SHANTZ





No, he's not eating on the job. This South Mine employee is just making a point about the value of an orderly and clean workplace. See page 5.



An investment in our futures!

Creighton digs deep for rich ore

nco employees will mine some of the highest grade ore in the world during the next 21 years at Creighton Mine, eventually reaching depths of more than 8, 100 feet underground.

The Company is moving forward with a two-phase \$125 million (US) project to develop a six million tonne, high-grade, low-cost nickel and copper deposit at the **Ontario Division's oldest** mine.

"It means investing in our future. It's job security. And that's an important thing," Imre Horvath, said scooptram driver working at the 6970-foot level.

"The grade is outstanding," added Imre, who has been an Inco miner for seven years.

"The young guys feel good about it. It's good for morale,"

commented Electrician Dermott Kinsella, a 27-year employee working at the 7000foot level of Creighton.

"It'll mean a future for me," said Mechanic Brian McLean, a two-year employee working the newest parts of the mine known as Creighton Deep.

"There will be a lot of equipment to maintain."

Brian said the massive investment by the Company will only improve the teamwork of an already positive group of miners at Creighton.

"This is a happy-go-lucky group of guys to begin with. So now it's even better," Brian said.

Creighton Complex Manager Fergus Kerr said developing Creighton Deep will mean a combination of miners working at the increased continued on page 6



The Inco Triangle is doing its part to reduce costs in the Ontario Division.

Beginning in May, the Triangle will no longer be mailed

With 14,000 pensioners and fewer than 6,000 employs, this reduces our press run by some 70 per cent," said printing and distribution by 60 per cent and more than \$90,000. Publications Editor Cory McPhee. "That cuts our cost of

The pensioner mail-out was one way of recognizing the many years of service contributed to the company," he said. "The appreciation for that service hasn't changed, but the challenges facing us have. Each of us is being called upon to save money wherever possible. In light of these circum-stances and the Division's restructuring it is impossible to justify the added cost of pensioner distribution any longer."

Other changes to the Triangle consistent with the Division's downsizing and the recognized need to improve communications with active employees include a reduction from 16 pages to 12, a renewed emphasis on business issues and a revamped distribution system that will see employees receive the Triangle at home. "There are obvious flaws in the plant distribution system," said Cory. "It is a passive system that puts the onus on the employee to seek out and pick up the publication. The layout of our operations is such that many employees in smaller, isolated positions, such as guards on gate duty or warehouse workers, risk being missed." The 60 per cent savings realized by eliminating pensioner distribution takes into account a home delivered Triangle for employees, said Cory. At less than half the cost we are able to provide a quantum leap forward in the quality of service. First, we achieve total saturation of our employee audience. Second, the publication is brought into the home where it can be read not only by employees but by the employee's family. He said efforts will be made to place the Triangle at the Sudbury library, area seniors clubs or perhaps even the company website for pensioner access.

Nickel World News





ear 2000

Taking the heat for charity

Lighter batteries more efficient, easier to carry



While it took two men to carry one of the old 46kilogram plate batterles, Bob Tessier, a heavy duty equipment mechanic at Little Stoble Mine, is shown here carrying two of the new 17-kilogram Optima batterles with ease.

By Dave Rollins

L ighter is better, when it comes to batteries. Inco employees have found that new batteries used in scooptrams, scissor lifts and surface vehicles are safer to handle because they are lighter to lift.

Although the batteries cost more, they are worth the expense because they last much longer.

"The Optima battery is far superior to the conventional flat-plate battery," said Mike Lahaie, Maintenance and Production foreman at Little Stobie Mine.

After more than a year of testing at Little Stobie Mine, the Optima ergonomic battery was accepted by the Original Equipment Manufacturer's committee.

Mike said at first he couldn't believe the 17-kilogram Optima batteries could replace the old 46-kilogram plate batteries, but "they've been in (the vehicles) for over a year now, and we haven't had a problem yet." Trevor Rickwood, Ontario Division ergonomist, said the idea of switching to the lightweight battery started two years ago after the storemen at Creighton Mine identified the large, conventional plate batteries as a lifting problem and a possible cause of back injuries. This information went to the warehouse ergonomics committee where Richard Riach, senior specialist with Mines Research and a member of the committee, suggested a test of the much smaller and lighter Optima battery.

cooperative effort between Mines Research, Mike at Little Stobie and the supplier, Harry Chadwick at Nordic Bearings.

Mr. Chadwick said he originally brought the battery to Richard because its design makes it immune to the vibration that ruins most plate batteries within three months.

Conventional batteries have several connected grid plates made of alloy, covered in lead paste and suspended in electrolyte. There is more electrolyte than is necessary to run the battery so the cells don't dry out.

 This design has a few weaknesses.

Mike said: "The old plate battery has room inside for gases to expand. It generates hydrogen gas when you put a charge to it and if you introduce a spark to the area, especially an enclosed area, it could blow up."

The shake-up the batteries receive in day-to-day use underground causes a few problems as well.

The vibrations of a moving scoopfram can shake the lead paste off the alloy grids which weakens the batteries' ability to hold a charge. It can also shake the plates loose and cause the battery to short out altogether.

Escaping gases and liquid leaks cause corrosion and mean the conventional battery must be maintained.

The new compact and lightweight Optima has none of these disadvantages.

The new battery has only two pure-lead plates, one positive and one negative, in each cell of the battery. These are wound tightly together and separated by an absorbent glass material, a kind of electrolyte sponge.

These spirals are pressure inserted into individual cells for greater strength.

This tight spiral design makes the new battery immune to vibration as its tightly packed grids can't shed their active material.

"You can put (the new battery) into a paint-shaker, shake it up and it doesn't do anything to the battery," Mr. Chadwick said.

Airtight and with no room for the gas to expand these batteries are explosion-proof.



Less than half the size and weight, the new Optima battery is much easier to handle than the old conventional plate battery.

battery. The new battery is rated at 1,200 cranking amps at 19 degrees C as opposed to 1,000 for the big 46-kilogram plate battery.

The new battery passed the test for Little Stobie's surface vehicles as well.

"These work great in the Jeeps," Mike said. "In the winter time a conventional battery loses up to 40 per cent of its start-up juice, while the Optima at 30 degrees below might lose 10 per cent."

The ergonomics of the smaller and lighter battery were also an important point, he said.

"It used to take two guys just to carry the old batteries," Mike said. "To change them you had to wrestle them up onto the top of the scooptram."

One man can carry two Optima batteries by himself. "The mechanics love them."

Richard said while the plate batteries were originally identified as a problem at the warehouse the change has helped a whole chain of people from the storemen to the mechanics, who had to deal with the same weight issue.

Mike said the new battery costs about \$70 more than a conventional battery, but lasts much longer.

Mr. Chadwick said the Optima batteries could outlast conventional batteries by eight or nine times. This kind of endurance represents a substantial cost savings.

"We're not even sure how long they last, none of them have stopped working yet."

Mike said the testing began in October 1996 when a number 735 truck was converted to use the Optima and by January 1997 they were installing them in other pieces of equipment. We went through a management of change," he said. "The equipment had to be modified to hold the smaller batteries in place." Mike said there was also a good deal of engineering to make sure the new batteries were matched with the right equipment. "If you have a Christmas tree (eight lights instead of four) on the front of your scooptram you have to make sure you have an alternator big enough to run that," he said. "Just putting in a new battery isn't going to solve every problem. We had to make sure it was the right solution."

Richard said as people found out about the new batteries the scale of the test grew because they couldn't wait to try it out.

"These batteries are in such high demand I have to keep them locked up," Mike said.

them locked up," Mike said. Richard said, "We've had nothing but positive results everywhere we applied it."

