



This Inco employee and pensioner are riding high on Adanac Ski Hill's new chair lift. To find out how they're serving the Sudbury slopes see page 6.

INCO Triangle

Printed on Recycled Paper

February 1995

Ontario Division

Vol. 54, No.2

First ore coming in '96

McCreedy East on target for production, costs

Expect the first ore from the new McCreedy East Mine in the spring of 1996.

That's the word from Don Gibson, project manager for McCreedy East, the company's largest proven, undeveloped nickel-copper deposit in the Sudbury Basin.

It won't be huge production at the start — just 600 tons of ore a day from the main ore body — but it's the beginning of production for the first phase of a development that involves a total capital expenditure of Cdn. \$194 million (U.S. \$158 million). Smaller production is also expected in late 1996 from McCreedy's 153 orebody.

"We've encountered no problems," says Don. "We're on target for scheduling and budget. We're still forecasting to make our schedule and our budget."

When the mine is in full production in late 1999, it is scheduled to produce 3,000 tons of ore a day for the next 17 years. The main ore body will generate 1,800 tons a day while another 1,200 tons will come from the 153 orebody.

McCreedy East is expected to be one of Inco's lowest-cost, most productive mines. Ore handling and materials transportation will be integrated with those of Coleman Mine.

He said Inco crews are already driving a ventilation ramp from the Levack Mine to the 153 ore body while other Inco crews started work before Christmas from the Lower Coleman end to enlarge that ramp to accommodate McCreedy's ore handling system.

Ore will be transported from the two ore bodies via two 55-ton electric trucks.

continued on page 2

Show time at Big Nickel

Attention, hardrock miners! If you ever harbored a desire to move into show business, then Shannon Tidball of the Big Nickel Mine has the opportunity for you this summer.

For the 1995 tourist season, the Big Nickel plans to stage drilling demonstrations of a Long Tom drill. Shannon says it's being installed at the Big Nickel site and demonstrations will take place outdoors.

The Big Nickel is recruiting miners either as volunteers or

part-time staff.

All she asks is that the miners be experienced in drilling and willing to work as drilling demonstrators and underground tour guides at least one day a week.

She says the miners will also serve as resource people for the Big Nickel and mentors for student tour guides.

The Big Nickel season runs from May 1 to Oct. 9.

If you're interested, you can call Shannon at 522-3701.

New Incontact TV episode airs March 10

Circle March 10 on your calendars and tune your television to Channel 7.

The sixth edition of Incontact TV, premieres on the small screen at 7 p.m. that evening.

Included in the March story line-up is a look at how and why hoisting drop tests are conducted, how Divisional

Shops is operating a 'business within a business' with its pump repair work cell, and why the Inco Cup continues to be the longest running corporate-sponsored sporting event in North America.

Subsequent airing times in March are March 26 at 4:30 p.m., March 27 at 8:30 p.m. and March 29 at 9 p.m.

Who is that masked man?



When the mercury dipped below -50°C (with the wind chill) on the first weekend in February, acid loader leader Don Primeau (inset) wasn't about to remove his balaclava and hat liner for the camera. When the Triangle asked Transportation employees to name the coldest spot in Copper Cliff the answer was quick and unanimous — the Acid Loading Area, especially atop the acid tank cars where Don is shown inspecting a rupture disk assembly. "If you get a north wind up here it's probably 10 to 15 degrees colder than on the ground," he said. "We're constantly working against freeze-ups in our hoses and safety showers." The Acid Loading Area loads 24 to 36 cars a day with three different acid products for use in such industries as paper mills, automotive plants, toothpaste and fertilizer.

4 Selling scrap steel

8 Construction heats up

12 Pensioners on blades

Movement of supplies a challenge for McCreedy team

continued from page 1

This is the same haulage system going into Creighton Deep. The first \$1.6 million truck will arrive at McCreedy late this fall, the second expected in the spring of 1996. This summer, crews will start working to provide the necessary underground infrastructure — refuge stations, pump stations, explosives magazines and fuel storage.

"Everything's going fine," he added. "Our EPCM (Engineering Procurement and Construction Management) team's up and running. The project's being managed from a trailer complex at the Coleman Mine. Engineering and procurement staff have been set up. Our construction management's been set up.

"The uniqueness about the whole project is that to mine the ore, we have to go down 3,400 feet, go in about 3,600 feet to the haulage ramp, go 4,500 feet to the main ore body and then another 2,500 feet

to the 153 ore body. One of our big challenges will be the logistics of moving men, supplies and ore in and out."

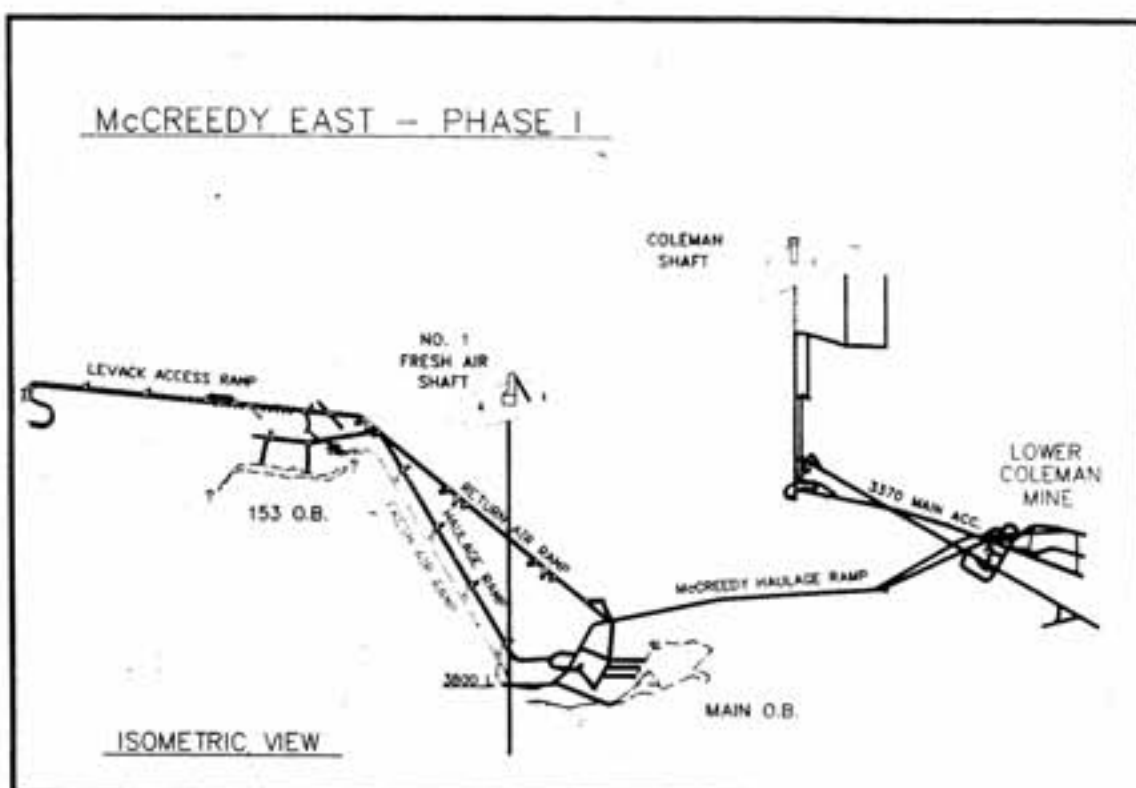
He said the team's studying various vehicles and modes of transport, including containerization of supplies to solve the problem.

