historians acclaim it the first "modern" battle: a Corps Commander of genius, who integrated the Australian infantry, the Tank Corps, the Royal Artillery and the RAF. (Three days earlier, in Texas, a 26-year old American soldier named Dwight David Eisenhower was married and promoted to first lieutenant on the same day. Later, General Eisenhower would study Sir John's battle techniques in advance of a somewhat larger invasion of the same continent, 120 miles southwest of Amiens at the beaches of Normandy.)

As a general, Sir John had many essential qualities: the ability to bear great strain and to make quick, yet clear decisions; extremely articulate, wide breadth of grasp, sheer intellect, forceful personality. The efficient and harmonious repatriation of 160,000 Australian soldiers at the end of the war, almost entirely inside eight months, is one of his most remarkable achievements. He left Europe for home on November 15, 1919 and received a tumultuous welcome in Melbourne on Boxing Day.

A civil engineer by education, Sir John was vice-chancellor of the University of Melbourne from 1923 (and acting Chancellor in 1925-1926). He also served as the head of the State Electricity Commission of Victoria and was broadly accepted as the greatest Australian of the early 1900's. Sir John Monash lived to be 66-years old. He is remembered as saying "Adopt as your fundamental creed that you will equip yourself for life, not solely for your own benefit but for the benefit of the whole community." The largest crowds ever assembled in Australia attended his state funeral.

Monash University, the second oldest university in the State of Victoria, was founded in 1958 and is named after Sir John Monash. It is located 12 miles southeast of Melbourne center in the suburb of Clayton, a town bordered on its north and east by the M-3 and the M-1 (a.k.a. Monash Freeway) and on its south and west by Port Phillip Bay. The university's 45,000 undergraduates and 17,000

graduate students make it the largest student body in Australia today. It is the only Australian member of the M8 Alliance of Academic Health Centers, Universities and National Academies. According to the Times Higher Education World Universities, it is ranked in the top one percent of world universities. In the 1960's-1970's it existed in an environment where most of the local professionals had attended the older University of Melbourne, and disdained the upstart institution. So Monash hired a young and talented teaching staff, actively sought students who were Indigenous Australian and, because the campus was brand new, it was able to provide modern handicapped access to its student-body. By the early 1970's Monash was the center of student radicalism in Australia; in 1971, 4500 students, then a substantial proportion of its entire student body, blockaded the University Council chambers to prevent student radicals from being expelled for conducting an anti-Vietnam War occupation- the expulsions were dropped. Also, in 1971, Monash University conferred the degree of Bachelor of Engineering (Civil) on a chestnut brown-headed, lanky, twenty-two-year-old youngster from the Melbourne suburbs named Anthony Gordon Collins.

Collins Street is a two-mile long thoroughfare that runs nearly east to west, one block north of the Yarra River. It was named after Lieutenant-Governor David Collins, born in London in 1756. Collins chose a career in the British Royal Navy, which then took him to America in early 1775 where he fought on the losing side at the Battle of Bunker Hill. He was one of the founders and, in 1788, the judgeadvocate of the first penal colony of what would become Sydney, Australia. Later, he moved south and established the first- but short-lived- settlement at Sullivan Bay, a skinny peninsula that closes the south entrance to Port Phillip Bay and sea access to Melbourne. Later he moved to Tasmania where he founded Hobart, now its capital.

Locals think of Collins Street as Melbourne's Main Street, although it has long been Melbourne's financial heart. At its eastern terminus, the "Paris" end, it is a short walk to the Old Treasury and Victoria Parliament buildings. At its western terminus, one can have a fair dinkum cup of coffee on an avro at the Café Bourgeois next to Victoria Harbour. You can have fun today with the Google automaton and virtually walk the entire two-miles, but in the early 1950's, a young Anthony Collins would have really walked along his namesake street and observed the many Victorian era buildings, including the massive Scots Church at Collins and Russell Streets, founded in 1838 by the Reverend James Forbes, the first Christian minister to settle in Melbourne. Further along, he might have wondered what went on behind the large bow windows at 36 Collins Street, known then and now as the Melbourne Club.