Mike said the real test was at the training centre in Azilda. They installed the Optima in a six cylinder 60 series D deck, which they knew had a flaw in the starter. It draws 1,000 amps instead of the normal 700.

"They start that thing 20 to 30 times a day and in four months it hasn't failed yet."

Mike stresses the main issue with the Optima is injury prevention – not just from back injuries but other mishaps as well.

When he checked with the engineers at Optima he found out the Optima is the only battery rated safe enough to be transported by air.

"How much safer do you want it?" he was asked.

The battery also includes flash-point arresters, which protect the battery from overcharge.

"If you overcharge the battery the relief valves pop off, which lets you know, 'Hey, there's something wrong here,'" he said.

The dry construction is so safe Mike said, "You can dismantle the battery safely with



All the Toyota Landcruisers at Little Stoble were switched over to Optima batteries because they are safer than conventional automobile batteries and are more efficient in the winter cold, said Mike Lahaie.

your bare hands."

Despite the safety of the battery, Mike said employees continue to take the same safety precautions they took with the old conventional plate batteries.

"We treat the Optima with the same respect as any other battery. It's just common sense."



The Optima batteries have left some extra room in the battery compartments on top of Little Stoble's scoops. They've been used without any problems or incidents

Richard said the test was a

"The engineers at Optima have tried introducing a spark to the battery to make it explode and they couldn't do it," Mike said. "It just won't explode."

Mike said the sealed construction and the electrolyte sponge make the battery safer and more convenient than the old plate batteries. Because the new battery is dry and airtight it doesn't leak and can even be mounted upside down.

"Because it doesn't leak the contacts never get corroded," Mike said. "It's a zero-maintenance battery, you don't even have to add water."

Mr. Chadwick said the spiral design allows the new battery to use higher purity lead and increase the surface area of the plates which gives it even more cranking amps than the much larger plate for more than a year now.

Mike Lahale, Maintenance and Production foreman at Little Stoble Mine, holds open the battery compartment cover of a scooptram on the 2000-foot level of Little Stoble Mine. "My first reaction was to laugh at the size of the battery," he said. "I mean,



this tiny thing was supposed to replace the big D battery? Well, I didn't laugh too long."

Greenhouse applies fungus to spur tree growth



Mike Peters, grounds supervisor with Safety, Health and Environment, simply fits the Copper Cliff Greenhouse watering system with a filter to prevent the fungus from clogging and the seedlings are inoculated at the same time they are watered.

noculation of pine seedlings with a special fungus will pay off in the long term as it eliminates the need to replant trees that don't take.

The inoculation of Inco's surface and underground greenhouse-grown jack pines makes them stronger and grow more quickly.

"We do it twice a year. And I'll be doing the next applica-tion myself," said Mike Peters, grounds supervisor with Safety, Health and Environment. Mike has just been trained by the company that produces the fungus.

Since 1994, Timmins-based Mikro-Tek would send one of its people to Copper Cliff to apply the liquid fungus, called mycorrhizae, to the seedlings.

But from now on that will be part of Mike's job.

Mike is sold on the benefits of mycorrhizae, which literally means 'fungus root.'

The cost of about two cents per tree is well worth it on a crop of about 280,000 seedlings a year - grown at the surface greenhouse in Copper Cliff and at the 4600-foot level of Creighton Mine.

"If they establish better then we don't have to replant. So it'll be a one-time deal and that's more cost-effective."

Wayne Smith, forestry coordinator with Mikro-Tek, said he's proud of the success he and Mike have had in regreening environmentallystressed land in the Sudbury region.

'We had been coming down here to do it. But now Mike's ready to do that," Wayne said.

A recent advancement in the application of the

mycorrhizae inoculum has made it easier to apply.

"We used to bring our own injection system here and apply it manually. But now we've found that by chopping it up and blending it at the Inco greenhouse it can be applied through the automated watering system."

Mike just fits the watering system with a filter to make sure the inoculum doesn't get clogged and everything runs as it should.

As Wayne explained a little inoculum goes a long way.

"There's enough inoculum in a one-litre bottle for 100,000 seedlings."

The mycorrhizae inoculum greatly improves the early survival and growth of seedlings by improving their ability to absorb water and nutrients through their roots.

Under normal conditions, mycorrhizae fungi live in most soils and on the roots of most plants. But stressed soil loses organic matter, nutrients, biological diversity and the fungi, all of which cuts plant productivity.

By introducing the fungi in Inco's greenhouses, the pine seedlings not only survive but thrive and grow more quickly.



High-tech doesn't always require high-tech equipment. A regular kitchen hand blender is used by Mikro-Tek's Wayne Smith to chop the fungus before it is added to the greenhouse watering system.





To coincide with its 60th anniversary the Copper Cliff Maintenance Pension Club donated \$6,000 to the Northern Cancer Research Foundation. Club members, from left, are: Dave Sinclair, Frank Etlinger, Len Venedam, Claude Poitras, Jim Armitage, Barry Wall, Art Chevrier, Foundation executive director Barb Cooper Clumpus, Claude Belanger, Roger Emund, Tim Foucault, Bill Doherty and Art Evans.

Prof. Stephen Hawking has been from space, In his scientific theories, to almost 7,000 feet underground in Sudbury. The world-renowned scientist just completed an underground visit on April 28 to the Sudbury Neutrino Observatory (SNO), located at the 6800-foot level of Creighton Mine. Prof. Hawking was also in Sudbury to officially open SNO on April 29. Read about why Prof. Hawking, who is frequently compared to genius Albert Einstein, is so interested in SNO in the May issue of The Inco Triangle.

Using more powder explosive, a blast for savings



Dan Gratton, blaster boss, determines the depth of an in-the-hole drill hole at the 2800foot level of South Mine before loading it with powder explosive.

outh Mine miners keep their powder dry.

That's something they concentrate on even more these days as they reduce production costs by using powder explosives in testing at South Mine.

The lower-cost Anfo powder explosive, used to blast panels of ore, can't be used in wet areas unless mixed with a gel explosive. That's because Anfo is water soluble. But the past practice of using the more expensive gel explosive in all areas has proven to be unnecessarily costly.

Already thousands of dollars have been

there are wet holes here," Dan explained while doing his job.

'We use the explosives wisely in each blasting area, because in mining it takes millions of dollars to get to this point of development."

Results of using the powder explosive are positive.

Bill Cyr, a mine foreman at South Mine, said the testing of the powder explosive will continue and using it is expected to become standard practice at South Mine in May.

"We're saving a lot of money in this switch to powder. In the last three weeks we've saved about \$20,000 already."

Bill said there are other related savings that South Mine people have found.

The use of Cordex 18 booster blaster cord, instead of the thicker gauge Cordex 25, is saving \$192 per blast, he said.

"As it turns out, we were using a more powerful blasting booster cord than we really needed."

There are further savings in the primer, to ignite the Anfo powder, by using a different type of product.

"Our fragmentation of the muck (ore) is very good. That means I'm saving time with my scoop drivers and there isn't any needed for secondary blasting."

George Darling, cost engineer, said that recently a whole cut was taken using only Anfo powder.

"There was no noticeable change in the break. The potential here for cost savings is enormous."

Bill said teamwork is responsible for the cost savings with good input from engineers and blasting crews.

"We've got a good team."







Teamwork is part of the job of loading explosives. Don Fraser, left, takes notes on the distances the bags are suspended down the in-the-hole drill holes while Blaster Boss Dan Gratton lowers a sandbag.



"The Anfo is working well for us, even in a super high-grade st-

ope at the 2800-foot level." more likely to absorb the effects of blasting

and is therefore more difficult to break apart than other ore, Don explained.

