

SUMMER 2003

U of A Engineer

Keeping in Touch with Alumni

Leader *of a* Leviathan

Waking the Giants
The Truth in Veritas
The Rig Master
Having a Blast

Gwyn Morgan
(Mechanical '67)

As summer arrives for U of A Engineer there is much progress to celebrate.

We enjoyed meeting alumni in Ottawa (February), Edmonton and Fort McMurray (April) and Calgary (May). We look forward to receptions this fall in Toronto, Victoria, and Vancouver.

The highlight of the fall will be Reunion 2003 (Edmonton, October 2–5). Meet with fellow alumni at the Dean's reception, the Dean's brunch or the alumni hospitality lounge, or take your family and friends to the Faculty's Preview Day open house.

If I do not get an opportunity to greet you personally at Reunion 2003, I still hope you will keep in touch. Please send updates on your career, address, and family developments to engineer.alum@ualberta.ca.

Your ongoing contact and interaction reflects your pride of affiliation. It also shows a deep appreciation for your academic past. Engineers have a strong tradition of expressing professional pride. The spirit of our alumni continually inspires us.

Our Faculty is among North America's leading engineering research and teaching centres. With 4,100 students, 20 research chairs, 100 new staff, several new buildings, and upgraded facilities, the Faculty pulses with a growing and compelling spirit of optimism.

Our alumni play a key role in that optimism and pride—past, present and future. For that, I thank you.

David M. Petis
Assistant Dean,
External Relations



U of A Engineer is the Faculty of Engineering Alumni magazine. It is published three times a year by the Dean's Office and is distributed to Faculty of Engineering alumni, friends, and staff.

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Message from the Editor

I hope you enjoy the summer issue of U of A Engineer. New to this issue is a column entitled "Virtual Engineer," an on-line interview with an alumnus far afield, across Canada (in this case) and across the world (in future instances).



I am constantly amazed and impressed by the far-flung contributions of U of A engineers! I hear from graduates working in California, the United Kingdom and Singapore. This

new column will illustrate the wide impact made by U of A engineers nationally and internationally.

This is but one change to the alumni magazine; more changes are to follow. But what will continue is the need for feedback from you, our alumni. Please feel free to call (780) 492-4514 with comments and suggestions. Your feedback to engineer.alum@ualberta.ca will continue to be an asset. Now, enjoy the magazine!

Sherrell Steele
Publisher/Managing Editor

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Waking the



Dr. Robert Hunt (Mechanical '68, PhD Geophysics '74) holds a fossilized humerus from a pachyrhinosaurus in Grande Prairie.

GIANTS

By April Weavell

The Grande Prairie area is renowned for its vast natural resources. Beneath the soil, though, lies another silent treasure. Creatures, some forgotten for over 70 million years, wait patiently to be discovered and recognized. Soon a set of gentle, knowing hands will sweep away a few traces of soil, revealing a vertebrae, or hopefully a skull—a story waiting to be brought to life.

For almost 20 years Dr. Robert (Bert) Hunt, PEng, has volunteered countless evenings, weekends and summers to unravel the mysteries of northwest Alberta's prehistoric life. This might seem an unlikely role for an engineering and physics instructor at the Grande Prairie Regional College (GPRC), but fossils have become a way of life for this outdoors enthusiast.

It started as a hobby and a keen interest, but Hunt has become more than just an amateur palaeontologist. He has worked alongside professionals from the Royal Tyrrell Museum and the Provincial Museum of Alberta, helping to establish Grande Prairie as the world's largest horned dinosaur bone bed.

Hunt's journey into the prehistoric began unexpectedly during his early years at the GPRC. Leaving his tenure track position as an instructor at Jamaica's College of Arts, Science and Technology (currently University of Technology), he was hired in 1974 to begin GPRC's University Engineering Transfer Program. His colleague, Dr. Desh

Mitra, offered him his first taste of palaeontology. "As Desh expanded his geology courses and brought in rocks and fossils, I used to just watch and learn," says Hunt. "It was all so interesting."

He credits his first big palaeontological discovery in 1984 more to his engineering background than to his interest in palaeontology. A quarry operator discovered some bones protruding from a terrace 50 metres above the river and asked the college to identify them. Mitra enlisted Hunt's help with the excavation. The two retrieved a few bones and sent them to Dr. Jim Burns, curator of quaternary palaeontology at the Provincial Museum of Alberta. The bones turned out to be those of a 10,000-year-old elk, later discovered to be a complete skeleton.

Hunt suddenly found himself with the task of preparing the site for Dr. Burns—organizing facilities and equipment, and overseeing the operators as they removed the overburden.

Once the skeleton was excavated, the skull was taken to the Provincial Museum. The rest

of the bones had to be glued together, however, since many of them were either splintered or fractured. An avid fan of jigsaw puzzles, Hunt could not resist this three-dimensional 10,000-year-old challenge. "I told Jim I'd be happy to restore each of the bones as best I could," he smiles. "I spent my whole summer restoring each of the body bones except for the skull. I had the lab full of clamps, holding bits and pieces of bone together."

Three years later, his engineering skills once again landed him in the middle of an extraordinary find. A crew from the Royal Tyrrell Museum was excavating a 72 million-year-old new species of pachyrhinosaurus (thick-nosed dinosaur), in what would turn out to be a most extraordinary finding.

The fossils in this single-species bed indicated five different maturity levels. Most bone beds contain only two maturity levels (adults and their annual offspring). Finding five "age sizes" together (babies, young, juveniles, sub-adults, and adults) suggests a social structure more highly evolved than in most animals living today.

“Every day I find something that hasn’t
seen daylight for over 70 million years.
No human has ever seen it before.”

Three years into the project, however, the team became concerned that the excavation site was slumping, increasing the possibility of an injury accident. When Hunt learned about this at the college, he volunteered to monitor the movement of the banks around the excavation to assess the danger. This allowed the team to continue its work.

Watching such a momentous piece of prehistory unfold in front of his eyes, Hunt

quickly felt the itch to get more involved. Soon he was right where he wanted to be, down on his hands and knees alongside the palaeontologists, uncovering fossilized fragments of the past. The following summer he spent an entire 10 weeks on-site, excavating and restoring hundreds of bones.

Hunt wasn’t the only member of his family to get “hands-on” experience. “One of the palaeontologists was becoming increasingly

frustrated trying to piece together a broken rib. My 15-year-old son Nando (now a Mechanical ‘97 graduate) walked in, shuffled the pieces around, and in less than 10 seconds had the pieces in order,” he laughs. “What made it even funnier is that when the guy tried to glue the pieces together he mixed them up, and Nando had to help him again.”

Hunt is proud that some of the find has returned home to Grande Prairie for the public to view and appreciate. A full-size free-standing skeleton cast of the pachyrhinosaurus and a floor mount of the elk are on display at the college, and a second dinosaur cast resides at the Grande Prairie Museum. On the lower level of the city’s Centre 2000 Trade and Tourism, an animated, full-size pachyrhinosaurus keeps guard over the fossil display.

Always ready to share his knowledge and experiences, Hunt offers presentations throughout the community and in local schools. “The whole awareness of our dinosaur past has become my major challenge, my personal goal,” he says.

He has honed his palaeontology skills even further since receiving his first excavation permit 14 years ago. Palaeontologists often call upon his skills to assist them. During the winter they have even mailed him collection bags of bone fragments for restoration.

It is not unusual for him to receive a phone call from a palaeontologist asking him to return to fossil or excavation sites for measurements, or to calculate technical data. Alongside his hammer, chisel, and blunt knife, he carries his most important tool, a camera, which he uses to accurately record details of every find and excavation. Through trigonometry, the photos quickly provide him with the exact location of a site years after it has been excavated.

Though his engineering background and his interest in palaeontology have facilitated his involvement with the area’s prehistory, Hunt factors one more item into the equation. As an instructor, he has access to the college’s vehicles, resources, and facilities. “Because I’m in a discipline with science labs, computers, and field equipment, it makes it



Dr. Hunt and his son Nando at the Pipestone Creek bed.



Fossil of a 10,000-year-old elk.

easy for all of these palaeontological opportunities to just wash into my life,” says Hunt.

This summer, Hunt will head down to Dinosaur Provincial Park in Brooks for a week to learn and labour with palaeontologists from around the world. He will be right at home with the steady pace and 16-hour days. His eagerness to learn will no

doubt make him a valued team member during the long, hot days.

Throughout it all, he continues to be inspired by the thrill of discovery. “Every single time I go out prospecting I wonder what I will find that day,” reflects Hunt. “Every day I find something that hasn’t seen daylight for over 70 million years. No

human has ever seen it before. You look at a piece of bone, or skull, or an animal skeleton and you know that 70 million years ago this was a walking, breathing creature. And then, in your mind, you put some skin on it and see it standing before you. It’s exhilarating.”



Skull of a pachyrhinosaurus encased in plaster and ready for removal.

Raising the Pachyrhinosaurus to New Heights

In the fall of 2001, while prospecting near Pipestone Creek southwest of Grande Prairie, Dr. Bert Hunt discovered an unusually well-preserved skull of a new species of pachyrhinosaurus. This new species, about the size of a modern rhino, has a unique array of horns and other projections on its head and frill, distinguishing it from all other horned dinosaurs.