"All of the ore comes out via Coleman which has adequate hoisting capacity."

At the same time, they recognize they'll have to develop one of the best and most efficient roadways underground to handle the traffic. They're looking around the world for answers.

"We'll have to be very efficient. We will have to develop and maintain one of the best roadways of any underground mine. It just has to be."

The Inco team also includes mine engineer Bruce Goard, development co-ordinator Rick Godin, project engineer Ed Shillemore, geologist Harold Granthien, and mine planners Tom Christiansen and Trevor Courchesne.



Inco crews are driving drifts from the Levack Mine and from the Lower Coleman Mine to McCreedy East Mine. The first ore from the main ore body is expected in the spring of 1996.

Here's lookin' at you!



Coleman Mine electrician John Daigle reflects on his importance to the mine's safety program. The mirrored message greets employees near the entrance to the Coleman Mine Dry.

Coleman employees raise \$2,000

Coleman Mine employees have some exciting new events to mark in their 1995 calendars.

A fishing tournament, midnight bowl and spring dance are in the works, thanks to the newly-formed Employees' Association.

The association was formed to increase employee morale and increase teamwork in the workplace through the staging of various events, said Carol Walton, a member of the group. One of the association's objectives is to provide activities that everyone can participate in.

The Employees' Association is raising money through

50/50 draws which have proven to be a huge success. Some of the money raised goes towards fruit baskets and flowers for hospitalized employees and toys for their children.

"The response has been great," said Carol. "We welcome all suggestions the employees may have."

Not quite a year old, the group currently has \$2,000 in its fund for future activities.

Joining Carol on the Employees' Association are Marcel Demers, Norm MacKay, Monica Delorme, Andy Besserer, Guy Pichette, Bob Carriere, Rod Burns, Robert Assabgui and Richard Bangs.

Off to the 'Robot Wars'



Inco wishes the Lively team good luck in the Canada First Robotics Competition in Brampton, Feb. 24 - 26. Team members from left are: (bottom row) Jason Rose, Jason Sanmiya, Eric Binmore and Jason Vergunst; (second row) Jennifer Wiseman, Shannon Murphy, Laurie Beynon and Heather Beynon; (third row) Chris Fosten, Dan Cunningham, Hansel Huang and Brad Hreljac; (back row) Franz Kirk, James Moorhouse and Brad King. Inco is sponsoring the team and Inco employees are serving as mentors for the Robotics project.

Discount cards from Disney

Planning a winter vacation in Florida?

Don't forget to drop by Public Affairs for your Disney World discount cards.

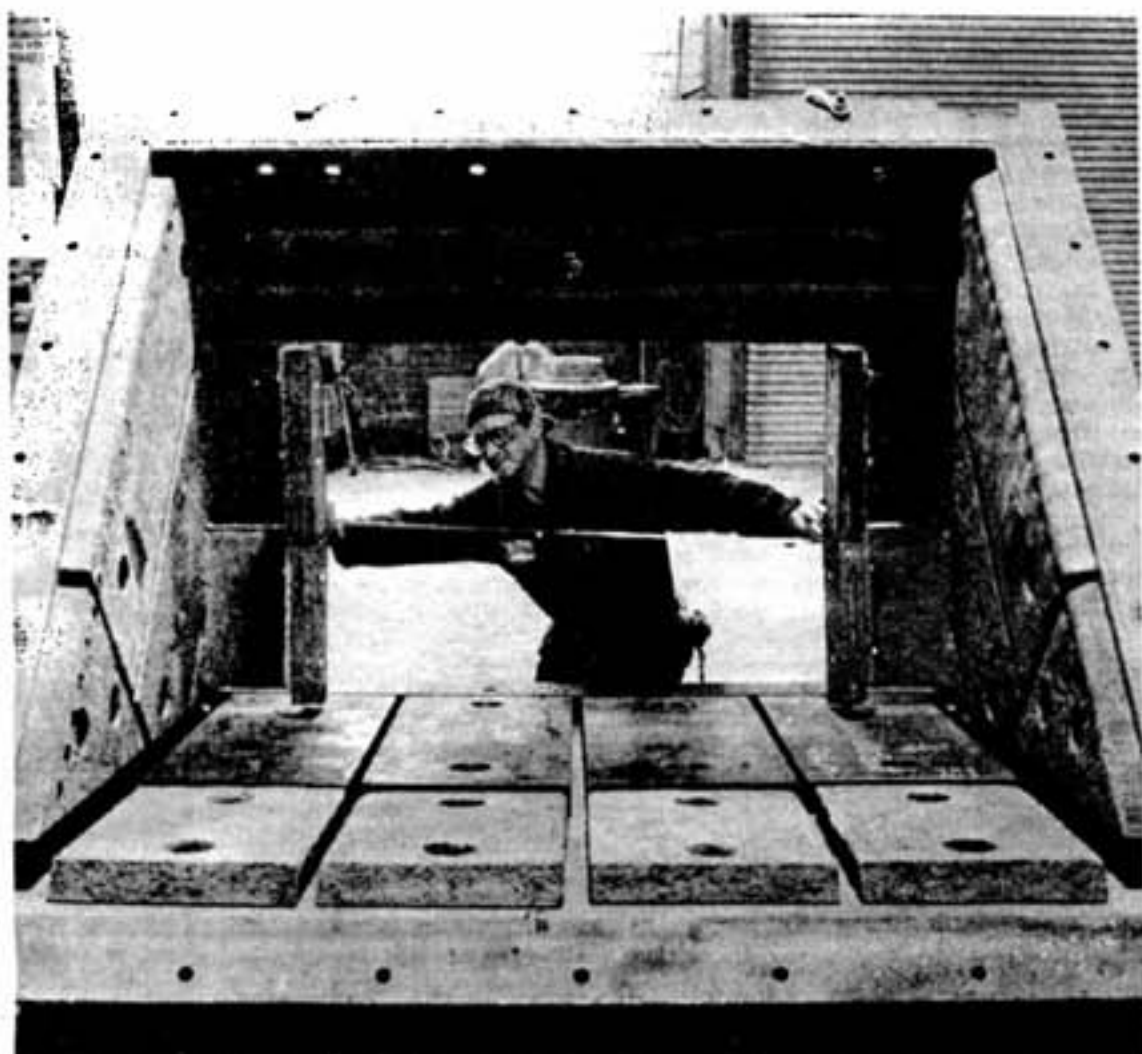
Walt Disney World is offering Inco employees and pensioners the opportunity to join its Magic Kingdom Club. Membership entitles you to various discounts for different events at Disney Theme Parks worldwide, at Disney Stores, and on other travel-related offers. There is no fee for the card.