'There are certain places where we have to use Canamex 550 no matter what. Canamex is a gel so it isn't water soluble. But Anfo dissolves in water.

When there's no water in an area, then Anfo is used. In other areas where there is some water, but not much, a mix of gel and

High-grade ore is

cut in production costs.

As part of the test, Anfo is being used in dry areas, where it works best.

"It's our way of trying to chip in and save the Company some money," said Dan Gratton, a blaster boss at South Mine.

Blaster Don Fraser, Dan's partner, said the switch from Canamex 550 gel explosive to Anfo powder explosive is proving to be the right thing to do.

"We were using the gel in areas where we didn't have to," Don said.

It's a safe and efficient way to lower production costs, he said.

Anfo is used - again helping keep costs down.

How it's used

The powder explosive is lowered into drill holes to certain depths to get the precise blasting result required. Don and Dan, or "D&D Blasting" as they refer to themselves, lower sandbags into the holes. The sandbags are suspended at the precise depth needed by strapping. Then the explosive is placed on top of the suspended sandbags until they are detonated at shift change.

"In this stope we use a combination of gel and Anfo, because

Blaster Don Fraser fills bags with sand before tying them off with strapping and lowering them down the in-the-hole drill holes to the desired depth for blasting. The sandbags block the holes so explosives can be placed at the proper depths.

Oscar's order saves money at South Mine



You can eat off the floors at South Mine's Hydraulic Hose and Fittings Department thanks to Oscar Gionet. The cleanliness is all part of Oscar's initiative to make the room much more efficient.

Oscar Gionet keeps his fittings storage room very clean. But more importantly, it's all in order.

And that means big improvements in efficiency and cost savings in production at Copper Cliff South Mine.

"It used to take up to a half hour to find a fitting for a scooptram. Now you can find what you need in less than a minute," said the mechanic with 29 years service.

Actually, he can find almost anything in 15 seconds, because of his cataloguing of about 900 fittings and posting of a numerical chart, which went into place earlier this year at the Hydraulic Hose and Fittings Department on surface. The room stores hydraulic fittings, hoses, nuts, bolts and many specialty pieces of equipment.

"The miners can come here and it's set up so they go to the chart and find what they want in less than a minute," he said.

"One fitting can cost us \$9,000 (in conservatively estimated production) if a scoop is down for a shift waiting for the part," Oscar said.

"Nobody likes to wait. After all, time is money. And nobody likes to lose money," he said.

"I saw we could save a lot of time and increase the productivity of this department. So I decided 'Why not?'"

The response of his co-workers at South Mine has been very positive, he said.

"They love it. They don't have to wait. There's no downtime compared to before." In mining, of course,

downtime is expensive.

"One fitting can stop a scoop for 30 minutes or two to three days if you have to order the part."

By keeping better track of what's in stock, Oscar has been able to cut downtime for scooptrams and greatly limit the need to order fittings not in stock.

Oscar's new system of organizing the room has allowed for many improvements. They are:

 Answer any call and give information to a customer within one minute.

 The ability to restock an entire inventory inside of two hours.
Elimination of

overstock.

 Doubling of inventory, at no extra cost and using a fraction of the original space.

 Reduction in time spent on orders, from 10 hours on 20 requests to 20 minutes on 20 requests.

The savings in time has allowed him to or-



South Mine's Oscar Gionet is serious about keeping all 900 parts of his department in order. His system has allowed miners to get the parts they need quickly, cutting or eliminating downtime.

ganize underground garages with ministock inventories and use unwanted shelving material in other locations.

He also organized high-pressure hose systems to in-the-hole drills, which eliminated unnecessary downtime.

Safety has also been enhanced by Oscar's organization of the storage room.

"It used to be necessary to climb a step ladder for many searches before," he explained. That's longer necessary.

In addition to improving efficiency, Oscar also boasts a clean workplace.

"My floors are so clean you can eat off them," he said with a proud grin.



Retired Industrial Mechanic Yvon Sonier and his wife, Lorraine, covered a lot of ground this winter. Yvon cross-country skied a total of 3,005 kilometres. He easily broke the season distance record at the Capreol Cross Country Ski Club, where he is a member, of 2,130 kilometres. His wife skied 1,020 kilometres with him. "Since I took my pension in 1991, we have kept very busy and we're in good health. We are very grateful to be able to enjoy our retirement," Yvon said.



Inco bids for re-certification of ISO 9002 standing

Inco's Port Colborne Refinery is reinforcing its commitment to quality with its recent re-registration for ISO 9002 certification.

"It's a standard throughout the industry," explained Christopher Browne, superintendent of Operations and Maintenance. "It means we have a certain standard of comparison by which our customers can judge us."

Inco received its initial registration in 1994 and since then has been audited by the Quality Management Institute each year.

Christopher said the institute looks at all elements included in Inco's policy quality manual.

"The certification means, when we say we're going to do something to meet our customer requirements, we are actually doing it to make sure it's a quality product."

Inco's mission, as stated in its policy statement, is "to be a quality metals producer committed to continuous improvement in safety, health, the environ-

ment and in our products and processes."

The guiding principles, as listed in the statement, are to establish safe workplaces, form partnerships with employees, customers and suppliers, based on honesty, trust and open communication, continuously improve our process and products through initiatives focused on employee involvement, provide training and education to develop skills and knowledge and to strive to meet internal and external requirements through the daily application of quality work.

Christopher credited all personnel as being instrumental in helping Inco achieve the level of quality it has today. He noted one indication of progress is the steady decrease in the number of customer complaints.

"Our future vision is to adopt a system of continuous improvement to continue to find avenues where proactive measures can be taken where quality is concerned."

Creighton Deep's high-grade ore be

continued from page 1

depths and employees controlling automated drills and scooptrams by tele-remote.

"It's all the talk in the lunchroom," Foreman Doug Brouse said of the new investment.

"It's a real positive," said Doug, an experienced miner who joined Inco three-and-ahalf years ago.

"Younger guys can see reaching pension."

General Foreman John Larsen also likes the message such an investment sends to employees.

"We have a lot of younger employees here. They are looking for a future. And they know Creighton is here for a long time," John said. He too said the announcement has improved an already positive working team. "They have good attitudes."

Doug said the miners of Creighton are positive people to be with, despite working in higher temperatures – which ventilation is designed to keep at 75 degrees F – in the deepest drifts of the Division.

"It's a hard-working crew and this investment will even improve that."

But the announcement wasn't a real surprise to the miners of Creighton, Doug said.

"We knew the high grade was here," he said.

"We knew the quality was here," added Kiruna truck Driver Dave McCauley.

"I never had any doubt of that," said the 30-year em-

ployee.

continued on page 8





Foreman Doug Brouse, left, and General Foreman John Larsen discuss mining plans at Creighton Deep. "Creighton is here for a long time," John said.



Development Miner Roger Santerre operates the jumbo drill



The investment at Creighton M employees said. Employees, like that \$125 million (US) is seriou: for mining in Sudbury.



<u>Q92.7 FM Radio</u> (April 16) "Inco's oldest working mine is about to have its life

Dermott Kinsella brings some equipment into the Electrical Shop on the 7000-foot level of Creighton Mine for maintenance.

preparing the rock face for blasting on the 7400-foot level.



Imre Horvath holds up a chunk of Creighton Deep's high grade. Imre fills his scooptram bucket with the nickel-copper ore every day and is glad to see he'll be doing that for many years to come.



