



Trevor Tario, son of Inco's Tom and Pauline Tario, shows the form that'll take him to the nationals. Inco Cup helped him get there. See page 10.

# INCO Triangle

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Ontario Division

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## ISO adds weight to quality movement

by Jerry Rogers

For Barry Bowerman of Copper Cliff Refining's Nickel Circuit, ISO 9002 certification is the price of admission to the global marketplace.

For Gerard Leduc of the Smelter's Matte Processing department, the drive for ISO registration means a profound change in lifestyle.

For Howard Niece at the Port Colborne Refinery, working on the ISO implementation team is a chance to help the company where he's worked for only three years succeed in a competitive world economy.

Catherine Neville, vice-president of the Quality Management Institute in Toronto, understands the varying reactions to how the Canadian workplace is responding to the trend toward

quality that's based on compliance to international standards.

"When you have a sound format, everybody knows their role and when everybody knows what they must do and everything is written down as it is with the ISO 9000 series (of standards), it provides a sound base for continuous improvement," says Ms Neville.

At the QMI headquarters in Toronto, Ms Neville recently presided over ceremonies in which Inco's Port Colborne Refinery, Matte Processing and the Nickel Circuit joined 15 other Canadian companies in receiving ISO registration.

While she told them the achievement of the registration required "visionary leadership, effective management, commitment and hard work",

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### Sphere's close tolerances a challenge

## Creighton neutrino detector passes major milestones

Two milestones were reached at the Sudbury Neutrino Observatory recently with the assembling of the top half of a huge geodesic sphere in a cavity 6,800 feet underground at Inco's Creighton Mine and the assembling of a test acrylic vessel wall section at Reynolds Polymer Technology in Boulder, Colorado.

The 17 meter diameter sphere, made up of struts of stainless steel tubing, represents the important contributions to the SNO detector being made by international collaborators from institutions in the United States and Great Britain.

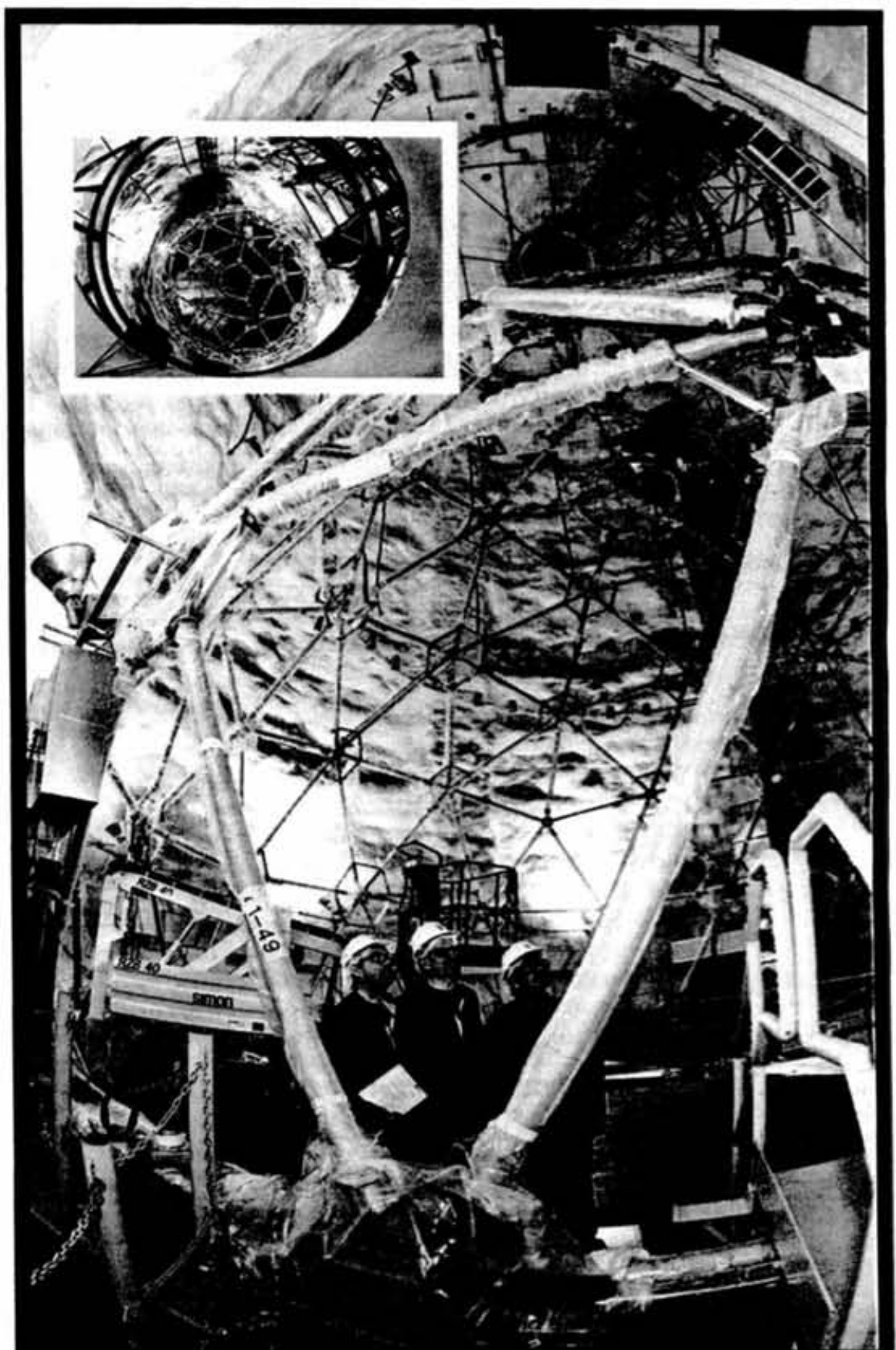
The geodesic sphere will contain 600 panels housing the 10,000 photomultiplier light sensors and reflectors which will detect neutrino events in the "heavy water"

core of the detector. The light sensor panels have been assembled under clean room conditions at a facility in the Walden Industrial Park near the site of the internationally-funded particle physics experiment.

Because a 12 meter diameter acrylic plastic sphere must be built (from 120 curved plastic panels) in the SNO cavity, the top half of the geodesic sphere is constructed first and is scheduled to be hoisted to the cavity top in March. The acrylic vessel will be constructed below it. Finally the lower half of the geodesic sphere will then be constructed and joined to the upper half, surrounding the plastic sphere with sensors.

The geodesic sphere assembly is a challenge because of the close tolerances required

*continued on page 2*



Geodesic dome takes shape

SNO's site manager Duncan Hepburn, communications director Doug Hallman and construction manager Larry Norris take a closer look at the stainless steel tubing struts that are being installed as the geodesic sphere begins to take shape. The inset picture shows what the SNO cavern, located underground at Inco's Creighton Mine, looks like as the inner core begins to take shape. This view is from the access port where the detector will be serviced. (Photos by Bob Chambers)

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## Geodesic sphere must meet waterproofing requirement

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to make this structure nearly waterproof (to isolate cleaner water inside the sphere), the extreme cleanliness needed and the limited assembly space in the cavity.

Assembly is being carried out by riggers from Mine Tech Limited in Lively.

The 6m-square test acrylic

vessel wall section assembled at Reynolds Polymer Technology in Boulder, Colorado included eight panels and 10 edge bonds.

The assembly of the vessel in the SNO cavity will begin later this spring. The SNO detector will investigate neutrinos — elementary particles of little if any mass and no elec-

tric charge — which come largely from the sun. Because the neutrinos are rarely absorbed by matter, they can penetrate the outer layer of the sun and the rock above the detector, while interfering cosmic rays are screened out. Neutrinos are seen through tiny flashes of light travelling from the central "heavy" wa-

ter in the acrylic vessel to the light sensors outside the tank in highly purified regular water. SNO will be the most sensitive detector of neutrinos yet built, with the ability to see all three types of neutrinos (while four other existing detectors detect only "electron" type neutrinos). It may help solve a solar neutrino puzzle — only

one third the number of neutrinos predicted by excellent theories of the sun, have been seen in measurements made thus far.

For more information contact: SNO Communication Office, P.O. Box 159, Lively, Ont. attention Leena Jensen or call (705) 692-7000, or fax (705) 692-7001.

## ISO registration meets global competition head on

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she acknowledged earlier that the move for ISO 9000 registration is being driven by the demands of customers.

"It's all based on a global market. People, organizations can no longer ship things all around the world and compete. ISO 9000 is driven out of a greater need for assurance for quality."

The Swiss-based International Organization for Standardization (ISO), a specialized body whose aim is the "development of international standards and related activities, including conformity assessment to facilitate the exchange of goods and services," is setting the benchmark for quality with its standards. QMI, a division of the Canadian Standards Association, is the leading registrar for ISO in Canada.

By the end of 1994, more than 6,200 Canadian and U.S. firms had secured ISO 9000 registration, 1101 of them from Canada.

Ms. Neville, who pointed out that Inco's leadership has made Sudbury the hotbed of ISO 9000 registration in the country, said there is less resistance to ISO 9000 today than even a year ago. With as many as 250 firms influenced by Inco's commitment to quality, Sudbury itself is a North American leader in ISO registrations.

She said companies with ISO 9000 registration find better market acceptance than without registration.

"The major thing in it for them is the ability to retain or get more customers. In North America, many companies are using ISO as the standard that their suppliers must meet ~~even to bid~~ on jobs. And because there is a strong market demand for ISO, companies aren't as wary about it today as before. Some people feel if they don't get on board with ISO, they'll miss the boat."

For Inco employees involved in ISO, the drive for registration is a learning



The Port Colborne Refinery saw its efforts to secure ISO 9002 registration recognized at a graduation ceremony at the Quality Management Institute in Toronto. Giving the thumbs up on receiving their plaque were Ray Alexander, left, senior process assistant in Process Technology, production assistant Richard Staniszewski, Bob Reyburn, superintendent of Safety, Training, and Administration, plant technologist Doug Schwyer, utility nickel foreman Bob Surridge and cobalt refining operator Howard Niece.

experience.

Barry Bowerman, a section leader in process technology at the Nickel Circuit, said a sense

was right but there was nothing written down so we had to build a history. Now everything's written down and responsibilities are assigned to individuals," Denis said at the ceremony in Toronto.

"We see the impact of ISO now on Inco internationally. Competition dictates that we do this. If we don't, we can't compete. This is a way of standardizing everything."

Gerard Leduc, a surface trainer at Matte Processing, likened ISO implementation to an individual going on a low cholesterol diet.

"It's a change in lifestyle. It's not the easiest thing to do. You have to work at it continuously. It's a mindset. You have to adapt," he said.

Howard Niece, a cobalt refining operator, saw ISO involvement as a newer, young employee as a good opportunity to help the Port Colborne team take a good quality system already in place and fine tune it.

QMI president John Calico, who spent several years in Levack while his father worked for the railway, said Inco and its suppliers' involvement with ISO 9000 is putting Northern Ontario on the map and changing the perception of how other companies regard Sudbury firms.

of teamwork emerged as the group worked for the last few of years toward ISO registration.

"Everyone's pulled together as a team. They see the benefit for the company and realize the importance of ISO in the global economy. It's like the price of admission for the market," said Barry, who described his ISO work as a new field of knowledge that was "personally fulfilling." "Once they realized what it was all about, their first response was how come we hadn't been doing this sooner. So it wasn't a very big step for us. One thing is you fail to give yourself the credit for what you're doing well. We wouldn't be in business now if we weren't doing something right."

Denis Lavoie, an instrumentation man at Matte Processing for 24 years, got involved with the ISO implementation from the start about a year and a half ago.

"We learned from the start that our way of doing things



Copper Cliff Refining's nickel circuit joined two other Inco operations in receiving ISO 9002 certification recently. Taking part in graduation ceremonies in Toronto were Gregg Gavin, left, quality assurance team leader, packing and shipping operator Don Wilson, Barry Bowerman, section leader, process technology, and Al Stanley, team leader IPC.



