INCO
Triangle

Vol. 47 No. 2

OCTOBER | Ontario Division | 1988

An unusual use for a Band-Aid by Dad. See story, page 11.

Orest Andrews puts the finishing touches on one of his carved birds. Story page 15.

$2.81 million awarded

Northern Ontario first for backfill research

Inco-inspired research into a new method of high-density backfill for mines is the first Northern Ontario scientific project to win investment from the Premier's Council Technology Fund.

With Inco itself providing half of the $6 million funding, the project will receive $2.81 million in provincial money to develop new materials and technology to improve mining productivity.

The project, which is a natural outgrowth of research initiated by Inco's mines research department of the Ontario division, is the first mining endeavour to get funding since the Premier's Council Technology Fund was created in 1986.

Dr. Mike Sopko, Ontario division president, described the research project as being "vitally significant" to the Canadian mining industry. Mines need backfill to fill in voids created by mining and to give structural strength to the mines.

"This technology which is being undertaken in co-operation with Ortech International, formerly the Ontario Research Foundation, and Laurentian University, could make a major contribution to improving the efficiency and productivity of mines," Dr. Sopko said.

Industry, Trade and Technology Minister Monte Kwinter announced the provincial funding at a news conference in Sudbury late last month.

"This work will build on the capabilities of one of Ontario's key industries," Mr. Kwinter said. "By improving efficiency, the mining sector will be better equipped to win new markets and create more jobs."

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Port Colborne safety scores high rating

The Port Colborne Refinery has picked up in safety where it left off last year when it won for the first time in its history the top safety honors for Milling, Smelting and Refining.

Although the refinery rests in third spot behind Copper Cliff's nickel and copper refineries in this year's tough competition, Port Colborne's safety record is better this year than a year ago when it captured two of the three safety categories.

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Dave and daughter paddling to prominence

Dave Derochie has made a canoeing comeback.

"The pounds are very easy to put on, very hard to take off," said the First Aid instructor and Plant Protection officer who returned to competitive canoeing after a 14-year absence that he describes as having made him "fat, pot-bellied and lazy."

Born and raised in the Sudbury area, the 21-year employee hardly looks his 43 years.

"But getting back into shape was an ordeal," he grimaced. "I had to take off about 30 pounds. I worked out at the gym all winter."

As a youngster, he took up canoeing and travelled all over Canada to compete with the Sudbury team, earning a mountain of medals in the process.

But he never talked about his athletic accomplishments. When the movie Chariots of Fire interested his two daughters, he had to haul his medals out of the closet to prove to them that he, too, was once a successful athlete.

It was an offer to coach canoe teams that reactivated his interest last year and it wasn't long before he was back into competing as well.

"The last time I raced successfully before I retired was at the 1969 Canada Games," he said. In that competition, he earned two golds, a silver and a bronze medal in various canoeing events.

In a way, Dave has taken up from where he quit. After only about a year of training, he cleaned up at national competitions this year by earning two golds and three silver medals.

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Dave Derochie and daughter Ginger show their winning style. The two race in huge war canoes paddled by a crew of 14.

German students tour Inco complex

It may not be coal or fluoride mining like back home, but West German students showed a keen interest in Inco operations during a tour here last month.

"The mining operations here are new to us and the theoretical information we learn here will help us," said Lutz Kaeding, a graduate student of Karlsruhe University. He plans to do research in the field and hopes to visit mining operations in other parts of the world to expand his knowledge in the field of geology and mineralogy.

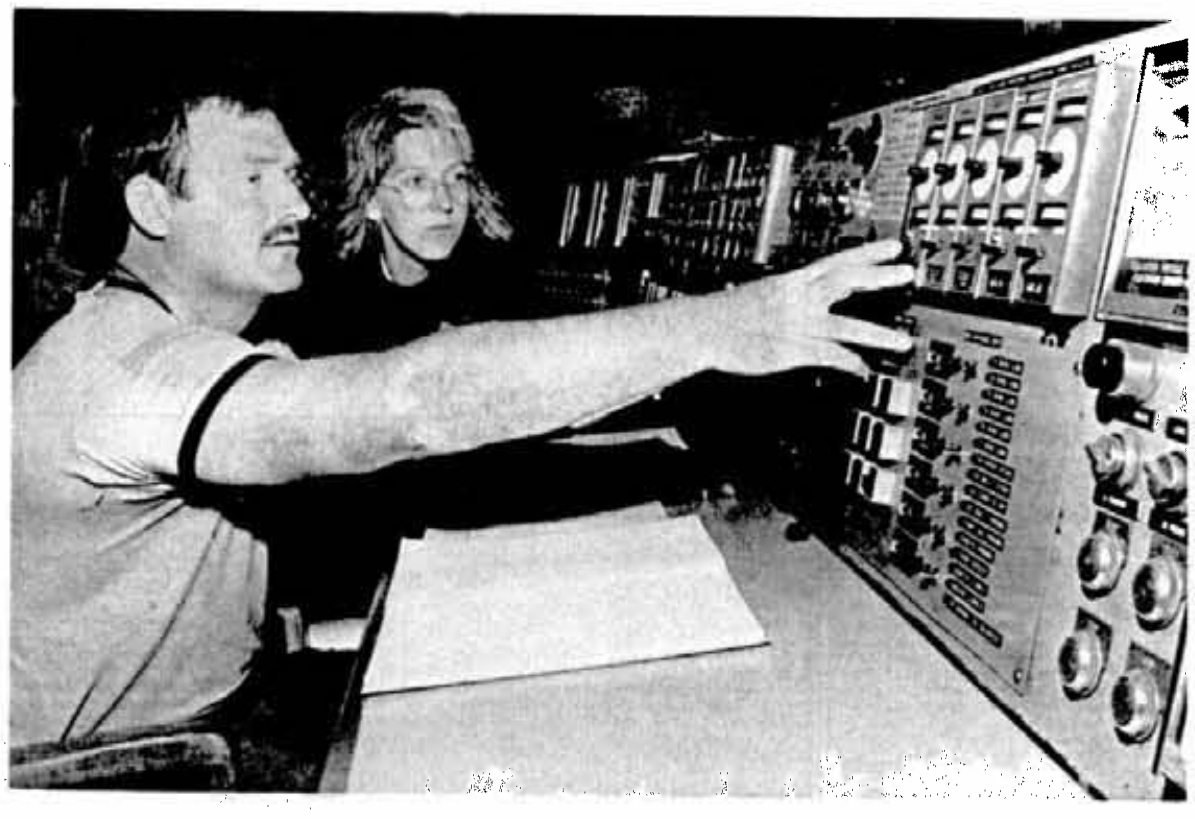
Lutz was one of 20 Karlsruhe University students and supervisors who toured Stobie Mine and the Frood-Stobie Mill in September. It was part of a three-week educational trip through Ontario and Quebec to allow the geo-sciences and mining students a closer look at various economic mineral operations.

The focus of their interest was on ore and host rock mineralogy and petrology, mining methods, aspects of ore processing and more.

The young Germans found Canada a friendly place.

"It doesn't take long to get to know people here," said Ulrike Henes-Klaiber, 30. "People are very open."

The tour moved on to Timmins after the Inco visit, and the students were scheduled to be on their way back to Germany by September 23. ■



Process foreman Dean Young shows Frood-Stobie Mill control room gadgetry to Ulrike Henes-Klaiber.

Inco shines with Shatner in TV documentary film

Dr. Larry Banbury outlines Inco's environmental efforts in an interview with the Voice of the Planet television crew.

Inco's Sudbury operation may not be the star of the international fight against pollution, but it's obviously part of the strong supporting cast.

That's why a Maryland Public Television crew filming a 10-part documentary on the global ecology visited Inco to film new technologies in controlling sulphur emissions.

"I have been told that you (Inco) have initiated much new technology in the control of sulphur dioxide, and that you are the world leaders in sulphur reduction," said Jeremy Hogarth, co-producer and director of the documentary called Voice of the Planet.

A film crew came to Sudbury in mid-August after filming a segment in Iceland and toured the tailings area, the greenhouse and other Inco operations. Part of the filming also included an interview with superintendent of Environmental Control Larry Banbury who described Inco's program of sulphur reduction and other environmental efforts.

To be broadcast in the United States and around the world in 1990, the series stars William Shatner of Star Trek fame. The filming for Voice of the Planet took place in over 17 countries as well as locations within the United States. The series advisor is Adrian Malone who produced "Cosmos" and the BBC series "The Ascent of Man."

Each of the 10 segments focuses on a different subject ranging from water, agriculture and extinction to air quality. Inco's efforts to regenerate surrounding lands were also noted by producers. ■

Nickel Beach adds $70,000 to city coffers

A $1 payment to Inco has returned $70,000 to Port Colborne city coffers this year.

Nickel Beach, leased from Inco for $1 a year since 1977, saw record vehicle admissions bring in a healthy profit over expenses this year for the southern Ontario municipality.

Parks and recreation officials report their costs for running the park were approximately $40,000, giving the city almost $30,000 in profit.

Under the 1977 agreement, Inco provides washrooms and fencing and the city looks after maintenance and cleaning of the half-mile sand beach. It's the single public beach within walking distance of the downtown, and only one of two municipally-operated beaches within the city.

Well over 13,000 cars entered Nickel Beach during July and August and although no surveys have ever been taken on attendance, estimates suggest almost 45,000 people used the beach.

The ball park figure is based on three people per vehicle and 10 percent pedestrian and cycle traffic.

Admission at Nickel Beach is free to pedestrians and cyclists who travel at least a half mile to the facility.

As well as providing income for the municipality, the beach operation also provides full-time seasonal maintenance, cleaning, and parking attendant work for six students.

Additional costs for the city includes road grooming equipment, pumping of sewage holding tanks and twice-weekly removal of garbage from dumpsters. ■

Dad chooses diapers over Aussie trip

What's more exciting than a six-week visit to the other side of the world?

For Fred Stanford, it's being home for the birth of his second child.

"First things first . . . priorities," said the 29-year-old engineer with the Stobie engineering department who turned down a chance at an expenses-paid Rotary International exchange trip to Australia.

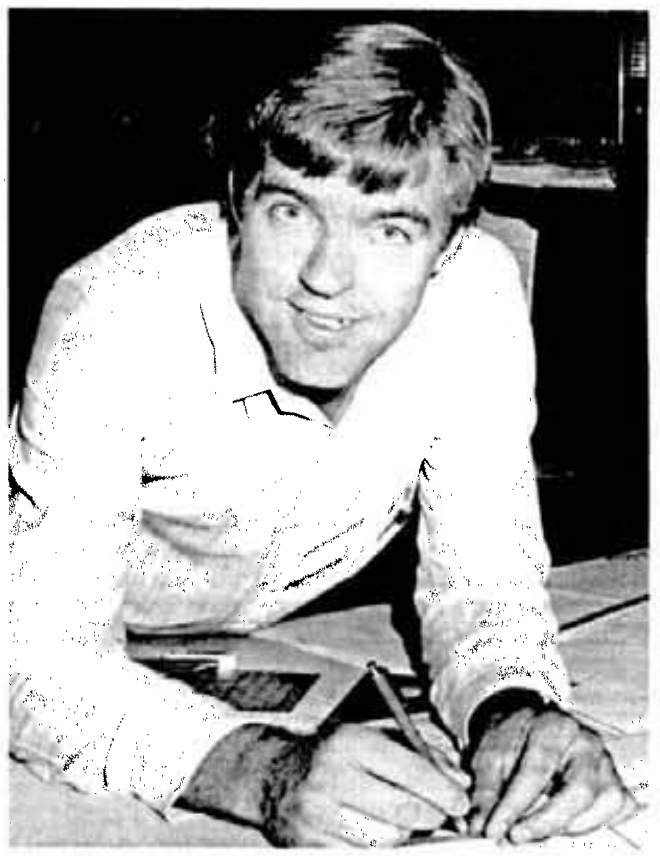
He applied for the Rotary-sponsored trip which was initially scheduled to leave for 'Down Under' next February. But when rescheduling changed the timing to coincide with the expected birth of his second child, he withdrew the application.

"I'd have taken a chance on a week or so," he said, "but the expected due date is right in the middle of the six weeks I would be in Australia."

He thinks he may have been on the short list to go but has no idea if he would have been chosen.

"I've never been off the continent before," he said. "I would have loved to go.

"But family first. I wouldn't want to be anywhere else when the baby is born." ■



Engineer Fred Stanford misses chance of a lifetime trip for once-in-a-lifetime event.

Thomas Gladstone's swing a five-time lucky thing?

"FIVE!!"

Not the traditional golfer's warning, but it would be more applicable to Thomas Gladstone's game.

The retired general foreman from the Copper Cliff smelter modestly describes his fifth career hole-in-one last month as "a matter of luck."

"I'm either very lucky or very good," he said with a smile. "I'd say I'm very lucky."

Nevertheless, Thomas' 'luck' has struck five times despite the fact that he's been swinging a golf club for only 16 years.

His reason for taking up the game so late in life?

"I always figured it was a dumb game," said Thomas, 78. "I figured golfers were a bunch of damned fools."

He joined the "damned fools" in the early 1970s. Within two years he sunk his first hole-in-one while golfing at the West Palm Beach Golf Club in Florida where he was vacationing.

A year later, playing the Lively Golf and Country Club, he sunk his second.

In all, three of his 'sinkers' were at the Lively club and two were in Florida.

Perhaps the most surprising thing about his most recent hole-in-one is that he was able to swing a golf club at all.