The Melbourne Club is a men-only, by invitation-only, social club also established in 1838 two blocks from the Scots Church. The Speaker of the Victorian Assembly in 1997 was the Honorable Sidney James Plowman. Jim might invite you to sit in his Speaker's Box and observe a rowdy "Questions" session in the Assembly. The Speaker, wearing his white wig and black robes, would be required to pound his gavel while saying "Ord-ah, Ord-ah" in a commanding, deep, sonorous voice, forty or

fifty times during the session. After the session, the Speaker might invite you to the Melbourne Club where a needed refreshment to relieve a raspy throat could be had away from the prying electorate and press corps. You would exit Parliament through the Speaker's door, cross Spring Street, and walk quickly west on Little Collins Street until you reached Club Lane. The Melbourne Club's back door, at the end of Club Lane, was an accommodation to members who felt it necessary not to be seen approaching the massive oak front doors that faced Collins Street. The lounge is illuminated by high south-facing bow windows that softened the rich blackwood and jarrah wall panels. Jim sits in a corner of the lounge reserved for the Speaker and his guests. Shortly, with no order given, the bar man in starched white shirt and formal coat tails approaches carrying a silver tray on which two tall, cold Tom Collins are perched. He bends rigidly at the waist, his back straight, head looking forward, the tray perfectly horizontal, and places the tall glasses in front of the Speaker and his guest. The white gloves prevent any finger marks on the glasses. A second round arrives as the first round is nearly depleted, again, with no apparent communication. Jim waits for his guest to catch on. It's subtle, but you get the point... eventually: A Tom Collins on Collins Street.

Jim passed away on May 3, 2007 at his country farm "Erimbali", a quiet and comfortable place where you would sit on the porch after dinner with Jim and Prue and gaze skyward at a bright and prominent Cruz, the geometric constellation known in English as the Southern Cross. The Victoria Assembly conducted a Condolences Session on June 5, 2007: Leader of the Opposition, the Honorable Edward Norman Baillieu, expressed it as well as anyone could that afternoon:

"Speaker, as you know, the challenges and opportunities of being Speaker are enormous, and Jim Plowman took them up as one of the youngest Speakers ever in 1979, serving for three years. On his return to Parliament he became Minister Assisting the Treasurer on State Owned Enterprises and Minister for Energy and Minerals, where he was instrumental in the early distribution of natural gas to country Victoria. Of course, he was again Speaker from 1996 to 1999.

Jim Plowman, though, had many loves. Clearly the love of his life, Prue, is in the gallery with us today. His other loves included his immediate family, his children, his grandchildren and his extended family. He loved arming lambs, wool and beef cattle at their property, Erimbali, on that aptly named Break-o-Day Road in the hills. It is a beautiful place. Those who attended the service which was held for Jim could only have come away moved by the magic of the place, because it is certainly beautiful."

As Minister of Energy and Minerals in 1992, he, and then-Treasurer, Alan Stockdale in Prime Minister Jeff Kennett's government, executed a near-perfect divestiture of Victoria's electric power assets. The auction was conducted by Credit Suisse in New York and created worldwide interest: Just in the Latrobe Valley, a 200 square mile open cut deposit of lignite surrounded by electric power plants, a dozen companies bid on the Loy Yang and Yallourn power plants, and the sale returned to the Victoria

Treasury nearly twice the book value of the assets. Coal power was alive and well in Australia.

Australian coal was first exploited in the late 1700s by convicts scavenging the shoreline of the Hunter River in New South Wales. The river snakes its way inland from its mouth at Newcastle. There are still a dozen active open-pit coal mines today less than 100 miles upstream from Newcastle.