It was a banner day for Copper Cliff Smelter's Matte Processing when the department received its certificate of ISO registration at a ceremony in Toronto at the Quality Management Institute headquarters. Taking part were, from left, instrumentation man Denis Lavole, shift supervisor Denis Gervais, QMI vice-president Catherine Neville, Ontario Division president Jim Ashcroft and surface trainer Gerard Leduc.

## Inco brothers see dad honored



Two proud Inco brothers attended the induction into the Canadian Mining Hall of Fame of their father the late Archibald M. Bell. Inco's Vice-President of Technology Malcolm Bell (left) and Director of Product Research Sandy Bell saw their father's name join a distinguished list of mining giants that have made major contributions to mining in Canada. The ceremony was held at the Royal York Hotel in Toronto following the Hall of Fame's annual banquet. The new inductee joins 53 other Hall of Fame members, including four from Inco — Charles Michener, Ralph Parker, Louis Renzoni and Robert Stanley.



# MAKING Change

**Fewer good bricks to the landfill**

## Claude's brickwork saves \$250,000 a year

It struck Smelter mason Claude Degagne like a ton of bricks.

"There they were on the floor, ready for the landfill... hundreds of perfectly good bricks and each one costing over \$100.

"There has to be a better way," said Claude.

There was and he found it.

His idea for a new way of relining the Smelter's huge converters means no jobs lost, less physically hard and dirty work and savings estimated at \$248,000 annually.

"Our problems started with the new bulk smelting process," said Claude. "It's much hotter than before and our brick that lined the sides of the converters wasn't holding up. The brick would burn out and the vessel would leak. As well as converter problems, the crews sometimes discovered that the leaks ruined other nearby expensive equipment and materials."

The Smelter switched to a different brick that stopped the leaks on the converters but caused something of a hemorrhage of the Smelter's brick budget.

"At \$106 a brick, and 900 bricks needed at least twice a year for each of five vessels, the cost went through the roof for the job," said Claude.

What Claude saw at his feet during a relining job last year gave him an idea. "The end walls had to be relined with two layers of brick, one layer on the inside of the vessel (hot face) and a second

facing the outside (cold face)."

On the ground during a recent relining job were perfectly good cold face bricks fused to the burned inside bricks, all of them designated for the landfill.

Claude wondered if the old brick which hadn't held up to the bulk smelting but cost just \$8.50 apiece, could be used on the outside and the newer \$106 brick on the hot face.

Armed with 30 years of experience in masonry, a good dose of imagination and innovation and some technical support from refractory specialist Randy Lawson of Smelter Maintenance, he came up with a design that allowed the two kinds of brick to be used.

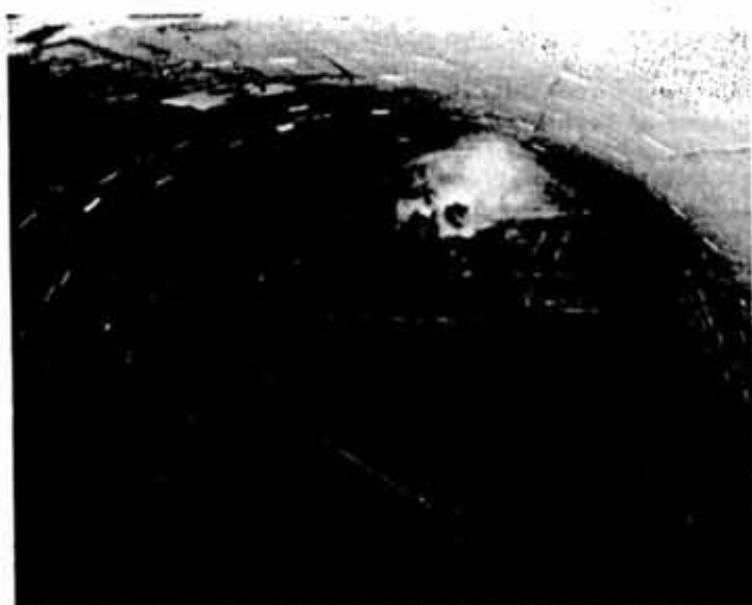
It worked.

"Since then we've done seven relinings already and the procedure is working great," said Claude.

Claude sees many more improvements on the way and many not even thought of yet. He feels new attitudes about listening to employees is making the difference.

He pointed to recent significant yet relatively inexpensive improvements in the copper cars that transport blister copper to Copper Cliff Refining's copper circuit as an example.

"Sid (Smelter manager Sid Segsworth) listened, gave full support, pushed the project and even got involved himself," said Claude.



A relining operation gets underway. Workmen are working on the end wall.



Smelter mason Claude Degagne stands beside the newly-bricked outside end wall of a converter, now covered with steel plate.

## Port Colborne celebrates record heat of utility nickel furnace

The Port Colborne Refinery's utility nickel furnace crews were given an early Christmas present December 1 when they marked a record 173rd heat of the No. 5 furnace.

The record heat was tapped by B Shift: Merv Lacharity, Roger Cote, Bob Bitner, Butch Skuta, Ron Baer and Mike Grisnik.

And the heat's success didn't end there. By the end of the campaign the furnace had achieved an unprecedented total of 175 heats, much to the delight of everyone at the Port Colborne Refinery.

"Teamwork was the key," said supervisor Dave Stremlaw. "This number of heats is a first for our plant."

Yet, in many ways, this success doesn't come as a surprise to the crew that worked hard at ensuring the increased

longevity of each furnace campaign. Dave explained that team enthusiasm has contributed to a number of design improvements over the past few years. Included among these improvements is the use of a higher alumina content brick and the re-design of the refractory layout which has helped increase the life of the furnace.

In the last two campaigns – the number of furnace heats between rebuilds – Dave pointed out he has noticed an increased furnace life of approximately 30 per cent which he attributes to the above changes and staff.

"We give the furnace crews a lot of credit for this," he said. "They did an excellent job keeping the record campaign going as long as possible."

The No. 5 furnace campaign lasted from April 1, 1993



Teamwork was the key when Port Colborne's utility nickel furnace crews marked a record 173rd heat of the No. 5 furnace. The record heat was tapped by B Shift: Merv Lacharity, Roger Cote, Bob Bitner, Butch Skuta, Ron Baer and Mike Grisnik.

to December 14, 1994.

For the furnace crew, each heat following the record breaking 173rd set a new performance standard for the utility nickel furnace operation. As a result, by the end of the

furnace campaign an amazing 87,000,000 pounds of utility nickel shot had been produced.

The refinery's utility nickel furnaces are a reverberatory type of furnace which is

charged with a wide variety of intermediate low-cobalt nickel feeds. It is batch charged and melted at heats in excess of 2,900 degrees Fahrenheit to yield 500,000 pounds of shot per heat as customer product.



# MAKING *Change*

## Miners come through as Clarabelle goes 'choke-free'

**I**t took the teamwork, persistence, professionalism and active participation of just about everyone who drilled, drove drifts, dug or otherwise earned a living at Inco's mines.

Besides saving Inco millions of dollars a year, it's making the lives of people at Clarabelle Mill a lot easier and considerably safer.

Getting choked up?

Not at Clarabelle.

Getting choked up here is practically a thing of the past.

A March 1 memo to mine managers and superintendents from the Ore Flow Team states that the Clarabelle crushing plant has had no steel chokes for February 1995. "As a matter of fact," states the memo, "the crushing plant has gone 41 days without a steel choke caused by the mines."

As far back as can be remembered, a choke-free month has never occurred before.

Considering that just over three years ago steel chokes and their attendant extensive downtime, lost production, damaged equipment, dirty and sometimes hard, physical work were occurring at up to 50 a month, their near-elimination is something of a miracle.

And Ore Flow Team members Tom White, Richard Marois and Ed Lew will tell you exactly who made the miracle happen.

### Miners did it

"The miners, all of them," said Tom. "Not only the ore flow teams at the mines, but every miner has had a hand in this accomplishment. We (ore flow team members) were the facilitators, perhaps. We tried to get the word out and tried to get people to talk to each other and work together. After that, these people carried the ball. They have not only our congratulations, but our heart-felt thanks for pitching in the way they did."

Just a few years ago, the stoppages were considered just part of the downside of the mill's operation. Then, with tough economic times in full swing, teams were formed all over Inco's operations to find ways to work smarter, better and surprisingly often easier.

The chokes, caused by steel, plastic pails, wood and other scraps mixed in with the muck from the mines, were noticed as a considerable drag on production. The problem was considered by the newly-established Ore Flow Team who put their money on Inco's miners. With cooperation and team-



Little Stobie ore flow team member and maintenance mechanic Doug Hallet stands in an area that looked a lot different before miners began a scrap removal program that not only makes for a better environment, but saves millions at the ore crushing stage (inset). The before and after effect seen here is similar at Inco's other mines.

work it was felt the stoppages could be reduced dramatically.

By the end of 1992, the chokes plunged from just under 50 a month to around five for most months and the new lower statistics continued through 1993. In the following year, there wasn't a single month that dealt with more than five chokes.

Part of the effort involved outspoken Clarabelle Mill crushing plant leader Don Tessier, who took his self-proclaimed "big mouth" and went to the mines to talk to just about every miner who would listen (see story in Aug. '93 Triangle, Pg. 7 headed *No teamwork between mines, surface? That's a lot of scrap!*)

With a knack for getting his point across and talking the colorful but blunt language of many miners, Don didn't sugar-coat the issue. "You leave it (steel) in the muck and I gotta take it out, and on my end it's sweaty, dirty, hard and unnecessary work."

### Applause, applause

"After one meeting the miners told me," said Don, "that it was the first time they've had a safety talk that ended in applause and a standing ovation."

Boosted by a "refund" offered for the thousands of plastic pails used at the mines, the item was targeted for removal at the mines (see same Triangle issue as above, Pg. 6, *Penny pails no longer a calamity*). Today, few pails make it to the mills.

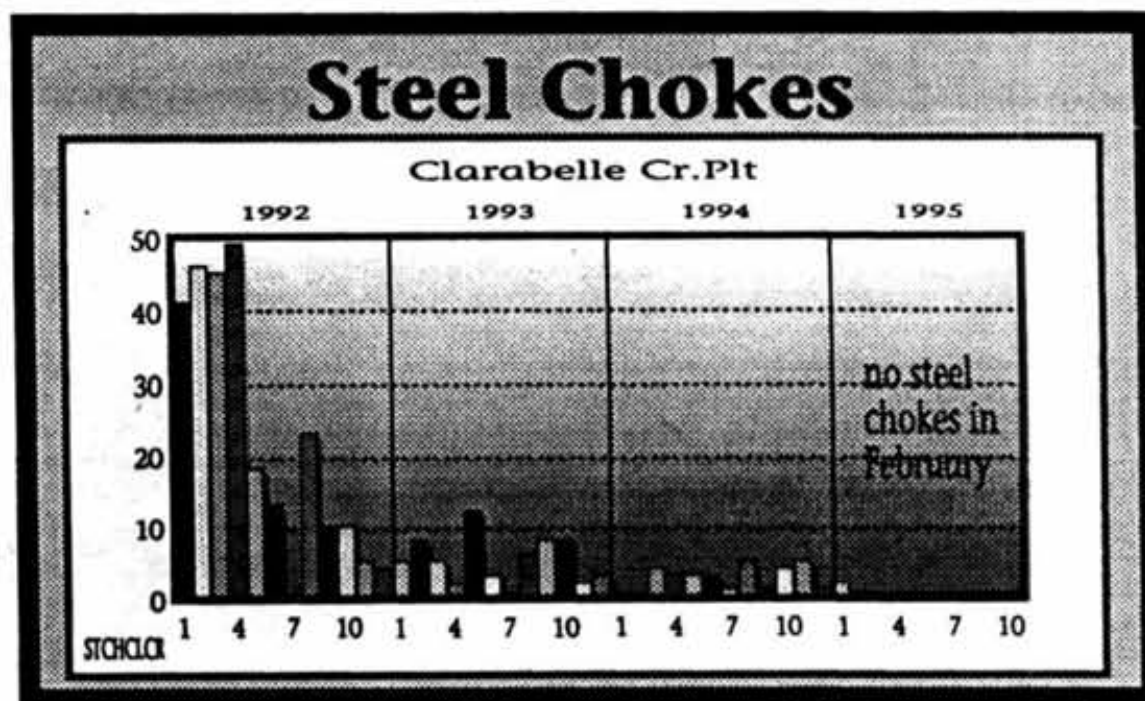
Tom said the mission of the ore flow teams set up at each mine by the Divisional Ore Flow Team was to find out why, where and how the scrap was getting into the system underground.