Money-saving benefits of the Magic Kingdom Club Card include discounts on hotel accommodations, vacation packages, car rentals and entrance fees.

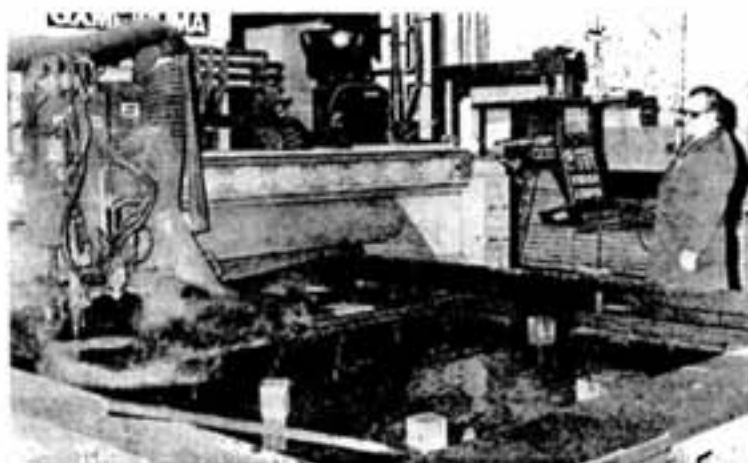
Pick up your membership card from Diane Flynn in Public Affairs at the Copper Cliff General Office or by calling 682-5425.

MAKING *Change*

Plate Shop sizzles with Grizzlies



Plateworker Jean-Louis Belanger measures the width of a load-out chute for South Mine. This is one of many jobs undertaken at the Plate Shop.



Armand Sauve looks on as steam rises from the water bed below during a cutting operation by the computerized numerical controlled burning machine — referred to as 'the heart' of the Plate Shop.



Sparks fly from the computerized numerical controlled burning machine as operator Gord Smith begins burning another hole through the four-inch thick steel plate.



Plateworker Gord Smith watches closely as the computerized numerical controlled burning machine carves the desired pattern of holes needed to construct a Grizzly plate.

By Cory McPhee

Nestled in a corner of Shops' Alley is Inco's own 'emergency room' — where cuts and burns are handled daily with care and precision by a dedicated group of professionals.

And although emergencies have become commonplace at the Plate Shop — the task put before them in early January proved particularly daunting.

Coleman Mine needed two Grizzly plates and they needed them fast. The plates sit atop the Grizzly over the orepass. Ore is dumped on the Grizzly by underground haulage trucks and oversized chunks are broken on the plates using a hoe-ram.

The order came in on January 4 with a delivery deadline of January 9 at noon. That meant just three working days for a shop which operates from Monday to Friday on day shift only.

"I had never done anything of this magnitude before," said plateworker Gord Smith. "I was a little apprehensive at first but once I got going it was a walk in the park. You have to have faith in your equipment and your programmer and they both came through."

The task facing Gord was to cut a series of 23-inch square holes in two steel plates measuring 10 feet long by eight feet wide and four inches thick. Each plate weighed six-and-a-

half tons and a mobile crane was needed to lift them onto the computerized numerical controlled burning machine (CNC) which Gord was operating.

"That CNC is the heart of our shop right now," said foreman Pierre Latour. "Every job that comes in goes through CNC programming before the pieces are cut up, assembled and finally welded."

In the case of the Coleman Grizzly plates, a programmer entered the necessary data into a computer and downloaded it to the CNC where Gord did the cutting.

"You need teamwork to make this type of job possible," said Gord. "The CNC is a high-tech machine and we've cut Grizzly plates before but never to this size. The combination of size and intricate cutting made this job unique. After a few cuts I relaxed and the job went without a hitch. It was delivered on time and I'm proud of that."

Also happy with the job was Coleman maintenance foreman Bob Simard, who had ordered it in the first place. "The Plate Shop really came through for us," he said. "The job was done exactly as we specified and delivered to us by the date we had requested. It was a fine effort on their part."

Customer satisfaction is the key to the Plate Shop being able to keep jobs in-house,

said Pierre.

"There was a time when this job would have been contracted out," he said. "But we have the expertise to do the job to the same or better quality standards and in the same or better timeliness. In almost every case we can meet the

specifications required by the customer — and the money stays within Inco."

The Plate Shop manufactures liner plates, chutes and just about anything requiring fabrication. There are 29 operating employees in the shop — 19 plateworkers, six

welders and four machine operators — and just about every day a new emergency arises.

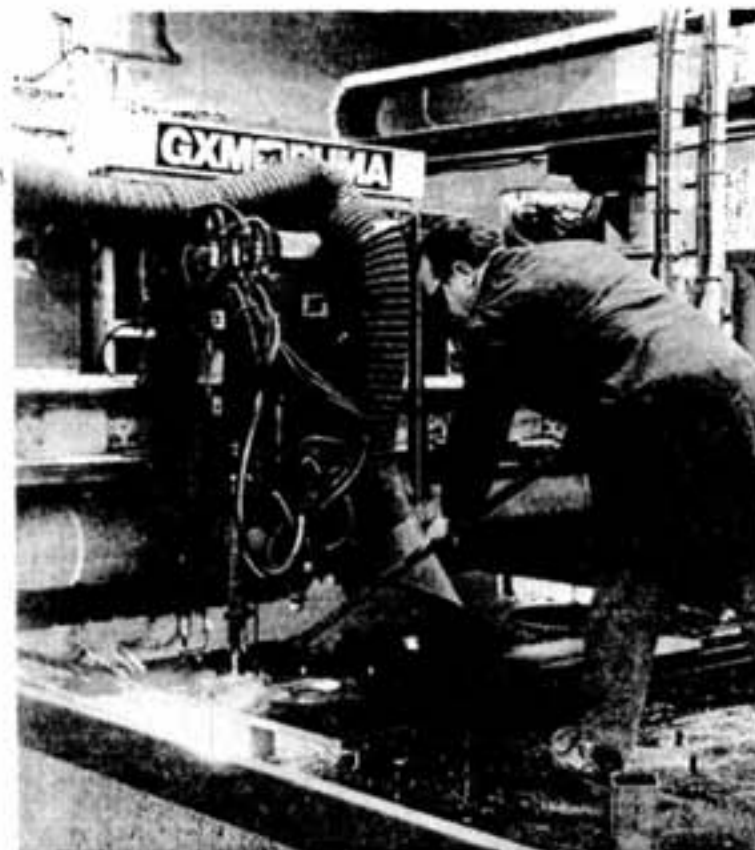
Right now, 90 per cent of our people are working on emergency jobs," said Pierre, citing a large jib assembly for ladle heating and a water-cooled panel for the MK melter uptake in the Smelter as examples.