Darren Tanke, a technician from the Royal Tyrrell Museum, planned to excavate the skull the following May, so Hunt spent the winter preparing. He planned every detail, right from determining the best method of removing the fossil from the site, to arranging the necessary resources and equipment.

No amount of planning, however, could predict what Mother Nature had in mind for the month of May. A visit to the site one week before the excavation revealed that the creek’s water-level was much higher than anticipated. Initial plans—to lower the skull and move it out along the creek-bed using quads and a tandem trailer—would be impossible. The only option was to protect the 360-kilogram skull in a steel cocoon and haul it straight up the steep 400-metre bank. Before they left the site, Hunt and his colleague Dr. Desh Mittra decided to construct a small plastic tent over



Dr. Hunt with the tow-truck driver removing the 360-kilogram pachyrhinosaurus skull.

the excavation site “in case it got a little cool.” Shortly after, it began to snow.

Throughout the week, as 30 centimetres of snow fell, Hunt had a steel sled fabricated, and found 400 metres of steel cable, a tow-truck, and a driver—all donated. Asking for donations was the easy part. “I usually show people my pictures, tell them what I am doing, and invite them out to the bone bed to meet the palaeontologists,” he says. “Most people get excited.”

The soil was wet and slippery, the weather was freezing, and the excavators were exhausted and covered in mud. Excavations often

require great physical and mental effort, but this one proved especially tough. Hunt recalls the Tyrrell supervisor claiming it was the toughest and most unfriendly excavation he had experienced in his 24 years of fossil research.

Despite the conditions, work beneath the tent continued. The team encased the pachyrhinosaurus skull in a plaster jacket, then secured it to the sled. Slowly, using the double-winch tow-truck and steel cable, they brought it safely to the top. It now awaits a new species name and restoration at the Royal Tyrrell Museum.



Gwyn Morgan
(Mechanical '67)

Leader of a Leviathan

GWYN

BY TOM KEYSER

MORGAN

In January 2002, EnCana Corp. was created amid the elegant furnishings and plush broadlooms of a board room in downtown Calgary. When shareholders approved the merger of Alberta Energy Co. Ltd. and PanCanadian Energy Corp., the \$30-billion hybrid instantly became North America's largest independent producer of oil and gas.

Shortly after celebrating EnCana's first birthday, President and Chief Executive Officer Gwyn Morgan (Mechanical '67) looks back on the process which led to the seamless integration of two corporate giants. Then the former Alberta Energy CEO utters the kind of humble remark you don't often hear from corporate decision-makers.

"I'm sort of in awe," marvels the 57-year-old CEO. "We gave our last integration report to the EnCana board in December because there was nothing more to talk about."

Most industry analysts were surprised and impressed by how swiftly things came together. During its first 12 months, the new corporate leviathan met a capital growth target said to be the largest ever executed in North America. Meanwhile, EnCana was able to achieve the highest production growth targets in its sector.

"When you're merging two \$15-billion companies, you'd expect integration to take 18 to 24 months," remarks Brian Prokop, an oil and gas analyst for Peters and Company

of Calgary. "This has been done in less than 12. It's really gone well."

Though Morgan lavishes praise on his senior managers and staff, he typically declines to dwell on his own contributions, which were enormous. Among them was the concise corporate brand itself: EnCana. By coining the name, Morgan provided a useful skeleton key to the heart and mind of a corporate philosopher-king.

The first syllable refers, of course, to the energy industry. The last, to Morgan's home province of Alberta. But the second syllable speaks loudest: Can, with a capital C. For Canada.

"When a Canadian-based company does business internationally, it allows Canadians to demonstrate their skills in various parts of the world. At the end of the day, graduates of the U of A, as well as university graduates from other parts of Canada, will stand shoulder-to-shoulder against anybody in the world. Here in Canada we have the skill sets to headquarter companies which can be true global champions."

Morgan is widely known for his strength of will and independence of thought, as well as an inclination to speak his mind. His vivid and sometimes fierce nationalistic vision has frequently placed him at odds with federal politicians, particularly those whose outlook extends no further west than the lush lawns of the Parliament buildings.

It's a vision which germinated in the rolling rural countryside northwest of Calgary, about 45 minutes' drive from the CEO's downtown office.

Morgan reflects on the circumstances of his birth in a mood of bittersweet irony. He entered the world through a door left open by the departure of his paternal uncle and namesake, Gwyn Morgan. His uncle, a RCAF fighter pilot shot down during World War II, was the second of three Morgan brothers to lose his life.

The Canadian military gave his father an early discharge as the family's sole surviving adult male, and the younger Gwyn Morgan was born soon after. "The fact my Uncle Gwyn got killed is the reason I'm here," Morgan murmurs.

Descended from Welsh miners, the Morgans settled and farmed near Carstairs. Youngest of a family with three older sisters, Gwyn was quickly put to work. He gained his earliest perspective on the land he loves from the seat of a tractor, rumbling across summer fallow.

He has also kept his love for remote places. A dedicated outdoor enthusiast who works obsessively to stay in shape, Morgan recently told Maclean's magazine he has "hiked, cycled, canoed and skied literally thousands of kilometres" throughout the West and far North.

“You start out with a world of possibilities.

Then you narrow the possibilities as you progress.

Just get out and do it.”

While Gwyn was attending Grade 10 classes, his father developed a medical condition and the six Morgans moved to Calgary. Once in the city, the youngster’s career aspirations took a sharp turn away from agriculture. Intrigued by society’s builders and proficient in math and science, he considered engineering for the first time, “although I didn’t really know what an engineer did.”

He found out after his acceptance to the U of A. Opting for a major in mechanical engineering, Morgan enrolled and excelled in the petroleum options and, at one stage, seriously considered a career in bio-medical engineering.

His grades were as healthy as a plough-horse, but his bankroll was on life support. “I would’ve been accepted to medical school but that would be two more years. Then a

his summers “doing grunt work for Imperial Oil,” leaned to the energy field.

Sticking close to home, he took his “first real job” with the Alberta Oil and Gas Conservation Board, an early incarnation of the Energy and Utilities Board, as a reservoir engineer. Morgan describes himself at this time as “very technical,” a “focused petroleum reservoir engineer,” not at all inclined toward the executive suite.

With a low chuckle, he answers the inevitable question: “Did I ever think I was going to run an oil and gas company? Not when I was cleaning out the pig barn. Even later, I couldn’t have imagined what I’m doing today.

“Today’s kids think they need a plan,” Morgan begins. “Well, there isn’t any plan. It’s a question of decreasing entropy,” he says, repeating a favourite phrase learned in a U of A physics class. “You start out with a world of possibilities. Then you narrow the possibilities as you progress. Just get out and do it.”

Morgan did. After two years, he moved from the Conservation Board to the Canadian subsidiary of an Omaha-based gas pipeline and transportation business, Northern Natural Gas. There, Morgan’s problem-solving efficiency was rewarded by a promotion to manager of operations and engineering. He was only 28.

When the Alberta Energy Company was formed in 1975, Morgan got in on the ground floor, joining AEC a month before its shares began to trade publicly.

The opportunity to work for an Alberta-based energy company appealed to Morgan’s sense of national pride. “This was more than

just a start-up. It was my first chance to work for a company that made its decisions right here,” says Morgan, who ultimately rose to the job of AEC’s Chief Executive. “From the start, I was proud of the company’s Canadian heritage and maybe a bit protective of it.”

Though he wears his nationalistic sympathies on his sleeve, Morgan doesn’t pretend to be an altruistic knight-errant, single-handedly defending Canadian honour. Yet he’s sincere when describing the AEC/PanCanadian merger as a conscious effort to beef up Canadian industry presence on the global stage.

“David O’Brien (the PanCanadian Chairperson) and I created EnCana Corp. because, obviously, we think it’s good for shareholders,” Morgan begins. “But we also did it, in some ways, because we’re patriots. That’s how we feel about the country.”

Morgan complains that the federal government hasn’t shown appreciation for the important role the energy business plays in driving the national economy. “Our MPs in Ottawa wouldn’t know that energy exports are the biggest net generator of foreign exchange revenue in the country, which is a key reason why the dollar hasn’t grown even weaker than it is.

“They wouldn’t know the industry provides the largest portion of corporate income tax. They wouldn’t know that one Canadian company in this business is the biggest single investor in three provinces: British Columbia, Alberta, and Nova Scotia. That’s our company.”

His long-term vision for EnCana includes growth, growth, and more growth.

That’s difficult to imagine. EnCana Corp. is already the most significant private oil producer in Ecuador, a major player in Canadian oil sands production, and the mightiest in terms of offshore production. EnCana is excited about recent exploration successes in the North Sea and Gulf of Mexico, and poised for new discoveries from the Mackenzie Delta to Australia, from Alaska to Azerbaijan.

Production forecasts for 2003 exceed the equivalent of 800,000 barrels of oil a day — before royalties.

How far can an oil patch leviathan go? For a one-time reservoir engineer without a career plan, a just-do-it guy whose instincts led him to the biggest job in the Canadian energy industry, the sky’s the limit.



PhD on top of that—another three years. But I was more than broke, I was in debt.”