But, in the late 1960s and early 1970s the exploration-world rushed to Queensland to negotiate agreements with then Premier Johannes Bjelke-Petersen for rights to develop Queensland coal. One of the companies to successfully negotiate development rights was the Utah Development Company (UDC), headquartered in Brisbane. UDC was 10.8% owned by a local publicly listed company named Utah Mining Australia Limited, and 89.2% by Utah International Inc., which itself was 100% owned by U.S.-based General Electric.

What would an Aussie bloke do in 1971 with a freshly minted undergraduate degree in civil engineering? If he had an interest in ground and surface water research, it turns out he might apply as a Masters candidate to Lehigh University, in the United States. On May 25, 1973, the Fritz Laboratory at Lehigh University would receive Report Number 394.1 in the Department of Civil and Environmental Engineering Authored by Collins, Anthony G. and titled, "Application of finite element program to water distribution systems analysis": Course report C.E. 479, in partial fulfillment of the requirements of a Masters degree in Civil Engineering.

In part, the report considered:

" ...an analogy between a structural system and a pipe network and shows the applicability of the finite element solution method to a pipe network. Because of the nonlinear nature of a pipe flow-head loss relationship a special technique is developed to solve the problem by an iteration method.

This iterative solution technique, coupled with the finite element approach offers significant advantages over the current solution methods for pipe network problems. This solution method does not suffer from the convergence problems of the Hardy Cross technique.

A detailed description of the changes made to a finite element program, GENFEM, and of the method of data input is included. Hopefully this solution method will lead to optimization of pipe network design and operation."

That same year, a Dr. Richard H. Gallagher, then professor of structural engineering at Cornell University, and an originator of the Finite Element Method, co-authored a book titled "Theory and Practice in Finite Element Structural Analysis". In 1988,

Richard Gallagher would become the 14th President of Clarkson University, in Potsdam, NY.

What would an Aussie bloke do entering the summer of 1973 with a freshly minted Masters degree in Civil Engineering? It turns out he would return to Australia, and eventually be employed by the Utah Development Company which was then finishing development of five large open cut coal mines in the Bowen Basin of Central Queensland, and its own export terminal at Hay Point, a beautiful stretch of land 15 miles south of Mackay, bordered on the east by the Coral Sea.

Queensland coal is black—and hard: Not the gray, wet dirt found in the Latrobe Valley. Black coal has 3–4 times more heating value than lignite. It is in great demand for power and steel production in Japan, India, China, Taiwan and Korea. Having its own export terminal put the Utah Development Company in a great position to profit from its Queensland land leases. Yet one might ask why GE, a company principally known for manufacturing, would be interested in Queensland hard coal. Was it for coal exports, which in 2009–2010 reached 300 million tons? In early negotiations with Johannes Bjelke-Petersen, the Premier let it be known the successful developer would need to include an electric power plant in the deal: GE was after the power plant. A decade later, in 1984, the partners sold the Utah Development Company to BHP Billiton. Interestingly, 100 miles northwest of Mackay, and 500 miles northwest of Brisbane, smack in the middle of the Bowen Coal Basin, sits the woop woop Collinsville, and the Collinsville Golf Course. Alas, the town is named after Charles Collins, Labour Member of the Queensland General Assembly for the Electoral District of Bowen from 1915–1936.

Now in his late 20s, Tony had conflicting thoughts between academia and the private sector. Eventually, his strong interest in research, especially his continued interest in ground and surface water, resolved the dilemma in favor of a return to Lehigh University as a doctoral candidate at the P.C. Rossin College of Engineering and Applied Science, School of Civil and Environmental Engineering.