"The answer was simple," said Tom. "There was no place to put the garbage but in the muck. In effect, the ore pass was the garbage dump in

tic pails into different boxes.

With undaunted enthusiasm, miners did the sorting and much more. Thousands of dollars in recyclable material such as machinery parts, pumps, clamps, cable reels, batteries, paper and cardboard were collected to the point where the teams at the mines are now officially named "Waste Management

Today, the equipment is running steadily. "It's been up and running since July of the first year we began asking the mines for their support," said Tom. He warns that the project is not over. "It's an ongoing thing. We can't relax in our efforts. If you leave garbage around at your house, you will eventually get used to the smell and there's less



A "major improvement" understates what this chart shows. It's all due to miners' teamwork and cooperation.

the mines."

The initial step was to put garbage bins out where the foreign materials could be disposed. There was excellent cooperation, but a snag surfaced. The unsorted material was creating a problem at the landfill sites.

Miners were now asked to separate wood, steel and plas-

Teams."

Thanks to Inco's miners, a piece of modern, labor-saving equipment installed but little used at the crushing plant is now back on line. "We have an automatic feed control for the crushing plant" said Ed, "but because of the many stoppages the equipment couldn't be used."

initiative to do something about it."

If the team spirit of miners continues the way it has, the Ore Flow Team figures major savings can be made in the rock dilution process.

"Nothing is possible without them. With them, we can do anything we put our minds to," said Richard.



# Creighton Deep project points to future



Viewing some drawings of the Creighton Deep project around consultant George Laszlo are, from left, project manager Jim Thomson, project coordinator George Darling and consultant Errol Harding.

It's called the Creighton Deep project and it joins Creighton Mine's other high profile attractions like the underground greenhouse and Sudbury Neutrino Observatory.

The innovation, ingenuity and determination that's involved in recovering more than two million tons of some of Inco's highest grade ore from the cellar of one of the country's deepest mines is the kind of "attraction" that Inco is counting on to keep the company competitive in the international nickel market.

"It's our future," said foreman Ray Parker. "It'll extend the life of the mine and the jobs here. With everything else going on at this mine it takes teamwork to make this place work. Without teamwork, this new project could never be carried out."

The announcement late last year that (Cdn.) \$18.3 million will be spent to establish a new ore-handling system for Creighton was just the latest milestone in the 92-year history of one of Canada's most prolific natural resources and good news for the people who work at Creighton.

"We've got new equipment coming here that'll make the job more interesting and a little easier," said development miner Rob LaFortune. "A ramp will have to be built. I think it's going to be more interesting and challenging around here."

Jim Thomson said the task to be met is how to get ore from 7,400 level to the load-

ing pocket at 6,680 level.

Moved over from Garson Mine, where, as project manager, he was instrumental in bringing the mine back on line, Jim now fills the same duties at the Creighton Deep project. "It's challenging, it's interesting and there's always something unanticipated to deal with," said Jim.

The challenge at Creighton Deep is to get the ore to an underground crusher where it is crushed to six inches before being conveyed and hoisted to surface.

"Many alternatives were examined in detail," said Jim. "The one chosen involved a huge Swedish-made electric truck that travels along underground roadways specially engineered to take the weight of a fully-loaded truck. It's one of three Kiruna electric trucks that are on order. McCree East will get two and we'll get the other one."

Jim said that two other proposals were initially in the running, deepening No. 8 shaft or using a vertical conveyor.

The vertical conveyor proposal was the favored one at first, but further examination revealed the technology was not only brand new, but unproven. "When you invest this kind of money into a project," said Jim, "you do not want to risk it by relying on unproven technology."

Environment and safety were also major factors in the decision to use the Kiruna. "Electrics are clean-running. The other alternative was to

use several diesel trucks."

The electric Kiruna truck has proven itself in Timmins and at mines in Newfoundland, Sweden and Australia.

Jim is confident that the road surfaces needed to carry the huge truck can be engineered to eliminate much of the bounce for the driver. "When a truck begins to bounce or sway carrying these weights it can create quite the ride in the cab."

Among the truck's many advantages is the facilitation of a top-down mining system at Creighton Deep that takes full advantage of de-stressed ground.

The truck will be loaded at chutes to be installed at 7,400 level and dumped at the 6,970 level from where a new slide

will carry the ore to an existing crusher at 7,000 level. A pumping system to handle water at the 7,400 level is also part of the project.

Planning for the project began in mid-'92 and evaluation of all alternatives was completed in March of 1994. Work on the dump and slide began in January of this year. The truck has been ordered and delivery is expected in November.

"The truck should be running development ore in March of '96," said Jim.

Brian Fram describes the project in the miner's usual spartan manner: "We'll be doing the same as before ... only deeper," he said. "It'll be interesting."



The 55-ton electric truck will help make the Creighton Deep operation possible.

## Site visits satisfy customers

You have probably heard the phrase "customer satisfaction is number one."

Well the people of Divisional Shops are going to great lengths to satisfy their customers.

For many years the quality of work done by the tradesmen in the shops has been second to none. However, if you talked to a customer of the shops they would most likely hint that the turnaround time for repairs would be an area for improvement.

The employees in the shops are the first to recognize the need to eliminate problems with communications among themselves and the various plants and mines at Inco.

With modern facilities and highly skilled tradesmen the foundation exists for an excellent relationship between the customers and the shops. The idea of scheduling monthly visits to plants and mines by hourly and staff employees of the shops was implemented to give shops' employees a better understanding of where and how their products are being used.

Most Inco people seem to believe that Div Shops "gets" work because it is part of Inco. This is not true. The shops have to bid on contracts and work just like outside shops and contractors in the region. "These monthly visits allow us to see if the products and supplies provided by Div Shops have been

acceptable," says Heavy Repair Shops supervisor Denis Hutchison. "Another quality these visits give us is the ability to look for future work to be done in the shops."

Bob Doner, a welder in the shops agrees with Denis. "These visits will allow a greater amount of communication between everyone, which certainly can't hurt," he said.

Divisional Shops superintendent Ivon Chaumont feels the intent of the monthly meetings is to improve customer relations and address any issues that the plant may have. "It will create a closer liaison between shop personnel and plant personnel," said Ivon.



*'I do it for the kids'*

# Frank Moss, education champion

by Suzy Dobinski

Frank Moss is committed to excellence in education.

A member of the Ontario Division maintenance study implementation team, Frank is the recent recipient of the Career Education Citation from the Ontario School Counsellors Association.

The Sudbury Board of Education nominated him for the award which is presented to individuals, groups or associations who have created, contributed to, or delivered career education material of high quality and considerable value to students. It is offered in recognition of outstanding contribution to the awareness of young people in the province of Ontario.

Frank has been chairperson of the Sudbury Board's Vocational Advisory Committee for the past five years and a member since 1987.

"That exposure to the education system has been one of the most gratifying experiences of my life," he said.

Growing up, Frank had a difficult time at school. This difficulty manifested itself through the years and left him with a bitter taste of what education was about and what it was for. He figured that if he ever got the opportunity to make changes, he'd grab at the chance.

Since then, Frank has been the driving force in organizing several educational expositions in Sudbury.

In 1990, he chaired *Technology—Your Tomorrow*, a technological career exposition that was the first of its kind to be presented locally.

He also pulled together a team from the local business, industry, education, government and labor sectors to plan, organize and present the Careers 2000 Exposition in 1993.

"Frank was instrumental in garnering immense community support to see this project to fruition," said Jessie MacIsaac, guidance coordinator with the Sudbury Board of Education. "Along with members of the organizing committee, he made countless presentations to local businesses and organizations to encourage them to donate human resources and financial resources to this worthwhile cause."

Currently, Frank is chairing a taskforce whose goal is to raise funds and develop the vision for a Careers 2000 bilingual, community career centre with state-of-the-art technology. The centre will offer learners in the Sudbury District an opportunity to develop their career plan to fulfil their aspirations in their pursuit of life-long learning.

The entire community will own the centre. Members will come from the education, business, industry and union sectors. It will receive funding from many different sources, so if one company has a bad year and can't afford to contribute, another company



Frank Moss holds his Career Education Citation from the Ontario School Counsellors Association. He was given the citation in recognition of his contributions to education.

could take up the slack, explained Frank.

The centre will operate days, evenings and weekends, making it accessible to students and those in the workforce. It will also have available a speaker's directory containing business and home phone numbers of business people who are available to answer questions.

The centre will help students in choosing a career path and will bring career counsellors, parents and individuals from the business/industrial sector into the decision-making process.

"Choosing a career is the most important decision you'll ever make in life," said Frank. "It affects your self esteem and your standard of living throughout your working career. It affects whether you're happy or very unhappy in

your career choice and it affects who your friends will be. It affects the rest of your life."

Staff for the centre would come from Laurentian University, Cambrian College, both school boards (the Sudbury Board of Education and the Roman Catholic Separate School Board), College Boreal, business and industrial sectors and the government.

Everybody wins, said Frank. Students will have up-to-date information available on careers, the community will see what can be accomplished through partnerships, the school boards will no longer bear the brunt of all funding and human resources, and parents will have a place where they can help in advising their children in choosing a career.

"Frank's contribution to the education of the youth in the

Sudbury region has been highly regarded by students and educators," said MacIsaac. "He has been a leader in initiating innovative career awareness activities and continues to be actively involved in developing new strategies to ensure that students are well prepared for the world of work."

Frank and all members of Careers 2000 are volunteers. "I do it for the kids," said Frank. "This award (Career Education Citation) is not about me, it's about the kids. All I am is a person trying to carry a message. The award given to me is deserving of hundreds of people who've helped me. It's their award too."

"Inco should be congratulated for their input in this community effort," he added. "Inco has been a tremendous supporter of Careers 2000 for

nine years."

The Sudbury Board of Education has also endorsed Frank's nomination for the Lamp of Learning Award. This award goes to someone who has made an outstanding contribution to public secondary education in Ontario and has shown constructive participation in educational affairs over a number of years.

According to Director of Education Jim Smith "strengthening the link between the classroom and the world of work has been an important focus for educator and business/industry representatives locally. Frank is to be commended for the leadership that he has shown in the development of innovative career education opportunities for our teachers and students. His provincial recognition is well deserved."



# Lively earns award at Robotics event

The award for the Most Innovative Robot Design was the payoff for the dedication, hard work and the desire to get the job done by students and staff from Lively District High School who recently returned home from the Canada First robotics competition in Brampton.

"It was a lot of fun," said team captain Jason Sanmiya, an Ontario Academic Credit student and son of Stew Sanmiya of Copper Cliff Refining. "And the sponsors were great - we couldn't have done this without them. Inco was short on its budget, but they still managed to get the money for us. And Shad Valley - well, to manage to support something like this for students is really great," Jason added.

The Spruce Moose, as the uniquely-designed robot is called, unfortunately got off to a slow start in its first of four heats during the day-long competition at Turner Fenton Secondary School in Brampton.