A misdirected golf ball smashed into his left foot three years ago and the shattered small bones kept him off his feet for four months. Two years ago, he ended up in the hospital with injuries sustained in a car accident. While in the hospital, he suffered a stroke. Because he has arthritis in his back, he had developed what friends and fellow golfers consider a "very unusual swing."

"I've barely been able to play these last few years," said Thomas. "Last year, I tried to golf once but didn't last more than three holes."

This season was too hot for comfortable golfing and he's been out for only about 10 rounds of nine-hole golf.

Long enough to chalk up another bout of "luck." ■

The hole-in-one view of Tom Gladstone

Hiring drive draws ex-Sudburians home

Inco's workforce is now in balance with its requirements.

"I don't see a repeat of this year's mass hirings," said personnel superintendent Vince Orlando. "At least not in the foreseeable future."

About 180 miners and maintenance people were hired this year after an enthusiastic response to a voluntary early retirement program in 1987.

Mr. Orlando said that in the 10 years before the hirings, Inco had surplus employees.

The hiring freeze ended this spring when Inco placed advertisements in northern Ontario newspapers to fill vacancies created through a better-than-expected response to the voluntary early retirement program last fall.

"We wanted to offer early retirement to about 300 people," he said, "but 460 applied. We decided to let them all go and replace them as part of the new hiring."

More than 2,000 people submitted applications in response to the advertising campaign, a large percentage coming from former Inco employees laid off during the lean years.

"Most of them came from people in the Sudbury area," he said, "but we had some apply from as far away as Newfoundland, the North West Territories and British Columbia."

He said there was no problem finding the experienced

Dale Lynds

heavy duty equipment mechanics, maintenance electricians and maintenance mechanics that the company required.

The overall shortage of miners in the province didn't hamper the hiring program, he said, because Inco and the Sudbury area have always been considered an attractive place in which to live and work.

From this point on, Inco will gauge its ongoing attrition rate and replace people as required, he added.

"If attrition increases, we'll be hiring to keep our workforce in balance with requirements," said Vince. "It'll be a gradual, on-going thing."

Coming home

For people like McCreedy West miner Peter King who left Inco in 1978 after eight years of service, the hiring program was a chance to return home to the Sudbury area.

He went south for a short stay doing "odds and ends" in Toronto.

"I like to go visit the south once in a while but I wouldn't want to live there," he said.

He moved north again and worked for Denison Mines and Falconbridge, then took courses at Cambrian College.

For the last four years he's been working for Rio Algom at

Continued on page 15

Creighton observatory site wows neutrino scientists

They came, they saw, they were conquered.

Thirty-five international scientists from the Sudbury Neutrino Observatory collaboration came to Sudbury last month to review the large neutrino detector project for Inco's Creighton Mine.

And when they left three days later, they were bowled over by the project's reception within the region and from Inco.

Dr. Doug Hallman, associate physics professor at Laurentian University, said the scientists from Great Britain, United States and Canada were impressed with the support locally and "certainly with Inco's co-operation."

"They were in agreement that the site was, indeed, the best suited in North America for this experiment," he said of the group that included Canadian project leader Dr. George Ewan of Queen's University, and U.S. project leader Dr. Art MacDonald of Princeton and British director Dr. David Sinclair of Oxford.

At a symposium co-sponsored at Science North by Inco, the Sudbury region and Laurentian, Ontario division president Dr. Mike Sopko stressed Inco's commitment to the scientific project.

Noting that Creighton boasts the great depth and stable rock structure needed for the scientific observation, Dr. Sopko said Creighton was "ideally suited because of its history of excellence in mining management and its safety performance."

Dr. Sopko, who called the project "a milestone" at Inco, said these two qualities were essential for the safe and successful conduct of scientific experiments in a working mine.

"Although we have extensive experience in developing and managing deep mines, this is the first time that we will be collaborating on a major scientific project within an active mine. By necessity, that will call for greater understanding and closer co-operation for all of us involved so that we both can accomplish our objectives."

Services at cost

Inco is offering all of its services, ranging from the initial construction to later maintenance and servicing, at cost.

Dr. Sopko said the Sudbury neutrino project will add to the cultural and scientific climate in northern Ontario and further heighten the profile of Canada's underground miners and enhance the changing image of Sudbury.

"At Inco, we're proud to be part of the team ushering in a new era in astrophysics and bringing such a prestigious project to Sudbury," he told the scientists and Sudbury civic leaders at Science North.

The Sudbury Neutrino Observatory is a $35-million underground laboratory to be located at the 6,800-foot level of Creighton Mine's No. 9 shaft.

The detector is a 20-meter diameter by 30-meter high water tank with a central clear plastic tank of "heavy water", surrounded by 2,000 light sensor tubes.

The laboratory would detect neutrinos - tiny neutral particles which pass through almost everything - which come from the sun and elsewhere in the universe. Of a unique design, the detector would be the best equipped in the world to answer vital questions about how our sun works as well as fusion processes in the sun and about the properties of neutrinos.

The neutrino project is inspiring international scientific and media attention.

CBC National News, for instance, delivered an in-depth scientific report on the Sudbury Neutrino Observatory during the week the scientists were in Sudbury. ■

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The family that canoes together . . .

He won all war boat events at the divisional and provincial championships that led to the nationals.

All the medals are in the war canoe category where Dave serves as coxswain and captain of 14-member crews competing in five different racing categories.

As an extra bonus for Dave, canoeing has become a family affair. Under her father's coaching, Ginger Derochie has already become a canoeist to watch. In her second year of racing this year, the 13-year-old won a gold and silver at the nationals, three golds at the provincial and two golds at the western division championships.

"Dad got me interested," Ginger said. "He didn't push me into it. I wanted to do it on my own."

She admits her father can be a tough and demanding coach, although he's no tougher on her than any of the other canoeists whom he coaches.

"But he doesn't treat me with any favoritism either," she said with a smile.

"I suppose I'm old to be racing, but then, I feel fine," said Dave as he proudly talks of his daughter's accomplishments.

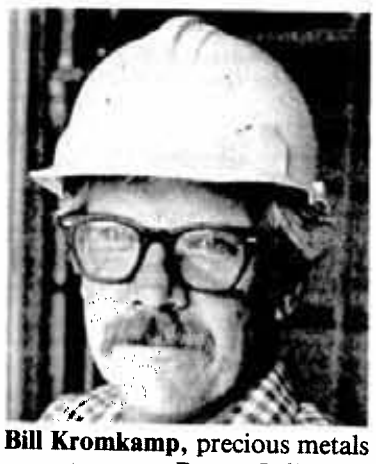
"You can always bounce back," he added. ■

Dave Derochie and daughter Ginger with some of the medals they've earned in canoe racing.

Like other Canadians from coast to coast, Inco employees have their own ideas, opinions and suggestions about local, company, national and international issues. Starting with the October issue of the Triangle, we will give Inco people an opportunity to voice their points of view.

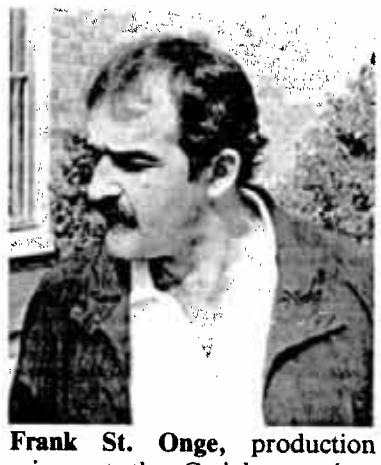
Question: Should Canada enter into a free trade deal with the United States?

Terry St. Louis, first-line supervisor in the Port Colborne electro-cobalt refinery: "The people of Canada aren't aware of all that's going on with trade. It should have been explained to the people in more detail and people should have had the chance to vote on it. What do we know about it? Very little."

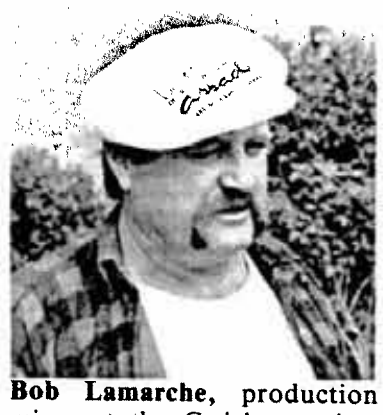


Bill Kromkamp, precious metals operator at Port Colborne: "Yes, I do. Because we are a border area, I feel it will be beneficial to those living in areas like this. I don't think there should be a plebiscite on the issue since our government is capable of making a good decision."

Hubert Aubin, backhoe operator at the Creighton mine: "Not after what I've heard. The way I understand it, the U.S. will be able to do whatever they like in Canada. Mr. Mulroney should bring it to a vote in the next election."



Frank St. Onge, production miner at the Creighton mine: "What kind of changes is free trade going to give us? What will happen to our lifestyle? You hear free trade but what does it really mean? When you talk government, there's a lot of $17 words. Let's see the fine print."

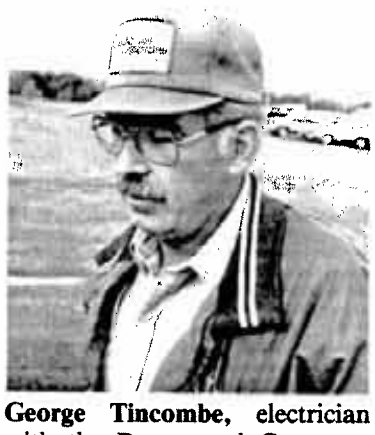


Bob Lamarche, production miner at the Creighton mine: "Personally, I'm not in favor of it to tell you the truth. To a guy like me, there's not been enough information available. My big fear is they'll take away lots of our privileges and traditions. In the United States, you have to pay for operations, here we have medicare. What's free trade going to do with us?"

Dino Iannandrea, industrial mechanic leader at Port Colborne: "I don't think the government should decide the issue. The people should decide. This is such a controversial issue that there should be a plebiscite or a referendum. Personally, I think we should try it but we should be very careful and it should be limited at first."

Rita Friel, timekeeper in the Copper Cliff comptroller's office: "Yes and no. Probably yes. If it works out honestly, the way they propose, it should be beneficial to all of us. That is, if it's not underhanded. My personal feeling is Canada never seems to do well out of any deal with the United States."

Jack McFarlane, packaging and shipping operator at the Iron Ore binding building: "From what I can see, it would be better. It's going to be a lot cheaper for somebody going over to the United States and buying something. Some companies will probably gain from free trade and some will lose. But it should be decided by a vote. Let the people decide."



George Tincombe, electrician with the Power and Construction department at the Iron Ore Plant: "For the nickel industry, it's supposed to be alright. For others, it's not so good. I'm sort of on the fence myself. I don't think we've been informed enough about it. At least, I'm not. There should be a vote."

Angie Gagnon, clerk-stenographer at the Clarabelle Mill: "It should go to the people because of the complexity of the issue. It shouldn't be a decision that Mr. Mulroney should make alone. It should be made by the people of Canada."

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We play it safe at midnight

Just when you thought it wasn't safe to go out after dark, along comes the midnight shift of production miners at McCreedy West Mine to prove you wrong. The crew hasn't had an injury since January 7, 1987, representing around 50,000 hours of injury-free work. From left are, Jim Mihajic, Bob Proulx, Lucien Goulet, Gaston O'Bumsawin, Eric Kaulback, Rejean Coutu, Peter Heinrichs, Bill Brennan, Willy Sivrais, Kevin Sexton, Len Lacroix, Barry Warren, Joe Morin, John Janakowski, Jim Michlouski, and Roger Landry.

Two brothers & 1 packing line = output of 5

It may seem like typecasting but two Italian-born brothers with 32 years experience each at the Port Colborne Refinery have been tapped to run the refinery's new $1.5 million, 10-kilo packaging system.

And Orazio Nuccitelli and his brother, Mario, have worked so well together over the years at Inco that a nod of the head or a flick of a finger is all they need to communicate with each other.

With the new packaging system, they can do the work of several men packing nickel rounds into 50-kilo cans. Together, they can handle 100,000 pounds of nickel product a shift. It used to take five men to pack 32,000 pounds a shift in the old way.

The brothers who emigrated to Canada from Italy in the mid-1950s are clearly impressed by the new system that will strengthen Inco's position worldwide in the plating nickel market. It packs five forms of nickel, 'S' and 'R' rounds, one inch by one inch electro, utility nickel shot and pellets for shipment worldwide.

"We used to pack manually before," says Orazio who calls his brother his best friend after working with him 20 years in the refinery warehouse. "It was a lot of work but not a lot of productivity."

Adds Mario: "It goes perfect now. You've got to change with the times. It's a tremendous change from before to now."

After Inco marketing specialists Peter Salathiel and Roger Covert identified the need for a 10-kilo packaging system, a Port Colborne team headed by David Stremlaw, Neil Dekoning, and Gary Hoffman began investigating packaging companies in Canada and Europe in 1987.

The new system of which the major component comes from Holland will now weigh 10 kilos of nickel product, place it in plastic bags, seal the bags, drop five bags into a box, seal the box, put 20 boxes on a wooden pallet and then stretch-wrap the boxes to a pallet.

Because it's a two shift-a-day operation, the Nuccitelli brothers share the work with a second team of Ben Graffi and Basil Radicione.

Project engineer Richard Staniszewski said the 10-kilogram packing line, which came into production last April, allows the company to supply nickel product on market demand. The products are primarily destined for European and U.S. manufacturers.

"It's far superior and it's all automated. All the operators have to do is supply the consumables, the labels, the cardboard cartons, the tape and the plastic film of course and do a little trouble-shooting. It's a beautiful piece of equipment," Mr. Staniszewski said. ■

Orazio Nuccitelli, left, and his brother, Mario, bring 64 years of Inco experience with them in running the Port Colborne Refinery's new 10-kilo packaging system for handling nickel rounds.