Morgan thought it significant that, of a variety of jobs offered him upon graduation in 1967, all came from the United States. Seattle-based Boeing recruited him for its aeronautical design division, but Morgan, who had spent

Cross Hairs on History

the Grand Man of the Grand Match

by George Ford (Civil '42, MSc Civil '46, Honorary DSc '88)

“His life was gentle and the elements so mixed in him that nature might stand up and say to all the world ‘This was a man.’”

—William Shakespeare, *Julius Caesar*, Act V, Scene 5

With the passing of Alex Mair (Civil '48), this magazine lost one of its best feature writers, and our city lost an icon. Edmonton won't be the same without this beloved author, historian, and storyteller.

Alex cared deeply about people in his community, about the people who went before him, and the events that surrounded their lives. We will all sadly miss his quick wit, soft Scottish accent, and gentle sense of humour.

Alex was born at Edmonton's Royal Alexandra Hospital in 1926. He grew up wishing to be a writer, but his Scottish parents discouraged that. Being an obedient son, he earned a degree in Civil Engineering at the University of Alberta in 1948.

He was a drummer with the Edmonton School Boys' Band, but sold his drums to buy an engagement ring for his future wife



Vivienne. His contact with fellow drummers continued throughout his life.

After graduation, he joined his father at the City of Edmonton. While in this posting in the early 1950s, Alex wrote his first article—on the problems of installing sewers in the Highlands community, with its sandy soils and pockets of quicksand. He was ecstatic when he received \$25 for his efforts.

While working for the city and later for the marketing division of Inland Cement, Alex continued to write and submit general interest articles to various magazines.

After Inland Cement, he helped establish the Radio and Television program at the Northern Alberta Institute of Technology (NAIT). He left NAIT in 1982 to devote his time to writing and broadcasting. From then on, he haunted Alberta's newspapers, museums, and archives, seeking out interesting stories, facts, and ideas to present to the public in his own quaint way via radio, articles and books.

His skills as a researcher and historian won repeated recognition. He was honoured with two consecutive terms as Honorary Chief Factor at Fort Edmonton. He received awards from the Alberta Historical Society and the Edmonton and District Historical Society, plus membership in the City of Edmonton Cultural Hall of Fame.

His last book, *Gateway City*, published in December 2000 and a bestseller for six

months, contains 60 short stories of Edmonton's past. He took great joy in writing about the city he loved.

Alex will always be remembered as a “man for the people”. Like his fellow Scot, Robbie Burns, he loved to visit with his cronies, discuss the affairs of the day, and recount stories of the past. Many wintry Saturday nights he would show up at Northlands curling rink to play, but mostly for the “after draw” of coffee and doughnuts. Inevitably, he would raise the idea of “The Grand Match”. When finally questioned about such an event, he would smile, sip some coffee and say:

“It was like this. Every seven or so years it gets cold enough to freeze over a small lake in a small town halfway between Glasgow and

Edinburgh. Whenever that happened, eight old cronies, four from each city, would agree to meet for a curling match. In order to ensure a level playing field, the winners of each end would be required to have a ‘wee drop’ of the finest single malt Scotch. By the sixth end, the playing field was flatter than Saskatchewan. By the eighth end, the leads were shaking hands and congratulating each other while the skips roared, ‘We’re not through yet!’ And by the 10th end, not even the skips worried about who had won— but aye, it was a grand match!”

Such stories were the lifeblood of Alex Mair—a storyteller who loved Edmonton and its people.

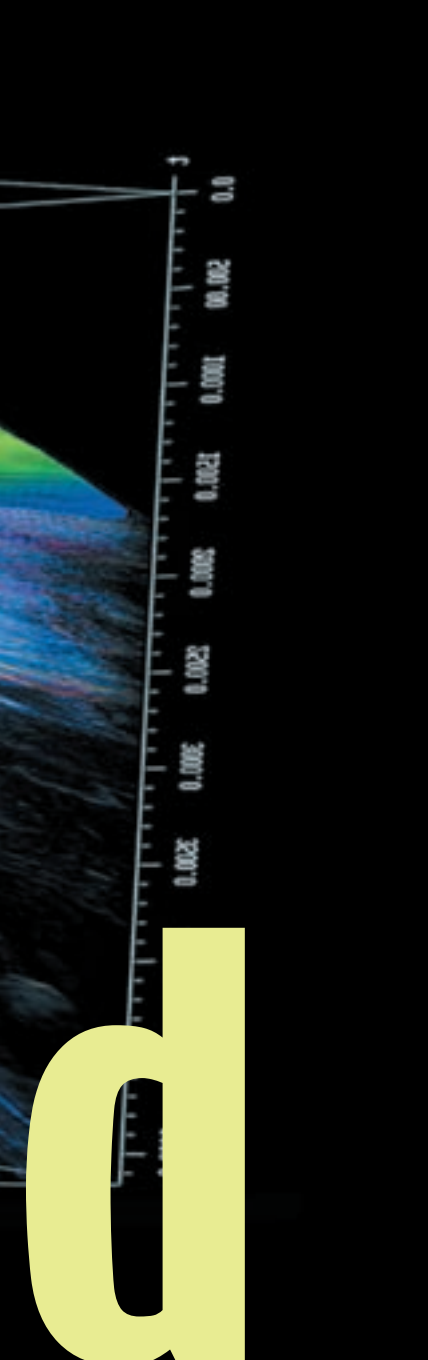




Davi Robson

The Truth in Veritas

by Tom Keyser



It's a long road from Bawlf, Alberta, to the glittering glass towers of corporate Houston. But David Robson (Electrical '61), Canada's 2002 Entrepreneur of the Year, managed the journey without losing touch with the tried-and-true business values he absorbed on his parents' farm.

Though he's chief executive officer of a \$550 million corporation, the founder of Texas-based Veritas DGC Inc. avoids debt like the plague, as his father did. And in an era of paper fortunes and stock-market margins, Robson retains a profound respect for cold, hard greenbacks.

"I get a cash report daily from our consolidated global position. That way I know exactly what our receipts were yesterday," grins the affable 63-year-old Robson.

Today, Robson is the senior strategist whose decisions affect 3,800 Veritas DGC employees in 20 countries. He spent 28 years nursing Veritas from a near-bankrupt Alberta seismic data processing company to its current status as the global energy industry's third-largest supplier of integrated seismic/geophysical services.

Along the way, he somehow found time to earn \$80,000-plus by riding in cutting-horse competitions. In fact, he claims he owes most of his accomplishments to a lifelong love of horseflesh.

"My original motivation was I wanted to have good horses," Robson explains at the company's Canadian headquarters in downtown Calgary. "I also wanted my own place to keep them. I knew I couldn't do that on a salary," says Robson.

One of the most relaxed and forthright senior execs in the North American oil patch, the self-deprecating Robson is more likely to regale you with tales of his failures than his triumphs.

He remembers flunking his first U of A physics exam because the prof was delivering a message: this freshman class would be required to meet high standards. "I think everybody failed," he laughs, "but it was a shock to the system. I'd never failed an exam before."

Not long after he nailed his degree, he found himself employed by a Calgary electrical contractor, sweating over plans for the proposed new Foothills Hospital.

"I hated that," Robson grumbles. "I was counting fixtures on the hospital drawings before it was built, and my mind was elsewhere. The boss came in and said: 'You made too many mistakes. You're fired.'" Robson's response was immediate and ecstatic. "I said, 'Good, I'm so glad to get outta' here.'"

Of course, the future entrepreneur was a naive stripling at the time. Eventually, he squeezed almost everything he wanted from life. And when he glances back over roads travelled, Robson's mind always goes back to Bawlf. "Two towns east of Camrose, on Highway 13," recites Robson, whose mother



Still robust, fit and wiry at 63, Robson is one senior executive who retains the go-for-broke attitude he exhibited during his twenties.



Top: The SR/V Veritas Viking towing multiple streamers in the deep water of the Gulf of Mexico.

Bottom left: Veritas has considerable expertise in acquiring seismic data in all types of environments worldwide.

Bottom right: Advanced cluster computing power and proprietary algorithms help geoscientists extract as much subsurface information as possible from seismic data.

still lives in the region. It was there he learned to ride, build a barn, wire a farmhouse—practical knowledge which has served him well.

Robson's parents were typical of their generation—they didn't discuss family finances. But he did find out that his dad had lost a piece of land during the Depression because he couldn't pay his taxes. From that time on, the Robsons paid cash for every piece of farm equipment they purchased.

"Another thing Bawlf had—a great school and a wonderful [group] of teachers who really cared," adds the Veritas CEO. "Our principal would tolerate no nonsense. He was one of those guys who just had to look at you."

Though an aptitude test suggested a medical career, Robson instead streamed into engineering. Post-graduation, after an occasional wrong turn, the young engineer found himself in a Calgary lab, building seismic playback equipment.

Robson described the business as slow-paced, although he didn't particularly mind. "I was enjoying my quarter horses." But after the Rainbow-Zama petroleum discovery in the mid-1960s, the intensity level cranked up in a hurry. "We went seven days a week, round the clock, working flat out," Robson recalls.

Eventually, Robson became operations boss of an early digital computer group associated with the seismic outfit. Almost immediately he found himself struggling with dysfunctional software. Solution: "We had to write new software from scratch," says Robson.

"Roy Lindseth (legendary geophysicist, who pioneered work in digital signal processing) was the theoretical guy I worked with. We wrote a new processing system in weeks. It was amateurish but it worked."