The Lehigh Valley has had an extensive immigrant population since the early 1700s when Moravians settled on the banks of the Lehigh River near Monocacy Creek. The settlement later would become Bethlehem, which in 1762 opened America's first pumped municipal water system, simply called "Waterworks". The discovery of iron ore stimulated immigration from Central Europe and created a melting pot of Czechoslovakian, Polish, and Ukrainian settlers who worked in the mines, and at the Saucona Iron Company. The Saucona Iron Company would be renamed the Bethlehem Steel Company in 1899, then reorganized in 1904 as the Bethlehem Steel Corporation by Charles Schwab, its first president, and Board Chair. It produced vast amounts of steel during WW I for US and Allied forces, and steel for the Golden Gate and George Washington bridges.

The eighth most common Czech and Slovak surname is Kuchera, which is an Americanization of properly pronounced Kucera (also Kučera, Kucèra, and Kucéra).

The word is a Czech-Slovak nickname meaning “curly hair”. Over time, the Lehigh Valley had attracted its share of immigrant families having the Kuchera surname—and so it was in the late 1970s that a pretty sheila named Karen Kuchera caught the eye of a lanky Lehigh University Aussie bloke named Tony Collins.

Asa Packer was the president of the Lehigh Valley Railroad in 1865. His donation of \$500,000 to build a university that would contribute to the “intellectual and moral improvement” of men in the Lehigh Valley was the largest donation of its kind at that time to any educational institution in America. In the 1800s, the Lehigh Valley was an industrial powerhouse, and Bethlehem Steel was its leading employer and the second largest steel manufacturer in the United States. The valley, only 60 miles from sources of financing in New York and Philadelphia, flourished and Lehigh University flourished with it. Even as the steel industry exited the United States for locations with less expensive production (Bethlehem Steel ceased operations in 2003), Lehigh University prospered. The oldest engineering honor society, Tau Beta Pi, was founded at Lehigh in 1885, in part because Phi Beta Kappa was restricted to liberal arts students. Today, Lehigh consists of four colleges with 90 majors and a total faculty of about 680 who teach 4900 undergraduate, and 2200 graduate students. In 2020, its endowment broke the \$1.35 billion mark. Between 1998 and 2006, the president of Lehigh University was Dr. Gregory Farrington, a 1968 graduate of Clarkson University (B.S. Chemistry). Notable Lehigh alumni include Dr. Anthony Collins, the president of Clarkson University, Lee Iacocca, Mike Smerconish, and Roger Penske.

Tony is known nationally as an advocate for industrial-academic partnerships to couple environmental engineering and innovation with real-life problem solving. You can see seeds of this advocacy when you read his 1980 publication “Energy Utilization and Recovery at the Allentown Wastewater Facility” (co-authored Dr. Robert L. Johnson, Professor of Civil Engineering). As a graduate student at Lehigh and with support from the City of Allentown Urban Observatory, he undertook an analysis of the wastewater treatment facility’s production of digester gas to determine improvements that might increase the conversion efficiency of organic digestion as well as economic uses of digester gas. The study concentrated on using low heating value digester gas as a fuel for generating on-site electricity in a co-generation mode where heat recovery would be used for space heating and improving bacterial conversion of organic material in the digestate. This was pretty innovative stuff in the late 1970s, partially fostered by 1978 PURPA legislation that required utilities to purchase electricity from “Qualifying Facilities” at an “Avoided Cost”. Among his recommendations were to initiate development of on-site cogeneration based on power generation ranging from 285 kW to 720 kW, and several interesting suggestions related to shaving peak power costs. One can only wonder who Tony pleaded with to type his paper. The single error in 47 pages of text, graphs, and complicated formulae, is the word “energy” mistyped as “Eenergy” in the eighth referenced citation on page 41. On the other hand, Karen Kuchera and Tony Collins were married in Bethlehem, PA. in May 1980: Mystery solved?

Twenty years hence, many publicly-owned water treatment facilities, including Allentown, capture and clean biogas from their anaerobic digesters, turn the gas into electricity, and capture the waste heat for efficiency improvements and plant thermal needs. Allentown contracted with PPL (its local utility) to install micro-turbines and heat recovery devices that produce >2 million kWh/year, supply 18% of the facility's electricity and 100% of its thermal requirements.