Making the rounds

Dave Stremlaw, Port Colborne's yard, shipping and shearing department supervisor, examines Thompson, Man. nickel rounds before they're fed into the refinery's new 10-kilo packaging system. With him is Kathy Kelly, a chemical engineer from Thompson, who was in the Port to study how the refinery handles regular and surplus nickel rounds.

Par for the course

As a gag, Brian Scott's buddies at the Port Colborne Refinery outfitted the electric golf cart that he uses daily with a golf driver, balls and score card. "It's good for a few laughs," says Brian, an electrical foreman for 22 years. The fleet of 14 used golf carts was introduced a year ago to replace bicycles for scooting around the sprawling complex.

Prevention is key to blood test

Richard Pelland boasts he's never been seriously sick a day in his life, but he's not taking his health for granted.

That's why the Copper Cliff Nickel Refinery maintenance mechanic apprentice was one of the first in line for the Blood Pressure Screening Clinic held at the refinery in September.

"I think a lot of people don't go to these things because they're afraid what they'll find out. They'd rather not know," said Richard, 37. "I take advantage of these things. If there's something wrong and you find out early enough, you could avoid a heart attack."

He said it was the first time he's had the opportunity to have his blood pressure checked, a precaution he wouldn't miss.

"I don't smoke and don't drink much, but I'm still careful with my health," he said.

He urged his fellow workers to take advantage of the program.

The two-day nickel refinery clinic was the second stop at Inco for the clinic, conducted by the Heart and Stroke Foundation of Ontario under the auspices of the Occupational Health Department. Earlier in September, well over 300 employees showed up for a similar clinic at the Copper Cliff Copper Refinery.

Employees took part on a voluntary basis, and the participants had their blood pressure taken twice. Each participant was then told in general terms whether the blood pressure readings are normal or high.

In cases where blood pressure readings were higher than normal, the participant was advised to visit a physician to have his/her blood pressure checked again. An employee's physician was also advised of any elevated readings.

Any participant whose blood pressure was considered definitely elevated will be followed up by a public health nurse in one month to verify that the employee had seen a physician.

Magda Arango, 20, one of three nursing students who volunteered to do the screening, said she'd rather see people turn out for such programs than see them later in hospital with problems that could have been avoided.

"It's good to see people taking an interest in their own health, to do something preventive." ■

Nursing student Magda Arango puts Richard Pelland through the test

BACKFILL RESEARCH

Continued from page 1

Ortech and Laurentian University's Centre In Mining and Mineral Exploration (CIMMER) will perform the laboratory research work for the project which is called "High-density Tailings Paste Fill."

First project

This will be the first major mining project between Inco and CIMMER. Inco will evaluate the economics of the backfill mixes developed by Ortech and CIMMER and will test them at an existing backfill plant.

Existing mining techniques in some Ontario mines require substantial amounts of valuable ore to be left behind in order to provide the stability and support to prevent cave-ins. This project will develop advanced new cement materials to backfill mines and the innovative pumping and piping equipment necessary to transport these mixtures over long distances.

These new materials will allow more ore to be extracted while still providing the necessary structural support for the mine.

Since the 1940s, Ontario mines using backfill employed large quantities of water to transport sand and mill tailings to the sites to be filled. But the method has drawbacks. The new system would improve quality control, give better support, drainage and bulkhead strength, help prevent spills and water pollution and provide better long-term stability.

The new research will investigate production of high density fill using mill tailings and the pumping of this new material from the surface to the empty stope.

If project scientists can overcome technical and economic difficulties in producing a new backfill mix, the project would have a significant impact on the mining industry. In Ontario alone, 27 of the province's 43 underground mines use backfill.

The high density backfill would lower energy requirements, improve ground control, safety and the mine and surface environment, reduce material needs and boost productivity. It will also reduce the amount of land needed for tailings storage.

The new technology, which could cut production costs, could also spur the reactivation of idle mines in the province.

The Premier's Council Technology Fund was established with $1 billion for 10 years to support science and technology research in the private sector and post-secondary institutions. ■

Safety work lauded

Inco's contribution to making mining a safer occupation earned management and employees special recognition by Mines Accident Prevention Association of Ontario president Bob Brailey.

In the MAPAO 57th annual report, Mr. Brailey said full credit must be given to the Ontario Division of Inco Limited for its positive contribution to the industry's safety performance.

"The gold group also put forth an excellent effort," said Mr. Brailey, "turning in a frequency of 2.6, (lost time accidents per 100 employees per year) well below the industry average."

PORT COLBORNE SCORES HIGH RATING

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"If we have a better second half than the first half (of 1988), we'll have better stats than last year even though we may not win the trophy," says manager Len Kowal who built upon the refinery's growing reputation when he became manager two years ago. "And that's what it's all about."

As further proof that the refinery's improved performance has won converts, Kowal said it has just been granted an Inco four-star rating from a three-star just two years ago.

"People here are feeling more reassured that there's long-term employment and they see a lot of effort going into mechanization. We want them to work safely and efficiently and it's starting to show," he added.

Chuck Goss, the refinery's worker safety and health representative who's been with Inco for 34 years, credits good communication between senior management and the employees for the safety turnaround.

From the top

"The management here, that's where it's at. It has to filter down from the top. And the attitude of the guys out in the plant, the unit guys, has changed too," he said, adding that they hadn't always felt safety was the highest priority with management. "Now the attitude is good. The stability of the plant and the upper management have shown that there is a commitment to safety."

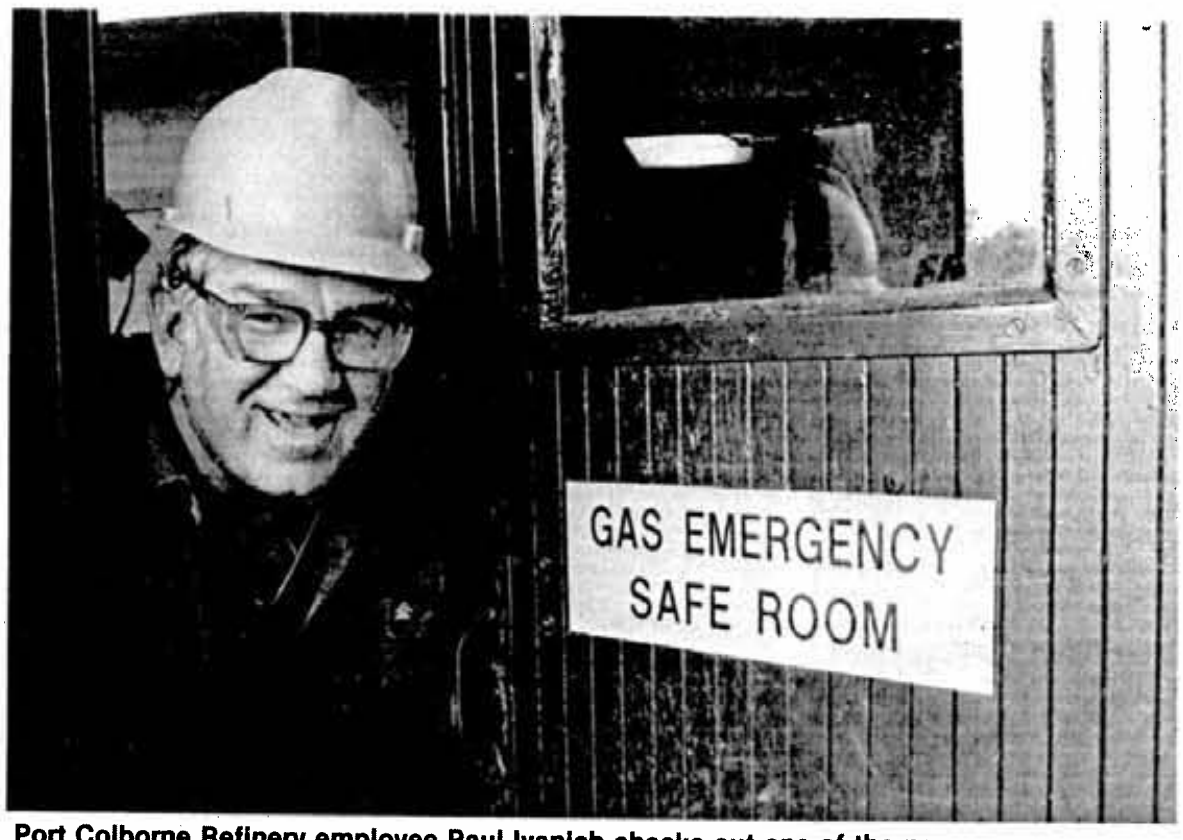
Both Kowal and Goss point to the refinery's diversification in the mid-1980s and the introduction of labor-saving mechanization as the major factors in changing the feelings toward safety.

Kowal, the 38-year-old manager, said the refinery has finally overcome fears fostered by layoffs in the early 1980s that it would eventually close. Changing the name to the Port Colborne Refinery also helped.

"The name change," he said, "suggested we have a different focus. Our raison d'être had changed. We're a cobalt refinery. We're a precious metal refinery. Utility nickel is the main nickel product, the number one nickel product to the stainless steel industry . . . People now feel more confident as they see us upgrade the cobalt hydrate plant, automate the processing of Thompson electro. All these things are positive and they see that we are in for the long run."

Chuck Goss, whom Kowal credits as one of the key employees in making the safety program work in the plant, said his colleagues are now in the habit of reporting incidents that have helped prevent accidents.

"We've just gone from a three-star to a four-star rating. We have a very strong quarter, but there's still room for fine-tuning," he said. "The way things are going with the company - it's more profitable, the nickel bonus, the new contract - everybody's just more positive today." ■



Port Colborne Refinery employee Paul Ivanich checks out one of the new gas emergency safe rooms scattered throughout the complex. The safe rooms are just one factor in the refinery's steadily-improving safety performance.

Clue's in the club

Rusty Dubery, 71, flails repeatedly at the elusive golf ball but sends only sand to the final hole of the Pensioners' Golf Tournament held in August. The problem must be the club, he figured, so he and buddies George Brideau, 59, Felix Mallais, 61, and Clarence Weist, 59, examine the faulty tool. A veteran of many tournaments, Rusty retired in 1977 from the Copper Cliff smelter where he was a welder. He served 43 years with Inco.

Ed's retirement dream gets off the ground

You can't keep a good man down.

"It's kind of scary. I've never tried anything like this before," mused Ed Leblanc as he lovingly studied the frame of the unfinished airplane under construction in his Whitefish garage.

"You kind of gather confidence as you go slowly ahead, but then, you wouldn't want to rush something like this."

It takes a bit of imagination to picture the finished product as the Inco construction coordinator rolls the cigar-shaped skeleton of welded tubes onto the driveway. The wingless fuselage is barely framed and only the landing gear makes the structure instantly identifiable.

Ed, 42, has been dreaming about flying since he was a kid. His dreams became reality in 1971 when he earned his pilot's license and the next step was to get his own airplane.

The trick was to convince his wife, Aline, who adamantly believed in keeping her two legs planted safely on terra firma.

"She was terrified of flying, and I kept trying to convince her that it wasn't dangerous at all," he laughs.

An early scheme to introduce her to the joys of flying backfired. He took her for an afternoon drive and just happened to end up at the airport where two friends were packing picnic lunches and fishing tackle for a flight to a secluded fishing hole.

"I told her how nice it would be to get away, to fly in to some terrific fishing spot and spend the day going just where we wanted to," he recalls.

Freak mishap

Nearly convinced, Aline watched the small aircraft crank up, taxi down the runway, hit a freak wind current and promptly flip over on its back.

Luckily, there were no injuries except to Ed's campaign to make an aviator out of Aline.

Aline finally gave in, however, and three years later Ed bought a small Supercub airplane.

"She (Aline) learned to like it. She likes to fly now."

For Ed, building his own airplane was the next natural step. He sold his Supercub in 1978 with the intention of buying a larger airplane but changed his mind and decided to build.

Aline is just as enthusiastic about the airplane taking shape in the garage and doesn't mind the many hours Ed has spent for the last year ensconced in the garage with his creation.

"During the holidays it was often dawn until midnight," he says.

The single-engine two-seater will probably cost him about $25,000 by the time he's finished in two years. But that's less than half the cost of a comparable aircraft off the showroom lot.