"We're good at it. With good communication with our customers, we can do emergency jobs. We're busy but we're not at the point where we would turn anyone away. We want everyone to know what we can do and we will do everything we can to keep the work in-house and everything we can to satisfy our customers."

"The more communication improves between the planning departments at the mines and plants and our own planning department, the easier it will become to prioritize and identify true emergency jobs so that all customer needs are met."

For Gord, communication is as important in the Plate Shop itself as it is with the rest of the Division.

"Communication and teamwork are completely vital," he said, "and it's getting better. The environment has always been good in the shop but I think it's improving. Everyone here takes a lot of pride in their work."



Plateworker Armand Sauve uses a bar to knock excess pieces of slag away from the burning area on the CNC at the Plate Shop.

MAKING *Change*

Big dollars in Inco scrap

By Suzy Dobinski

With scrap steel prices at approximately \$150 (Cdn) a ton, selling Inco scrap is a lucrative and environmentally friendly business.

Approximately 30 truckloads of prepared scrap metal leave Inco's Sudbury District plants each month. These loads weigh about 25 tons, the majority of which are prepared and delivered to southern Ontario markets by Northland Iron and Metals Limited (NIM).

Storage areas for scrap and surplus material are called marshalling yards. Inco's marshalling yards are at Creighton, Stobie and the Copper Cliff Smelter. They also serve as preparation areas for ferrous and non-ferrous metal, said Bob Debie, supervisor of Investment Recovery.

Preparing scrap means cutting it into two-foot lengths, either by shearing or burning with a torch, explained Bob. The scrap is then loaded onto trucks, scaled and hauled to markets down south or to NIM's yard for further preparation.

In addition to scrap steel, loads of copper, aluminum, manganese, stainless steel, electric motors, transformers and batteries are accumulated in the marshalling areas and also shipped to market.

Pure, shiny copper is recycled through Inco's own copper circuit at Copper Cliff Refining.

Non-ferrous scrap is sold to the highest bidder whom Inco feels will best be able to dispose of or utilize the material. This material is sold as is, where is . . . and buyers are responsible for coming in and loading the metals.

"For many years we have enjoyed a very strong working relationship with NIM," said Bob. "They've gone above and beyond what is expected of them in our contract."

"For example, a certain amount of muck accompanies the used rods and balls that come to our marshalling yards from Clarabelle Mill. NIM removes the rods and balls for their own purpose, screens the muck and returns it to Clarabelle Mill where it is put through the circuit again."

"It's a win-win situation," he said. "We're keeping material that is no longer useful to us out of the landfill sites and making money on it by selling it to NIM. They in turn make money by separating and preparing the metals for whatever market they can find."

Those markets, said Erica Greenspoon, vice-president of NIM, are varied.

"We separate the different metals and prepare them according to the specifications

requested by different mills and customers," she said. "In any one marshalling yard we may find stainless steel, copper, lead, aluminum — just about everything. And there's a market for all of it."

Scrap and surplus material have many uses, said Bob.

Surplus vehicles from the Ontario Division fleet are made available to Sudbury area contractors and Inco employees. Alexander Centre Industries buys slag from Inco to make Dry Pack for use in road beds and driveways — and also supplies a lot to Ca-

nadian Pacific (CP) and Canadian National (CN) for use as rail ballast. Hoist ropes are bought by P and B Metals of New Liskeard, chopped into two-foot pieces and sold as scrap metal.

Last October, 60,000 pounds of scrap rail was lifted at no cost to Inco and the company received market value for the scrap steel. Several projects of this nature are completed during the year, said Bob.

"Companies worldwide come to Inco to buy surplus material," he said. "A lot of

material goes to the Third World where it is used for manufacturing."

Surplus equipment sales are ongoing, both internally and externally. Investment Recovery is currently negotiating the sale of an Ahlstrom cooling shaft from the Copper Cliff Smelter.

"A good majority of the scrap is bought for use in the same type of industry," said Bob. "There is a value to all scrap — it's valuable to someone."

"There is nothing that I can't sell. All scrap is sold, whether as is, or cut into two

foot lengths."

Inco recently sold almost \$18,000 worth of equipment from the Agricultural department.

Bob represents Investment Recovery on the Slag Disposal Committee and the Plant Decommissioning Committees. He has also served as a resource to the Division's Scrap in the Muck Teams.

Investment Recovery will soon have access to a worldwide, computer network called Trace Trak. This network is available for those who want to buy or sell material.



Shear operator Paul Daley cuts through scrap metal with ease.



Dave Rose of Northland Iron and Metals burns a large piece of scrap down to manageable size.

Investment Recovery supervisor Bob Debie is dwarfed by a pile of scrap metal in the Smelter marshalling yard.

MAKING Change

Team gets 'pumped' over Div Shops repairs

By Jerry Rogers

"We'll take pride in our work and pride takes care of us. And everything else can be acquired."

— Motto of James Joudrey and Lynne Descary of Divisional Shops.

If you were to bottle the energy and ideas of James Joudrey and Lynne Descary and market them, you'd have a sure-fire winner.

As partners successfully running a pump repair business, they're young, keen and out for business.

While their enterprise has only been up and running for a year, they've survived start-up struggles to win over tough critics and save Inco big dollars, all by operating a business within a business at Divisional Shops in Copper Cliff.

Several years after settling in at Inco, the two partners are finding their own niche and identities and pride of workmanship by operating on the front line of Div Shops unique 'work cell' concept.

"The pride we put in our work cell is what will make it successful," says Lynne, a 31-year-old mother of two who had the distinction of being the first female maintenance mechanic at Inco when she came to Clarabelle Mill in 1988. "It's great. It gives you a real sense of ownership in our company."

Adds Jim, a 30-year-old industrial mechanic who joined Inco six years ago from a railway job in Toronto. "It gives you a little more sense of self-worth, that you're not just a number."

Inco has roughly 550 portable, submersible pumps, ranging from 1.9 horsepower to 140 horsepower, in its plants and mines for the daily pumping and draining chores common to the mining industry. In 1993, the Sudbury operations spent \$1.2 million on repairing broken and disabled pumps.

With the team in place and concentrating on repairs to the two most popular submersibles, the 58 and 13 horsepower, they repaired 107 over 43 weeks in 1994.

More importantly, by making the repairs themselves at Div Shops and working with internal customers at Inco, they figure they've saved \$488,000 in cash out the door. They've cut the turnaround for repairs from about three weeks a pump when the project started to two days on the 13s and three days on the 58s.

The pump repair business took off officially in late 1993 as Div Shops officials realized



With a steady hand from machinist/instructor Ron Ylitalo, Lynne Descary tightens the nuts on the oil housing bottom of a submersible pump under repair at Div Shops.

the company spent a tremendous amount of money on repairs with outside vendors. With the right training, they reasoned, Div Shops specialists could satisfy the repair needs for other Inco departments while keeping those repair dollars from going elsewhere.