In 1982, the year he received his Ph.D. in Civil Engineering, he co-authored a paper with Burt Hoffman and the aforementioned Dr. Robert Johnson, titled FEAPS, which returned to his interest in finite element methods to analyze water distribution systems. It is an elegant application of finite element analysis that considers each hydraulic component of a water distribution system as an element with linear behavior constrained by a node. By developing and solving a set of simultaneous equations representing the water distribution system, the program iterates assumed coefficients to balance flow rate and head loss in each pipe. In the citations is a laboratory report number 394.1, dated May 1973 by Collins, Anthony G. referencing prior art with finite element analysis on water distribution systems. Nine years after first describing the idea, he had developed a way to automate the iterative process using FEAPS. The paper includes a FEAPS User Manual describing required data for each input *card* in the program deck. The program contains four subroutines and reminds one of the early days when a poorly written subroutine, a dropped deck, or a misplaced card would result in an uncontrolled "do-loop", and burn untold CPU minutes before the machine spit out the program and told you to go fix the code.

"Turbidity Reduction by a Coal/Aluminum Filter", Fisk laboratory report 354.475, in 1982 earned Tony a Ph.D. in Civil Engineering. In the paper, he discloses how coal-aluminum granular media filters reduce the turbidity in low alkaline source waters to comply with the Safe Water Drinking Act limit of 1.0 ntu (nephelometric turbidity unit). This discovery had great application in water treatment plants that treat source water because it eliminated the need for flocculation coagulation and sedimentation operations prior to filtration, and except for pH adjustment no chemicals were required.

Source water is ground water, streams, rivers, springs and lakes in a watershed. Turbidity is a measure of water's "cloudiness" and is related to the quantity of suspended solids in the water. Because it is an indication of soil runoff into source water, turbidity also can relate to organisms and insoluble chemicals in adjacent soils. The US EPA, under the Safe Water Drinking Act, requires water treatment facilities using conventional or direct filtration to frequently measure effluent turbidity, and although the regulations limit turbidity to 1.0 ntu or less, 95% of samples analyzed each month may not have turbidity more than 0.3 ntu. Tony's research was a big deal for public water treatment facilities, because its disclosure described an inexpensive means of achieving the regulatory limits on large volumes of drinking water. For a visual understanding and comparison of turbidity, go to <http://en.wikipedia.org/wiki/Turbidity> and view the three samples on the top-right

of the page. The very clear sample on the left meets a turbidity measurement of 5 ntu, five times above the Safe Water Drinking Act limit. The Beacon Institute for Rivers and Estuaries in Troy, NY had not yet been born, but its seeds had been planted and grew into reality in 2011 when the former Beacon Institute became part of Clarkson.

The discovery was made public in Volume 77, No 6, June 1985 of the Journal of American Water Works Association when it published an article co-authored by Anthony G. Collins and Robert L. Johnson titled Reduction of Turbidity by a Coal-Aluminum Filter. Dr. Johnson, a young Iowa State Ph.D. alumnus, joined the faculty of Lehigh University as the director Hydraulic and Environmental Engineering Division. He was a Professor of Civil Engineering in 1977, a well-known expert in wastewater treatment, pipe network analysis, and storm water management and he was Tony's mentor, advisor and close friend. Dr. Johnson passed away on June 15, 2008 at age 73.