The aircraft will be powered by a 150 hp motor and will feature a wingspan of about 35 feet. With a top speed of 115 mph and a range of about 550

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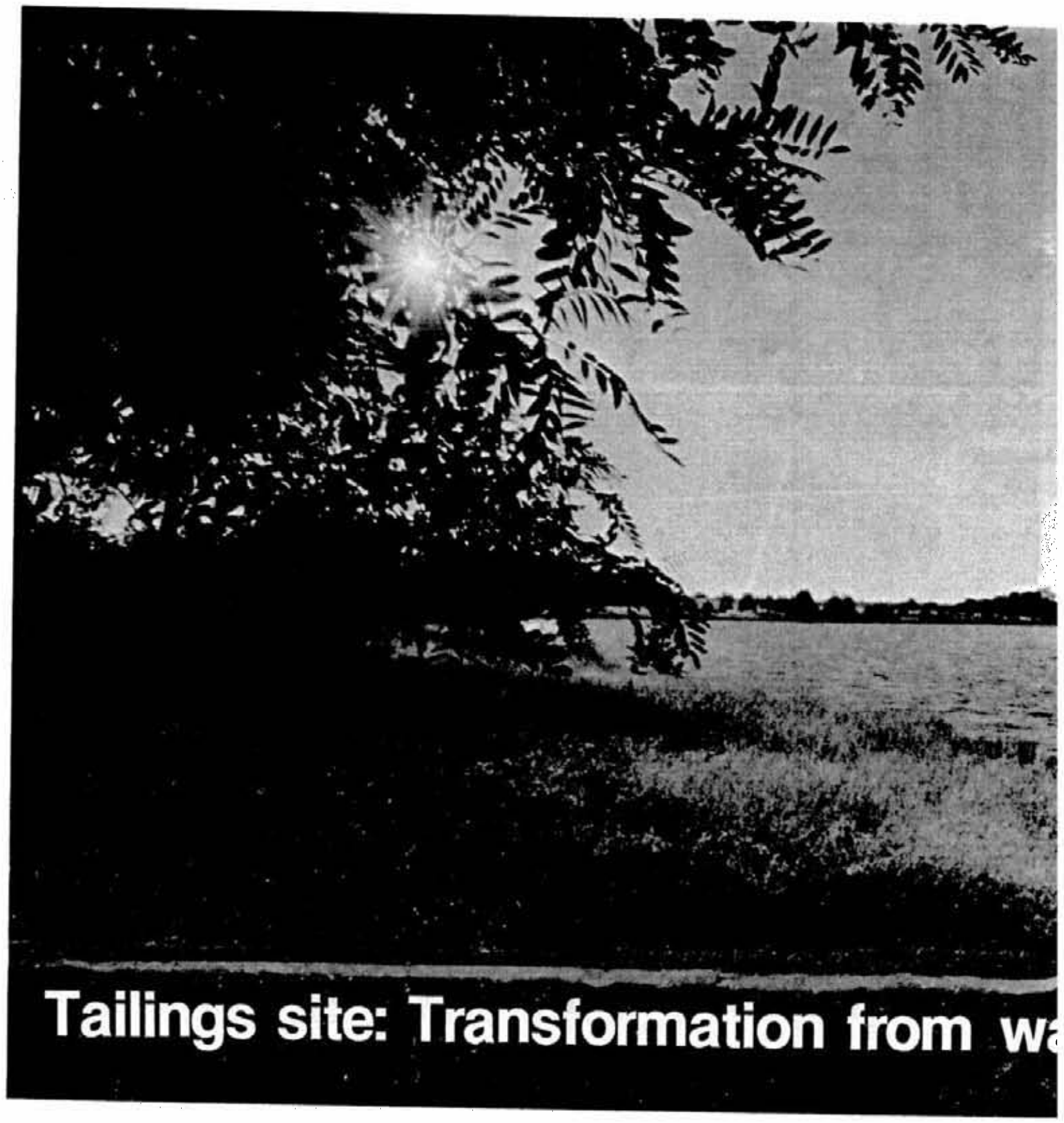
Ed tinkers with his flying machine



Tailings site: Transformation from wa

It's a bird sanctuary, a wildlife area, a hunting ground for owls, hawks and foxes. It's a stopover for migrating waterfowl on the small pond surrounded by wide open expanses of green and gold fields dotted with birch trees, evergreens and other assorted flora and fauna.

It's the Inco dump.

"I don't think anyone expected this to go so well," said grounds specialist Darl Bolton, one of the innovators and experimenters at Inco's agriculture department who are transforming the tailings containment area by teasing vegetation out of millions of tons of Inco's milling waste.

The task seems insurmountable. Take a portion of the 10 million tons of sterile, finely-ground rock piped every year to a 5,000 acre site just north of Highway 17 between Copper Cliff and Lively and turn it into aesthetically pleasing, safe and hospitable park-like surroundings.

"This stuff is sterile for growing purposes," said Darl. "The biggest problem to the environment is the dust it creates. Basically, the entire reclamation project is simply a matter of dust control."

Faced with residents' complaints, concern for the environment as well as the dust's contamination of refining processes and machinery, Inco has wrestled with dust control since the 1930s when new smelting technologies created the need for a finely-ground concentrate.

Tailings are produced as a waste by-product of the milling process and the material is disposed of by taking advantage of the natural terrain, often in valleys located between rock hills. Rock outcrops can be used to act as buttresses for the tailings dams and as dams themselves.

Piping complex

A mix of tailings and water is pumped through more than 25 miles of pipe network from Frood-Stobie, Clarabelle and Copper Cliff mills and is used to increase the height of starter dams built on a waste rock base. Because the storage area is raised in height, the tailings are stepped toward the centre of the site.

At the initial stages when the elevation of the tailings is low, the surrounding hills protect the material from dust-creating winds. Once filled in, however, the protection evaporates and on a windy day the tailings can resemble a Sahara sandstorm.

Early attempts at control with water sprays and ground covers proved not only ineffective but uneconomical. In active storage areas, Inco uses several tested and approved chemical sprays as a short-term dust control measure. The long-term solution is land reclamation and revegetation.

The first seeding program attempted in the mid 1940s was unsuccessful, but a decade later stubborn persistence by Inco to coax roots from seeds planted on the tailings paid off and an experimental program of revegetation plots was established.

Today, according to Darl, more than 1,500 acres of tailings have been successfully revegetated and another 1,000 acres are nearing completion.

"We're like a farmer trying to get the crop to grow," said Darl.

Catch-22 situation

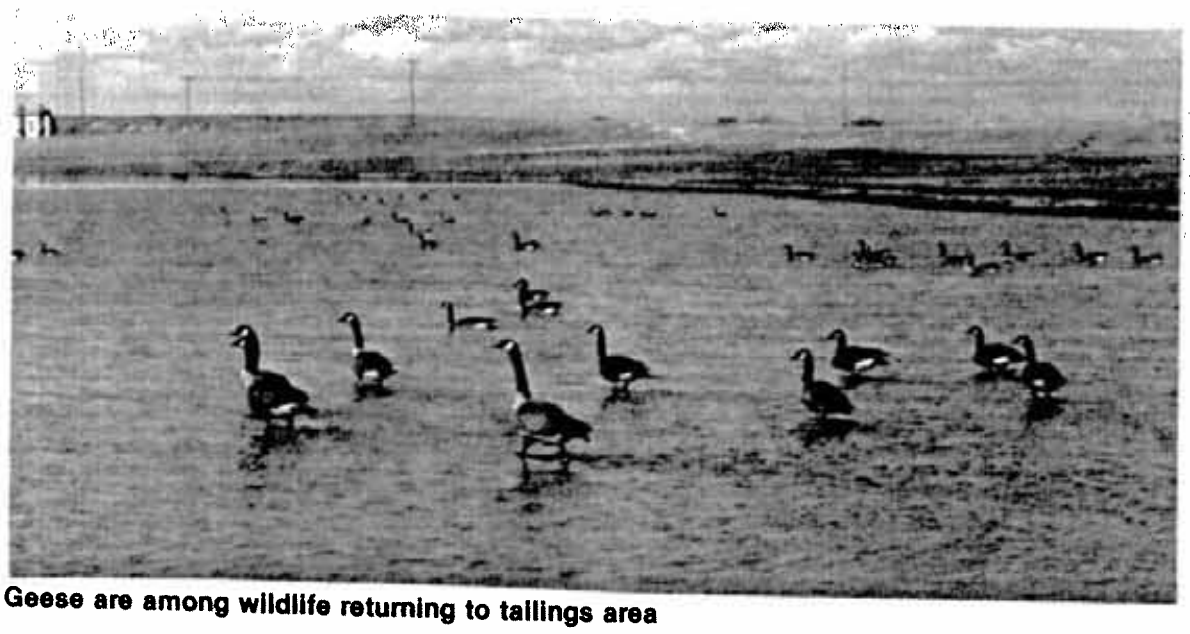
Although they're getting better at it all the time, Inco's "farmers" will see their job get tougher in the future. Government guidelines calling for even less sulphur dioxide going up company smokestacks create a Catch-22 situation. Less acidic materials going into the furnace will mean more will have to be removed at the milling stage and disposed of on the ground.

Recently-announced plans to combine the company's three milling operations at Clarabelle Mill will greatly enhance the separation of high sulphur bearing pyrrhotite. It's also regarded as a major step toward meeting the new government standards.

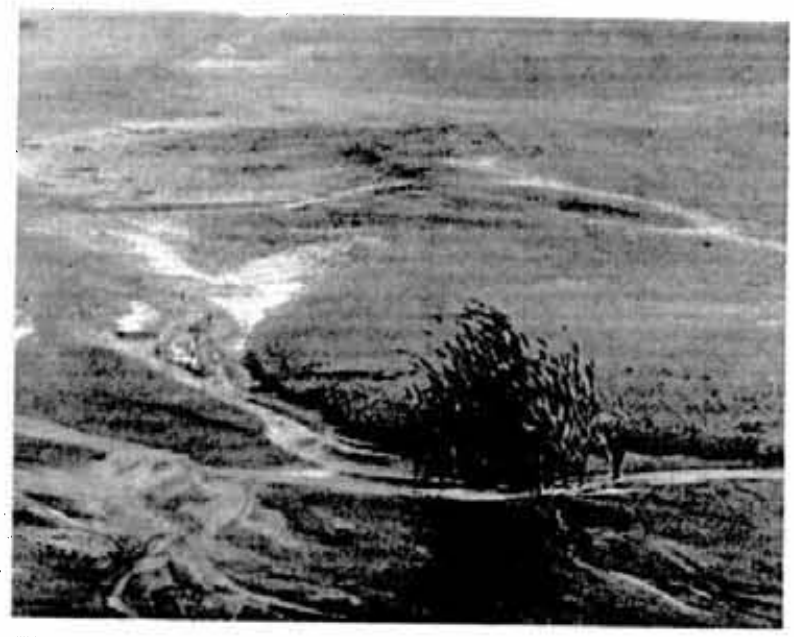
New solutions for handling the minerals on the ground are under development, such as the impounding of pyrrhotite in a 400 acre site in the centre of the total tailings area to minimize acid seepage.

The ultimate solution for the iron, sulphur, and nickel-rich sand may come in the future, however, when new processing technologies may permit economical recovery of the minerals from the concentrate.

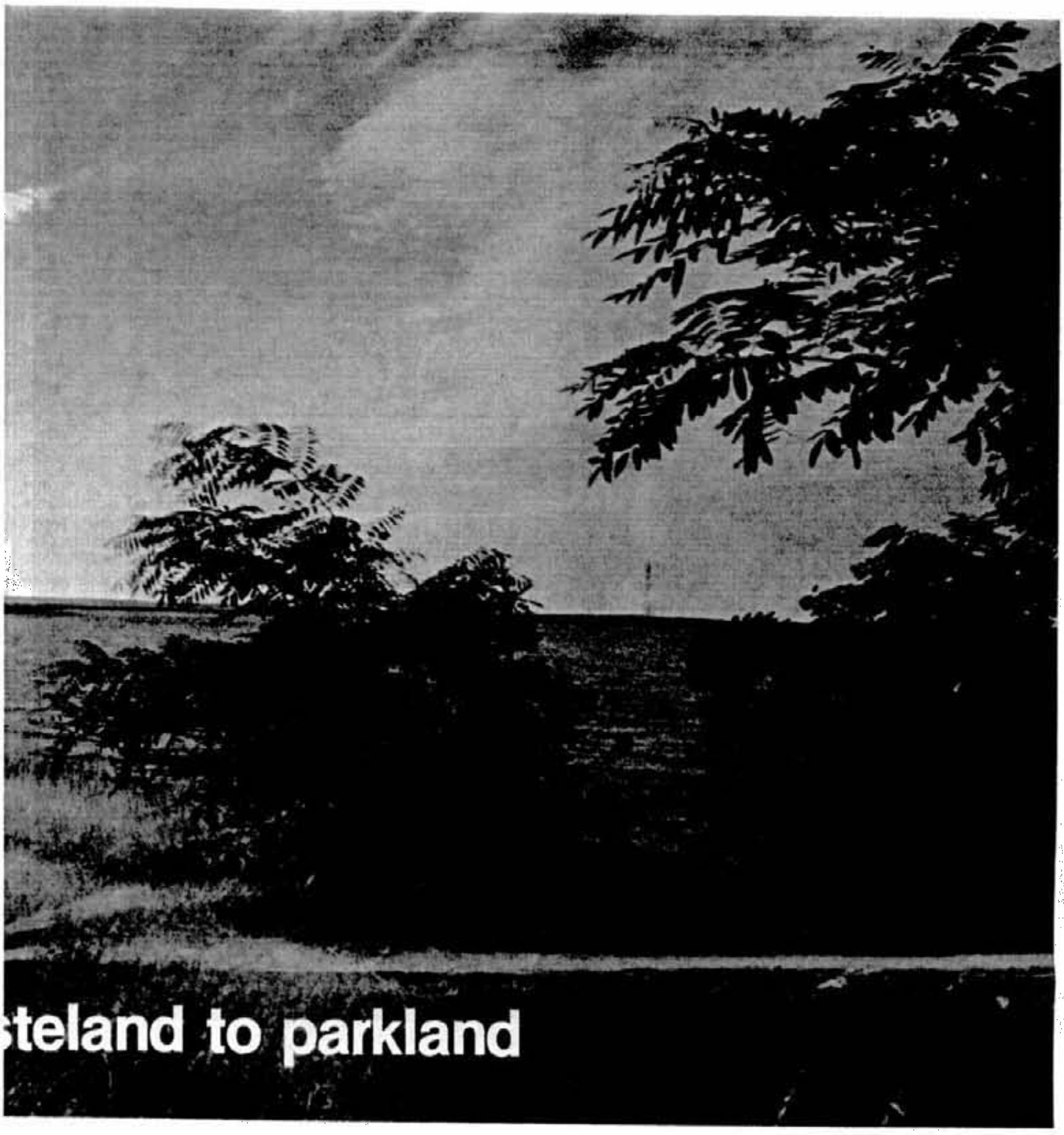
In effect, Inco could be mining its own wastes in the future.