"We recognized that we could not continue to manage our operations in the traditional manner. We needed to utilize all of the resources available to us and that, really, is our tradespeople," says Willy Metson, Div Shops technical services co-ordinator. "Greater participation by them will lead to improved safety, increased productivity and better service to our customers."

In the fall of 1993, machinist Ron Ylitalo and the late Glenn Snellman were the first to receive training to repair the pumps from the leading pump manufacturer. James came on board a year ago March. Lynne joined last fall. She focuses on the 13 horsepower pumps, he looks after the 58s.

"In our area, we have to be self-motivated," says James. "We do our own ordering, assessing, building and making sure the mines get their pumps delivered. We draw up our own charts and our own business cards."

Lynne agrees. "We work well as an improvement team," she says. "To be a suc-

cessful work cell, you have to keep good records, everything from testing to billing. I look after all that and Jim trades off that for doing most of the bullwork. We're an equal opportunity work cell."

How they approach a pump repair is indicative of their business acumen.

At the outset, pumps are only repaired if the repair cost is less than a third of buying a new one. For a 58 horsepower, that means spending no more than \$7,000 on a rebuild, parts and labor.

In a half hour, they can estimate the tab. It takes another three or four hours to strip down a pump. If the pump can't be fixed, they salvage the parts. Without sacrificing quality, they've also discovered refurbished parts that are a fraction of the cost of buying new.

Casting their eyes at outside competitors, they're aiming to create a warehouse exchange program in 1995. If successful, this would cut the amount of money — \$82,000 from April to December in 1994 — spent on rentals while the pumps are being repaired.

"The key," says Lynne, "is that the mines have to send us the old ones. We can't repair them if we don't have them."

For this and other aspects of their business to succeed, they need feedback and good customer relations. They aim to start an education and awareness program this year,



Black and white doesn't tell the story but Lynne Descary has added her own touch to the submersible pumps she and partner James Joudrey repair. While she paints them fuchsia, the new coat of paint has a business perspective. It identifies the pumps as having been repaired by the Div Shops team.

talking about basic handling and safety of pumps to cut the incidence of repair.

"Even though they may be a large item, they're still sensitive and can't be thrown around," Jim says. "If the pump comes with a four-inch outlet, it shouldn't be reduced at all even though in many instances it is and down to as low as one inch, which creates a false head pressure in it."

"... The point is, we need the feedback. We can stand here and make all the pump repairs we can but if we don't find out from the mines how often they break down or if the pumps are running well, we won't improve."

Lorne Tkachuk, a Stobie mine foreman, is one of their steadiest customers.

"What I've seen so far is they're doing a darn good job. But only time will tell if it (pump repairs) will stand up to the job. They have the concept of what we need. The communication lines are definitely open," he says. "I think it's going to be okay. We are their end customers and they're going to keep us



Industrial machinist James Joudrey works on a stripped down pump as a member of a two-person team at Div Shops.

happy. Time will tell."

Fair enough, the team says. "If we don't take interest in the company, there won't be a company," says Lynne. "I've only got six years in at Inco so I want to sure this company stays around."

Jim nods in agreement.

"That's one of the reasons they've hired us. So we could help Inco make it into the year 2000."

2 + Many = team success

When you run a successful business within a business at Inco, there are a lot of people behind the scenes helping making it all come together.

While James Joudrey and Lynne Descary are on the frontlines turning pump repairs into major savings for Inco, they're quick to single out other Div Shops personnel for their success.

Machinist Ron Ylitalo, who

along with the late Glen Snellman first took the training on submersible pumps, remains the team's instructor.

When they need help, they can call upon machinists Roger Chevrier and Bob Ojala, welders John McCann and Edgar Lessard, winder John Maslakewycz, planner Richard Coupal and foreman John Prudhomme.

Safety and planning at work on construction job

By Cory McPhee

When you're dealing with 31 tons you don't fool around.

That, said industrial mechanic Pat Matthews, is why safety was the number one consideration for an Inco Construction crew charged with installing a massive heater house over a fresh air intake fan behind North Mine.

On a frosty January morning, the crew braved winter's cool conditions on surface to help bring heat to those working underground.

The heater house installation is part of a larger project to meet the ventilation needs necessary for North Mine to access new ore bodies. Two booster fans were installed on the 1,400-foot level underground and a return air exhaust fan was installed a short distance past the tailings trestle on the mine side of Godfrey Drive.

But it was the heater house — 30 feet long, 20 feet wide and weighing 31 tons — that concerned the construction crew the most.

"That was the heaviest aspect of the job and the one we worried about the most but it went without a hitch," said Pat. "Safety was our number one concern because of the sheer size of the installation, but the crew had input into the process and any safety concerns raised were addressed very quickly. There was good communication all the way around."

Inco Construction's portion of the total ventilation project will cost around \$1 million and is about 95 per cent complete, said planner Doug Fosten.

"It's a large job that required a fair bit of organization and would have been contracted out in the past. But where a contractor would have sublet the various job requirements, we, in Inco Construction, did everything except fabricate the heater house."

"All the forming, the concrete work, the steel erection, electrical work and installation of the heater house was done by our own people — in close coordination with General Engineering and with terrific cooperation from North Mine. It's much better to have Inco, the company, pay \$1 million to Inco Construction than to an outside contractor."

The heater house was delivered to the North Mine site on the back of a large flat-bed truck. Inside the structure are two large gas burners which heat the outside air before it is taken underground.

A crane was used to move the heater house from the truck to its final resting place atop the fresh air intake fan. A great deal of planning went into the process to ensure that everything went smoothly and safely, said Doug.

"In order to support the weight of the heater house for

proper positioning we had to erect temporary supports of steel girders and lumber while keeping safety our chief priority," he said. "Those temporary supports had to be just the right height to allow final tie-in to the permanent steel supports. The final tie-ins were done once the heater house was in position and safely supported."

"We had a budget that we stuck to and a schedule that we stuck to, and the quality of the job was second to none."

Inco Construction is involved in various construction projects at plants and mines across the Division. Its workforce includes industrial mechanics, welders and electricians.

According to Pat, the North Mine ventilation project is the type of large job they'd like to see more often.

"We shine on major jobs like this and it's the kind of work we like to get," he said. "Our crews are blended very well, with a mixture of youth, experience and the different

skills needed to complement each other."

"We take a lot of pride in our work and we always look out for each other. There's certainly pride involved in seeing a major job like this through from start to finish. A goal was set and it was met. It was a very successful job."

Contributing to that success was the lead time given Inco Construction on the project so they were able to set up and plan the job to do it as good as anyone else, said su-

perintendent Ron Rafuse.

Planning began in August and installations began in September at the three fan assembly locations.

"The job went according to plan with very few hitches," said Ron. "It's an example of teamwork paying off. The crew had very good ideas and we used them."

"It was done as efficiently, as quickly and to the same degree of quality as any outside contractor — and the money stays inside Inco."