What would an Aussie bloke with a newly minted Ph.D. and a very pretty, super-smart wife (M.S. Math and Computer Technology—Clarkson University), do to earn a living in 1982? Academia versus private sector conflicts now fully resolved, Tony and Karen moved to the North Country in New York State and Tony began his teaching career as an assistant professor of civil and environmental engineering at Clarkson University. The Clarkson hockey team reached the quarterfinals of the NCAA championship that year, and was the ECAC Conference champion under Coach Bill Flaherty. This also was the year eight legacy schools received NCAA Division 1 waivers, without which all sports programs at each school would have been required to be in the same NCAA Division (a waiver Tony would later have to defend to save Clarkson's Division 1 hockey program). Robert Plane, a former chemistry professor and former Provost of Cornell University was in his eighth year as the 12th President of Clarkson. It also marked the first time since 1911 that Halley's comet appeared in the sky; coincidentally, Hayley Shen received her Ph.D. in Civil and Environmental Engineering at Clarkson's Commencement that year, and 44 Clarkson Students were included in the *Who's Who Among Students in American Universities and Colleges*; roughly 10% of the total enrollment.

His teaching and advising capabilities, his spirit, and his uniquely enjoyable personality led to his appointment as Department Chair Civil and Environmental Engineering, and to full professor, in 1992. In 1992, Hayley Shen, his academic colleague, also was promoted to full professor. Professor Shen has an interest in water: Sea Ice Dynamics. Though she has field experience in the Arctic and Antarctica, one can understand the attraction and benefit of researching sea ice dynamics at Clarkson, in micro-scale, on the Raquette River, between January and March.

Tony began shifting the engineering analysis-and-solution discussion in his first year as Chair when he added ethical and social consequences as part of analyses and solutions. For the first time, students had to consider those implications as they made decisions about options to solve engineering problems. In 1994, he received

the Distinguished Teaching Award and his second Outstanding Advisor Award- a legacy of Dr. Robert Johnson's tutelage. In part because he is so skilled with people, in part because of his ability to deal with complicated situations, in part because he has a vision of what a modern academic environment should consist of, and in part because he is a man of integrity and fairness, his career grew administratively and in March 2003, he was the university's provost when Denny Brown, Clarkson's 15th president, announced he would be retiring from Clarkson effective June 30, 2003. The Board of Trustees immediately formed a search committee to identify and interview replacement candidates. The Trustees meet on campus in the fall and on Commencement weekends. The winter meeting customarily occurs off-campus, and in the spring of 2003, it occurred in Boston. Tony's election as the 16th president of Clarkson University was unanimous, but he missed the celebration: He had remained in Potsdam, hard at work on university business. In his October 2003 Inaugural Address, he introduced a theme, which has guided so much of his academic career and his life: Evolution to Excellence. He said, "I ask you to join with me...and build...a technological university second to none- a university that develops leaders concerned about humanity and creates technology that aids humanity." Surely, we hear Sir John Monash reminding... "for the benefit of the whole community".

In 2003, Karen took her Masters in math and computer technology and joined SUNY Potsdam as a Senior Programmer Analyst while she and Tony raised four children together and became an active couple in North Country life. Foster House is named for Rett Foster, former Trustee Board Chair and Colgate alumnus, who initiated discussions about an on-campus president's house in 2009. It had always seemed unusual the Clarkson president should live off-campus, let alone in a house overlooking the SUNY Potsdam campus, and Rett argued persuasively to remedy that problem. The house was financed entirely from Clarkson University Board of Trustees donations. Rett passed away in February 2010, too young, and before the house dedication ceremony in May 2010. Tony and Karen were its first residents. If you park your car in the area adjacent to the front of the house, just beyond the roundabout, you can watch as guests climb the front staircase: the first floor windows invite all aglow from an inner happiness. It might be Clarkson's amazing women's NCAA Division 1 hockey champions or the women's volleyball team, or Nordic Skiers, or perhaps, some years ago, an ageless Egon accompanied by a Nobel Laureate or several freshly named Goldwater scholars. The door opens before the guests arrive, revealing President and Mrs. Collins. Their smiles are inviting; their handshakes and warm embraces are firm and sincere. They are empty nesters: Kate, Michael, Jill and Greta now are out in the world pursuing their own careers: Jill, the only Clarkson graduate of the four, went to the former penal colony founded two and a half centuries ago by Lieutenant-Governor Collins. Tony and Karen are happy to see you; you are part of their extended family. He still is tall and lanky, now with a bit of grey at the temples. His blue crinkled and smiling eyes look directly at you as you step inside. If you are lucky, Bill Vitek and his combo will be playing Ellington or Basie softly in the background. Bill will look up; lift an eyebrow in recognition, then return to a complicated keyboard riff. Karen smiles and welcomes you. She will size up your mood, run her analytics, tell you who has arrived and who