In 1969, Robson left to join a small competitor as a partner. The business was doing well but expansion opportunities in Australia and the U.K. were funded with bank debt.

But then the exploration market soured. At one point, the Bank of Nova Scotia called its loan and said, "We're very disappointed in you." Robson grimaces at the memory.

After that scrape, Robson personally took charge of company finances. While he learned on the job, the company was able to placate the bankers. Shortly thereafter, Robson led an



effort to raise \$250,000 from a venture capital fund, a financial boost which placed the company on a more secure footing.

By 1974, when he bought into the company that evolved into Veritas DGC, Robson had already logged 10 years in the seismic business. He applied his organizational and operational experience to this new challenge, that of doing a “turnaround” of a financially troubled business.

The company name, suggested by the wife of a previous owner, means “truth” in Latin. Most appropriate, Robson felt. “We didn’t argue about the name for two seconds. Absolutely perfect,” he smiles.

From that point forward, Veritas (a specialist in land seismic exploration) generated steady profits. Meanwhile, Robson grew increasingly bored.

Tempted to go public, but intimidated by the prospect, he and an associate started out small, creating a junior capital fund with Robson’s partner as CEO. By this means they gained valuable experience. Ultimately, they merged the fund with parts of Veritas.

By 1992 they felt ready to take the next step. An initial public offering on the Toronto Stock Exchange raised \$25 million. Veritas followed that with a \$15-million add-on. “That cleared off our debt and gave us about \$15 million cash on the balance sheet.”

As profits grew, and as Veritas ventured into foreign markets, it attracted the attention of a Houston group—board members of a “tired” U.S. company known as Digicon Inc., a specialist in offshore seismic operations.

Digicon had cash flow problems but brought superb technical capability and a strong employee base to the table. In 1996, negotiations led to a \$72.3-million US merger which Robson frankly describes as “absolute hell.”

“This was a deal driven by the Digicon board,” (although Robson insisted on calling all shots, post-merger). “Senior management were unhappy about it. They didn’t know who these upstart Canadians were.”

Though the integration process was difficult at times, the last, lingering merger issues were tidied up about a year ago, Robson says.

Today, Robson spends most of his time mentoring, advising, and plotting fiscal strategies with senior advisors.

When Veritas went public in Toronto, Robson lost his status as the company’s majority shareholder. And as the company has grown, he has taught himself to share responsibility for leadership with the presidents in charge of Veritas DGC’s eight corporate divisions.

As Robson puts it: “We have to do what’s right for the company. Not what’s right for me, or for anyone else.”

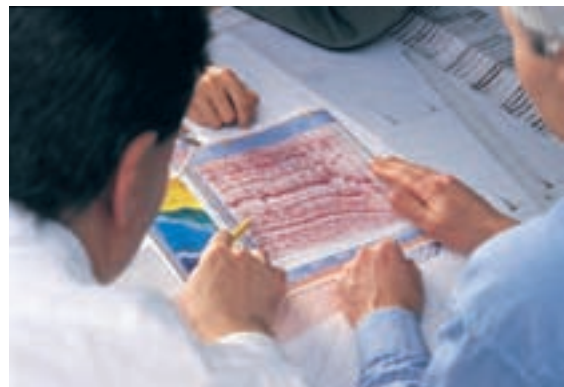
Still robust, fit and wiry at 63, Robson is one senior executive who retains the go-for-broke attitude he exhibited during his twenties. When young people seek advice, he tells them to take a chance, to trust themselves. “Don’t worry about history because you can’t change it. Move on. Life isn’t a smooth ride. Strange things will happen and they

won’t all be what you planned. Just keep going and try to make progress.”

Robson also believes in the importance of old-fashioned R and R. He gets his jollies running the annual Canadian Supreme, a four-day western horse show in Red Deer. (Robson jokes that he runs it as benevolent dictator.) Last summer, the operators dished out \$289,000 in prize money.

But whether you seek success showing horses or success in commerce, Robson insists, one ingredient supersedes all others: commitment. “We graduate people from today’s universities who have wonderful technical backgrounds. But it’s emotion that matters. It’s drive, commitment.”

“It’s like the old joke about bacon and eggs,” the winner of Ernst & Young’s Entrepreneur of the Year award sums up with a chuckle. “The hen was involved—but the pig was committed.”



Top left: Dave Robson in a cutting horse competition, a sport he has enjoyed and promoted for over 25 years.

Bottom right: Veritas integrates geophysics, geology, petrophysics, and reservoir engineering to model hydrocarbon reservoirs

Call for photos for the **2004** Engineering Perspectives Calendar

It’s not too soon to submit your photos for consideration for next year’s calendar. The theme is “Engineering Up Close.” Interpret this theme in a creative shot, and earn your spot in the 2004 calendar. For further details, contact Sherrell.Steele@ualberta.ca.

the **RIG** master



Fred Pheasey
(Mechanical '65)

FRED PHEASEY,
Inspirational Entrepreneur
Honoured for Oil Field Success

Fred Pheasey could be considered an entrepreneurial genius. The Edmonton company that Pheasey founded, Dreco Energy Services Ltd., has become one of the world's leading manufacturers of drilling equipment, constructing high-tech rigs for some of the harshest environments Mother Nature can dish out.

by Keith Gerein,
Edmonton Journal Staff Writer

“Over the years, he’s developed a tremendous confidence to tackle projects that others wouldn’t touch. He’ll risk a lot to get something done.”



But while the equipment is a marvel of engineering, Pheasey insists the secret to his business success boils down to a simple formula. “Listen and look after the customer. Find ways to add value,” he says. “Do it consistently and good things will happen for all the stakeholders.”

“It’s not rocket science.” Pheasey’s business principles have served him well over the last three decades, a period in which he helped shepherd Alberta’s oil field services industry onto the international stage. Last year, the 60-year-old entrepreneur received his due with an induction into the Canadian Petroleum Hall of Fame.

While Pheasey is quick to credit Dreco’s staff for the honour, those who have worked alongside him say the company would not have gone anywhere without his drive and ambition.

“Fred is an inspirational kind of guy,” says Doug Frame, who served as Dreco’s executive vice president and headed up the company’s Houston office for more than 15 years. “Over the years, he’s developed a tremendous confidence to tackle projects that others wouldn’t touch. He’ll risk a lot to get something done.”

Dreco is a major Alberta success story. Rigs constructed by the firm span the globe, from the ice-fields of Alaska to the Amazon jungle, from the North African desert to the North Sea.

Thirty years ago, it was a different story. Pheasey and his friend Ron Sorokan were jobless after their former employer, Barber Machinery, was sold. The pair decided to start their own company, each contributing \$8,000.

After receiving an investment of \$45,000 from Earl Griffith, one of Barber’s former owners, and a grant of \$235,000 from the Alberta Opportunity Company, they had enough to get started.

It wasn’t much: a handful of staff in a 1,000-square-foot tin shack on 75th Street and 64th Avenue in Edmonton.

The company made its living by selling mud pumps, although Pheasey had ambitions

to build oil derricks. The problem was that he couldn’t convince anyone in Canada to buy a derrick from him. “At the time, contractors were used to importing from the United States,” says Frame. “Everyone said that you couldn’t build drilling rigs in Canada. But Fred absolutely wouldn’t take that as an answer.”

Brazil, of all places, finally gave Pheasey the opening he needed. He persuaded the Brazilian national oil company to take one of his rigs, then sold another to a firm with interests in Alaska.

The Canadian market could ignore the upstart no longer and international success wasn’t far behind. In 1977, Pheasey recalls, the firm received one of its breakthrough deals. A man from Denmark-based Maersk Drilling phoned early one morning wondering if Dreco could build a derrick for an offshore rig that would fit into a 747 airplane.

“I told him ‘no,’ but I didn’t think any other company could do it either,” Pheasey says. “I took his name and did some investigating. A while later, I phoned him back and told him we could deliver it in 60 days. He asked how much it would cost to do it in 30 days.”

Dreco eventually got the project done in just 18 days, earning a fat bonus and a lot of future business from Maersk.

Those were the heydays of Dreco’s development. From revenue of \$600,000 and around 100 employees in 1973, Dreco grew like prairie weed and by 1981 had become one of the world’s three largest rig manufacturers with revenue of \$243 million US and close to 3,000 staff.

With no reason to think the boom of the ’70s would end, the firm plunged into even greater expansion, selling common shares and piling up tens of millions of dollars in short-term, high-interest debt.

Then the bottom fell out of the market. As world oil surpluses sharply reversed sky-

rocketing prices of only a few years earlier, the drilling binge abruptly ended.

For Dreco, the change translated into a huge demand for cash, large, difficult-to-collect accounts receivable, and bulging inventories. The company skidded into receivership.

“When something like that happens, you get a chance to talk with yourself,” says Pheasey. “Anybody can quit, but our group of people wasn’t built that way.

“A friend of mine used to say that if you’re in a hole, the only thing you can do is to sell your way out. And that’s what we did.”

The firm rode out the uncertain oil prices of the ’80s and, by specializing in high-end rigs and pursuing foreign markets, it strung together an impressive run of profitable years through the ’90s.