Geese are among wildlife returning to tailings area



First signs of nature's rebound



Getting things to grow in the acidic tailings involves adding up to 25 tons of limestone, 600 pounds of fertilizer, 80 pounds of rye seed and 70 pounds of grass seed on each of the approximately 250 acres to be reclaimed this year.

Greening the tailings area not only requires the proper mix of materials, but expert timing and a good amount of luck. High surface and reflected temperatures of the man-made soil demands the right amount of rain at the right time. Plants taking root must do so quickly before the soil's unique composition creates an "iron pan", a rock-hard crust up to 18 inches thick impenetrable by roots except through cracks.

Miles of pipe transport tailings to site

Lending a hand

Yet nature itself has rebounded with Inco's helping hand. Along with the thousands of pine seedlings, grasses and other vegetation introduced by company agriculturists, wild flowers and a wide variety of trees ranging from birch to oak have invaded the area.

The natural food chain has not only been re-established, but is thriving in the reclaimed areas. Insects were the first settlers, attracting in turn small mammals and meadow birds, waterfowl and shorebirds. Foxes sighted in the area signal that the natural ecosystem continues to develop.

By 1976 a plan was in place to develop the tailings and adjacent areas into a Wildlife Management Area in co-operation with the Ontario Ministry of Natural Resources.

Also in co-operation with the ministry, Inco has helped relocate young Canada geese to ponds in the tailings area. Many birds return to nest in the ponds after the annual migration south.

The "Inco flock" gets larger every year.

Water, so important to birds and wildlife, is also a prime concern for Inco.

Inco engineers have designed the entire milling and waste disposal operation in a closed circuit to recycle the millions of gallons of water mixed in with the tailings.

An interconnected system of syphons, settling ponds, gravity flow drainage ditches, seepage dams and pumps collects the water used in the waste disposal process and returns it to the milling operation to be reused. Any excess is treated before discharge to the environment.

$60 million forecast

The three mills use no fresh water in the milling operations.

The tailings disposal site includes a 2,400 acre expansion now well underway. The new 'R' area's multi-million ton storage capacity should fill Inco's disposal needs for the next 30 years at present production rates.

To be completed in 1996, the area's nine miles of roads, 25 miles of piping, numerous pumps and millions of tons of material for dam construction will take a cash outlay of more than $60 million. Two of four sub-areas that make up the expansion were completed last year at a cost of $17 million.

Underway this year is a second stage approved by Inco at a cost of nearly $20 million, and there's no estimate yet of the cash outlay of a final stage planned early in the next decade.

Inco's reclamation efforts date back to the early 1900s when the Copper Cliff roast yard was turned into a park and even provided a Victory Garden of potatoes for the war effort.

Today, with its carpet of grass, flowers, and many shrubs and trees, Nickel Park is a major attraction in the community.

With over a half-century of research, trial and error and reclamation experience under its belt, Inco hit the deck running when the current social climate and environmental legislation demanded waste disposal in a safe and acceptable manner.

"We got into land reclamation long before there were any government regulations, and today there's no doubt that Inco's in the forefront in the field," said Darl.

Although all mining operations don't necessarily face the same problems, he said, there are enough similarities that much of what Inco has learned is being shared with mining operations throughout the world. ■

Inco's agriculturists take over from here

Better ideas pay off for Inco, employees

Try to give some people a little advice and they'll tell you to go fly a kite.

Not so Denis LePage. He's liable to ask you how to fly it higher and get you some hard cash for the idea.

As supervisor of Inco's suggestion plan that pays employees up to $10,000 for ideas on how to improve the proverbial mouse trap, Denis is always on the hunt for the extra grapple grommet in the thingamabob to make the dojigger machine work better.

And business has never been better.

"We get an average of about 300 suggestions a month coming across this desk," said Denis. "About 31 percent of all suggestions are adopted and awards paid and that's more than ever before."

"That's amazing," he said, "because the record number of adopted ideas comes at a time when Inco has fewer employees than ever before.

"I think it clearly shows that our employees are interested in the future of the company and want to help."

He said the suggestion plan is one of the best ways to make improvements in the workplace not only in terms of productivity but also in other areas such as safety.

"Who else is better qualified to improve a job than the people who actually work on it?" he asked.

The program has "steady customers," according to Denis, people who will submit as many as 30 suggestions in one year.

Calculated at one-sixth of the first-year savings for the company, the awards range from a minimum of $25 to a maximum of $10,000.

Three maximums

"More maximum awards are being paid out than ever before," he said. To date (this year) we've already paid out three maximums, and that's more than all of 1987."

"It's shaping out to be another record year for the program," he said.

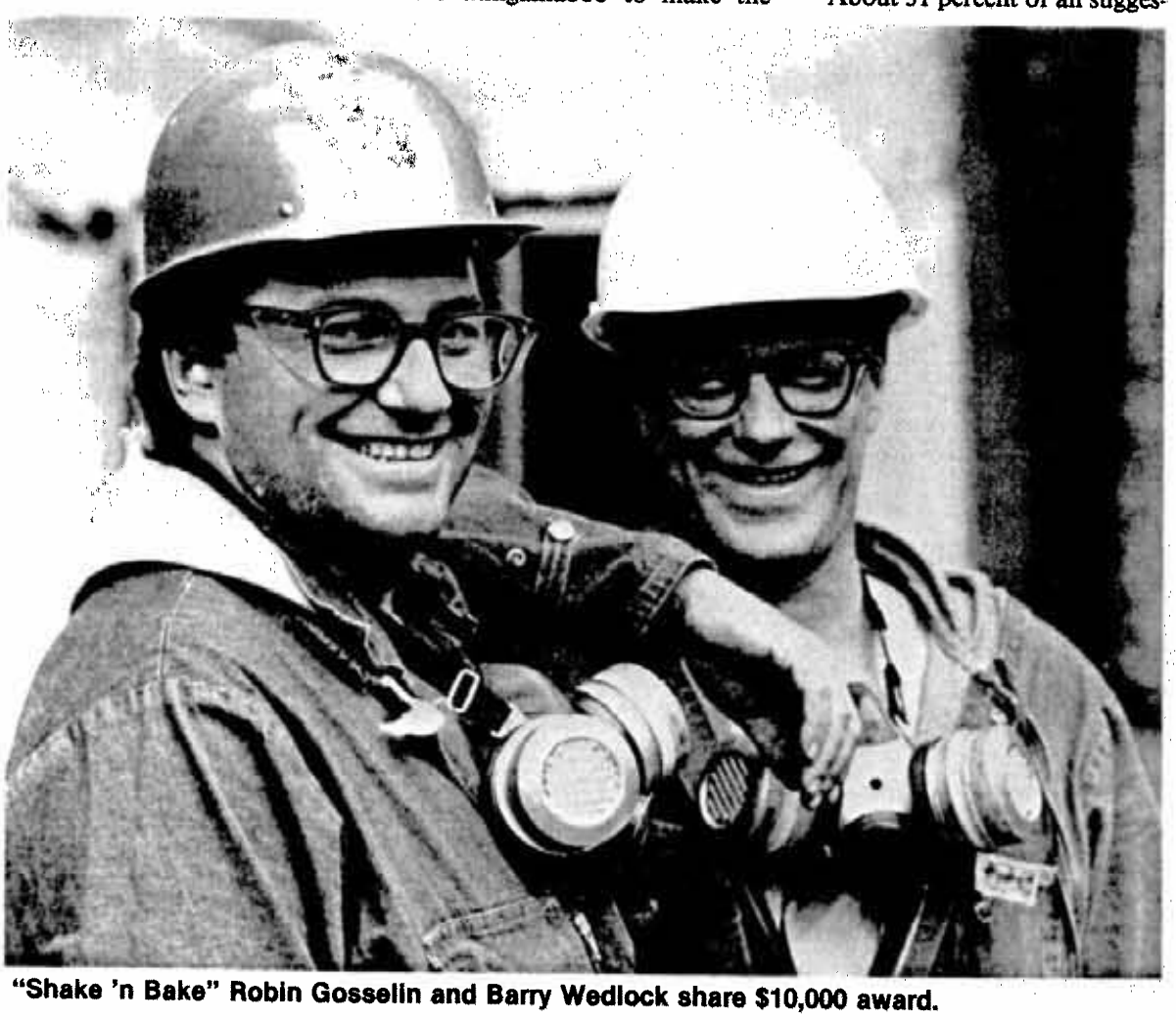
One reason in the increase in quality as well as quantity of the suggestions is a more experienced, highly-trained and better educated workforce than ever before. As employees become more aware of the program and the kind of thing Inco seeks, they are finding better ways to find ideas.

"We have people who are pooling their skills, in effect forming committees to work on suggestions together," he said. "We are getting as many as 10 signatures on some of the ideas."

Recognizing employees and their ideas as a valuable resource, the company's active encouragement has also contributed to a positive atmosphere that aids participation in the plan.

"I think our people know that the company wants and appreciates their participation," said Denis. "The suggestion plan remains one of our best tools in realizing our goals of increased production, safety, and working conditions in general."

Participation in the plan benefits everyone, he said. "The company benefits and employees benefit through better safety and working conditions." ■



"Shake 'n Bake" Robin Gosselin and Barry Wedlock share $10,000 award.

Ludwig feeds the machine faster

Big ideas, big winners . . .

The more grapple-grommets the operator feeds into the thingamabob machines every hour, the earlier he gets to go home.

Simple.

But it took the experience, know-how and inventive mind of maintenance mechanic Ludwig Zibauer to adapt that principle to modify some Copper Cliff Copper Refinery equipment and to cash in on a $10,000 suggestion plan award.

The 31-year Inco veteran devised a method of increasing the feed of the sheet preparation machine that flattens the copper sheets before being made into cathodes.

It increases the number of sheets handled from 10 per minute to around 13 or 14.

Any complaints from the machine's operator?

"No way," said maintenance foreman Jerry Pawlowski. "The guys love it. With faster feed, they get more done. Everybody wins."

Ludwig has submitted many suggestions in his years with Inco and has earned suggestion plan awards before.

"But this is the biggest so far," he said. "I hit the prize with this one."

He said the modification, like many of the best suggestions, was a simple one.

"After a while, as you become more familiar with a machine, you can see how things can be improved," he said. "This was simply a matter of adding a cylinder and lift table but not any major redesign of the machine."

Good timing

The award came at just the right time for Ludwig. He was in the middle of preparations for a six-week vacation in Europe when he was presented with the award.

"This will come in handy to offset the cost of the holiday," he said.

He and his wife, Patricia, were planning to visit England for a week, then travel to his hometown of Munich, partly to join in Oktoberfest celebrations in the West German city.

$10,000 richer

Also $10,000 richer is John Jennings, an operator on the sand floor at the Copper Cliff smelter who suggested using signal switches to stop and start two conveyors that supply flux to the nickel and copper circuits.

Trippers are used to fill the individual bins and the modification eliminates the need for one man to accompany the tripper down the length of the belt to signal to the belt operator when the bins were full.

Furnace vacuum operators Barry Wedlock and co-suggester Robin Gosselin also shared a maximum award for their suggestion to make an adapter for the vacuum system so that one man can do furnace roofs and the other dust drags and floors around the furnaces.

The move eliminates the need to sweep which caused dusty conditions. It also saved money in clean-up jobs previously contracted outside the company despite the fact that housekeeping standards were increased. ■

Ludwig Zibauer at the pile of copper sheets to be fed into modified preparation machines.

Janie Stokes hams it up with father Russel to see if dad has a heart. At right, Ray Philion demonstrates one use for a Band-Aid for "chatterbox" daughter Therese.

Like father, like daughter, at work and home

What do you do at work, daddy?

That question won't surface again for the daughters of two Inco employees who, this summer, got a close up view at just what their fathers do for a living.

"I knew what he did and where he worked but I actually had no idea exactly what was involved until I saw first-hand," said 28-year-old Janie Stokes, a third-year Cambrian College nursing student who served as a Plant Protection officer.

Her father Russel, 52, a plant protection officer, said although the two never worked the same shift during the summer, each relieved the other at least once. Both claim being on the same shift would have been no problem.

"When you have five kids," said Russel, "you have to get along with them."

He's proud of her performance although he avoids giving her "marks."

"I was confident in her abilities," he said.

Janie said she has a new respect for her father and the job he does. In fact, she wouldn't mind doing it herself when she graduates.

"Inco is high on the list of places where I'd like to work when I finish school," she said.

As a plant protection officer, a job that includes first aid, she would be able to use her nurse's training.

The summer was somewhat uneventful, she said, with first aid work limited to a few band-aids and eye washes.

Hot tip

The high point of her summer had more to do with fire protection than nursing. During the shutdown, she answered an anonymous call about a grass fire at the Frood Stobie complex started by a blueberry picker. She rushed out and armed with a hand water pump, attempted to put it out herself.

But the fire was too large and she ended up calling in the fire department.