Due to a few mechanical glitches, some radio interference and some bad luck, the Lively team wasn't able to advance past the first rounds of competition and into the playoff rounds. Although they only managed a grand total of 11 points, compared to other teams' totals of between 40 and 50 points, the Lively students, staff and their support network did not leave the competition glum nor empty-handed. Their creative but simple robot design, which utilizes an auger-style spiral which pulls balls into the machine and into a trough, earned the team one of six awards - the Most Innovative Robot Design Award, in recognition of the unique physical design of the robot. In this category, judges look for a unique form of construction which allows a robot to perform its task more efficiently and effectively than its competitors. The design is also assessed on its aesthetic value and whether it utilizes materials in a cost-efficient manner.

The Spruce Moose fit the judges' criteria to a "T".

The Lively team members include Eric Binmore, son of Copper Cliff Refining senior analyst Seiji Binmore; maintenance foreman Jim Cunningham's son, Dan Cunningham; Brad King, son of smelter electrician Brian King; Chris Fosten, son of Inco Construction and Hoisting planner Doug Fosten; and Jason Sanmiya.

Other members include Brad Hreljac, Jason Rose, Hansel Huang, Laurie and Heather Beynon, Jason Vergunst, James Moorehouse, Franz Kirk and Dana Andrews.

The team was given financial assistance by Inco Limited and educational direction from Shad Valley. Inco engineers provided invaluable guidance and sup-



Some of the Lively High School team members stand behind the "Spruce Moose" at the Canada First robotics competition in Brampton where the team won the Most Innovative Robot Design award.

port to the students in their role as team mentors, but it was the students themselves who got their hands dirty and did the "real" work.

The competition, in its second year, fielded 18 teams from across Canada. A combination of sport, technology, science and engineering, the "Robot Rampage" challenges students to design and build a remote-controlled robot which is capable of collecting and depositing volleyballs into the team's own goal or quadrant, while competing with up to three other teams. Every team started off on equal footing, as each were given six weeks to design and construct the robot, using \$350 and materials supplied by Canada First, plus up to \$350 of the team members' own money.

The game is played on a carpeted playing field, 24 feet square, with the goals situated in each corner, and divided into quarters by raised bumpers resembling speed bumps. The contest objective is to score the highest number of points by collecting up to four balls of the team's color (ie: red, blue, yellow or green) and placing them in the team's own goal or quadrant during a two-minute heat. At the same time, the team must use strategy to prevent the other teams from doing the same. Collusion, collusion, blocking and stealing are all part of the game, as long as it is done in a sportsmanlike manner.

"The impetus for Canada First grew out of the notion that most of the role models for today's youth are promoted from the ranks of sports, music and entertainment," said competition president Bruce MacMillan.

"However, in reality, the future of Canada rests on up-and-coming minds and innovators in the areas of science and technology. Canada First's main objective is to make these areas of endeavor as attractive to youth as hockey and rock 'n roll."

That philosophy seemed to work, as all day long electricity filled the air in the gymnasium of the host Brampton school, whose team just happened to be last year's champion. Team members, supporting students and even their teachers yelled, clapped, stomped and laughed the day through, generating an air of friendly competition and excitement. Backstage, teams of students huddled around their inventions, making last

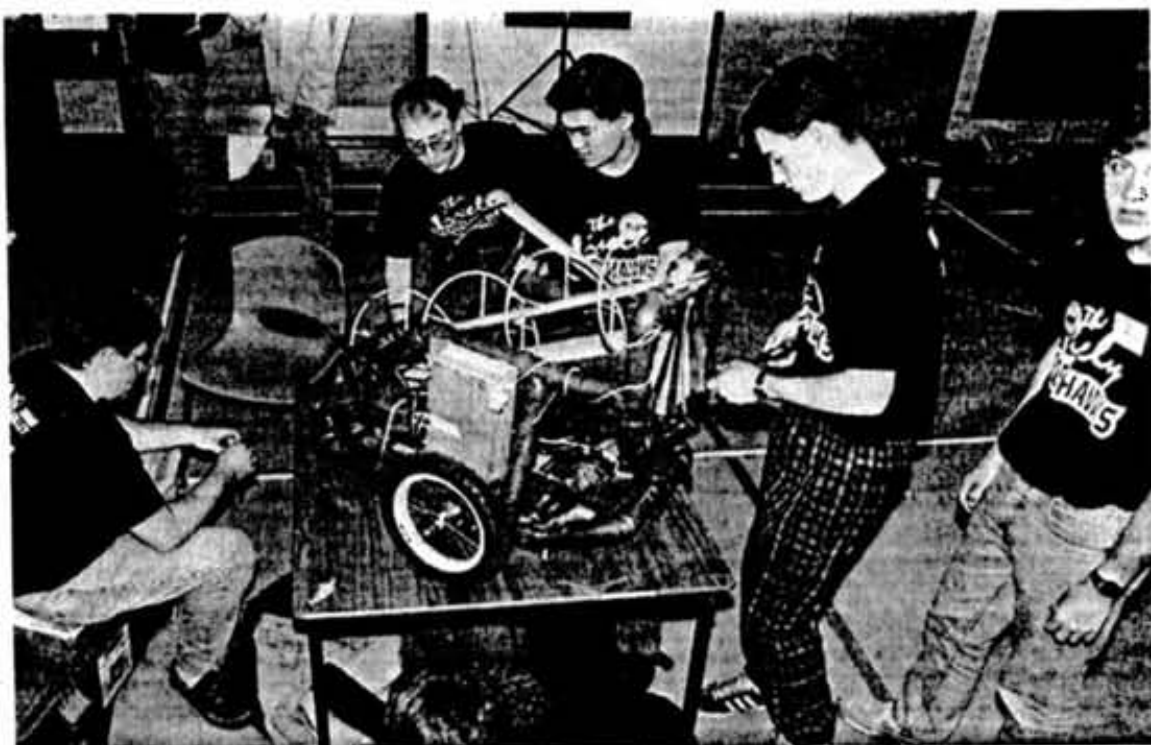
minute preparations between heats, tinkering or repairing the robots in order to get them ready for the next round of competition.

While the robots were of roughly the same dimensions, the specific designs were vastly different, ranging from a clumsy-looking boxlike construction to a streamlined, go-kart type of machine. All were unique and each were designed for a specific strength or two; one may be better at blocking other robots, while another's strength is collecting the balls and scoring.

"This has been great - a good experience for the kids," said Lively teacher Ted Beynon. "They don't often get a chance to work in real engineering sessions with profes-

sionals." Fellow teacher Joan Gawalko agreed, adding that the Lively team was experiencing a "sink or swim" situation - most of their practice runs the day before were used up doing last-minute alterations and repairs. "This is their practice," she added. "So, they're doing remarkably."

"There were a few things that we didn't have time to include in the design, such as arms out front to scoop the balls in, but it was a lot of fun, nevertheless," Jason Sanmiya noted. "I don't think we could've won the whole thing, looking at some of the other designs around here, but I do wish we could've gone on to the second round. It was just a couple of glitches which stopped us."



Lively High School students prepare the "Spruce Moose" for the competition.



# Inco support crucial for northern skiers

Pictures and story  
by Suzy Dobinski

The longest running corporate sponsored amateur ski series in North America, the Inco Cup, wrapped up its 22nd season last month with a banquet at the Copper Cliff Club.

"Inco's involvement is crucial to the Inco Cup race series," said Cheryl China, Alpine Chair of the Northern Ontario Ski Division. "Inco has been the longest standing corporate sponsor of a ski division in North America and has been there through thick and thin for us. Their involvement is really crucial to the development of young athletes, young alpine ski racing athletes in Northern Ontario."

More than 100 excited and determined skiers competed in races at Timmins, North Bay, Sault Ste. Marie and Sudbury this season, with teams representing each city.

The four races featured four ski disciplines: Downhill, Super G, Slalom, and Giant Slalom. Skiers were judged on stance and balance, edge and pressure control, turn initiation and steering, and time and coordination.

To join the Inco Cup circuit, skiers must have a skiing commitment, a desire to improve and an Alpine Canada



Maggie Dale marks the score while Mari DeMarco looks on. Both are of the Adanac club.

eventual goal is to make it to the Olympics.

Although the Inco Cup is a serious competition and skiers concentrate on getting their best time, there is also room for fun and camaraderie.

Each year, the season wraps up with a banquet at the Copper Cliff Club. This special evening is for fun, laughter and reminiscing over the year's races.

It is also the night that awards are given to the top male and female skiers of the year and the coveted Inco Cup is presented to the team finishing atop the overall standings.

The Searchmount Ski Runners of Sault Ste. Marie captured the Inco Cup for the fourth consecutive year in 1995.

The top male and female skiers were Brian Woltz of North Bay and Lise-Marie Acton of the Sault, whose parents Gord and Diane skied the Inco Cup circuit on their way to becoming national team members.

Many skiers use the Inco Cup as a stepping stone for greater levels of competition and many dream of being on the national team or skiing in the Olympics, said Jeff.

Inspiration for today's skiers can be found in Inco Cup winners of the past - people like Kate Pace, Gord and Diane Acton, 1972 Olympic gold medalist Kathy Kreiner, and 1993 Canadian men's downhill champion John Mealy.

For kids racing Inco Cup, the slope's the limit.



Searchmount Ski Runner Trevor Tario was in fine form to capture the Inco Cup for the fourth consecutive year in 1995. Trevor is the Pauline Tario of Occupational Medicine.



The Searchmount Ski Runners of Sault Ste. Marie are all smiles after capturing the Inco Cup for the fourth consecutive year in 1995.

Competitor Card, said China.

Inco Cup participants are serious racers and the calibre of the event is reflected in its point allocation system. Using a complex, computer calculated formula, skiers begin with 625 points and lose points as they ski - the same system used in professional racing.

To put it in perspective, Kate Pace, 1994 World Cup Downhill Champion and Inco Cup graduate, has 0.00 points, the best possible score. Top Inco Cup skiers carry about 80 points.

"The calibre of racing is very, very high, on a par with racing anywhere in Ontario," said China. "Given the limitations of our mountains and hills it's different than racing in British Columbia and Alberta, but it's top-notch racing in Ontario."

If a racer is successful in the Inco Cup program, they can move to the Division Juvenile team for ages 14 and under. If they succeed there, they can move to the Division Racing Team for those over 14. This

road eventually leads to the National Alpine team and from there to the Olympics.

Traditionally, Inco Cup racers range in age from 12 to 16, about 60 per cent male.

Serious skiers start their training long before the snow falls. Dryland training usually starts in October, when skiers work on improving their stamina, coordination and balance.

"During the height of the skiing season these racers might be on the slopes virtually every night. That's not by design, that's by desire," said Jeff Grieve, a senior environmental analyst at Inco and longtime Inco Cup volunteer.

Kids miss a lot of school with long hours of training and going to competitions. But doing school work outside of class time is a small price to pay as they work to realize their dreams, said Jeff.

Skier David Rodney, son of Inco Exploration and Technical Services' Wayne Rodney and Information Systems retiree Celia Rodney, says his



Adanac coach Rob Fry and Jamie Lyon of the Adanac club wait for a trip to the top of the hill.



Skiers took to the air as well.