Brian Gniazdoski extended. A new project will see Creighton Mine extended to a depth of over 8,000 feet by the year 2019. That will allow miners to bring out nickel, copper and platinum"

CIMX Mix 105 FM Radio (April 16)

"In the wake of the recent cutbacks at Inco comes a bit of good news today. The Company has announced that after two years of test drilling at Creighton Mine it's going ahead with a major expansion underground ... "Profitable projects like this one that we're talking about are key to our long-term future here in Sudbury," (said Inco spokesperson Cory McPhee)"

MCTV

News At Noon (April 16)

"Inco's economic picture is

ing mined by high-grade employees



me bolsters an already positive working team environment, these guys riding a tractor to their worksite, also noted money and speaks volumes about inco's long-term plans



"It's a pretty good grade. That's for sure," said imre Horvath, with a great degree of understatement.

KIRUNA DRIVER UPBEAT ABOUT FUTURE

While the miners are going down deeper, their spirits are rising at Creighton Mine.

Take Dave McCauley, a 30-year employee and Kiruna truck driver at Creighton Deep.

He enjoys the challenge of driving the big electric truck.

"It isn't as rugged as a diesel, there's delicate computer equipment in this thing so you have to be a little more careful going down the ramps."

That's not his only concern as he drives the 55-ton truck between the 7000 and 7400-foot levels at Creighton Mine.



Kiruna truck Driver Dave McCauley drives the 13-foot wide, 55-ton ore-hauling vehicle down ramps between the 7000 and 7400-foot levels of Creighton Mine.

"The Kiruna is 13-feet wide and this ramp at its narrowest point is 14-feet wide," he said. "With only six inches on either side I have to take it slow."

Dave said it took a while for him to get used to the big truck.

Now, however, he said he has no trouble driving down the ramps, which have an average



Although the Kiruna is powered by electricity it's much more than an overgrown golf cart.

This vehicle pulls its own weight.

"It weighs 55-tons and carries a 55-ton payload," Dave said. "That's more than 100 tons total going up the ramp. She has power."

He said the Kiruna is powered by an overhead trolley track which delivers 2,000 volts to the big machine. With more than 200 rechargeable battery packs, each about half the size of a car battery, the truck can move beyond the end of the track under its own power.

Dave said he wasn't surprised by the announcement to expand Creighton Mine.

"We knew this was going to go," he said. "We talked to the diamond drillers and geologists when they were down here so it's no surprise to any of us."

The announcement Inco will spend \$125 million (US) expanding Creighton was still good for morale at the mine, he said.

"It helps to pick up everybody's spirits. It's good to know the place is going to stay open for sure."

And Dave wants Creighton to stay open.

He's had a good 30 years at Inco but he's not ready to retire yet, he said.

"I'm only 49 and I have two kids in school."

Dave said he continues to enjoy working at Inco.

"I like it here, I can move around and bid on different jobs. So it never gets dull," he said. "I came to Sudbury on a motorcycle with nothing 30 years ago and I got a great job here, married a wonderful French girl and had two great kids," Dave said. "I never would have been taken care of like this at another company."

How the media saw it.

getting a little brighter today, thanks to a major announcement in Sudbury. The company has unveiled (a \$125 deepest nickel mine in the western world, to even greater depths. The company said Thursday it has discov-

ence in Copper Cliff

The Toronto Star

ore at Inco's Voisey's Bay site in Labrador, said an Inco spokesperson. Jerry Rogers added Inco can still make money at this new low-cost Sudbury deposit even though nickel prices are low and will obviously make more if and when they go up"

cost projects in the face of weak nickel prices. Production is to begin in 2001."



Dave McCauley, at the controls of the Kiruna truck on Creighton Mine's 7400-foot level said, "I've had a good 30 years at Inco." He added that the investment at Creighton Deep means many more years of mining.

million US) expansion program at its Creighton Mine site. Over the next 21 years, six million tonnes of highgrade ore will be extracted ...

<u>CBON Radio (French-</u> language CBC) (April 16)

"Inco is investing \$177 (Cdn.) at its oldest mine in the Sudbury Region to explore the richest orebody in the world. But this six-million-tonne orebody is situated at more than 8,000 feet and the mine will become the deepest in North America...."

The Sudbury Star Sudbury and Area page (April 17) "Inco is spending \$125 million US to push its Creighton Mine, already the ered additional nickel, copper and precious metals ore that goes well below the 7400-foot level the company is currently working on. Some drill results show the Creighton ore body as deep as 10,000 feet. Ron Aelick, president of the company's Ontario Division, said development work on extracting that ore, said to be richest the company has seen in Sudbury, will begin immediately. The ore is said to be 3.4 per cent nickel. The current average yield from the company's other mines in the Sudbury basin is about 1.3 per cent. The company has estimated the quantity of the additional ore at six million tonnes. "This project will extend the life of Creighton, our company's oldest mine, well into the next century,

Your Business section (April 17)

"Despite slumping world metal prices, Inco Ltd. will spend \$125 million (U.S.) to develop a high-grade nickel and copper deposit at its existing Creighton mine near Sudbury . . . The western world's largest nickel producer announced yesterday that it will start the first phase of developing the six million tonne deposit immediately and continue with a second phase until at least 2019. This project is consistent with our strategy of reducing our cost structure and focusing on mines that will be very competitive, even at low nickel prices," said Michael Sopko, Inco's chairman and chief executive officer. The ore in the new Sudbury deposit is a higher grade than

The Globe & Mail Report on Business section (April 17)

"Nickel giant Inco Ltd. plans to spend \$125 million (US) to expand a nickel and copper mine in Sudbury, Ont. Toronto-based Inco said it will develop a six-milliontonne deposit at the Creighton Mine, Inco's oldest working mine, to provide the company with a source of high-grade, low-cost ore lasting well into the 21st century. It added the investment will make Creighton one of North America's deepest mines and is part of the company's plan to develop low-

(April 17)

"Inco Ltd. is spending US \$125 million to boost production at a 96-year-old mine in Sudbury, Ont., the mining giant's first expansion after two major waves of cuts. The company said yesterday it will start preparations immediately toward mining a high-grade nickelcopper deposit lying beneath the existing workings of its Creighton Mine. When the two-stage expansion is complete, the mine will be one of the deepest in North America, at 2,500 metres ... The new mine area is expected to produce 24 million pounds of nickel and 21 million pounds of copper a year at peak levels. Production is expected to continue at least until 2019."

Creighton expansion focuses on low-cost ore

continued from page 6

Dave said he has never placed much stock in media speculation that mining in Sudbury is threatened by Inco's purchase of the highgrade Voisey's Bay deposit.

"Inco is here to stay. We aren't folding up our tent."

Demand for Inco nickel and copper can't be met by Voisey's Bay alone, which is why the Company has been purchasing some 200 million pounds of nickel on the London Metals Exchange to satisfy its customers, Dave pointed out.

"The ore has to come from here (Sudbury). Everybody's been crying wolf for years. I've never bought that."

Thatviewhasbeenbackedup by the investment in Creighton's future, he said.

The investment by the Company represents a strong commitment to mine the orebodies of the Sudbury basin for many years to come.

"We are committed to Sudbury and we are committed to a profitable Inco presence in Sudbury for the long term," said Ontario Division President Ron Aelick.

The first phase of the project will involve mine development between the 7400-foot and 7660-foot levels at Creighton until the year 2013, while the second phase will develop down to the 8180-foot level taking the project to the year 2019.

Construction is expected to begin immediately on the first phase.

Initial ore production from the first phase is expected in 2001. Annual production is expected to be 10,900 tonnes of nickel, 9,500 tonnes of copper and 28,000 ounces of platinum-group metals.