In 1997, Dreco was acquired by National Oilwell Inc. of Houston in a friendly share-swap deal worth \$510 million. The merger created the largest oil rig manufacturer in North America, with a market value of more than \$1.4 billion.

More than five years after the sale, Pheasey reveals little sadness at letting go of the firm he started from scratch. “I look back now and I can honestly say it was a great decision,” he says. “Everyone is better off. Our customers, our employees, our shareholders, and the community.”

Today, Pheasey remains a key player in the industry as an executive vice-president with National Oilwell, and says he doesn’t see retirement in his future.

“I suppose I have to be practical. My value to the company is going to diminish,” he says. “But I hope I can find a place, because retirement just isn’t an option. I’m having too much fun.”

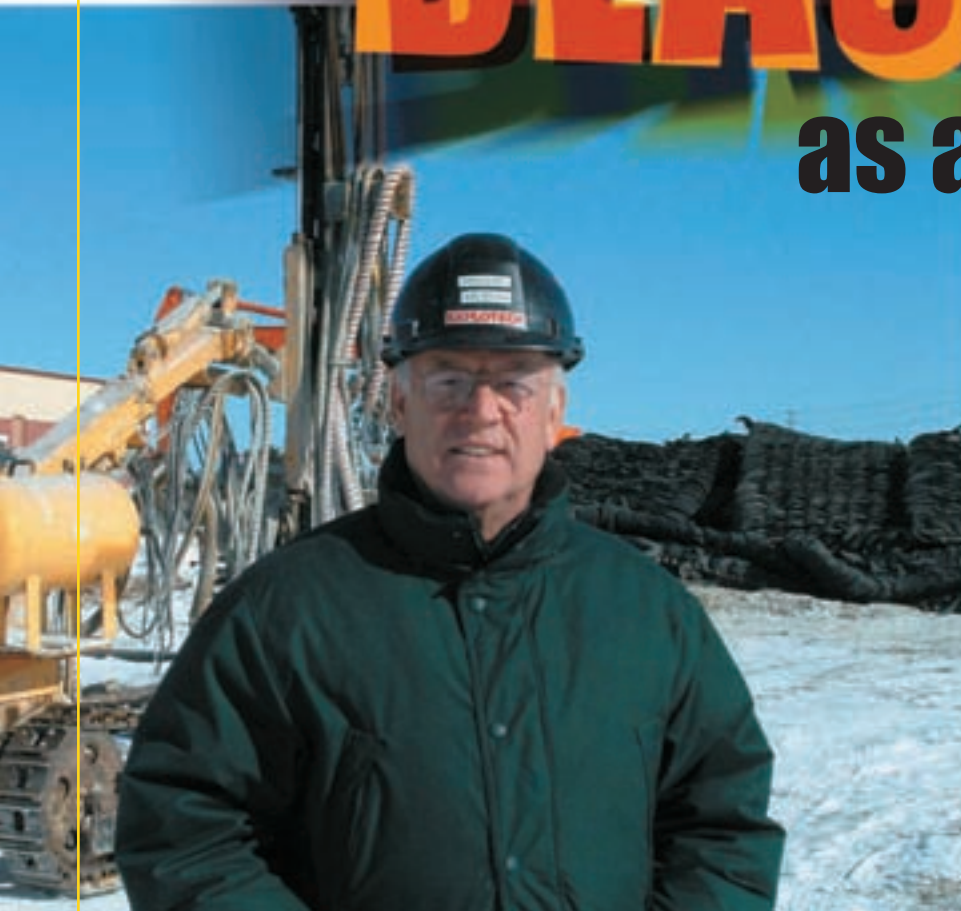
Reprinted with permission of the Edmonton Journal.



Having a

BLAST

as an Engineer



Here we meet **RENE (MOOSE) MORIN (Mining '59)**, owner/operator of Explotech, an Ottawa based firm specializing in blasts and explosions (www.explotech.com). He tells us about "having a blast" as an engineer.

What got you interested in explosions and blasting?

Believe it or not, when I got my Boy Scout merit badge for mining, I visited the Star Key Coal mine just out of Edmonton and got sort of turned on with mining. Also, my brother worked there and used to bring home the odd stick of powder that we had fun with.

What was your path from graduation to owning Explotech?

My first employer upon graduation (in the Yukon) was Bill Field, a mining graduate of the U of A.

I worked in the Yukon on a molybdenum prospect for the summer after graduation (jobs were hard to come by then). Then the manager plugged me into a friend who managed La Luz Mine in Nicaragua, so I went there for 13 months.

Once I paid off my school debts, I came back to Canada, wrote 55 job applications, and got two offers—one surveying at a small property in Salmo, B.C. and one cleaning ditches at the old Britannia Beach mine just out of Vancouver (jobs were really hard to



Sequential pictures of a marine pipeline blast.

come by). I took neither of these offers. I had met a nurse from Montreal in Nicaragua and, guess where I ended up? Once in Montreal, I made applications at DuPont and CIL Explosives Divisions.

I was offered a job with DuPont and stayed there for 17 years in various capacities: tech representative, branch manager, construction sales manager, bulk explosive product manager, and, finally, national sales manager.

I left DuPont to work with a drilling and blasting firm in Ottawa—was there for two years—then hung out my shingle as a blasting consultant. That was the only thing I knew anything about, and I felt there was a need.

I was extremely fortunate to keep the company going successfully for 25 years.



Excavation for a low head hydro project on the Trent Severn Canal near Batawa, Ontario.

How or why is blasting and explosives a good business?

There was a niche market for someone who had hands-on blasting and engineering experience but was not tied up to a specific explosives manufacturer.

How did your education and experience at the Faculty of Engineering equip you for your current business?

It would have been difficult to get the credibility without an engineering degree and, of course, the varied experience.

What are your remaining connections with Edmonton or Alberta or the U of A?

The mining and metallurgy class was small—14 in all—and since the 20th year we have been having reunions every five years. Now we have them every two years, since some of us have health problems and may not make it to the next one. Fortunately, we have only lost one classmate so far.

I still have family in Edmonton. My brother also went to the U of A, as did all his children. I managed to make it back for the 25th reunion and we are planning on being at our 50th.

What fosters pride for you as an alumnus?

It's great to see the Engineering Faculty making its mark. When I graduated, the private schools like Queen's and McGill were the big shooters. I don't think that is so anymore.

What emotional, sentimental, or intellectual connections still remain with U of A?

I still think of some of our professors. They were really dedicated people and believed in getting us though and into the workforce with good knowledge.

Also, I flunked out, and the Engineering Faculty let me back in (albeit after my having to prove that I wanted to get back in). They took a chance and, although I still struggled, it certainly has made a heck of a difference in my life.

What made your experience at the U of A better/different than your peers or competitors who graduated from other universities? What is your competitive edge?

We had no delusions of grandeur. Most of us came from farms or working-class backgrounds

What message do you have for fellow alumni?

Be proud of your school and be grateful that you were able to get a good engineering degree. Nothing rots my socks more than to hear a grad knock our school. It was a great school, and is now a better school. And it doesn't hurt to throw a little cash back at the place that gave us our current lifestyle.

Mr. Morin was alumni host for the Ottawa regional alumni and friends reception.



Enlarging a tunnel bore by blasting in Ottawa, Ontario.

Countdown to 2003 Reunion EDMONTON

On Your Mark!

Plans are brewing for Reunion 2003. U of A Engineer checked in with class organizers, and here's what they had to say:



Gregory Gulayets (Chemical '78) invites fellow classmates to gather on "the old stomping grounds" and catch up with each other. "My daughter is going up there next year, so I'll have a chance to see all the changes on campus and imagine what her time there will be like," says Gulayets.

Packing up photographs of their 3-year-old daughter, Jean and Bob Armstrong (Mechanical '93) plan to play the role of proud parents to the hilt. Meeting up with fellow graduates Janine Thompson and Gail Thornton, Jean will swap notes on career and family developments. Jean says, "It will be fun to catch up with the non-co-ops

and the 'Chemmys' and 'Mechies.'" Jean and Bob are both looking forward to their class's first big reunion—the 10th.

Bob Reynolds, class organizer for Chemical '48 says, "We plan to tack on a 3-day trip to Jasper, Banff and the Royal Tyrrell Museum for those nostalgic for the mountains and prairies." About a third of this class has settled in Eastern Canada and another third has been living in the United States. So this 55th anniversary will truly be a homecoming. Adds Bob, "This group never got together until its 50th. But that reunion went over big. Everyone was delighted."

The Gulayets, Armstrongs, Reynolds and all other class organizers issue a call to action—confirm your plans to attend reunion weekend this fall!



Get Set!

If you graduated in a year ending in a "3" or an "8"—like Gregory Gulayets, Bob and Jean Armstrong, and Bob Reynolds—you're celebrating a special reunion year in 2003. Reunion 2003 will be held October 2–5 on the U of A campus.

By now, you ought to have received your Reunion 2003 brochure which was mailed out to alumni celebrating special reunions this year. Even if you did not receive a special invitation, you are more than welcome to attend Reunion 2003 activities.

Go!

In addition to university-wide events, the Faculty of Engineering will host several complimentary events specifically for Engineering alumni and their families. Please include these special activities in your Reunion Weekend schedule. Registration for Engineering-specific events has already started. Don't delay! Go to www.engineering.ualberta.ca/alumni to register.