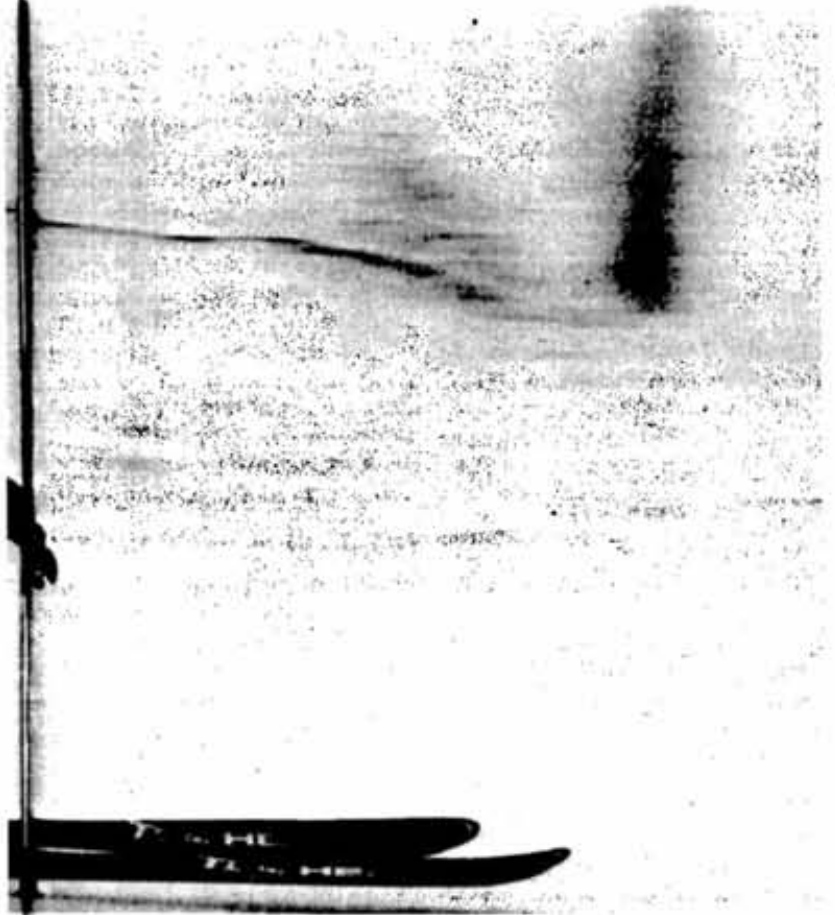




A skier strikes an aggressive pose as he takes on the Adanac hill.



Skis are everywhere at Adanac.



his Sault Ste. Marie team capture the Inco Cup and Tom Tario of Maintenance Training and



the hills in Inco Cup races this year.



Teddy Walker of the Searchmount Ski Runners of Sault Ste. Marie gets ready to compete.



# Inco Cup's Tario, Rodney off to nationals

Trevor Tario and David Rodney have gone head to head all year on the Inco Cup circuit as two of the top juvenile skiers in Northern Ontario.

Later this month, the two travel to British Columbia as teammates on the Ontario entry in the Canadian Juvenile Skiing Championships.

The battle for national supremacy in the 14 and under age category takes place in Panorama, B.C. March 19 to 26. Trevor and David earned their spots on the Ontario team with impressive performances at the provincial championships at Osler Bluff in Collingwood earlier this month, where David won silver in slalom and Trevor captured bronze in the super giant slalom.

It marks the first time in three attempts for both skiers that they have advanced past the provincial level to the national championships. It also continues an incredibly successful ski season that saw David capture six gold, four silver and one bronze on the Inco Cup juvenile circuit, with Trevor close behind at three gold, two silver and three bronze.

"We've been battling all year but we're also good friends," said Trevor, 14, the smallest member of the Ontario team at five foot, six inches tall and 125 pounds.

"I think the competition at the nationals is going to be good this year. Judging by the provincials, the skiers will be big and good in the speed events.

"Skiers from British Columbia have an advantage because they are used to the longer hills," he said. "and the bigger guys can afford a few more mistakes than me. Smaller racers like myself need a good technical run to com-



Trevor Tario, left, and David Rodney sport the medals they won at the provincial juvenile championships that earned them berths on the Ontario team heading to the nationals in British Columbia this month.

pete because we can't count on speed on the flats. Everything has to be right—starting the night before with waxing the skis."

Trevor's favorite event is the slalom where the closer gates put more emphasis on technique than speed and size is less of a factor. In speed events, such as the downhill and super giant slalom, his strength is his turning ability, he said.

Trevor's father Tom Tario of Maintenance Training and mother Pauline of Occupational Medicine figure their enthusiasm for the sport must have rubbed off on their kids. "Trevor started skiing at age 3 and his sister (Courtney, 10) began at age 2," said Pauline. "At that time, Tom and I had

just gotten into skiing and we were very enthusiastic but not very good. We used to do a lot of skiing on our rear ends."

An audiometric technician, Pauline and the Tario family try to go to as many races as possible to support Trevor. "It's great to have Inco support these kids and other Northern Ontario skiers. It's made a difference."

Tom not only actively supports his son, but does his bit for other young Northern Ontario skiers by volunteering as well. He's taken 14 days of vacation to help at Inco Cup races, making the winter season his busiest for outdoor activity.

David, also 14, said he and Trevor have been skiing against each other since both

were nine years old. David is another fan of the slalom and counts turning ability and consistency as his greatest skiing attributes.

In the Northern Ontario Ski Division, he may be the biggest juvenile at five feet, 10 inches tall and 140 pounds. At the provincials, he was merely middle-of-the-pack in terms of size.

"The competition got a lot bigger in southern Ontario and I'm expecting more of the same at the nationals," he said. "I'm happy to be going."

"The competition at Osler Bluff was very good and I was worried after the first three races because I hadn't placed well, but in my fourth race I pulled out the silver. Consistency has been one of my strong

points all season. I finish a lot of my races."

David's father Wayne Rodney of Inco Exploration and Technical Services and mother Celia, retired from Information Systems last year, say skiing has helped David learn to focus his efforts. "He's a typical teenager and there's a big world out there and he wants to do it all," smiled Wayne. "When it comes to skiing, he's focussed. He's also learned a lot about communicating with adults and a wide variety of people of all ages. He's made many good friends."

Celia said that at David's level of skiing, there is less driving involved because most trips are by van with a rotation of volunteer parents sharing driving duties. Earlier, however, there was a lot of driving to practices and races. "You can well imagine," she said with a laugh, "that good weather for skiing isn't always good weather for driving."

David and Trevor are on the slopes an average of four times a week during ski season honing their skills. Both would like to go further in their still young ski careers and dream of some day competing at the Olympics.

At the same time, the pair are practical enough to have more readily attainable goals in mind like making the provincial team at the senior level.

"I would like to go as far as I can in skiing," said David. "It's a lot of work and a lot of money but I'd like to try."

"You have to be in good shape and love the sport. I might fantasize about the Olympics but just making it to an all-world competition of any sort would be something really big for me."

## Northern skiers thank Inco for support

Dear Inco,

This ski season has been a great one thanks to the kind people at Inco. They have given us some great races as well as supplied really nice medals.

Thanks again for everything you have done.

Kelly Holmes

Dear Sirs,

I am writing to thank you very much for supplying the Northern Ontario Ski Division with such a fun and challenging race series. Every year I look forward to being able to race in the Inco Cup. I would also like to thank you for the wonderful ball caps and the lovely banquet which you so graciously provide each year for all the racers.

Thanks again, yours in skiing,

Chris Ferro,  
North Bay Ski Racers

Dear Inco,

Thank you very much for having another year of the Inco Cup. Thank you for having the ball caps. They are nicer each year.

I'm glad you decided to have the banquet again this year. It's nice to see all the racers again, before the end of the ski year.

Thank you.  
Kristy Storey

Dear Inco,

Thank you very much for funding the Inco Cup races. If you didn't fund these races there would hardly be any more races.

This is my first year of racing with the North Bay Ski Team.

I have raced this year in Timmins, Sault Saint Marie, North Bay and Sudbury. Every race has been a lot of fun for me. I hope we will still have the Inco Cup series next year and it will be as much fun as it was this year.

Thank you.  
Owen Nicholl

Dear Inco,

Thank you very much for your sponsorship of our races. You make our whole ski season possible. Your medals are wonderful. We know that when we are at an Inco race and we place well that we have done well and will receive a wonderful Inco medal.

Anyway, thanks again, your races mean everything to us racers.

Kris Jordan

Dear Inco,

In these times when money is not as readily available as before, to sponsor a race, in which many skiers from all over Ontario compete in what has grown to be one of the best race series, is more than appreciated.

This race series gives my brother Martin and me a chance to improve our racing skills and to meet many new and old friends. This year I have finished almost all of the races in the top seed and my brother not too far behind. We certainly appreciate the hats you give us every year and are always keen to see the new styles and colors. In conclusion, thank you for a terrific season.

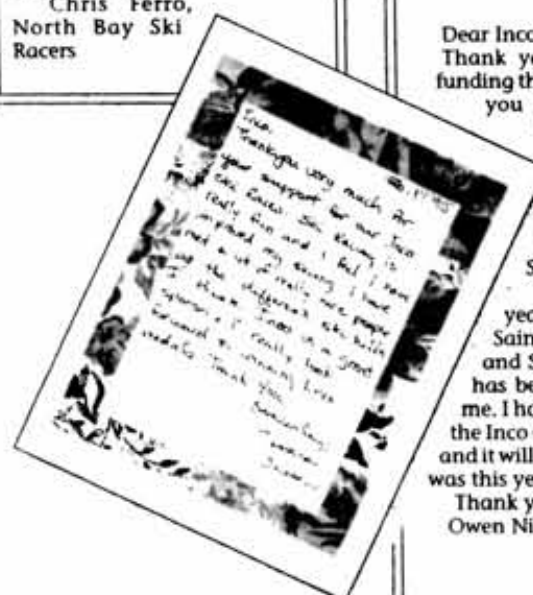
Bruno and Martin Lepage.

Dear Inco,

Thank you so much for holding the Inco Cup race series and the banquet. If it wasn't for Inco holding all the Inco races, I would only have four races this year. But now, because of Inco, I will have eight. I would like to share with you some of the memories I have gained while racing the Inco Cup circuit this year. It all started at the Timmins Inco Cup race, my first race of the year. I never finished any of the races but being there was a fun and enjoyable experience that I won't soon forget. Then came the North Bay Inco Cup race. There were four races, two giant slalom and two slalom. I had so much fun in the first giant slalom because I got my first Inco medal. I wasn't so lucky in all the other races coming fourth in two other races and 19th in one slalom. There isn't another thing in the world I would rather be doing than ski racing and Inco makes it possible. The last Inco Cup race that I raced in so far this year was in Sault Ste. Marie. My placings there weren't the best because Northern Ontario Ski Division racers were there but I was close enough to the Division skiers that it made me quite proud of myself.

I am looking forward to the Sudbury race and Inco Cup banquet. Before I go I would like to thank you again for sponsoring the Inco Cup race circuit. THANKS INCO!

Dave Woltz





# EVH

## FOR YOUR HEALTH

From the Occupational Medicine Dept.

For years in Canada we have been taught to lift "properly" by bending our knees holding our "tummy" in and keeping our back upright. This was based on the idea that the main thing that went wrong with the back was irritation of the small facet joints. Pelvic tilt was in style. Across the nation there were lectures, pictures, videos and presentations telling about the virtues of this position.

The fact that we couldn't even reach across the sink to turn on the taps without leaning forward, let alone do any work, did not deter the crusaders on this point.

Anyone who has tried to do any work on the job or at home knows that

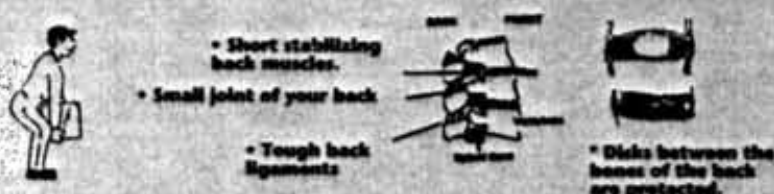
# Lifting - some of the old ideas were not the best

it is impossible to stay upright and do anything. As a result we end up leaning forward at the lower back and put terrific stress on the muscles, ligaments and the back of the discs. Even if we are only lifting a toothbrush, we are lifting half our body weight plus the toothbrush with our lower back. We are lifting more if we have a "pot".

We should have looked at the weight lifter or talked to the people in Australia to get a better perspective on how we should be lifting and reaching and keeping the back in a position of strength. We should be bending our knees, keeping our back as upright as possible but keeping our seat out so that when we do lean forward the movement is at the hip joints. They are the strongest joints with the strongest muscles in the body.