"It is the type of low-cost, high return on investment project our company needs to maximize profitability and maintain its world leadership in today's and tomorrow's global market," Ron added. "This new project will extend production at Creighton, Inco's oldest working mine, well into the 21st century and will provide our Ontario Division with a further source of high-grade, low-cost ore," said Mike Sopko, Chairman and Chief Executive Officer.

"This project is consistent with our strategy of reducing our cost structure and focusing on mines that will be very competitive even at low nickel prices," Mike said.

"We will continue to invest in operations with rich orebodies and exceptionally low costs. That is the prime mover behind our \$125 million (US) investment that we announced for Creighton Mine," Mike told shareholders at the Inco Annual General Meeting, on April 22 in Toronto.

The Creighton investment will entail the development of proven ore reserves of 2.8 million tonnes grading 3.45 per cent nickel and 2.9 per cent copper, located between the 7400 and 7660-foot levels.

There is an additional 3.1 million tonnes of probable ore reserves located between the 7660 and 8180 foot levels with gradings of 3.62 per cent nickel and 3.25 per cent copper. This compares to the average grade of 1.3 per cent nickel and 1.1 per cent copper in the Ontario Division.

While mining at Creighton is currently conducted at a depth of 7400 feet, this project will add production areas on the 7530 and 7660-foot levels.

The project will include a new fresh-air ventilation system, an access ramp, lateral development and an ore-handling system below the 7400foot level.

"It (the investment) means better ventilation," commented a pleased Roger Santerre, a development miner operating a jumbo drill at Creighton Deep.

"Good clean air will be a

number-one priority," commented Brian Gniazdoski, a Creighton electrician with nine years at Inco.

Handling the heat at that depth will be one of the company's greatest challenges, Fergus explained.

The natural temperature of the rock at these depths is about 115 degrees F.

To keep the working environment relatively comfortable, the Company will develop a new ventilation system capable of pumping 500,000 cubic feet a minute of fresh air to the development area.

"When you are mining at these depths, in this heat, it requires huge amounts of air to cool it down," Fergus said.

The aim is to bring air temperature in the drifts to about 75 degrees F.

Employees will operate many automated drills and scooptrams by tele-remote in the new development area, but there will still be miners working at the new depths, Fergus said. With this development, Creighton, which is home to the Sudbury Neutrino Observatory at its 6800-foot level, will become one of the deepest operating mines in North America.

Creighton Mine was discovered in 1856 and made its first shipment of ore in 1901.

In the 97 years since then, Creighton has produced nearly 150 million tonnes of low-cost copper and nickel ore. And now, there will be more where that came from.

Employees make playground a reality

On October 10 last year, Melissa Moskalyk of Port Colborne fell from her bed. Not an unusual event for fouryear-olds, but for Melissa, daughter of Martin and Cherie Moskalyk, her fall resulted in her death.

Before the night was over, John Van Gool, stationary engineer at Inco's Port Colborne Refinery, had formulated an idea – a way for all children in Port Colborne to remember the young girl.

He discussed his idea with his wife Karen, and with his friends Mike and Monique Petrachenko, and Andy and Debbie Morin.

Within a week the ball was rolling: Melissa's Playground would become part of the Elizabeth Street Sports Complex in Port Colborne.

The Complex location was chosen because Melissa was athletically-minded. She had played soccer with her friend Jake Van Gool, son of John and Karen.

John and Karen had another reason to get involved. Last year their son Hayden nearly drowned in a swimming pool accident, the day before his second birthday.

Melissa's death was a reminder of their own near tragedy. When John heard of Melissa's accident – John and Karen are close friends of the Moskalyks – Team Melissa swung into action.

A two-day volleyball tournament brought together 76 teams from across the Niagara Region, and raised \$8,200 for the playground. John's goal was \$15,000.

Students at St. John Bosco School, where Melissa had attended, had already designed and sold Christmas cards to kick off the playground fund with a \$500 donation. And hundreds of merchants have donated prizes for events yet to be held.

One of those events, Melissa's Dance, raised another \$8,800 for the playground equipment. More than 500 people danced the night away at St. Jean de Brebeuf Hall. When four police officers showed up to review the liquor license, Niagara Region's finest also donated some cash to the fund and wished the organizers all the best.

"There was so much food donated," said John. "We were able to give some to the local food bank."

Team Melissa's goal has been increased and will no doubt be overshot by a 100kilometre classic car rally on May 23. The rally will start at the Elizabeth Street Sports Complex, circle the Niagara Region and end at Port Colborne's H.H. Knoll Lakeview Park. About 50 Harley-Davidson riders from the Niagara chapter of the Harley Owners Group will escort the rally to assist the police in opening the way.

Like to join your fellow classic car owners?

You could win one of several trophies: the Mayor's Choice trophy, the trophy for the club with the most cars represented, the best original vehicle, the best street rod, the best custom vehicle or you could win the most coveted trophy of the rally, Melissa's Choice.

The initial goal of Team Melissa was to raise \$15,000 for the playground. The current forecast, including a \$7,000 incentive from the City of Port Colborne, is that more than \$35,000 will be raised. This increased funding has allowed for an expanded playground to be developed. Installation is expected to begin in mid-summer.

The efforts of several community-minded citizens, spearheaded by Inco's John Van Gool, will make a lasting monument to Melissa.

Safety program hatches 'Egg-citing' ideas



for both function and safety, said John Bozic, chief chemist and management safety co-chair for Process Technology and Production Planning.

to another table.

The next table would then build the egg-protecting contraption from that procedure without ever seeing the origi-

At the end of the course, the groups were run through a "flipchart exercise" where they were asked to write down what they thought had improved an what needs to be improved in their area, John said. Everyone who participated was also asked to rate the different aspects of the course on a scale of one to five and give their input. This information was submitted to the Getting To Zero Workshop Team to help improve the next course. Bill Romas, program coordinator, said almost all of the Getting To Zero workshop evaluations were filled out by participants giving valuable information about safety in their areas. "It's testimony that our workshop is on the right track. It encourages people to think about safety every day at work and at home." Getting To Zero was jointly developed by Inco and the United Steelworkers of America.

Bill Taggart and John Bozic hold up a few of the eggprotection devices made as part of an exercise to show the safety value of procedures during a recent Getting to Zero workshop. Bill said, "The people in Process Tech did a great job writing and following procedures, these two are almost identical."

Hat do safety and a goodbreakfast have in common? Part of the success of the Getting to Zero workshops was the use of raw eggs to show the importance of clear procedures John and Bill Taggart, act-

ing librarian and acting union safety co-chair for Process Technology, gave the workshop to more than 60 people.

John said the groups taking the Getting to Zero workshops were separated into tables of four people each. Each table received 1.5 drinking straws and three feet of masking tape.

They also each received the following objective: "To develop and write a procedure on how to drop this container of hazardous material (raw egg) from a height of six feet safely down to the floor."

Each table got to practice with a golf ball first.

They made a model using the straws, tape and a golf ball instead of the egg.

Once they had their design worked out, they wrote the procedure and gave that procedure nal model.

The procedures were put to the test when the containers of deadly cholesterol (the eggs) were finally dropped in front of the whole group, at the end of the exercise.

This hands-on approach to safety came out of the recommendations made after last year's Getting to Zero workshops.

"The people who took the course last year said they like the hands-on safety exercises," Bill said.

So this year's course was designed to address that specific area and, at the same time, be more interactive.

"The reception to this one was really good," Bill said. "People really preferred the handson stuff to sitting there and listening to someone lecture about safety."

Sounds of Inco people in Sound of Music



Theatre Cambrian's The Sound of Music cast includes a few members of the Inco family.