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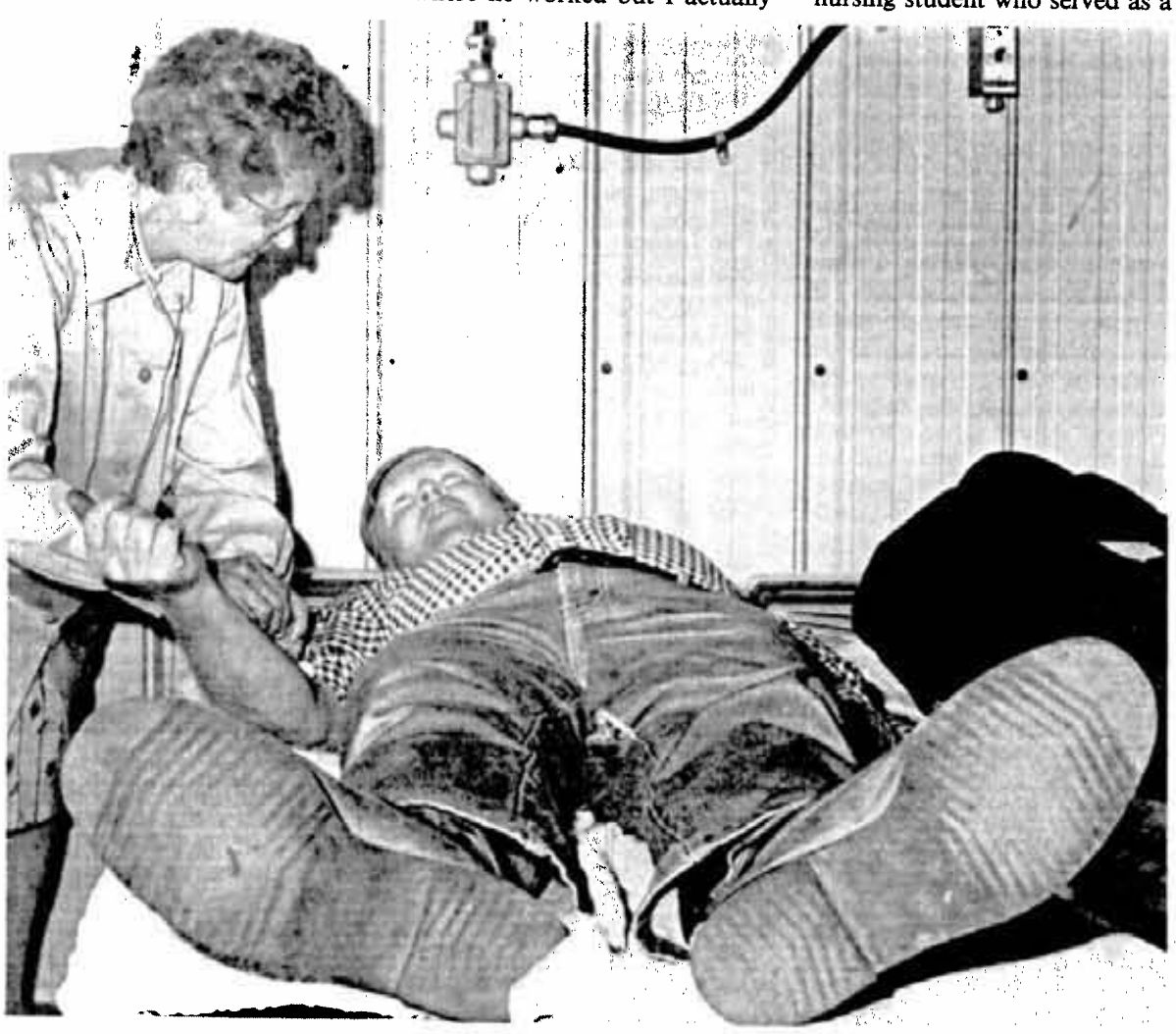


First annual clinic

Red Cross volunteer Mrs. Lucie Prevost keeps Glen Wilson of the loco shop comfortable after he gave a unit of blood at a half-day blood donor clinic set up by the Occupational Health, Safety and Environment committee at Divisional Shops. About 80 people were expected to take part, and organizers will attempt to make the clinic an annual event.

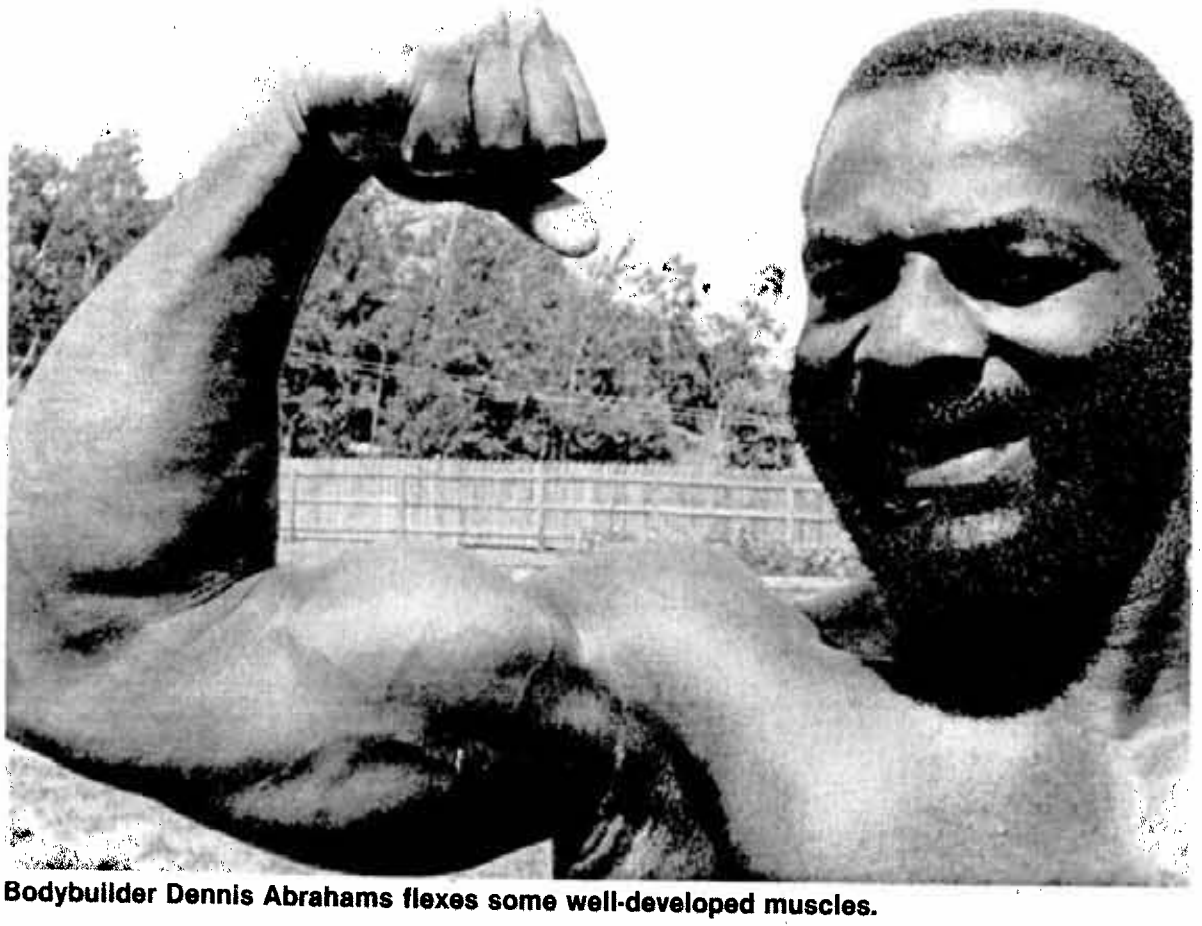
Nickel is key to color

Using a process licensed by the Inco group of companies, a United States company is giving nickel-containing stainless steel an added dimension.

By immersion in a hot acid solution, a chrome-oxidized finish with a variation in hues is produced, depending in part upon the duration of treatment.

"It can be fabricated, bent, notched, punched, drawn and embossed without any fracturing or reduction of color intensity," said Richard Tyereck of B&M Finishers' Prismatic stainless steel division.

He said the main application is in the architectural industry for interior and exterior use. There is also an increasing demand for it in roofing.



Bodybuilder Dennis Abrahams flexes some well-developed muscles.

Bodybuilding: sculpture in muscles

It's expensive, time-consuming, physically and mentally draining and it'll never make you rich.

So why is Dennis Abrahams into bodybuilding?

"I don't think there is a rational reason," he says with a broad grin. "Bodybuilders tend to be a little insane."

Since 1985, when he began the sport seriously, Dennis has been successful at his particular form of insanity. He's captured second place in the Ontario Masters championships and third place in the Northern Ontario Bodybuilding Association competition.

A mill assistant at Copper Cliff, the 40-year-old Southview Drive resident has been with Inco for 17 years and although he began "recreational" bodybuilding in 1980 his interest in it turned serious five years later.

"As you get older, you become more concerned about keeping in shape," he said. "But once in it, and you realize the time involved, it's too late. I guess you get caught up in it. I can't turn back now."

He may have begun "getting intense" about it earlier but working for Inco steady nights and going to school full-time during the day left little room for sleep, let alone the many hours of training a week the sport demands.

For eight years, he juggled work, family and school to earn an honors degree in sociology and a bachelor of arts degree in economics.

He laughs when asked why he subjected himself to the sleepless nights, hours of study and hard work.

Self-improvement

"An effort at self-improvement, I suppose," he says. "Self-improvement and self-advancement."

He's finished school but bodybuilding has taken up much of the time once devoted to study.

"I try to spend at least three or four hours a day, six days a week training," he said. "You have to keep at it if you're going to get anywhere."

It may not look like it, he said, but the sport involves a continuing cash investment.

"Besides membership at the gym, there's between $100 and $200 a month just for vitamins, supplements, special diet and other items," he said. "Then there's travel expenses when you go to competitions."

"And there is no pot of gold at the end of the rainbow," he said. "It's not the kind of sport you go into for the money. You have to like it. That's the only reward."

He rejects the common perception that bodybuilders tend toward narcissism although he admits it may look like that to an outsider.

"You have to pay a lot of attention to your body," he said. "But you are examining it very critically rather than admiring yourself. If anything, bodybuilders tend more toward self-criticism than self-admiration."

Perhaps the most misunderstood element in bodybuilding is the commitment involved.

"You see ads that promise a transformation from skinny to a beautiful body in six weeks. That's unrealistic. It takes years, not weeks."

Although he had a good foundation to start with, he acknowledges that it is possible to start from a slim body to reach the classic bodybuilder's frame.

"But it's much more than building muscle. It's more like sculpture than building. I came down from 235 pounds in January to 188 pounds and I have another 12 pounds to go before I have a chance at the Canadian Masters this fall."

In Your Yard . . .

. . . vegetable and flower garden clean up is essential to control many insects and diseases. Gather all plant debris and dispose of it in the garbage throughout the summer and especially during final cleanup in the fall. By doing this you will effectively control problems such as white mold on beans; mildew, leaf blight and maggots in onions; blight on tomatoes, potatoes, begonias, tulips, peonies, petunias, geraniums, gladiolus and rose; leaf spot on currants and gooseberries; black spot on roses and rust on hollyhocks and snapdragons. To avoid diseases rotate crops where possible, plant disease-resistant varieties, encourage air circulation, don't handle or work around plants when they are wet and keep plants vigorous and healthy.

One precaution can be taken to reduce the possibility of winter injury on evergreens such as pine, spruce and cedar. Thoroughly soak the soil around evergreens before freezing weather sets in to ensure an ample supply of water during the winter months.

In preparation for fertilizing and liming your lawn and gardens next year - this is the time to take soil samples. Analysis of soil will determine levels of phosphorus (P), potassium (K), magnesium (Mg) and pH and will provide recommendations on types and amounts of fertilizer and lime that need to be applied to eliminate nutrient problems and maintain a healthy lawn and garden. Information on a soil testing device, sample kits and costs are available from your local Ontario Ministry of Agriculture and Food office.

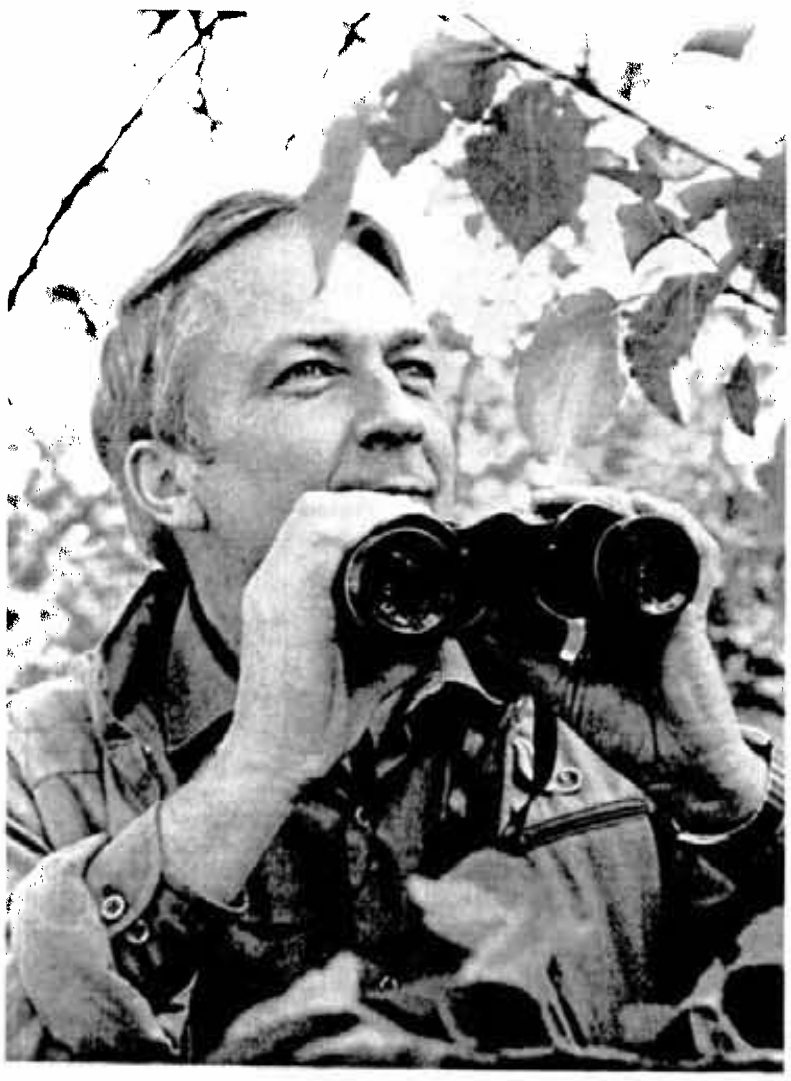
September to early October is the best time to plant spring-flowering bulbs such as hyacinth, tulip, daffodil and crocus. Plant at least 4 weeks before the ground freezes so that roots become established. Bulbs must be planted in well-drained, fertile soil, in full sun or partial shade. If the pH of the soil is below 6.5, lime is required. Select large, firm, disease-free bulbs. Follow instructions for planting, at the recommended depth and spacing, and add bonemeal to increase root growth. Water thoroughly after planting.