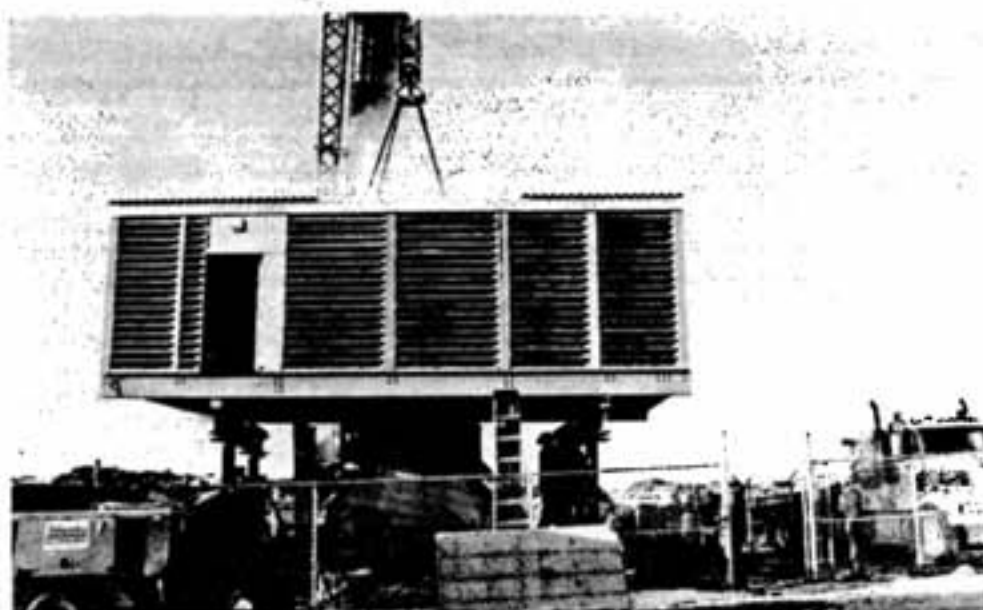
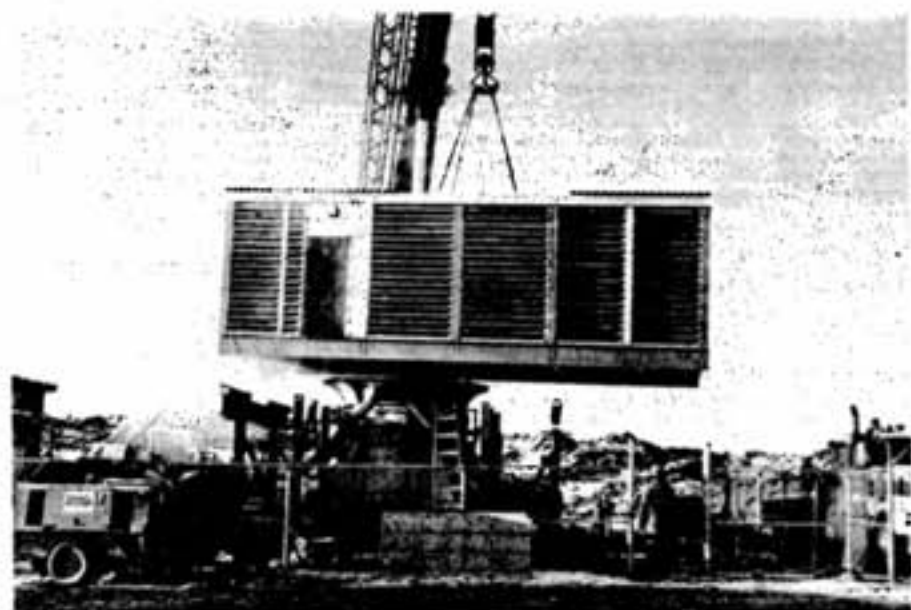
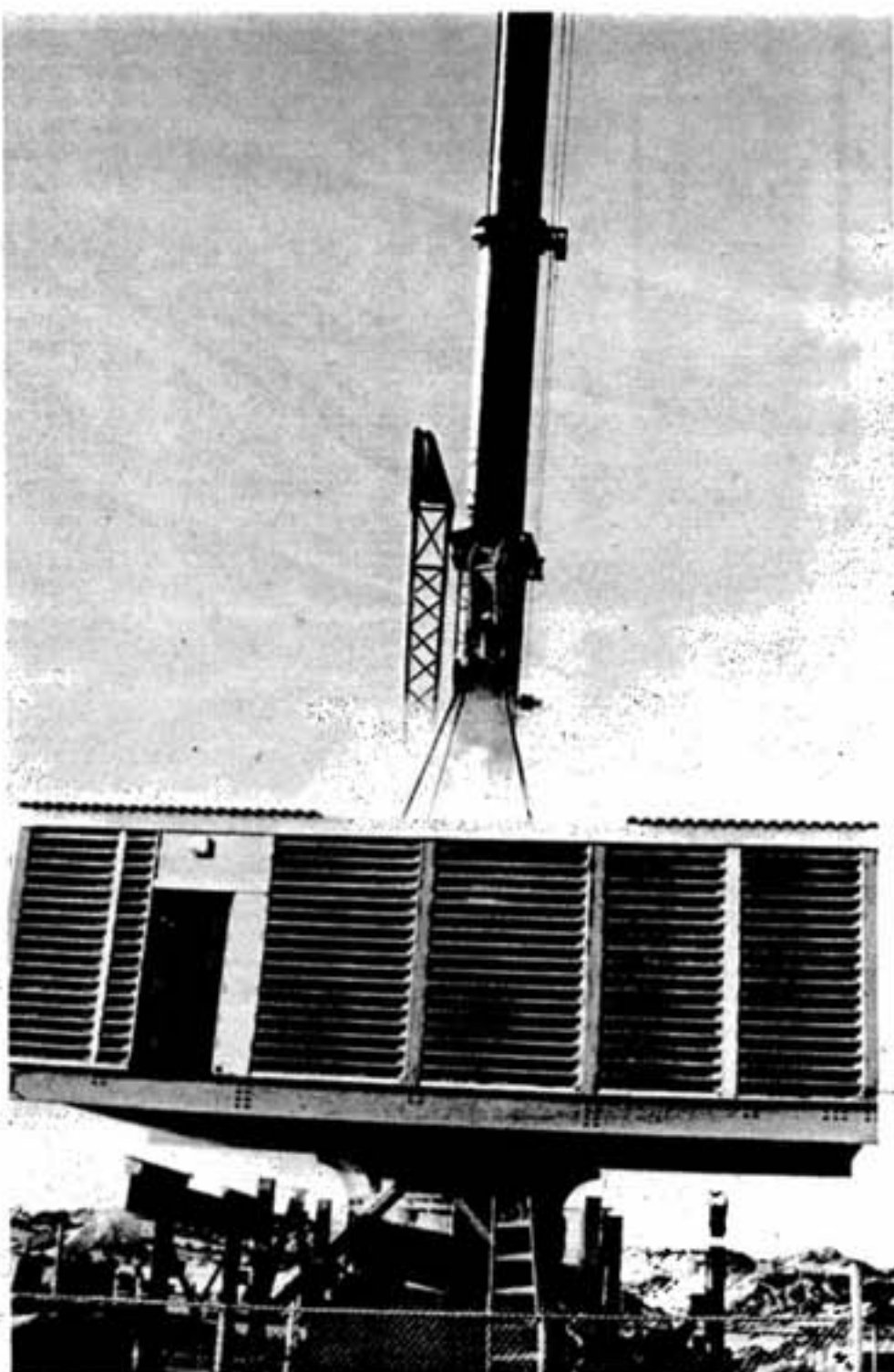
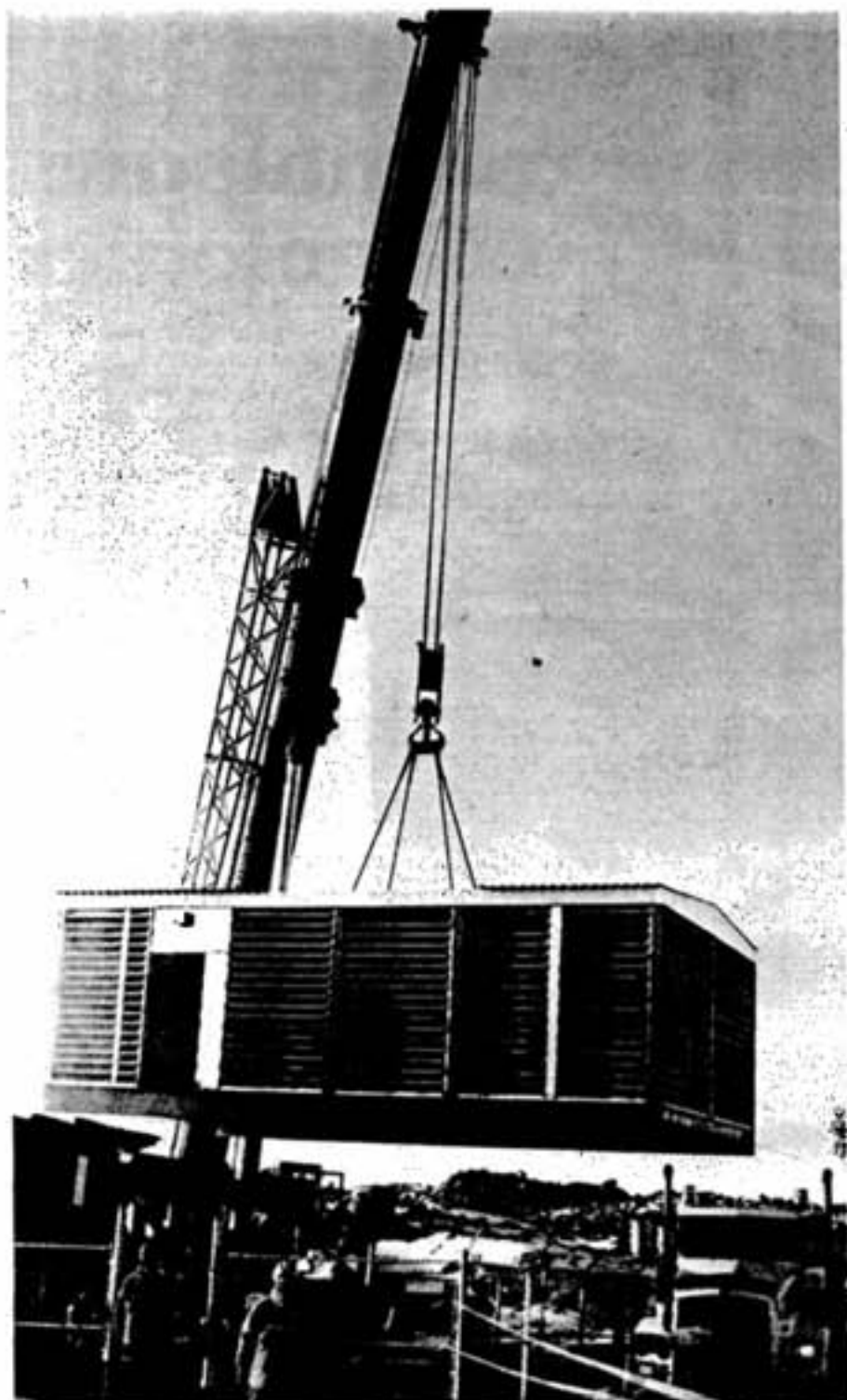
With the heater house inches away from its final resting place, the Inco Construction crew looks on in interest. From left are Kevin Sarlo, Pat Matthews, Bryson Gray and Peter Suomu.