1. Your back is eight times stronger when arch/hollow is kept in your lower back.

When arch is kept in your back it is a position of strength for:



2. Keep your back as upright as possible so the stress on the back is always the same as the load being lifted.



3. Keeping the curve/arch in your back transfer the work to the large trailer hitch type hip joints.

Keep arch in back by:

- Bending your knees.
- Keeping your seat out.
- Keeping your head up.



4. Losing the arch in your back puts the stress on your back rather than your big strong hip muscles.

Stress on the lower back is:

- 8 times greater when bending or reaching at a 45° angle.



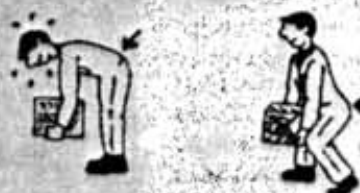
- 10 times greater when bending at a 90° angle.



Weight of the trunk of the 200 lb. person is about 100 lbs.

5. If you forget and round your back while lifting or working do not get up.

- Bend your knees.
- Stick your seat out.
- Keep your back straight.
- Rock back on your hips.
- Lift your hips and knees.



6. Practice so that you can use good lifting positions automatically.

- Hold on to the back of a chair and practice bending while keeping the arch in your back.



7. Do gentle exercises for 10 minutes before and after physical activity at work, home and play.

- To get your muscles ready to work.
- To prevent or decrease stiffness.
- To decrease injury and accidents.

8. Do exercises for your back every day.

- Exercise on your hands and knees to keep your short muscles that stabilize the back strong.
- Do half situps to keep "tummy" muscles fit.
- Do gentle stretches to keep muscles related to the back flexible.

Lifting brochures and 8.5" X 11" posters to go with the brochures will be available soon from Inco's Occupational Medicine Department.

## Inco, Codelco sign agreement to extend exploration in Chile

Inco subsidiary Compania Minera Mamina recently announced that it has signed an agreement with its joint venture partner Codelco Chile to proceed with Phase Two of an exploration program for a copper-bearing orebody in northern Chile.

Phase Two of the program will consist of geophysical and geochemical surveying and test drilling on the 10,000-hectare property in the First Region of Chile, about 90 kilometres east of the city of Iquique. The Mamina property belongs to Chile's state-owned copper company Codelco, the world's largest copper producer. Phase Two is expected to be completed by November, 1995. At that time, if exploration results are positive, a feasibility study will proceed.

Upon a successful feasibility study Inco will have earned an interest in this property.

The exploration program and feasibility study outlined in the joint venture agreement between Codelco Chile and Compania Minera Mamina, signed in August 1994, could involve a total estimated expenditure of Cdn. \$25.3 million (U.S. \$18.5 million.)

The official signing of the Phase Two agreement in Santiago recently was witnessed by Canadian Prime Minister Jean Chrétien as part of his trade mission to the Caribbean and a number of South American countries.



# in touch

## Helping Jamaican poor enriches pensioner

Inco pensioner Georgette Bergeron is dedicated to helping those less fortunate.

Georgette, a registered nurse with Inco for 25 years who still volunteers twice weekly at Occupational Medicine, is in Jamaica this month to lend her hand where needed. It is her third trip to the impoverished country.

Her involvement with missionary work began 20 years ago when she donated materials to Third World countries. She later became involved with Haitian Experience Sudbury.

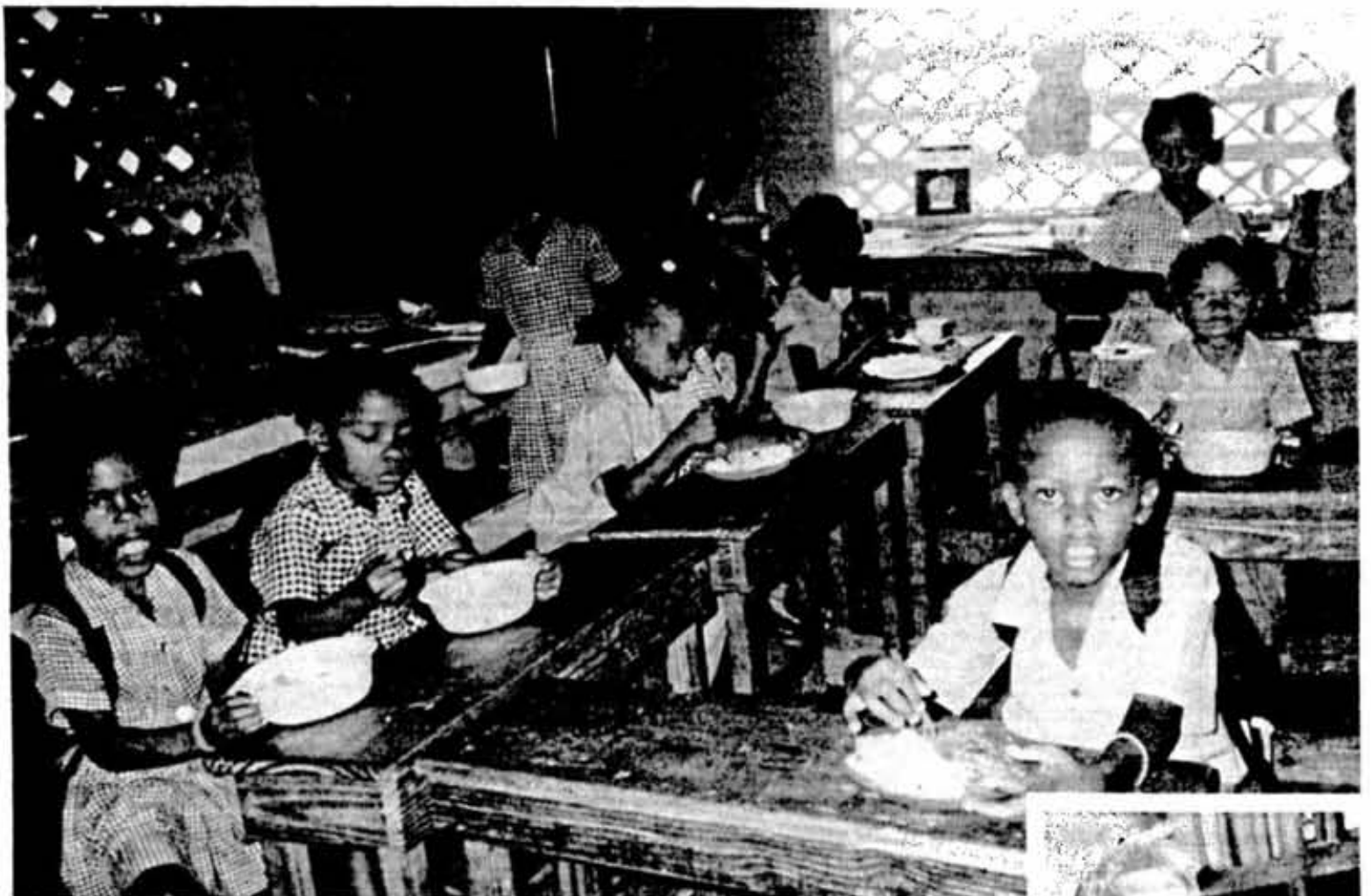
Haitian Experience was founded in 1982 by two Toronto teachers who wanted to help the poor in Haiti. The Sudbury chapter has been operating for five years and has sent members to Haiti, the Dominican Republic and Jamaica.

Georgette and five others left for Kingston, Jamaica on March 10 to work for two weeks with Franciscan nun Sister Grace Yepp who runs an orphanage in the slums of the city.

The group will be building a three-room block house for teachers.

"This is the first time we actually know beforehand what we'll be doing once we get there," said Georgette. "We usually work with Sister Yepp on whatever project needs to be done, whether it's building houses, cleaning up or doing repairs to the orphanage."

Last year, 28 students and adults managed to build two houses, wash walls, scrub floors, repair cribs in the or-



Youngsters at the orphanage where Georgette is helping to build a three-room house for school teachers.

phanage and do other maintenance work in the 10 days they were there.

"Once people become accustomed to us and realize we won't dominate them, they try and help," said Georgette. "You get to know a lot of people and it's lots of fun."

However, she admits that

the work can be depressing and sometimes she has a hard time coping. "You have to keep a good attitude. You have to make your own fun."

The Sudbury group is one of many who dedicate their time and energy to Sister Yepp. Many groups from Northern Ontario travel to Jamaica at

different times of the year.

The cost is \$1,000 for two weeks, which covers transportation to and from Jamaica, room and board, and transportation in Kingston.

Anyone interested in joining or donating to Haitian Experience Sudbury can contact Georgette at 969-2192.



Inco pensioner Georgette Bergeron.

## In Memoriam

NAME	BORN	DIED	YRS SERVED	NAME	BORN	DIED	YRS SERVED
Bastien Clifford	06/09/38	02/14/95	29	Karppi Jack	10/05/31	02/12/95	39
Chamberlain Henry T.	02/21/10	02/18/95	28	Krivoguzovs Trifans	03/03/24	02/18/95	33
Daly Garth O.	06/12/38	02/05/95	15	McFadden James	01/19/21	02/04/95	42
Duda Nicholas	12/16/25	02/11/95	29	Paulin Laurier	05/08/14	02/04/95	22
Farrow Ignatius	12/07/27	02/09/95	38	Regan William D.	12/12/08	02/16/95	37
Gaspero Alceo	10/15/11	02/04/95	22	Roy Gregpr H.	08/10/15	02/06/95	37
George Ralph	09/16/17	02/02/95	31	Salach Stanislaw	03/09/21	02/18/95	23
Greer George	10/02/28	02/01/95	36	Salhani Daniel	05/24/16	02/21/95	43
Hawkins, Frank E.	03/24/07	02/10/95	33	Somers Donald J.	03/25/29	02/09/95	30
Hrnjez Danilo	06/15/24	02/17/95	31	DelTorchio Ronald	06/29/40	11/07/94	28
Janik Mytro	01/10/19	02/04/95	22	Zakrzewski Michael	10/13/19	02/25/95	25
Johnson Cecil	03/11/17	02/23/95	40				



# Sports Sports Sports Sports Sports Sports Sports

## Copper Cliff Mines' curlers celebrate

**K**een competition, big appetites and an inclination to have a good time earmarked this year's Copper Cliff Mines curling bonspiel at the Sudbury Curling Club.