Tuberous begonias, dahlias and gladiolus are tender and need to be stored indoors over the winter. After the first frost dig tuberous begonias, gently shake the excess earth off the roots and spread plants out in a warm room - but not in direct sunlight. Allow plants to dry for a couple of weeks and then clean shoots and fibrous roots off the tubers. Also at this time, cut the tops off dahlias - 15 cm above the soil and leave the roots in the ground for another week. Dig the roots carefully and allow them to dry for a few hours. When partly dry, store begonia and dahlia tubers in slightly moistened peat moss or vermiculite at 5 - 10 °C. Cut gladiolus leaves off, just above the soil, after they have been browned by frost. On a warm, sunny day dig corms and dry them in a warm room with good air circulation. When dry enough remove all tops, roots and earth. Discard any damaged or diseased corms. Dust with the approved pesticide / fungicide - carefully follow the directions on the container. Store gladiolus corms in a shallow, open box at 5 - 10 °C.

Ellen L. Heale, P.Ag.

United Way campaign launched

Ontario division president Mike Sopko and United Steelworkers of America Local 6500 president Dave Campbell officially launched Inco's United Way campaign by raising a promotional banner at one of the entrances to the smelter complex last month. Organizers hope that donations this year will equal or surpass 1987's total of $180,000 figure. Union and management work together to make the annual fund-raising effort a success.



Chris Bell keeps sharp eye out for the elusive winged quarry.

"Birders" in the environmental forefront

As head of Stobie Mine's engineering department, Chris Bell spends his working hours knee deep in diagrams, blueprints and calculations that help keep Stobie running smoothly.

But his spare time is for the birds.

"I like to call myself a birder," said the London, England-born engineer as he drinks coffee from a mug depicting a Golden Eagle. "I've been interested in birds since I was a boy."

While birdwatching has provided him with many hours of outdoor recreation, fun, and a fair share of excitement, he and thousands of others like him are providing valuable information used by environmentalists to assess changes in the environment.

"A sudden decrease in sightings reported can be an early warning system that something is wrong," he said. "Birders have contributed quite a bit to continent-wide studies on bird populations and behavior."

And Chris has done his share.

A member of the Sudbury Ornithological Society, he coordinates the annual Christmas Bird Count at Gore Bay and Mindemoya on Manitoulin Island and participates in the annual count in Sudbury.

He also conducts an annual breeding bird survey at Manitowaning on the island as well as a survey for the Forest Bird Monitoring Project.

He was a regional co-ordinator for Sudbury in the Ontario Breeding Bird Atlas Project and did research for the bird checklist for the District of Sudbury.

Rare birds

"It's kind of competitive. You try to see rare birds before the next guy does," he said. "It's a nice mix. It's a lot of fun but it serves a useful purpose as well."

"Birders" often get involved in their own efforts to help rebuild declining bird populations; efforts such as building nesting boxes for rare bluebirds that visit.

How do you ensure only Bluebirds take up residence?

The proper-sized hole to keep out larger birds is one measure, but another method requires a good knowledge of bird behavior.

"To keep out tree swallows (notorious squatters) you place the boxes facing each other," he said. "Tree swallows fight a lot amongst themselves so they tend to stay away from each other."

Despite its sometimes austere topography, the Sudbury area is a good place for birdwatching and promises to keep getting better as vegetation programs flourish.

"There are more birds in the immediate Sudbury area today than just a few years ago," he said, attributing the increase, at least in part, to area greening programs.

Perhaps a major attraction of "birding" is that it can be relatively inexpensive.

"It can be no more than a bird house in the back yard or a walk through the park," he said.

But he warns that, once bitten, a hobbyist can spend as much money as he wants.

"Some people spend thousands of dollars on camera equipment to photograph birds," he said. "Others will travel around the world in an effort to see rare species." ■

Retirement life is go, go, go

On his retirement from Inco three years ago, Severo Zanatta expected to have more time to spend at his Downes Lake camp, where he could do a little fishing, observe nature and generally "take it easy."

Fat chance.

He managed three or four visits to the camp last summer, sandwiched between numerous other activities which keep the 59-year-old father of three on the go. His camp is something he's able to find time for when his schedule permits.

In fact, since he retired as a machinist, he probably greets more visitors than all but a few residents of the Sudbury area. Literally thousands every summer. With his enthusiasm for the city and surrounding area, his knowledge of the mining business and his friendly and outgoing style, he's a natural and knowledgeable guide.

What better way to spend your summer than indulging your enthusiasm for the area by explaining it to tourists and by acting as a co-ordinator for the thousands of interested visitors who tour the Inco facilities?

Severo did have some previous experience.

"When I was still at Inco, people would come into the shop and I would explain the machines to them," he said. "I enjoyed the opportunity."

His ability to get his message across was not lost on Inco officials who were quick to utilize his talents upon his retirement.

Big Nickel

With the number of tours through Big Nickel and other Inco facilities, there is too much activity for one person. Severo has enlisted seven other pensioners - Inco veterans - who also work as guides through the summer months.

"Among the pensioners we have experts in many areas of the mining operations so it works out very well in terms of conducting tours," Severo said. "Since there's me and the seven other people, naturally they call us Snow White and the Seven Dwarfs."

Any resemblance between Severo and his crew and the original Disney characters is non-existent.

But the Path of Discovery tour including a special visit to the surface processing operations of Inco, the largest integrated, mining, smelting and refining complex in the world, is a "must" for a significant number of visitors to the Sudbury region. And Severo and the other guides play a significant role in explaining how the operation works.

The Path of Discovery tour, made possible through a federal government grant and support from Inco Limited, leaves the Big Nickel Mine and Science North several times daily and keeps the pensioners involved busy during the summer season.

As attendance at Science North increases, so does attendance at Big Nickel. More than 78,000 took the Big Nickel and Path of Discovery tours last year, up more than 6,000 from 1986. Science North, with almost 271,000 visitors, also set a record, up more than 32,000 from the previous year.

Severo also emphasizes that students hired by Science North for the summer season do the actual Path of Discovery Tour. "Us pensioners are there as back-up. With our experience, there are questions we can answer which the students might not know."

"That's the practical side of it. But you learn quite a bit yourself because you have to look at all aspects of the operations. When I first started this project, I learned more about Inco in three months than I did in 37 years on the job."

Severo also keeps busy on other projects. Twice a week at Cambrian College, he teaches young people practical instruction in the machine shop. He has a class of about 20 and wishes he had more time to provide individual instruction.

As usual, there's not enough time to go around.

The classes he teaches in the winter are twice a week. Another two days a week, he spends some time playing hockey with a group of pensioners, including buddies from Inco, where the minimum age to take part in the "scrimmages" is 55.

In addition, the father of three and his wife Louisa are fans of the sport of curling, another of Severo's hobbies. He also canvasses for the Arthritis Society, and wishes he had more time to get involved in other community activities.

"Since I've been on pension, I sometimes wish I was an atom so I could split myself in about four other different ways," he said.

"There are so many activities to get involved in, but sometimes you just have to say you're too busy. That's because you're a pensioner." ■

Severo Zanatta describes Inco operations to a school group.

Inco Reserved Scholarship Competition winners

It was another banner year for the Inco Reserved Scholarship Competition program with 20 winners selected from the 77 applications submitted. Fifteen scholarships were awarded from the Sudbury area, three in Thompson and two in southern Ontario. In addition, one finalist award of $1,000 was awarded to a Thompson applicant.

Begun in 1956, the annual scholarships are tenable for a maximum of four years subject to annual review, and have an annual value of up to $2,250. This includes a maximum of $1,500 towards tuition and fees and a personal grant of $750.

Children of Canadian employees, pensioners or deceased employees who are in a program of studies required for university admission are eligible for the scholarships, providing they will graduate with a secondary school diploma in the year the scholarship is awarded.

An independent committee of high school principals select award winners on the basis of scholastic records, SAT (Scholastic Aptitude Test) scores and information supplied by the applicant and the high schools.

Scholarship application forms and SAT registration material for the 1989 awards may be obtained from the applicant's school or from; Administrator, Scholarship program, Inco Limited, P.O. Box 44, Royal Trust Tower, Toronto-Dominion Centre, Toronto, Ontario, M5K 1N4; (416) 361-7844.

Deadlines for the 1989 registrations are September 26, October 24 and December 19. SAT test dates are November 5 and December 3, 1988 and January 28, 1989.

Introduced here are the winners from Ontario.

Juliana Bilibajkich, 18, is a graduate of Marymount College and is the daughter of Transportation department conductor Momir Bilibajkich. She plans to attend the University of Western Ontario to study science and medicine with a career goal of cardiovascular surgery. She lists music, sports and reading as interests.

Derek DeMonte, 19, is son of Clarabelle maintenance mechanic Lindo DeMonte and is a graduate of Lockerby Composite School. He will attend the University of Waterloo to study actuarial science with the goal of becoming an actuary. His hobbies are weight training and coin collecting.

Corrie McBain, 18, wants to enter the field of medicine. She will attend the University of Western Ontario where she will study science. Daughter of Creighton electrician Walter McBain, Corrie is a graduate of Lively District Secondary School. She likes windsurfing, shopping and socializing.

Tammy Compton, 18, a graduate of Chelmsford Valley District Composite School will attend the University of Guelph to study general science and complete her Bachelor of Science degree with an end goal of becoming a physician. She is the daughter of Levack miner Earl Compton. Her hobbies are sketching, painting, and reading.

David Leppinen, 18, will study applied mathematics and engineering at the University of Waterloo. The son of pensioner Richard Leppinen, he is a graduate of St. Charles College. He plans to obtain a Master's degree and work in research and development. He lists basketball, tennis, camping, reading and music as major interests.

Kevin F. O'Grady, 19, will attend the University of Waterloo to study mechanical engineering in order to pursue a Masters degree so he can eventually open his own medical equipment design business. A graduate of St. Charles College, he's the son of smelter maintenance mechanic Francis O'Grady. Kevin likes reading, swimming, gold, woodworking, carpentry and fishing.

Paul Corey of Port Colborne is a graduate of Ridley College who plans to attend the University of Guelph to take a Bachelor of Arts course. He is the son of Port Colborne P.M. Refinery supervisor Gerard Corey.

Mark A. Fabricius, 19, is the son of senior environmental analyst Peter Fabricius and is a graduate of Lockerby Composite School. He plans to attend Laurentian University where he will take commerce with the eventual goal of becoming an accountant and running his own accounting firm. He lists hockey and golf as favorite activities.

Helen Osborne of Welland, daughter of Port Colborne Research & Development project leader Geoffrey E. Osborne, wants to attend Brock University to take a Bachelor of Administration honors program and co-op accounting course. She is a graduate of Welland Eastdale Secondary School.

Nancy Otten, 19, is a graduate of Chelmsford Valley District Composite School who enjoys volleyball and basketball. Daughter of Levack driller Ben Otten, she will attend the University of Guelph to take general science and veterinary medicine with the aim of becoming a veterinarian.

Donald C.A. Robertson Jr., 19, plans to attend Laurentian University to study commerce. He plans to enter law school with the eventual goal of going into corporate law. Donald is a graduate of Sudbury Secondary School and is the son of Frood garage mechanic Donald Robertson. He enjoys stamp collecting, fishing and skiing.

Andrew Park, 18, son of Creighton mines technical services superintendent Choon Park, is a graduate of St. Charles College who will attend the University of Waterloo to study systems design engineering. He hasn't decided on a career goal. Andrew likes writing, volleyball, and track and field.

Marc J. Robillard, 19, is a graduate of Ecole Secondaire Macdonald-Cartier. Son of Little Stobie miner Fernand Robillard, he will attend McMaster University to study arts and science with the eventual goal of going into the medical field either as a doctor or researcher. He likes reading, horseback riding and swimming.

INCO

Reserved Scholarship Competition for Children of Canadian Employees & Pensioners 1989 Awards

Up to twenty scholarships will be awarded in the 1989 competition. The awards have possible tenure of four academic years and annually provide tuition and associated academic fees up to a maximum of $1,500 and a grant of $750 for other expenses. Up to five applicants may also be selected each year to win a $1,000 finalist award.

ELIGIBILITY Children of Canadian employees, and of pensioners or deceased employees, enrolled in a program of studies required for university admission who will graduate with a secondary school diploma in 1989.