Back row, from left: Afton Hicks, Brandi Braithwaite, Dianne Lye, Terrie Barasey, Shannon Spencer, Christine Spencer, Sarah Spencer, Mark Mannisto, Shanna Fraser, Aaron Babin, Ronald Babin, Sarah Babin, Lynda Kirkland, Angela O'Leary.

Middle row, from left: Amanda Braithwaite, Diana Engel, Ron May, Brendan Tremblay, Michelle Godin, Jordan Dawe, Vennesa Chevrette, Samantha Benoit, Sarah Craig, Kristle McLeod.

Front row, from left: Mackenzie Fraser, Thomas Beltrame, Marc Collin, Jasmine Collin, Cassandra Fournier, Samantha Bielanski, Kerry McCallum, Jeneile Marier.

he hills are alive with the sound of family members of Inco employees and retirees.

At least that's the case in Theatre Cambrian's production of The Sound of Music, which runs from May 12 to May 30 at Cambrian College.

The beloved musical, made into a popular film in the 1960s, is being performed by many sons, daughters and grandchildren of Inco employees and retirees.

Now, it is by no means a

prerequisite to have an Inco family connection to be in Theatre Cambrian. But there is no shortage of people who do, points out Jamie Bourget, artistic director of Theatre Cambrian. Inco is a sponsor of Theatre Cambrian.

Here is a list of those cast members with family connections to Inco.

Aaron Babin, 16, and Sarah Babin, 12, are the children of Ron Babin, a 25-year employee who is the emergency systems coordinator at the



"Tea, a drink with jam and bread..." A handful of aspiring actors rehearse the "Do, re, me" scene as the young Von Trapps for Theatre **Cambrian's production of the** Sound of Music.

Smelter. Aaron and Sarah play Friedrich Von Trapp and Max Detweller, respectively.

Samantha Benoit, 9, who plays an orphan, is the daughter of Gerry Benoit, who has worked at South Mine and Creighton Mine. Her maternal grandfather, James Gilfillan, worked at Creighton Mine for 33 years until his retirement in 1984. Herpaternal grandfather, Charlie Benoit, worked 39 years at Creighton until his retirement in 1991.

Samantha Bielanski, 7, who plays Gretl Von Trapp, is the daughter of Henry Bielanski, a foreman at Clarabelle Mill with 22 years at Inco. Her grandfather, Stan Bielanski, retired from open pit mining after 32 years of service.

Amanda Braithwaite, 10, and Brandi Braithwaite, 13, play an orphan and novice respectfully, are the children of Murray Braithwaite, a heavyequipment mechanic at Garson Mine for the last seven years. Their grandfather, John Braithwaite, retired after 28 years as an industrial mechanic at many surface plants.

Jennifer Burchell, who playsSisterSophia, is the daughter of Fred Burchell, retired after 38 years service and was a manager of maintenance at the Smelter. Her grandfather, the late William Burchell, was a slag train engineer for more than 40 years.

Jasmine Collin, 6, and Marc Collin, 4, who play orphans, are the children of Jean-Marc Collin, a lab sampler with 38 years service.

Sarah Craig, 19, who plays Maria Von Trapp, is the granddaughter of Lloyd Mohns, retired in 1973 after 25 years at Levack Mine.

Shanna Fraser, 19, who plays a novice, is the daughter of Al Fraser, retired after 35 years at Stobie Mine.

Michelle Godin, 12, who plays Liesl Von Trapp, is the daughter of Rick Godin, a general foreman at Coleman Mine where he has worked for 21 years. Herpaternal grandfather, the late Armand Godin, worked as a mechanic at the Smelter for 30 years before retiring in 1974. Her maternal grandfather, Marcel Rainville, was a flotation operator at the Copper Cliff Mill when he retired with 33 years experience in 1985.

Dianne Lye, who plays Sister Margaretta, is the daughter of the late Aldege Leclair, who worked from 1948 to 1972 as a surveyor and in the engineering department.

Mark Mannisto, 21, who plays a Lederhosen Lad, is the grandson of Romeo Allard, retired in 1962 after 38 years as a mechanical planner at the Smelter.

Jenelle Marier, 10, who plays an orphan, is the daughter of David Marier, an electrician at Clarabelle Mill for the past 13 years. Her grandfather, Larry Marier, worked at Little Stobie for 26 years as a crusherman before retiring.

Ronnie May, 11, who plays an orphan, is the grandson of retiree Eric Kerstens, a miner at Frood Mine for 28 years. His paternal grandfather is Ted May, a miner for 22 years at South Mine before his retirement.

Kerry McCallum, 18, who plays Frau Schmidt, is the daughter of Albert McCallum, who has worked at Creighton Mine for 28 years. Her grandfather, Ernest Conrad, retired after 30 years at Inco.

Kristie McLeod, who plays Sister Theresa, is the daughter of Don McLeod, a geologist at South Mine with 29 years service.

Christine Spencer, Sarah Spencer, 15, and Shannon Spencer, 13, play Sister Catherine, a novice and Liesl, respectively. Christine is the daughter of Dennis D'Arcy, who was a police officer with the Copper Cliff Police and security and safety inspector at the Copper Cliff Nickel Refinery until he retired in 1985. Sarah and Shannon are his granddaughters.

- NICKEL WORLD NEWS'-

A top International Monetary Fund (IMF) official has said the Asian financial crisis - which has adversely affected nickel prices - is drawing to a close and that Malaysia is wellpoised for recovery. "Malaysia is improving significantly and the worst of the financial crisis is over for most countries (in the region)," said Stanley Fischer, IMF deputy managing director. After meeting with Malaysia's finance minister and central bank governor in early April, Fischer also said the country's latest 1998 economic growth forecast was in line with IMF estimates. Malaysian authorities lowered the 1998 economic growth estimates last month to two to three per cent from four to five per cent. The Asian crisis began last year in Thailand and quickly spread to other countries in the region, including Indonesia and South Korea.

down because of a shortage of raw materials.

Toronto-based Boliden Ltd. can't explain what caused a major toxic spill from its tailings pond in southern Spain, when a company dam gave way in late April. Environmentalists have called the spill of 400 cubic metres of acid water and solids, which has contaminated more than 2,000 hectares of land, an ecological disaster that is worsening by the hour as contaminated water and sludge now toward the sea. Boliden chief executive Anders Bulow said media reports have exaggerated the damage caused by a toxic waste spill from the tailings pond at the company's Los Frailes zinc mine. But that didn't prevent the stock (BOL/TSE) from tumbling \$1.45 to \$10.45 as nervous investors weighed the full impact on Boliden, a subsidiary of Swedish conglomerate Trelleborg AB. With metal stocks already being hammered amid weak commodity prices, analysts said the incident couldn't come at a worse time for Boliden, which has interests in 14 mines in Canada, Europe and Saudi Arabia.

they can't get wage and cost cuts to offset the low metal prices that have made it unprofitable. Vancouver-based Imperial, which owns 55 per cent of the mine, said it will lay off 167 employees at the mine if it doesn't get concessions by July 31.

Noranda Inc. has no plans to take over Falconbridge Ltd., Noranda President David Kerr told shareholders at Falconbridge's annual meeting in Toronto in April. "Noranda's hands are very full. We have a lot of

capital projects right now. Al-

Noranda Inc. has agreed to buy control of a Chilean copper smelter. The company has signed letters of intent to buy the 75% of Fundicion Refimet SA it does not already own. Refimet operates a copper smelter in northern Chile, one of the world's key copper mining regions. The smelter can process 158,000 tonnes of ore a year. Noranda wants to hike that capacity by 100,000 tonnes annually, said chief operating officer David Goldman. Noranda has no mines in the region. Falconbridge Ltd., 48per-cent owned by Noranda, is developing the large Collahuasi mine in Chile. But that mine is too far away to provide large volumes of ore to Refimet. Late last month, Noranda also agreed to buy a major US metals recycler.