Here are just a few of the events you will enjoy:

Dean's Reception for Reunion Alumni and Guests

Friday, October 3
4:00 to 6:00 p.m.
Faculty Club, U of A Campus
Cost: Complimentary

If you are an Engineering alumnus or alumna celebrating a special reunion this year, Dr. David Lynch and Mrs. Lynch invite you and your spouse (or guest) to join them at this complimentary event. This reception offers a wonderful opportunity to see all your engineering classmates and colleagues in one place.

Dean's Brunch for 50+ Reunion Alumni

Saturday, October 4
9:30 to 11:00 a.m.
Engineering Teaching and Learning Complex (ETLC)
Cost: Complimentary

Engineering alumni who are celebrating their 50th, 55th or 60th reunions (graduating in 1943, 1948 or 1953) are invited to bring their spouses or guests to a complimentary hot brunch hosted by Dr. David Lynch and Mrs. Lynch (other Engineering alumni who graduated more than 50 years ago are also welcome). Dr. Lynch will give a special presentation during this event.

Engineering Open House/ Preview Day

Saturday, October 4
9:00 a.m. to 4:00 p.m.
Engineering Teaching and Learning Complex
Cost: Complimentary

All Engineering alumni, their families and friends, prospective students, and other guests are invited to attend the Faculty of Engineering's annual Open House. The impressive new Engineering Teaching and Learning Complex (ETLC) will be the venue for a wide variety of displays from all engineering disciplines. Take a guided tour of the new complex, and drop by the alumni hospitality lounge to have a coffee and visit with old friends.

Written with contributions from and thanks to Leanne Sim Nickel.

CLASS ORGANIZERS

Over the past few months, enthusiastic and dedicated class organizers may have been in contact with you by mail, phone, or e-mail to discuss reunion plans. Class organizers play a key role in tracking down long-lost classmates, and in arranging special class activities during Reunion Weekend (and at other times during the year).

If you have not yet been contacted by your class organizer call Leanne Sim Nickel in Edmonton at (780) 492-1317 or Laurie Hanasyk in Calgary at (403) 531-5873. If you don't see your class listed, you are still welcome to participate in any of the university-wide or faculty-specific activities.

'48 Chemical *Bob Reynolds*

'48 Civil *Bruce Burgess*

'48 Electrical *Alan Robertson*

'48 Mining *Robert Spencer*

'53 Chemical *Bill Musgrove*

'53 Civil *Neil Longson*

'53 Mining *John Giovanetto*

'53 Petroleum *Art Wood*

'58 Chemical *Donald Thurston*

'58 Electrical *Bud Finley*

'63 Civil *Craig Harrold*

'68 Civil *Barry Temple*

'73 Mechanical *Jim Nygren*

'78 Chemical *Gregory Gulayets*

'78 Civil *Glen Davidson*

'78 Electrical *Curtis Sparrow*

'78 Petroleum *D. Kerry Fulton*

'83 Chemical *Raymond Lemieux*

'83 Computer *Samson Mah*

'88 Electrical *Michael Palamarek*

'93 Chemical *Chantelle Carley*

'93 Mechanical *Jean Armstrong, Janine (Babowal) Thompson, Gail Thorton*

'93 Mechanical *Janine Thompson*

'98 Civil *Jesse Kozak*

'98 Mechanical *Britt Laramee*

See what has changed and what's yet to come at the University of Alberta.

Scattered **CIVIL** to be Reunited in Markin/CNRL Natural Resources Engineering Facility

by Phil Haswell, BEd, BSc

Civil and Environmental Engineering is the largest of the U of A's four engineering departments, and the largest civil engineering department in Canada. Unprecedented growth in graduate and undergraduate enrolment in the department has strained the department's teaching and research facilities, which are scattered over campus in 10 different buildings.

The new Markin/CNRL Natural Resources Engineering Facility (NREF) will collect these scattered elements in a single facility. NREF will provide a suitable space for research and collaboration, and will afford the department's researchers the opportunity to expand their research activities in technologically sophisticated surroundings.

The new building occupies the previous site of the T. Blench Hydraulics Laboratory. Built in 1962, the single-story laboratory



A computer rendering of the Markin/CNRL Natural Resources Engineering Building.



The old T. Blench Hydraulics Laboratory

building was demolished in January 2003. The area formerly covered by the hydraulics laboratory and its parking lot represents the approximate footprint of the new, 28,000 square metre gross (320,000 square foot) Markin/CNRL NREF.

The flumes, river trays, pumps, data acquisition equipment, and other experimental apparatus from the lab have either been put in storage or temporarily relocated to the basement of the Civil/Electrical Building.

Construction on the new building is well underway to meet the fall 2004 completion

Markin/CNRL Natural Resources Engineering Facility **QUICK FACTS**

Building area:
28,000 square metres gross
(320,000 square foot).

Number of stories: nine,
with seven above grade.

Research laboratories: 78

Undergraduate laboratories: 26

Undergraduate classrooms: nine

Graduate student spaces: 325

Project cost: \$65 million

date. Shortly after the site was cleared in January, the excavation contractor began removing approximately 45,000 cubic metres (about 5,000 dump trucks) of sand, till, silt and lacustrine clay, creating a hole big enough to accommodate the foundations and the two below-grade levels of the nine-story building.

The Markin/CNRL Natural Resources Engineering Facility will be in full operation in 2005.



It's Live!

Follow the construction activity via our live webcam! Go to the Faculty of Engineering home page at <http://www.engineering.ualberta.ca> and follow the Markin/CNRL Natural Resources Engineering Facility webcam link.



Phil Haswell is Director of Facilities for the Faculty of Engineering and will be filing progress reports each issue.

BALL, BRUCE DR.
(BSc Metallurgical '69, PhD Metallurgical '73) PEng



was recognized by the Consulting Engineers of Alberta for his participation in the Coalbanks Crossing Pedestrian Bridge spanning the Oldman River in Lethbridge. This project was given an Award of Excellence for Transportation Infrastructure. The judges saluted the bridge for its "fit" within the community and for its environmental worthiness, technical efficiencies and appropriateness in design, and material selection. Dr. Ball, with Ball Associated Engineering Ltd., provided quality assurance on the steel portions of the project.

BARDELL, GARY
(Civil '78) PEng



has been appointed president and CEO of the Churchill Corporation. Mr. Bardell has been with Stuart Olson Construction (a subsidiary of the Churchill Corporation) since 1979 and has progressed through operations, business development, and general management. His mandate is to expand Churchill's industrial and commercial businesses. Churchill provides commercial building, industrial construction, insulation, maintenance, and related services throughout Western Canada.

BROWN, TOM
(Civil '71) PEng, GSC



has been appointed chairperson of the 2003 Board for the Canadian Construction Association. Mr. Brown, senior vice president of Ledcor Alberta Ltd. in Edmonton, is responsible for the Alberta road building oper-

ation and the Alberta highway maintenance operations. The Canadian Construction Association (CCA) represents the interests of the construction industry to the federal government. Go to www.cca-acc.com for further information.

CAMARTA, NEIL
(Chemical '75) PEng



was awarded the Alberta Chamber of Resources Resource Person of the Year Award at this year's annual general meeting and banquet. Mr. Camarta has been senior vice president, oil sands, with Shell Canada Ltd. since, 1999. He joined Shell Canada as an engineer in 1975 and has held various technical and management roles—primarily in gas production. In March 1996, Mr. Camarta took on the additional responsibility of pulling together a major new oil sands mining project on Shell Canada's oil sands leases in Fort McMurray. In late 1999, Shell and its new joint venture partners, Chevron Canada Resources and Western Oil Sands Inc., gave the go-ahead for the Athabasca Oil Sands Project.

The Alberta Chamber of Resources Resource Person of the Year Award is given annually to an individual who exemplifies the attributes and qualities that have made Alberta one of the most prosperous, entrepreneurial and forward-thinking jurisdictions in the world.

GOMES, BOB
(Civil '78) PEng



has been appointed president of the Board of Consulting Engineers of Alberta (CEA) for the 2003/2004 term. Mr. Gomes is vice president for Northern Alberta with Stantec Consulting Ltd. This is his third term in office with CEA.

HOGG, BRAD
(Computer '94)



represents Vintacom Media Group, Alberta's fastest growing company in 2003 (according to Alberta Venture magazine). Mr. Hogg is CEO and president of Vintacom, an Edmonton-based developer of e-commerce applications and DreamMates.com, an on-line dating service. Established in 1999, the company now has 35 employees and experienced a 12,754% increase in sales over three years, with gross sales of \$3,996,413 at year-end 2002. Go to www.vintacom.com for further information.

JOHNSTONE, DWAYNE
(Civil '87) PEng



was recognized as a key player in the Springbank Water and Wastewater Master Plans for the municipal district of Rocky View. This project won an Award of Merit, Studies, Software, Special Projects from the Consulting Engineers of Alberta at this year's Showcase Awards. Mr. Johnstone's employer, Morrison Hershfield Ltd., researched and identified infrastructure issues and technical options in order to help the Springbank area find a long term solution for providing water and wastewater services to its future 55,000 residents. The study employed detailed computer modeling and looked at potentially merging 23 water utilities into one or two water and wastewater systems. Mr. Johnstone, co-author of the report, is an associate with Morrison Hershfield Ltd. and manager of infrastructure services for Southern Alberta.