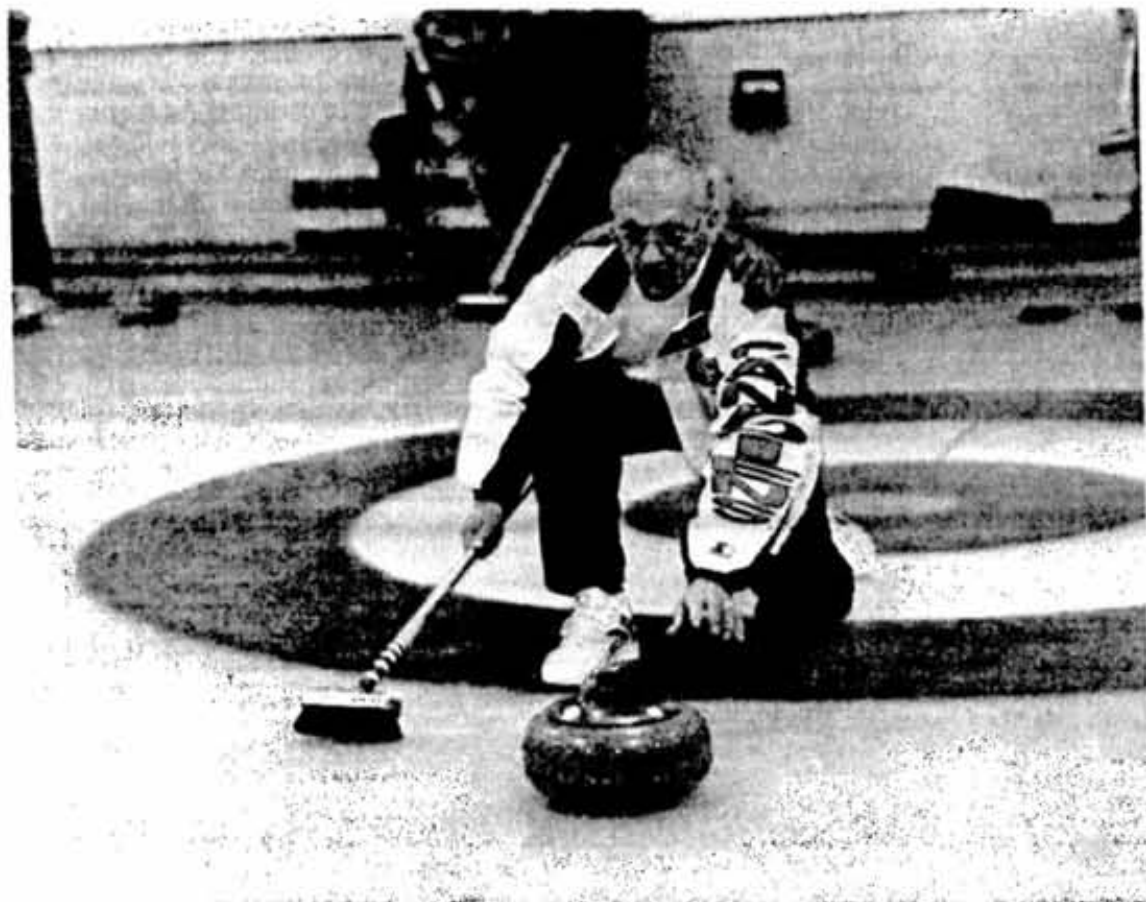
"Above all, everybody had a great time," said South Mine miner Doug Martin, one of the organizers of the event. "There was a drop in participation due to shift changes, but we hope that'll be temporary and we'll continue to grow every year."

Twenty teams representing some 80 mine employees, their wives and invited guests made for excellent competition.

A team headed by South Mine geologist Jim Muir won the event.



**Sandra Narduzzi, wife of South Mine ventilation technician Henry Narduzzi, shows some fine form but loses it after the rock's gone.**



**South Mine blaster boss Reg Brisebois lets a rock go.**



**North Mine training instructor John Hanlon follows the rock as it slides down the ice.**



**South Mine driller Denis Mainville signals his teammates where to put the rock. Behind him is South Mine chief geologist Jim Muir.**

## Mills 'bowled' over

Central Mills holds its annual bowling tournament on Saturday, May 13 at the Plaza Bowl in Sudbury at 7 p.m. Cost, including shoes, is \$15 per person.

The tournament will include three games of bowling, prizes and trophies for high

team triple, high team single and a "Skunk" trophy.

The first 24 teams will be accepted.

For more information please call Angie Gagnon at 682-5730, Susan Benoit at 682-8805 or Ted Wilson at 682-8633.





## HERITAGE T H R E A D S

by Marty McAllister

I knew change was coming, of course, but . . . and this is what I was leading up to last time . . . not this much, this fast.

In the six-year life of this column, every story that you've liked best has dealt with you and yours, in one way or another. And it is fascinating to look back and discover that the subjects of those stories, if not the story content itself, have also seen the most change. Several deserve a small epilogue.

### I would never have thought . . .

I wrote my first column in April, 1989, with nary a thought of my own retirement . . . even though I had over 30 years' service. I had, after all, turned 50 only the previous month. Barely more than two-and-a-half years later, I was outa there. So, about half of these have been written before retirement and about half after. The boundary, if you want to call it that, was December, 1991. That, along with a gaggle of grandchildren and the fact that Muriel has now joined me out here on the middle ground, is big enough change for me. *A Trip Back In Time* appeared in June of that first year so it could precede the Creighton Reunion, which would be held at the beginning of July. And, even though *The Triangle* had inadvertently used the wrong draft of the story, it was well received anyway, likely because it just happened to catch the mood of former Creightonites preparing to see one another again. The reunion did its job . . . in more ways than anyone could reasonably have expected. And those who came in droves, day after emotional day, had the time of their lives. Just ask Cubby or Yockey or Yolly or Red. Or Cowboy. Or Chink. They'll tell you. And they'll likely admit they couldn't bear to go through it again . . . because, well, you know.

### The best of the bunch

That fall, *Leaders And Legends of Our Own Time* became, as far as my

## There's a family in my cabinet

(Part Two)

writing's concerned, the quintessential Inco Family yarn. I had incredible fun writing it and it has received the most attention of them all . . . even if I got into a little Dutch over it. It did teach me a thing or two. Mainly, as *Triangle* editor and newspaper veteran John Gast explained at the time, a column that doesn't raise some hackles once in a while likely isn't very popular. Names from that column bring these changes to mind: Lou Bures in New York and Ron Smith in Toronto have both retired; Art Akers, I hear, is one of the head honchos at Huntington; Charlie Hews is an adjunct professor at Queen's; . . . tempus volat.

### An unusual keepsake

In November, 1990, *A Bridge From Heart to Heart* was a two-page thing I did about the founding of Thompson. I put a lot of myself into that feature and the month before it appeared I took the manuscript with me to a writers' workshop in Ottawa. There, as part of the deal, a former editor of *Saturday Night* magazine read it and gave his evaluation. He thought it was sort of okay, but believed I had thrown in a lot of irrelevant things. Oh-oh! I had already turned it in to *The Triangle*, so 'the bullet was out of the gun', as it were. I just hoped people would like the photos John selected. Well, I got a couple of enjoyable letters, and then, a few weeks later, Jerry Rogers forwarded to me a copy of my article which Dave Allen had sent him from Toronto. A handwritten note across the top simply said: "I really like this . . . puts it all together . . . WROA." That reinforced my faith in writing one's level best for one's real readers, not for the critics. I think you'll understand why I still have a special spot for Roy Aitken's encouraging little note. He left us too soon, but is certainly not forgotten.

If you think of anything we've already talked about that you think needs revisiting . . . or if you have any comments or suggestions at all for that matter, please drop a line to me at *The Triangle*. There's always plenty of room for the family in my cabinet.

# Port Colborne

## Energy, ISO power Port Colborne

There are no cases of the February/March blahs in Port Colborne this winter.

Not only are employees celebrating their ISO 9002-1994 success, they are also making innovative contributions in energy savings and on-the-job efficiency.

Starting the first week in March, the ISO 9002-1994 Internal Audit team will be sharpening its pencils and getting to work. The 1995 internal audit will start in the Cobalt Refinery and continue on to the Utility Nickel and Foundry Plant in April. In June, the Shipping, Shearing and Stores Department will be undertaken as well as an examination of Management Responsibility and Internal Quality Auditing.

This year's audit team consists of Ray Alexander, Peter Hymen, Howard Niece and Doug Schwyer. Two new members, Al Glaab and Richard Pengelly, have been added and will be serving as observers this spring.

In honor of achieving the ISO 9002-1994 certification, pizza and wings were served in each operating area of the plant on designated days during the first three weeks of March.

Meanwhile, back at the refinery, the Energy Conservation Team has already implemented two new ideas with positive results. First, a 50-horsepower vacuum pump is no longer operating on the weekends, generating a net savings of approximately \$5,000 per year. A smaller pump has been purchased for the south lab which uses it during that time.

Second, the baseboard heaters have been disconnected and removed

from the offices which already have existing central heat. The annual savings are estimated at \$600 per year. Looking to the future, the team is considering some other energy saving options including placing motion sensors to activate main lighting in the refinery Reagent Building and the Warehouse, programmable thermostats, converting the silver sand dryer from electric heat to natural gas, and finally, investigating various alternatives to the auxiliary plant steam heaters.

The refinery's Energy Conservation Team consists of Doug MacVicar, Mike Dinga, Al Brown, Fred Della Ventura, Frank Igersic and Dave Thomas Jr.

This winter the shop's Total Quality Improvement Action Team has also been hard at work making good use of their recently-acquired Vogel Arc-Fit pipe notcher. This interesting device, obtained through information that team members obtained at an industrial trade show, is used to notch pipe for fabricating hand rails and other tasks with greater safety and efficiency.

In the past, explained team members, pipe was joined in a T-type fashion which sometimes weakens at the joint. With the pipe notcher, pipes fit snugly together. The device has also proved to be great for creating stair railing in which pipes were previously cut on an angle and joined. This way the fit is better and there are no shavings. In addition, this portable device can be used with the small press or the brake press.

Team members include Archie Ferguson, Ian Dick, Mario D'Uva and Greg Royal.



# Yesterdays todays



## 40 Years Ago

Adjudicators were eloquent in their praise of individual performers, school choirs, orchestras and bands during the 10th annual music festival held at the Canadian Legion building in Sudbury in 1955.

Sponsored by the Sudbury Kiwanis Club and the Registered Music Teachers Association, the five-day event attracted 6,000 entries and large audiences which made it "an inspiringly successful week for the public-spirited citizens who organized and brought it off," said the Triangle.

Winner of the \$250 Inco scholarship, the festival's major prize, was Mildred Istona, a young Sudbury violinist who had "a tremendous sense of authority and enormous vitality," said adjudicator Gordon Clinton.

Other winners were Jack Davidson, "the finest voice to be heard in the festival," and Frankie Morosa, a young piano accordionist "who played it as it should be played."

Other stories that month were: 'Platinum Metals in Inco Display at Provincial Museum', 'Young Creighton Badminton Players Sensation of Ontario Championship'.

## 25 Years Ago

From remotely controlled cranes in the crushing plant and flotation area at Frood-Stobie to the automatic electric systems in the Smelter, the invisible wings of radio were making many tasks at Inco easier and more efficient.

Twenty-five locomotives on the company's 100 miles of railway track, plus work and repair crews were now in constant communication with each other through a central radio control unit.

Personnel in open pits and mines were also using all kinds of radio equipment, right down to two-way personal portable units.

In fact, almost all maintenance, ambulance, service and operating crews in every phase of the company's mining, milling, smelting and

refining operations were hooked up in some kind of communication network.

At the forefront in 1970, Inco in Sudbury was an excellent example of a company adapting to the many electronic innovations that were rapidly being introduced to industry.

Other stories that month were: 'President Sees Progress in Top Process Research', and 'Deliveries Down but Inco Making Strong Comeback'.

## 15 Years Ago

The result of a development and construction program in 1977, when it was decided new cages would be required to replace some of the existing cages in Inco mines, the company was going ahead with a decision to build its own custom-designed cages.

Mining equipment companies didn't have the type of cages the company needed so the only way to get them was either to order them custom-built or build them themselves.

Riggers, operating and maintenance repair crews were canvassed for suggestions, which the Maintenance Engineering department used to come up with a design. It was turned over to Divisional Shops for construction.

"In many cases the experienced tradesmen (of Divisional Shops) were able to come up with improvements in the assembly and construction methods," said Dick McIvor, senior design engineer. "And we were able to change procedures and come up with less expensive ways of doing things."

The final result was a cage with improved ventilation, inspection ports for slinging operations, replaceable wear shoes, provisions for tying down equipment, a superior safety mechanism and cage 'chairs' to hold the cage steady when loading and unloading heavy loads.

Other stories that month were: 'Copper Refinery Bonspiel', 'Creighton Mine Bonspiel', 'Highlights from Inco's 1979 Annual Report'.

# INCOME ideas

by Susan LeMay, CMA

## Open for business

### Be your own boss.

Do what you really like to do.

Write off your expenses — everybody else seems to be doing it.

In short, there is a strong appeal in the idea of having your own business, whether it is full-time or part-time. Many who have taken early retirement, not only from Inco but also from other companies, have an opportunity to try something new.

How does it work?

What are the advantages?

What are the pitfalls?