SELECTION An independent committee of high school principals will select award winners on the basis of scholastic records, SAT scores and information supplied by the applicant and the high school. The names of the winners will be announced in mid-August.

APPLICATION Scholarship application forms and SAT registration material may be obtained from the applicant's school or from:

Administrator
Scholarship Program
Inco Limited
P.O. Box 44, Royal Trust Tower
Toronto-Dominion Centre
Toronto, Ontario M5K 1N4
(416) 361-7844

SAT TEST DATES

TEST DATES	REGISTRATION DEADLINES
November 5, 1988	September 26, 1988
December 3, 1988	October 24, 1988
January 28, 1989	December 19, 1988

APPLICATION DEADLINE: MARCH 31, 1989

Matthew Spence, 18, wants to go to Queen's University to take engineering. Son of Levack geologist Gordon Spence, Matthew is a graduate of Levack High School. He likes skiing, basketball and volleyball.

Nancy Tombari, 18, plans to attend Laurentian University to study commerce with the eventual goal of owning her own business. Daughter of Stobie miner Mario Tombari, she is a graduate of Lasalle Secondary School. Nancy likes skiing and swimming.

Natasha Zajc, 18, is the daughter of power department engineering technologist and general foreman Stan Zajc. She's a graduate of Sudbury Secondary School and plans to attend the University of Western Ontario to study general science. She hopes to finish her schooling with a medical degree and go into pediatrics. She enjoys music, tennis and reading.

Peter Zwarich, 19, plans to attend the University of Western Ontario to study science. He wants to seek a career in physics or biophysics. Peter is the son of Creighton ventilation technician Peter Zwarich. The graduate of Nickel District Secondary School likes volleyball, basketball and tennis.

Inco - a history of service on University Boards

Laurentian University Board of Governors

(the late) R.D. Parker
(the late) Richard Dow
Donald A. Fraser
Winton Newman
F.W. Sheridan
Ron Taylor
Norman Wadge
Elmer McVey
Michael Sopko

University of Sudbury Board of Regents

(the late) R.D. Parker
Jim Grassby
(the late) Mel Young

Thorneloe University Board of Governors

(the late) Richard Dow
Peter Souter
Alan Sauerbrei

Huntington University Board of Regents

(the late) Ron Brown
W. Cook
Gordon Machum

Ron MacDonald

Union leader tapped for heritage body

Most people have principles but few live by them like Ron MacDonald.

"My philosophy has always been to get involved in the community," said the 38-year Inco veteran and union representative whose new appointment to the Northern Ontario Heritage Fund is only the latest in a long list of charities, fund-raising and community development groups in which he is involved.

Retired from Inco this year, he had been on a leave of absence when he served as vice-president and president of United Steelworkers of America Local 6500. Today he serves as international staff representative for the union.

Union involvement is only a part of what he considers his responsibility to his co-workers and the community. He's active on 10 boards ranging from the Sudbury Regional Development Council, Cambrian College, United Way and Science North to the Sudbury Northern Development Corporation and Cancer Society.

A maintenance mechanic at the smelter complex when he took a leave of absence 12 years ago, Ronald claims he doesn't mind the additional work the new appointment represents.

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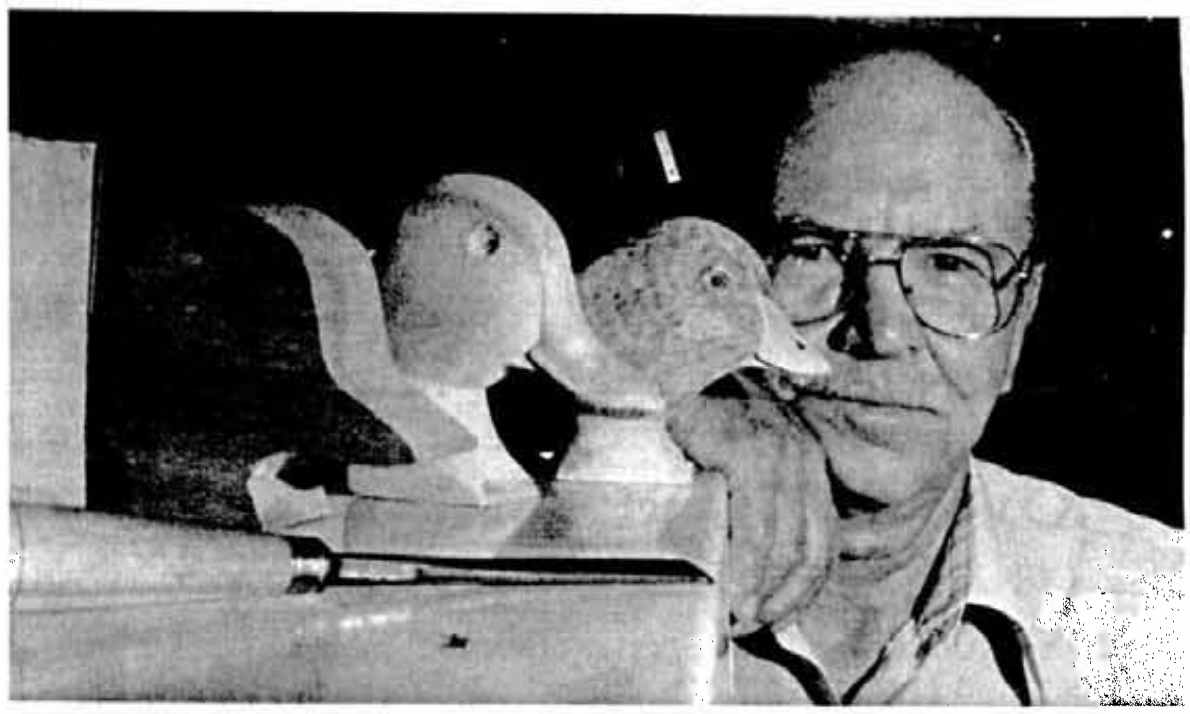


Orest shows progressive stages of carving a decoy's head.

Wood carvings come to life in Orest Andrew's hands

A quick glance at the wood duck on the work table in the basement of Orest Andrews' Lively home and you would swear it's about to take flight. It looks that realistic.

But Orest is quick to point out that there's still work to be done. He is a perfectionist, and his work on this particular wood carving is far from over.

A pensioner who spent 34 years at Inco in a variety of jobs, including Graphic Arts and Public Affairs, Orest has been a sculptor in wood for more than of his 66 years. It is a hobby which consumes many a long winter hour and one that he is happy to teach to others.

He limits his own carving to ducks - painstakingly crafted and elevated to exact replicas of the real thing. He carves up to three a winter, no more since each of the exquisitely-fashioned carvings takes about 100 hours of artistry.

His particular art form is more intriguing since it demands the skills of a sculptor, a painter and a carpenter. He uses sophisticated carpentry tools, generous quantities of paint and an array of paint brushes.

"Each of the carvings requires 10 to 14 coats of paint in order to bring it up to the standard where it looks authentic," he said.

Duck Hunter

His interest in duck hunting triggered his hobby.

"I've been hunting ducks all my life," he said. "From there it was natural that I should make my own decoys. So I did."

Orest, who graduated from the Ontario College of Art in 1939, found it an enjoyable hobby. But he didn't realize, that some of his hunting buddies from Inco would also be intrigued.

"They saw my decoys and they thought they'd like to make their own," he said. "That's how I got started in the teaching area."

For the past two decades, he's instructed men and women from the Sudbury area in the art of woodcarving duck decoys and other waterfowl and birds. While he specializes in ducks himself, his students might be working on anything from songbirds to loons.

"One person comes in working on a songbird and somebody else is carrying a loon," he said. "I kid one that he can probably carve his songbird out of the wood left over from the one carving the loon."

Not every student is as skilled as the teacher.

Shares Knowledge

"One lad took four years to carve a decoy and he told me: 'if you're ever out on Lake Nipissing and you see a decoy in a plastic box, don't shoot it - it's mine.'"

Passing on his knowledge helps fill this Inco pensioner's life. This past winter, he spent two nights a week teaching about 30 students at Sudbury's Lockerby Composite school.

There was an added bonus this past winter.

Two of his Sudbury students won first prizes at the Sportsman's Show for carvings in the duck decoy category.

For all his skills, Orest continues to pursue his wood carving only as a hobby. He could fetch $800 or more for his ducks carvings.

"If I wanted to do this full-time, I'd probably have to live about 300 years to fill all the orders," he said. "This is a hobby and I enjoy it but there are other things to do."

He's still enjoys his duck hunting. Indeed, he keeps a freezer full, not only for meat but for references in terms, of colouring and size in relation to his woodcarving.

Another of this busy pensioner's interests is dogs and the walls of his recreation room are "papered" with ribbons won at retrieval trials by animals he has trained over the years. He has trained animals for others, as well.

Orest's two beautiful black lab retrievers, Knight and Benson, also come in for their share of attention. And how much exercise can Orest Andrews afford to give them on his busy schedule?

Only about 10 miles a day. ■

EX-SUDBURIANS

Continued from page 3

Elliot Lake, travelling back and forth to his home and family in Sudbury on weekends.

For Peter, Elliot Lake is the flip side of Toronto.

"Nice, but too quiet," he said. "Sudbury is just about the perfect mix."

Smelter maintenance mechanic Dale Lynds was laid off after five years with Inco in 1982 while still an apprentice. He finished his training at Kidd Creek in Timmins and Cambrian College, then went south to Markham and worked at the Ford assembly plant for four years. With the job opening here, he jumped at the chance to return to Inco.

"I was born in Sudbury and I like the north, the lakes and the fishing." he said. "It's nice down south, but very expensive. I liked it but not enough to stay.

"I like snowmobiling," he said. "And there's no snow down there." ■

LIKE FATHER

Continued from page 11

For Ray Philion's daughter, Therese, the summer Plant Protection officer's job at Inco was an "eye-opener" about what her father did for a living.

"I knew but I didn't know, if you know what I mean," said the 23-year-old who is also a nursing student at Cambrian.

Although she wants to specialize in "bedside nursing" instead of working for Inco after she finishes her training, she said the Inco job was the best summer she's ever spent.

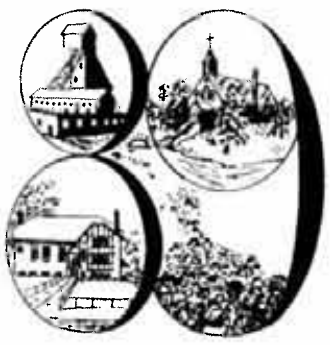
"And Dad didn't interfere once. He left me to do my own thing," she said.

Ray knew his daughter could handle the job.

"From what I hear," he said, "she did a good job."

Does working in the same place increase or decrease conversation around the house?

"Increase," said Ray. "And Therese can be a real chatterbox." ■



Creighton Shines in '89

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Japanese visit Clarabelle

Three leaders from Japan's nickel and steel industries were the focus of a high-level tour of the Clarabelle Mill in mid-September. Central Mills manager Peter Ryan explained the new role of the Clarabelle Mill to Takao Ono, second from left, the senior managing director of Daido/Inco Alloys. Looking on are Takahori Yamamoto, executive vice-president of the Daido Steel Company, and Saburo Minato, president of the Tokyo Nickel Company and Daido/Inco Alloys. Daido Steel, a major Inco customer, is Japan's largest steel manufacturers. Daido/Inco Alloys represents a joint marketing venture to sell high-nickel alloys.

FREE TRADE

Continued from page 4

John Rickard, foreman at the No. 2 research and development station at Port Colborne: "I can't see it making any big difference. Eighty per-cent of the trade in Canada has with the rest of the world is with the United States. If it's going to make a difference, get out and trade with the rest of the world. The only reason I don't like the deal is we're going to end up selling our water down the drain. Sell the oil, but don't sell the water."

Gaetan Durocher, process foreman at the Clarabelle Mill: "I say yes on some points, no on some others. It depends on what they're bargaining for. For the water rights, for instance, Canada says the U.S. won't have any. But some say yes they will. Nobody really knows. For the rest, such as this industry (the nickel industry) lumber, free trade would be better." ■

ED'S RETIREMENT

Continued from page 7

miles, it'll fly on about 36 gallons of fuel.

Hardly experienced at building airplanes, Ed looks to expert advice from a friend who owns an airplane repair service.

Already, improvements have been made in the basic design, and Ed sees little problem in getting the finished product past government inspectors who will have to stamp their seal of approval at specific stages of construction.

All homebuilts are classified as experimental aircraft by the transportation ministry.

Ed eventually wants to build skis for winter flying and pontoons for landing on water. He'll add expensive radio and navigation equipment, necessary for the long trips he plans to make when he retires.

"We'll travel to the west and east coast and even the United States by air," he said. "That's my retirement dream." ■

UNION LEADER

Continued from page 15

"There are a lot of exciting possibilities here" he said. "Although it's only a one-year appointment, there is a lot that can be accomplished."

He hopes the heritage fund program will come into effect quickly because "I don't want to sit on a board that does nothing."

According to Ron, $30 million in government funds has been designated annually for the next 12 years to assist single-industry communities expand their horizons and to help adjust to technological changes in the communities through the promotion of research and development. Special projects for economic diversification and boosting small business are also included in the mandate of the board.

Members of the Heritage Fund's board were chosen to represent a cross section of people, from women, francophones, natives as well as individuals from business, industry, labor and municipal governments. ■

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Published monthly for employees and pensioners of the Ontario division of Inco Limited. Produced by the public affairs department. Member of the International Association of Business Communicators.

Letters and comments are welcomed and should be addressed to the editor at Inco Limited, Public Affairs Department, Copper Cliff, Ontario P0M 1N0. Phone 705-682-5429.