KIEFER, WERNER
(Civil '73) PEng



accepted an Award of Merit in the Water Resources, Energy Production category of the Showcase Awards, sponsored by the Consulting Engineers of Alberta. His employer, Stantec Consulting, was recognized for EPCOR's E. L. Smith Water Treatment Plant UV Addition project—one of the world's largest ultraviolet light installations. The process uses ultraviolet light to render harmful protozoan pathogens inactive. Stantec Consulting was saluted for extending the technology, effectively managing the risks, and making a substantial benefit to society. Mr. Kiefer is project manager for Stantec Consulting and provided project coordination on the E. L. Smith Plant.

LEFSRUD, LIANNE
(Civil '94, MSc Environmental '96) PEng



has been appointed assistant director, professional practice for the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA). Prior to this, Ms. Lefsrud was transportation engineer for Transportation Planning at CN. She advanced through nine positions at CN since May 1996. Ms. Lefsrud will play a key role in APEGGA's regulatory function.

LONG, DEJIANG DR.
(Civil '91) PEng



accepted an Award of Excellence in the International category from the Consulting Engineers of Alberta. Dr. Long's employer, Golder Associates, was recognized for

Flood Management Optimization at the Sihuan Basin in China. This international cooperation involved 28 Canadian, Japanese, and Chinese specialists and resulted in the successful development, testing, and application of a state-of-the-art decision support system software. This software is used in optimal operations for large and complex flood control and damage systems in the Sihuan basin, inhabited by 4.5 million citizens along the Yangtze River. The judges saluted this project for excellent collaboration among industry and academics on an international stage and for world-class expertise. Dr. Long is principal for Golder Associates and was project director on the Flood Management project.

MONTGOMERY, COLIN JAMES (JIM)
(Civil '73) PEng



was reappointed to a third term on the Board of Directors of the Consulting Engineers of Alberta. Mr. Montgomery is a partner with The Cohos Evamy Partners.

READY, LEE
(MEng Electrical '98) PEng



accepted the CIBC Small Business Award of Distinction from the Alberta Chamber of Commerce at the 2003 Alberta Business Awards of Distinction. Mr. Ready is founder of Ready Engineering, an automation and electrical engineering firm based in Spruce Grove. Started in 1997 as a single client, two-employee firm, it has expanded sales into the United States, Australia, Indonesia, and Russia. It has 19 employees, offices in Washington and Texas, and had revenues of \$2.5 million last year.

REINDERS, THOMAS
(Civil '96) PEng



accepted an Award of Excellence in Water Resources, Energy Production from the Consulting Engineers of Alberta at this year's Showcase Awards. His employer, Associated Engineering, was recognized for the Anthony Henday Water Treatment Plant Expansion for the Mountain View Regional Water Services Commission. The design team overcame the challenge of high levels of contaminant in the raw water using innovative pre-treatment of the water integrated with state-of-the-art membrane filtration. Mr. Reinders is environmental process engineer with Associated Engineering and was project and process engineer on the Anthony Henday Plant Expansion project.

RIDLEY, ROD
(Mechanical '78) PEng



has been appointed manager of the new Sensors Engineering business unit for the Alberta Research Council Inc. (ARC). Mr. Ridley has been with ARC since 1979. His unit provides specialized measurement and monitoring systems using various integrated sensor devices to meet specific customer needs. As well as developing the appropriate software, Sensors Engineering can adapt various hardware components for specific applications that improve production processes for energy, power generation, oil sands, hard rock mining, pulp and paper, and water utilities. Mr. Ridley will provide leadership, technical support, and expertise to take Sensors' technologies to the marketplace.

Alberta Research Council is a Canadian leader in innovation in global solutions in energy, life sciences, agriculture, environment, forestry, and manufacturing.

ROGGEVEEN, COLIN
(Civil '94) PEng

accepted the Award of Merit for Water Resources, Energy Production, from the Consulting Engineers of Alberta. His employer, Edmonton Airports, was recognized for mitigating chemical contamination in stormwater due to aircraft de-icing. This issue was addressed, in part, by the installation of storm sewers under the airport tarmac. Mr. Roggeveen is project manager at Edmonton Airports.

SMITH, PETER
(Mechanical '69, MEng Mechanical '74) PEng



was mechanical process lead and mechanical lead engineer on the Corridor Pipeline Facilities project. This project, and Smith's employer SNC-Lavalin, received an Award of Merit in the Natural Resources, Mining and Industrial category at this year's Showcase Awards hosted by the Consulting Engineers of Alberta. The Corridor Pipeline was delivered on time and on budget with zero lost time due to accidents and a total recorded incident frequency report well below target. The project included design, procurement, and construction management of the above-ground facilities and pipeline infrastructure. This project was also recognized for a facilities design that incorporates operability, accessibility, maintainability, and environmental responsibility. It will be the model for future Terasen pipeline pump stations.

SOMJI, NIZAR J.
(MEng Chemical '85) PEng



is the president and CEO of Matrikon Inc., recently recognized by Alberta Venture magazine as the sixth-fastest growing company in the province. Matrikon is an Edmonton web-based industrial product and service provider. Founded in 1988, Matrikon has 450 employees with gross sales of \$37,576,000 in 2002. The company experienced a 136% increase in growth in the last three years.

Recipient of the top award, the Premier's Award of Distinction, as well as Western Economic Diversification Canada's Export Award of Distinction at the 2003 Alberta Business Awards of Distinction, Matrikon exports its industrial plant management software to Africa, Asia, Australia, Europe, the Middle East, South America, and the United States. The top honour, the Premier's Award, goes to the business that embodies the Alberta Advantage by exhibiting overall outstanding leadership and leadership in the business community. The Export Award recognizes outstanding achievement in exporting products, services, and technology beyond Alberta borders.

STEWART, JAMES (JIM) R.
(Civil '71) PEng



was reappointed to the 2003 Board of Directors of Consulting Engineers of Alberta. This is his fourth year on the Board. Mr. Stewart is senior vice president, manager for Northern Alberta, and market sector leader for the earth and water sector of UMA Engineering Ltd. He supervises 400 people in Northern Alberta and serves on the executive committee for UMA on the national level.

VAN ANDEL, JOHN
(Civil '84) PEng



accepted the Award of Merit for Water Resources, Energy Production at this year's Showcase

Awards, hosted by the Consulting Engineers of Alberta. His employer, UMA Engineering, was recognized for the stormwater management project at Edmonton Airport. This \$6 million project included storm sewer installations underneath the airport taxiway and runway, extensive channel excavation, a 300,000 cubic metre detention facility, and a sub-surface wetland treatment center. Mr. Van Anadel is project manager with UMA Engineering and worked as design engineer on the Edmonton Airports project.

VAN CAMP, KEVIN
(Mechanical '80) PEng



was recently appointed as development engineer with Genics Inc, a developer and manufacturer of wood preservatives and part of the ATCO Group. Mr. Van Camp brings 20 years of experience

in commercial, research and institutional building services, and industrial equipment, process and plant design and construction.

WATT, DAVID
(Civil '78) PEng



serves on the Board of Consulting Engineers of Alberta. Mr. Watt is principal of

D. A. Watt Consulting Group.

WIART, DENIS
(Mechanical '93) PEng



has joined ECO-Technica as a principal and manager of mechanical engineering. Mr. Wiart has worked in a wide range of industries including power generation, chemical production, pharmaceuticals, and aerospace technology and brings extensive experience in detail design, project and quality management. He will lead ECO-Technica's growth in the mechanical disciplines. ECO-Technica is located in Edmonton and offers engineering and project services.

YAMADA, MIKE
(MEng Environmental '91) PEng



accepted the Award of Excellence in Water Resources, Energy Production at this

year's Showcase Awards hosted by the Consulting Engineers of Alberta. Mr. Yamada's employer, UMA Engineering, was recognized for the Gold Bar Wastewater Treatment Plant—Biological Nutrient Removal Retrofit Project for the City of Edmonton. This \$18 million project included a full-scale application of technology in a hostile environment and the application of new technology to a plant that provided considerable physical challenges. Remarkably, it was completed in 15 months. UMA was the prime consultant on the project; Stantec and Magna Engineering were sub-consultants. Mr. Yamada is environmental process engineer with UMA Engineering and served as process engineer on the Gold Bar project.

in memoriam

The Faculty of Engineering sincerely regrets the passing of the following alumni and friends.

- Austin, Eric (Chemical '32)
- Brooke, Edward Hugh (Chemical '42)
- Coote, G. F. (Bud) (Civil '40)
- Donovan, Joseph (Electrical '49)
- Edwards, Milton C. (Electrical '37)
- Grant, Norman Angus (Mining '42)
- Hiller, Walter (Civil '43)
- Holte, Donald Ervin (Mechanical '63)
- Hope, Dr. Gordon (Electrical '57)
- Kennedy, Elmer (Chemical '50)
- Knight, Ronald James (Civil '49)
- Meckelborg, Ewald (Wally) (MEng Civil '72)
- Prokopy, Peter (Civil '39)
- Scott, Wallace (Electrical '68)
- Wyld, Richard Charles (Civil '51, MSc Civil '58)

for the record (missed memoriams)

The Faculty of Engineering was recently made aware that the following alumni passed away more than a year ago.