There were strong increases in nickel demand last year, but not enough to prevent supply surpluses, reports the UK-based World Bureau of Metal Statistics. Nickel output increased by 4.75 per cent to 998,100 tonnes. This created a supply surplus of 23,600 tonnes in 1997, compared to a surplus of 25,400 tonnes in 1996.

Rio Algom Ltd. of Toronto has launched a \$603-million takeover bid for Ideal Metal Inc. of Laval, Que. Ideal distributes and processes nonferrous metals, including aluminum and copperalloys. Rio Algom is making the offer through its wholly-owned subsidiary Atlas Alloys Inc.

Russia's Norilsk Nickel unit subsidiary Severonickel is expected to have lost 4,000 to 5,000 tonnes of nickel production for the month of April as a result of an unscheduled shut-

though we're sitting on a large war chest, our cash out exceeds our cash in by about \$1 billion." Noranda, which owns 48 per cent of Falconbridge, has long said it wants to increase its stake in the nickel and copper company. Kerr's comments came after Falconbridge posted what chief executive Oyvind Hushovd called very disappointing profit of \$2.2 million (1¢ a share) for the first quarter ended March 31, down from \$46 million (26¢) in the same period last year. However, Mr. Hushovd said he is optimistic about the rest of the year. "We expect to see a fairly balanced market in 1998. This leads us to Imperial Metals Corp. and believe there might be a possi-Sumitomo Corp. plan to shut bility for improved nickel prices their Mount Polley gold and coplater this year." per mine in British Columbia, if

Springrunoff caused Falconbridge Ltd. to temporarily shutdown mining activity below the 2800-foot level at its Kidd Mining Division in Timmins earlier this month. Falconbridge said warm weather caused an unusual amount of water to enter the mine in the backfill system. The company scheduled more than 100 employees on vacation for up to 12 days because of the runoff.

Australia's Abednego Nickel said it could begin producing nickel from a \$600 million stand-alone project by mid-2000.

The Philippines' three nickel ore producers - Rio Tuba, Taganito and Hinatuan - are expected to increase output in 1998 due to expected higher sales to apanese customers.

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Aaaaaachooooo! Spring is in the air

Let the sneezing begin.

The spring season has arrived. And for many people this means a time of struggling with allergy symptoms.

FOR YOUR HEALTH

From the Occupational Medicine Dept.

There are some things we can do to minimize the impact of allergies. But thanks to El Nino, this year may prove to be a bigger struggle than usual.

Allergic Rhinitis, better known as Hay Fever, affects approximately 15 per cent of the population, including both adults and children.

This allergic reaction begins with the inhalation of airborne allergens. The sensitive person's immune system then releases histomines and other chemicals causing various symptoms.

The most common symptoms of allergic rhinitis are: sneezing; runny nose; sinus headaches; and itchy eyes, nose and throat.

This common medical problem is generally due to a sensitivity to pollen or mold spores.

Pollen can be defined as a group of tiny particles called microspores, deriving from various plant life.

These particles become airborne during the spring season irritating many eyes along the way. It has been said pollen can travel up to 400 miles.

Molds are a fungus type growth found both indoors and outdoors.

Bathrooms, kitchens and basements are areas in the home where molds can become a problem due to humidity. A humid environment proves to be favorable for mold growth.

Molds that grow outdoors are found in fields and on dead leaves. Pollen and molds may be the primary allergens when it comes to

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allergic rhinitis. However, the severity of spring allergies can worsen with added exposure to dust, pet hair and other indoor pollutants.

There is no cure for allergies but there are ways to help control the symptoms. The three main treatments for allergic rhinitis are: medication, immunotherapy and simple avoidance.

The medications usually used for this medical condition include over-the-counter oral decongestants, nasal sprays and antihistamines.

Caution should be used when using these medications. Read the labels carefully and become aware of the potential secondary effects. For example, some of the medications can cause drowsiness and sedation. Therefore, driving and operating heavy machinery are discouraged.

Immunotherapy is a medical term for "allergy shots." This method may be recommended for those who do not respond well to medication or cannot reduce exposure to allergens.

Avoidance is another method of helping reduce the effects of spring allergies.

Complete avoidance of allergens may not be possible, however, it is a method that any sufferer can use.

Here are some ways to lesson the exposure:

Keep windows closed and use air conditioning in the summer.

Use a dehumidifier to reduce potential for mold growth.

Consider installing an air filter system in the home.

Do not hang clothes out to dry because pollen can cling to them.

 Avoid outdoor activities between 5 a.m. and 10 a.m., these are peak pollen hours.

CENTRAL DEVICTION OF CHILDREN PARTY AND AND AN ADDRESS OF

YEAR 2000

Will you be paid after Jan. 1, 2000? - Yes, no problem Inco people getting 2000 ready

Noreen St. Germain is one of the Information Systems (IS) Department staff dedicated to making sure Inco's fundamental business operations will be functional when the century changes.

Noreen's contribution to Year 2000 success is ensuring that an absolutely essential system is ready for the new millennium – the Time/Timekeep system which keeps track of Local 6500 employees' time.

The system takes an employee's time report, checks the rules of the Collective Bargaining Agreement and forwards the results of its calculations to the payroll system.

In addition to the Time/Timekeep system, there are 32 others being tackled by the Year 2000 Business Systems Team.

They have taken their enormous task in stride, contributing extra hours and effort to make sure Year 2000 compliance is achieved.

It is not unusual to find several hard-working members of the team at their desks long after normal working hours.

For Noreen, who is frequently among these night hawks, going that extra mile is right in character. The fact that she is always one of the earliest arrivals and one of the last to leave is commendable. However, it is an astounding feat when you realize that she lives on an island several hour's drive from Copper Cliff. During the winter months she snowmobiles to shore then drives to work. In the summer she uses a small boat to get across the water. Between seasons is a real challenge because she must judge whether a snowmobile, boat or air-boat offers the best chance of getting to shore in one piece. When you add a 10-hour working day to between four and six hours of travel time, you know Noreen's dedication is exceptional. It is not surprising that she is also appreciated by her colleagues for her ability to work under pressure, maintain a positive attitude and deliver high quality work. With Noreen in charge of Time/Timekeep there is no doubt that Local 6500 will get their pay cheques on schedule in Year 2000.

If it doesn't understand what to do when the clock changes from Dec 31, 1999 to January 1, 2000, Local 6500 employees wouldn't get paid.

Time/Timekeep with its 3,500 programs and 750,000 lines of code is the largest system the Year 2000 Business Systems team is working on.

Getting it ready for Year 2000 involves numerous steps: identifying the date problems, deciding on the best approach to correct them, preparing test scenarios to make sure that the correct results are produced after the repairs, actually fixing the computer code and finally, doing the testing. As the countdown to Year 2000 progresses, the pressure to complete this massive project in time is fierce and inescapable.

LET'S TALK SAFETY

with Ron Rafuse

Most of us have seen the loss control accident ratio pyramid that for a given number of minor injuries there are so many medical injuries and lost-time accidents (LTAs).

For a certain number of LTAs there is a fatal accident. This model was developed in 1969, with a long study of major companies using accident and incident frequencies.

There must always be emphasis on working safely and encouragement in the workplace not to do work you feel is unsafe, not to use defective equipment, only operate equipment you have been authorized to use, develop procedures and the list goes on.

But we must also look at what is behind the ratio pyramid that is really the underlying cause of incidents and accidents in both on and off the job activities.

The underlying cause is behavior.