### Getting Started

Anybody can be in business for his or herself. If you have a product or service to sell and you know customers will come, you can set the wheels in motion. If you want to conduct business under your own name, making the decision is enough. Your next step is setting up operations so you can package and market your product or service.

If you want to use some other name, or you want to include what you do in your business name, then you need to register the name with the Ministry of Consumer and Commercial Relations in Ontario.

There is lots of help available for would-be business owners. Some of this help is free, or low cost. Helping would-be business people is a business of its own. Government is in this business at all levels and courses are offered on a continuing basis in many schools. In addition, there are often seminars for people starting their own businesses.

In Sudbury, The Regional Development Office runs a one-evening seminar two or three times a year on starting your business. This lets you know about community resources and the steps required to meet regulations. It also provides individual assistance for specific issues if asked.

Planning is important in a small business. The greater the costs, the more you will plan.

### Home-based Business

Home-based businesses are the trend of the late '90s. These are small businesses usually carried out by a single person who owns the business and does all the work, or by a couple who share the work and the income. The only office these businesses have is located in the home of the owner. Home-based businesses might offer anything from word processing services to home maintenance service to pet sitting and everything in between. If there is no other space except that at home, you have joined the increasing number of home-based businesses.

### Advantages

The biggest advantage of being in a home-based business is the flexibility it can give you. You can do your office work anytime you want to. Even at midnight or 3 a.m. There are also the advantages that everyone else seems to be enjoying. It often seems from talk we hear that self-employed people are allowed large deductions from the income tax they pay. There

is a tax rule that allows you to deduct any business losses from other income, and this is one of the advantages that people often hold out as a reason for being self-employed.

Think carefully though, "Why would you be in business to lose money?" The 'tax advantage', if you can call it that, lies in the fact that if there are areas of your home that are used strictly for business, then a part of the expenses like hydro, heat and rent are business expenses. You would have most of these expenses anyway and now part of them are tax deductible.

Another advantage is that you will be able to offer your children or your spouse a job when the job market is tight. The result is that so some of the money earned in your business is taxed in their hands and probably at a lower rate.

### The Pitfalls

There are expenses associated with starting up a new business. You will probably find that you have to pay most of

them right at the beginning and then claim a tax deduction later. For a period of time you have a reduced cash flow.

Planning is essential if you are not going to be discouraged and give up. The surest way to keep any business on track is to have to invest some of your hard-earned money in it. If you have had to do that, then you are likely to be quite careful with your resources. Otherwise you run the risk of over-extending yourself by purchasing things you don't need, or taking money from the business for yourself, as a reward.

It is true that very few small businesses are still active and profitable after five years. Their owners either didn't plan or didn't keep on top of their company, the competition and/or the market. Being in business presents opportunities if you are prepared and it gives great satisfaction if it is a business that you enjoy. As well, sometimes these businesses make money for their owners. What other reason could there be for being in business?



## I heard it down at . . .



# The Dry

by Jerry Rogers

## Tales of Bonus Bill, Crying Sam, Timber Dog John

'You jig, you amble, you lisp and nickname God's creatures.'

— Shakespeare

Louis Beres and Wilbert Lawrence can appreciate that.

Creighton Mine veterans, Louis, 68 and a one-time foreman, and Wilbert, 72 and a former driller and stope leader, still get a chuckle whenever they reminisce about the old days and the cast of characters that populated Creighton.

Not surprisingly, Louis, the bard of the deep with a poetic turn of phrase, and Wilbert, a foxy sonuvagun known as the Red Fox, share a penchant for nicknames.

Nicknames are not as fashionable today as they once were. But it's easy to understand their appeal, especially when you figure back in Louis and Wilbert's heyday, mining wasn't as sophisticated as today and manpower was plentiful underground.

Of course, nearly everyone of us has, at one time or another during our lifetime, been known by something other than our formal name whether we liked it or not. They start in our childhood as pet names and follow us through school and into worklife.

Nicknames may simply be contractions of our given names - Jim for James, Sandy for Alexander. Our surnames supply nicknames as well so that Ron Smith becomes not Ron or Ronny but "Smitty" to his friends. Nicknames can come from physical characteristics as in Fats Domino, Red Skelton or Meatloaf or reflect some trait (Smiley, Swifty).

The love of nicknames is rich indeed.

Egyptian pharaohs were accorded nicknames as well as the ancient Greeks. Aristocles, the Greek philosopher, is better recognized as Plato, the nickname he was given for his broad shoulders while Sophocles was known as 'The Bee' for his stinging observations.

While nicknames blossomed in Renaissance times, nowhere have they flourished as much as in North America.

There have been enough celebrated Docs to staff a city hospital, more Reds than a convention of colour rinses, more Dizzys than Daffys. It's no revelation that the worlds of politics, sports, crime and the military abound with fanciful monickers. Even in the society world, nicknames were a security blanket and a passport to the more fashionable circles.

Which brings us back to Creighton.

Louis "The Bear" has enshrined Creighton's nicknames in verse and Wilbert "Redeye" - so named because of the cheap Italian wine he guzzled as a soldier in The Second World War - modestly opines he may have created some of Creighton's more colourful nicknames.

"When you're working hard, you had to have a little time for something else, a little fun," says Wilbert. "We worked there at Creighton for the money. It was a job a guy could do. I had worked at various jobs, bush jobs, the army, gold mining. This was the best. You had to work alright. You came out of Creighton pretty shiny. Creighton miners were pretty dark by the end of the day."

Louis, who did another stint with the Sudbury Neutrino Observatory after retiring in 1982, says mining was good to them. "If you did your job, nobody bothered you at all."

On a fine March morning, they compared notes about the old gang, many of whom have departed to that great ore pass in the sky. This is what they had to say.

**Blueberry Bob** was actually Bob Jenkins who picked blueberries all summer with his family.

**Bingo Bill** printed his own bingo cards. Trouble was, he tried to play with them at the bingo hall and got caught.

**Bonus Bill** didn't make much.

**Broken Jaw Pete** incurred his injury at a gold mine before coming to Creighton.

**B. S. Smith** never stopped talking, always had a story to tell.

**Bones** was so skinny he didn't cast a shadow.

**Clean Face Mike** wasn't much of a worker.

**Congo** was named after the work area on 3 shaft that he had to climb 400 feet to reach.

**Crying Sam** was always crying about not making bonus.

**Coulson Eddy** hung out at the Coulson Hotel, telling mining stories.

**Floor Plank** spent so much time sawing up old planks underground his bonus was never much more than 14 cents an hour while his buddies who buried the planks made a buck an hour.

**Gentle Ben.** He wasn't.

**The Garlic Snapper** ate so much garlic he became later known as **Snapper** and then **Russian Mike** for who knows what reason today.

**Horizontal Mike** got caught sleeping by the shift boss.

**Jeepers Jeepers** never swore.

**Jam Sandwich** ate nothing but.

**Next Monday** always promised to pay back the money he borrowed next week but never did.

**Naughty Not** fooled around with another fellow's wife once too often.

**Square Set Charlie** was actually the late Charlie McFarlane, a dandy miner in square set timber construction.

**Square Hole** couldn't burn a round hole while trying to qualify on the acetylene torch.

**Starvin' Marvin** never brought a lunch to work and bummed sandwiches.

**Snap Snap** was Wrigley's best customer.

**Sure Shot Tom** had nine kids.

**Taxi Joe** was a cabbie off the job.

**Timber Dog John** earned his sobriquet when he regularly overloaded an ore car in a low spot in a drift. Out of frustration because the car then became too high to get out, his

partner threatened to bean him with a timber dog.

**Vent Pipe Vic** tried to sneak up on an early cage and hid in the vent pipe in the station when the foreman came around.

**West Coast Willie** hailed from British Columbia.

**Yogi Bear** was as busy as a bear in winter.

And then there were **Foot Wall**, **Fur Coat John**, **Mr. Clean**, **Over the Hill Bill**, **Soup Bone**, **The Whitefish Lawyer**, **Up-She-GoDown** and **Yama Yama**.

Over time, the nicknames and the stories behind them took on a life of their own. To this day, oldtimers say they never did know the real names of some of the colourful characters of their past.

"I was never called by my right name in my life," Red Lawrence laughs today even though the red has become grey. "The only one who called me Wilbert was my mother."

### Hats off to Inco

An Inco Cup cap given to skiers at the wind-up banquet at the Copper Cliff Club was an unexpected hit at a recent international ski race at Osler Bluff in Collingwood.

Almost two dozen Inco Cup skiers competed in the Federation International au Ski event against racers from Canada, the U.S., Europe and even Australia.

And the suede-peaked cap emblazoned with Inco Dual Slalom '95 for the Adanac final event for the '95 Inco Cup season would have been a popular collectible if Inco Cuppers would have parted with theirs.

"The Northerners were envied for their hats," says Inco's Jeff Grieve, an Inco Cup organizer and senior environmental analyst at Copper Cliff Refining. "It was a treasure. Everybody kept asking our kids, 'Where'd you get the hat? How do I get one?'"

### On Blueberry Hill

Put this in the where-do-they-find-the-time department. **Tony Cirillo**, a machinist at Creighton Mine when he's not adding to his reputation as a soccer referee without equal, is planning an outside business venture. A family affair at that. With wife, **Grace**, Tony is opening a new "gourmet fast food franchise" around Easter in the old Marconi's restaurant on Regent Street. Grace and Tony will call it **Blueberry Hill**, natch, and they'll have lots of help make it succeed. Daughters **Tina**, 21, **Carla**, 20, who'll be the manager, **Toni**, 18, and son **Paolo**, 11, who'll be the mascot, will staff the eatery.

### Kudos all around

Laurels for the special issue of Incontact Magazine celebrating the visit of Prime Minister **Jean Chretien** to Inco and Garson last June with Inco Chairman and Chief Executive Officer **Mike Sopko**. The eight-page edition won a finalist award in the eighth annual International Mercury Awards competition in New York. Awards don't tell half the story. The special issue was written, edited, laid out and printed overnight.

**Stewart Tait**, manager of Quality and Human Resources, is both a recognized expert on the quality movement and an informed observer of how quality is having an impact on the community. Both come into view in Stew's excellent piece on Using Quality to Advance Community Well-Being in a special report of the **Canadian Business Review** in its winter edition. **Sudbury** and its member organizations are well on their way, he argues, to enhancing "the well-being of their constituents by accelerating the learning process and by using total quality methods to address community needs and to realize community opportunities."

### Whatever happened to . . . ?

For 34 years, **Toh Chong** was a steady instrument man in the Instrumentation department. Now, after retiring in 1994, Toh is making real music. He's playing the piano at Laurentian University and keeping up his work with Tai Chi. Toh plans to visit Singapore this summer . . . **Gunter Prawzick**, who was a Creighton hoistman with 33 years' service when he retired in 1991, is busier today than before retirement. He's into spring cleaning, changing windows, working on his house and, oh yes, making Germany and Poland springtime stops . . . **Michael Armillotta** won't let a recent broken ankle slow him down from his volunteer work. Michael, an audiometric technician in Occupational Medicine with 32.5 years' service on retirement four years ago, volunteers at a nursing home, his church and the Caruso Club. He's just returned from sunny Mexico . . . A first-class mechanic at Copper Cliff Refining's nickel circuit for 39 years before calling it a day in 1991, **Karl Teufel** always enjoyed work. Eventhough he golfs and travels, he loves life in retirement and has found timeto start a small ladies' wear business. He says he had great friends on the job and they are what he misses most . . . **Douglas Scanks** was a senior analyst at the Smelter and worked 32 years with Inco before leaving in 1991. Travelling to Ottawa, Kincardin and Florida occupies his time now when he isn't relaxing by the pool at home or gardening . . . **Guisepppe Vitiello** can't wait to head for Europe for three months. Meanwhile, the former 28-year Transportation Department conductor is still busy with winter-time chores such as snow shovelling. He, too, retired four years ago.

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