is on the way. She introduces you to her guests, then tend to everyone's needs. You will feel at home. Even special. The evening will end too early.

Tony can walk from Foster House to the unpretentious president's office on the third floor of the Cora and Bayard Science Center in less than 12 minutes, but he never does. He leaves the house early with a long stride, a smile on his face and the day's thoughts in his eyes, and en-route will slow or stop to say hi to faculty, staff, students, and—well—everyone. He's accessible, everyone knows him, everyone nods, or says good morning; he's a likeable guy. Maybe it will take 30 minutes, maybe an hour. If he stops for coffee, it may be longer; there will be a discussion about the hockey teams, or the mini-Baja, or CAMP, or maybe a parent is nearby, and he will turn his attention that way and ask how the student is doing. If you walk along, you will get involved too. Easy-going conversation, introductions, laughs, then you look at his eyes and see he's smiling and talking while studying the situation unfolding in front of him, thinking about tasks and things yet to do.

Except when it's brutally cold in Potsdam— a condition locals, alumni and upper classmen know simply as Minus Forty—he will wear a suit and tie, but no overcoat. You won't need to look closely to pick out a bit of green and a bit of gold: Maybe a lapel pin, maybe his striped tie, maybe a green blazer, with a gold crest. After 39 years on campus, the hemoglobin in his veins is all gone; been replaced with green and gold. He's not just a Clarkson man— he is Clarkson alive.

But, in June 2021, Clarkson announced Tony would step down as Clarkson's 16th president in June 2022 at the conclusion of the academic year. During his Clarkson years, he has greatly advanced the university's reputation nationally and internationally. Adding ethical and social components to the science and analytics of civil and environmental engineering is now a recognized important component of most engineering and science courses taught in the developed world.

During Tony and Karen's time at Clarkson, the university has become a nationally ranked institution of higher learning. Every year one or more students receive recognition as Goldwater scholars. Student led designs, like the mini-Baja, consistently place high in national, and international, competitions. Student retention, number of women and minority undergraduates, graduation rates including placement in a field of choice, and starting salaries all have improved drastically. Twenty percent of Clarkson's 44,000 living alumni either are owners or top-level executives in their business endeavors. And Clarkson NCAA Division I and III athletic teams consistently places high in their leagues, and its hockey teams consistently place top athletes into professional leagues.

Clarkson, an institute of higher education, established by the three sisters of Thomas Streatfield Clarkson III in 1896 to memorialize the death of their brother, remained

substantially as it was founded until Tony and Karen came to town. In their time, the Hill “campus” changed from a dormitory-athletic space, to include substantial academics, and the downtown campus began to shift to entrepreneurial activities; the institution grew a regional campus in Schenectady by absorbing Union’s graduate college, the Beacon Institute became a reality and a national noteworthy rivers and estuaries institution. A relationship with the Trudeau Institute in Saranac is a partner in managing world class immunotherapy research in support of Clarkson student interests in biology and biomedical science.

“I shall be telling this with a sigh
Somewhere ages and ages hence,
Two roads diverged in a wood, and I—
I took the one less traveled by,
And that has made all the difference.”

R. Frost

In 2022 Clarkson memorialized their legacy of accomplishment: The Clarkson Trustees renamed the Hill Campus, the Collins Hill Campus.

Jim Wood’64
Morgantown, WV
Winter, 2023