Incidents are caused by behavior. Behaviors result from how we think. How we think comes from our values and culture. And role models are a strong influence on our values and culture.

In the workplace the role model may be a senior employee, a supervisor or a co-worker.

Each of us could be a role model for someone at our place of work. If you are a supervisor, your position as a role model and person in charge must be one of strong influence in ensuring that everyone is held accountable for their responsibilities and the standards are understood and followed.

We now see that each person in the workplace at whatever level they are at, from senior management down, has some influence over behavior – whether it be one of holding people accountable or looking after the people you work with to ensure proper behavior is carried out in the workplace. This is how people care for each other at work. They set goals, look out for each other and work as a team.

Behavior means how you conduct yourself and how you respond individually or in a group to your environment.

It works best when we have a personal commitment and a work group or team effort to look after our conduct and how we handle responsibilities to working safely.

There must always be emphasis on working safely

In our off-the-job or home activities this behavior model is not any different.

If you look at family life, we all were and are influenced by role models in our lives and they had an effect on our behavior.

Role models in our lives could be parents, older family members, relatives or people you associate with.

Many of us can look back at parents who were strong role models and influenced our behavior as we grew up. How we conduct ourselves today is a direct result of the influence of our role models on our behavior.

As parents we have the same responsibility to be role models to our children.

The school year is drawing to a close and students are focusing on getting summer employment.

As parents we want to be certain that the jobs our teenagers are doing are safe.

Talk to your son or daughter and find out more about what they will be doing. You may even want to visit the workplace and find our what safety training your teen will receive. Pay attention to chemical hazards and personal protective equipment. Are they safe from injury?

Encourage your children to talk freely to you about concerns. Encourage them to ask questions at the worksite.

Consider asking questions such as what are the particular hazards of the workplace including machinery and chemical? Where can they obtain instructions or training? To whom do they report problems or concerns? What protective equipment is needed? Where do they get material safety data information and to whom do they report an incident, injury or concern?

Remember the habits and the role-model influence on behavior at their summer job and the education they get there could set their standards and work habits for jobs later in life.

To ensure we influence our children's behavior and safety habits in life, we must lead by example and make safety a part of how we behave each and every day in all activities on and off the job.

Ron Rafuse is Superintendent of Safety in the Ontario Division



Name	Date of Birth	Date of Death	Years of Service	Name	Date of Birth	Date of Death	Years of Service
John Alkenbrack	04-09-11	03-27-98	29	Laurence Marsh	08-05-19	03-03-98	32
Oswald Arseneault	03-28-18	03-13-98	31.5	Elmer McVey	10-29-20	03-03-98	43
Jean Aubin	06-20-28	03-09-98	41	Herbert Meredith	07-28-11	03-04-98	41.4
Francis Blanchard	05-02-23	03-24-98	32	Lewis Midgley	02-28-11	03-03-98	38.5
Raymond Bouchard	1 12-11-16	03-28-98	30.5	Jacob Negraeff	02-10-06	03-05-98	23.5

Leo Bourgeois	02-13-13	03-03-98	42
Charles Byers	09-26-00	03-24-98	32.8
Romolo Camilucci	05-20-19	03-06-98	40
Jacob Castron	05-02-02	03-01-98	30.9
Laurent Cayen	04-21-16	03-08-98	32.5
John Chokan	03-05-17	03-31-98	38
Harold Collier	11-15-23	03-23-98	28
Mervyn Conrad	03-19-32	03-17-98	31.5
Frederick Deschene	09-20-29	03-30-98	31.5
Stuart Dickson	03-28-10	03-23-98	40.5
Philipe Gauthier	06-18-19	03-02-98	35.5
Aldo Giommi	07-11-08	03-05-98	42
Alfred Klippenstein	11-30-25	03-08-98	17.7
Emile Lapointe	01-17-14	03-07-98	32
Germain Laurin	09-03-35	03-26-98	30.5
Eugene Marcon	06-10-15	03-14-98	36.4

Iwan Onufryk	09-16-27	03-07-98	33.5
John Ovens	03-03-07	03-18-98	37
Fred Paras	02-22-19	03-20-98	29
Alphonse Perros	12-22-09	03-29-98	20.9
Wilfred Rochefort	02-10-24	03-08-98	38.9
Elio Serafini	08-19-25	03-03-98	38
Bertrand Soucy	12-01-26	03-26-98	34.5
Herbert Squirell	10-05-15	03-09-98	31
James Stillar	04-28-29	03-03-98	39
Aurelio Taricani	02-26-22	03-12-98	23.6
Omato Tomassini	11-20-28	03-02-98	40
Gerard Vallee	08-18-20	03-29-98	26
Ronald Witherell	08-27-28	03-13-98	31.4
George Wright	08-17-17	03-06-98	26.6
Alvin Wyers	03-01-27	03-22-98	23

Nickel Refinery man braves African heat for charity

e ate crocodile meat, caterpillars, even worms, and struggled through 41°C heat, but the Nickel Refinery's Guido Chezzi would do it again.

"It was well worth

As a volunteer with the Canadian Cooperative Association (CCA), Guido recently went to two African countries roughing the temperature and limited - if sometimes exotic - variety of food to see how the charitable institution's money was being spent and to help establish community credit unions.

"The credit unions form village banks so people can pool their money together and buy the most essential thing-water," said the safety trainer, who learned that water cost \$10 a bottle, much more than residents can afford.

Guido, who retires in May after 33 years with Inco, is also a director with the Nickel Centre Credit Union Charitable Foundation and president of the Sudbury District Credit Union Chapter.

"Many Africans are unable to improve the lives of their families and communities because they lack access to savings and credit programs."

The CCA, an arm of the federal govern-



Having seen the smiling children of Africa and their families struggle for the most basic of essentials, Guido Chezzi said he is more motivated than ever to continue raising money to help the poor.

ment through the Canadian International Development Association (CIDA), has 26 development projects in African countries focusing on agriculture, coop housing, financial organization and fishing. The funds also go toward the purchases of farming equipment, medicine and the development of schools.

Money donated by

the CCA is matched nineto-one by CIDA, making fundraising efforts by volunteers so much more valuable, Guido explained.

He was with a group of seven Canadians from the CCA, which raises money through cooperatives and credit unions including Sudbury and district credit unions.

Guido said his motivation to be a volunteer

Nickel Refinery Safety Trainer Guido Chezzi

and to go to Africa was simple.

'We buy Ski-Doos, ATVs and motor boats - they can barely buy food and water. They live in mud huts and shacks with no plumbing."

The warm response from the people of the two countries he visited, Ghana and Zimbabwe, made the long threeweek trip and fatigue worthwhile, he said.

"It was just amazing how overwhelmed they are to see people coming to help them. You don't realize how much you can offer just by being there," said Guido, who returned to Sudbury from his working holiday on March

Upon the departure of the CCA group, Guido saw an example of how grateful the African people are.

"A teacher, involved with the credit union in Kumose in Ghana, walked nine miles to the airport to see our group leave. That's how appreciative they are," he said.

"To me, it was a gratifying experience. We're helping people, who are living in drastic conditions."

Having seen the smiling children and their families, who are the focus of the assistance, Guido said he'd gladly

go back someday to continue the volunteer work and see the good it is doing.

Although, he had trouble sleeping each night and found the heat difficult to tolerate he has great memories of the visit.

"I paved the way for Bill Clinton," he said with a laugh. The US President arrived on the African continent for an extensive tour several weeks after Guido arrived there.

Getting back to the food, how did those insects taste Guido?

"They're high in proteins. I didn't mind them."

found the people of the two African countries he visited were very grateful for the help of International visitors like him.



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