- Anderson, Allen Richard D. (Electrical '63)
- Little, Earl Edward (Mining '49)
- Young, J. Ross (Electrical '51)



Keep in Touch

engineer.alum@ualberta.ca

Graduate's Name _____

Year of Graduation and Degree _____

Do you have a new address?

Home Address _____

Business Address _____

Organization _____

Title _____

Street _____

City _____ Province _____

Postal Code _____ Telephone _____

Fax _____

Preferred E-mail _____

What's New with You?

(Comments for possible publication in this magazine)

E-mail, fax or post this information to
engineer.alum@ualberta.ca
Fax (780) 492-0500
E6-050 Engineering Teaching & Learning Complex
Edmonton, Alberta T6G 2V4

The personal information requested on this form is collected and protected under the authority of the Universities Act and Section 32 (c) of the Alberta Freedom of Information and Protection of Privacy Act for the purposes of maintaining up to date records of alumni and friends and obtaining alumni feedback.

Civil

Hughes, Ralph

(Chemical '61, MSc Civil '63)

An old friend and U of A graduate and PEng, G. F. (Bud) Coote (Civil '40) passed away last week. He was an accomplished man. (Received February 6, 2003.)

Computer Engineering

Bhasin, Sunny (Computer '02)

Shortly after graduation, I started a company, The Bhasin Group, with fellow Computer Engineering alumni. Primary partners include Lindsey George, Sameer Hirji, Jeff Bazinet and me.

The company gives us a base from which to launch products, in the hopes that one or more will take off. To this end, we are currently involved in various projects. For more information see www.bhasingroup.com, or contact me anytime at sunny.bhasin@bhasingroup.com.

Electrical Engineering

Braun, Darcy (MSc Electrical '96)

I joined Operation Technology Inc. (OTI) in 1996 after completing my MSc in Electrical Engineering. After seven years, I am still at OTI working as senior electrical engineer in Lake Forest, California. OTI develops and markets the ETAP family of products, used by electrical engineers to design and analyze electrical power systems. Friends can contact me at braun@etap.com.

Does, Mark D. (Electrical '91, MSc Electrical '93, PhD Biomedical Engineering '97)

After graduation I did a post-doc at Yale University from 1997 to 1999. I served as associate research scientist (this is a research-track faculty position) in Diagnostic Radiology at Yale University School of Medicine from 1999-2001, then as assistant professor from 2001-2002.

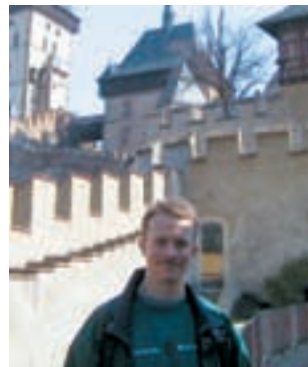
From September 2002 to present I have been an assistant profes-

sor, biomedical engineering, at Vanderbilt University.

There are no real family developments. I'm not really in the engineering profession—more of the academic profession (research and teaching). I'm proud to be from U of A because of its very high standards in education and research. Considering that I only went to U of A because I happened to live in St. Albert, I feel quite fortunate.

Freeman, James (Electrical '89, MSc Electrical '91)

I recently returned from the Czech Republic, where, with a handful of other U of A graduates, I formed part of an ex-pat team that helped start up a new mobile cell phone company. I was in Prague from late 1999 until May 2002, and became director of service development and pricing. In that role, my



team brought 13 products to market in 17 months, a tough challenge in a young company with inexperienced staff.

My wife Sandra and I are back from travels in Europe last spring/early summer, and I am now doing strategic planning and project management consulting from my university-area home. I am also actively training for the upcoming triathlon season, and have

resumed instruction of the university-area karate club. I may be reached at freejame@telus.net.

Palladino, Tony (Electrical '77)

In an effort to give back a little—to the U of A and to the electric industry—after 26 years, I served on the organizing committee for the U of A sponsored Distributed Generation seminar on February 20 and 21. Go to www.ee.ualberta.ca/pwrsys/topics.html for more information. This seminar was important because there are more and more smaller generators connecting to distribution systems (lower voltage systems). This is a change from the past. For orderly development—which is in the public interest—we need to develop standards.

Petroleum Engineering

Dyer, Steve (Petroleum '87, MSc Petroleum '89)

I work for EnCana as the manager of environmental and regulatory affairs for the Buzzard Development Project in the U.K. North Sea, based out of London. I have been living here for the past three years with my wife Cheryl and son Mitchell. We are having a great time in the U.K. and look forward to spending a few more years in London and maybe Aberdeen. My career continues to evolve every three years, varying among engineering, operations, and other. Cheers, Steve.

Calling All GNCTR Alumni

Dr. Sid Simmonds is attempting to compile a history of the Great Northern Concrete Toboggan Race (GNCTR) and is anxious to hear from former participants in these races.

The University of Alberta was one of four engineering educational institutions competing in the first GNCTR in 1974 and has participated in every race since. The second and subsequent races were organized by the competing students themselves—a truly remarkable achievement, but one that prevented the keeping of continuous records. Sid asks you to submit the year you competed, the name of the host institution, the race location, the name of the winning team, and other information of interest (such as photos, copies of race rules, or other any memorable or unique aspects of that race). Contact Sid at shsimmonds@civil.ualberta.ca.

Alumni Events

Chemical '58 – 45th Reunion

A reunion dinner for the class of Chemical Engineering '58 will take place in Calgary on Friday, September 19. Contact class organizer Don Thurston for further information.

Edmonton Alumni Reception

Graduates from Chemical, Materials and Metallurgical Engineering who reside in the Edmonton area are invited to an alumni reception at the Faculty Club in November. For a specific date and time check www.engineering.ualberta.ca/alumni.

Fall Convocation

Fall Convocation for Engineering graduates will take place November 20. For further information contact Linda Arndt at (780) 492-2376.

Toronto Regional Alumni and Friends Reception

Toronto alumni are invited to a reception in September. For a specific date and time check www.engineering.ualberta.ca/alumni.

Ottawa Alumni Reception

The second annual Ottawa Regional alumni and friends reception was held February 10 at the Westin Ottawa. Host Rene (Moose) Morin (Mining '59), along with his wife Doris, welcomed 40 alumni and introduced the Dean, David Lynch, PhD. Dr. Lynch spoke about the great students, teachers and researchers, and new infrastructure at the U of A, and gave an update on the Natural Resources Engineering Facility (NREF), currently under construction. The Dean issued a personal invitation to all to visit Edmonton and tour NREF once it's completed.

Special guests included Francis Lionnet and Robert Roy, representing the Natural Sciences and Engineering Research Council, and Dr. Lloyd Pinkney (Engineering Physics '52), an early researcher on the Canada Arm used on the space shuttle.



Moose Morin, left, and Dr. Gary Lindberg.

Alumni Reunion Days

The University of Alberta will host Reunion Days from October 2–5, 2004. The Dean's reception will be October 3, the Dean's Brunch will be October 4 and Engineering Open House and Dean's Forum will be October 4.

Victoria Regional Alumni Tea

Victoria alumni and friends are invited to a tea on Wednesday, October 29 from 2:00–4:00 p.m. For location check www.engineering.ualberta.ca/alumni.

Vancouver Alumni Reception

The Vancouver alumni and friends reception will be held on Thursday, October 30, from 5:30–7:30 p.m. For location check www.engineering.ualberta.ca/alumni.

Bulletin Board

National Professional Practice Exams

The Association of Professional Engineers, Geologists and Geophysicists of Alberta has set the deadlines for registration for the national professional practice exams. The deadlines are June 3 for the exam on July 21, and September 1 for the exam on October 20. Go to www.apegga.org for further information.

Petrochem Expo 2003

The Petrochem Expo will take place September 18 and 19 in Westerner Park in Red Deer. The show includes petrochemical, petroleum, pipeline, and refining equipment and services. Contact Linda McCaffrey, director, Uniglobe International Exhibitions Ltd., phone (403) 258-0705, fax (403) 258-0745 or e-mail expos@uniglobetradeshows.com for more information.

Fourth International Conference on Computer Applications in the Minerals Industries

The fourth International Conference on Computer Applications in the Minerals Industries will be held September 8–10 in Calgary. Deadline for on-line publication of manuscripts is July 15. The contact for abstracts is Dr. Raj K. Singhal, P.O. Box 68002, Crowfoot Postal Outlet, 28 Crowfoot Terrace NW, Calgary, Alberta, T3G 1Y0 Canada, fax: (403) 241-9460, e-mail: singhal@telusplanet.net. The official CAMI 2003 website is www.cami2003.com.

Errors and Omissions

Apologies to Dr. Vermeulen for the following errors in photo captions in issue 10. The picture identified as having been taken on the Mountain River, NWT, actually depicts the Camsell River, between Great Bear Lake and Great Slave Lake, NWT (1989). The picture identified as the Starlight Range, Willmore Wilderness, Alberta, actually depicts The Fritz Lakes, Willmore Wilderness, Alberta.

In last issue's engineer.alumn@ualberta.ca, we incorrectly identified Roman Z. Zaputowycz as a graduate of Electrical '57. Make that '56.

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ENGINEERING

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