Industrial mechanic Peter Suomu and foreman Bryson Gray discuss the final descent of the heater house.



Planner Doug Fosten watches carefully the positioning of the heater house.



The 31-ton heater house is hoisted by crane from the back of a tractor trailer truck (top left) . . . raised just high enough to clear the fresh air fan assembly (bottom left) . . . centred over the fan (top right) . . . and gently lowered into position atop the temporary steel supports (bottom right).



Pat Matthews gets up for a closer look as he guides the heater house into proper position for final tie-in to the permanent steel supports.



Pat Matthews discusses strategy with co-workers for the permanent attachment of the heater house to its supports.



Welder Wayne Mohammed, left, and industrial mechanic Pat Matthews bolt the bottom beam of the heater house to its steel support structure.

Team effort spells success

The North Mine heater house installation could not have been accomplished without teamwork, said those involved. And any team is only as good as its players.

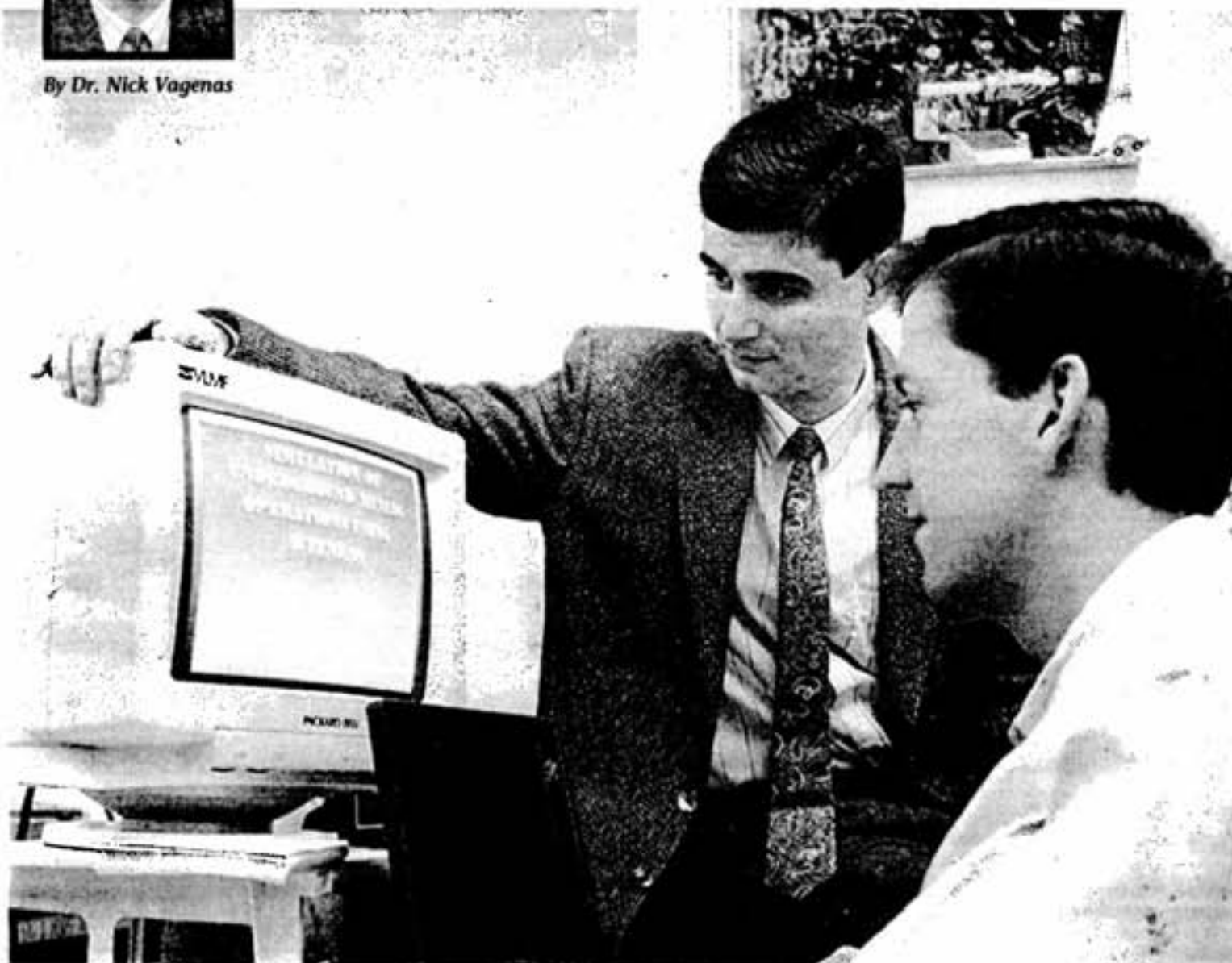
Here are the Inco Construction employees involved in the installation:

Rolly Boudreau	—	Welder
Doug Fosten	—	Planner
Bryson Gray	—	Foreman
Mike Martin	—	Industrial Mechanic
Pat Matthews	—	Industrial Mechanic
Wayne Mohammed	—	Welder
Kevin Sarlo	—	Industrial Mechanic
Dan Serre	—	Industrial Mechanic
Peter Suomu	—	Industrial Mechanic



By Dr. Nick Vagenas

Why education and training are vital in new mining technologies



Dr. Nick Vagenas of Laurentian University's Mining Automation Laboratory watches a computer demonstration unfold with Neil Runciman, a graduate student in the Mineral Resources Engineering Master's Program.

The Canadian mining industry is facing strong competition from countries with lower labor costs and good mineral endowments. To remain competitive, we can no longer depend only on the country's mineral resources. We need to become more knowledgeable and smarter than our competitors.

The world's economic situation, political scene and technology are in constant change. Our business plans and managerial strategies should not be based on assumptions of a relatively steady international business environment. Our operational decision making within our mines must incorporate the ability to cope with change. Coping with such changes as the introduction of new technologies demands information, knowledge and awareness.

Unless we are educated, we cannot make a change, we cannot introduce new concepts or new systems, we cannot evaluate the short and long-term implications unless we are informed. To stay in business in the long run, it is not enough to invest in new equipment or facilities. Our industry must acquire agility and invest also in knowledgeable people and intelligent information systems.

New technologies such as teleoperation, telecommunications and mining automation require employees with multi-disciplinary skills. For

instance, mining engineers should be knowledgeable not only in the traditional mining engineering field but also in robotics, electronics, industrial plant management and maintenance of mining equipment. Underground mining operators must become familiar with computers and electronics. New mining technologies are expected to have an impact both in the industry and in the university's educational and research activities.

At the industrial level, mining companies must develop educational and training policies for their employees so that the transition to the new technologies will be smooth and without problems. These policies may include:

- Seminars and workshops to increase knowledge and awareness in new technologies;
- Pilot projects, demonstrations and training systems that show the potential and limitations of new mining technologies;
- Methods to improve the business culture within a mining company so that employees and employers can cope with the introduction of new technologies in a collaborative spirit and business attitude;
- Economic/promotional incentives for employees to upgrade their skills by attending appropriate courses at

universities or colleges.

These policies should be introduced for the present workforce of a mining company in all levels of management and hierarchy. Furthermore, mining companies must implement recruitment strategies to identify the skills and educational requirements of the future workforce. Recruitment strategies should be based on managerial criteria and human resources planning priorities that facilitate the introduction of new technologies and bring to our mines employees with these qualities:

- Technical competence in new technologies;
- Understanding of the environmental effects of the processes and technologies they are using;
- Understanding of the operational effects of new and present technologies;
- Understanding the concepts of teamwork, problem-solving and continuous improvement and learning;
- Good communication skills.

The training policies and recruitment strategies call for financial and human resources for their implementation and, therefore, mining companies should be prepared to invest and also seek external support (e.g. university collaboration, government funds) in order to

initiate and facilitate the education and training of their employees in new mining technologies.

At the university/college level, the first step is the introduction of courses in new mining technologies so that students graduating with a university/college degree should be knowledgeable in new technologies and be able to adapt to the needs and requirements

of the industrial sector.

Following this direction, the Laurentian University Mining Automation Laboratory (LUMAL), in close collaboration with Inco Limited and the faculty of the School of Engineering, has taken the initiative to create an educational and research environment for new mining equipment technologies.

Laurentian University is the only Canadian university offering a fourth year compulsory course in the undergraduate curriculum in mining automation and reliability of mining equipment. The Master's program in Mineral Resources Engineering includes postgraduate courses in new mining technologies and maintenance of mining machinery.

The university's role in contributing to new mining technologies should not be viewed only from an educational perspective. High quality education of students or engineers in new technologies can not be offered unless the university is conducting research in this field. Furthermore, this research must be closely coupled with industry's short and long-term plans in innovation and development. Universities' research and educational activities reach their true potential only if they are directly contributing to our industry's needs and demands for competitiveness and long-term economic viability.

The challenge in our industry is not the new technologies. It is how we manage and introduce these technologies. To succeed we have to be informed, we have to be educated, the earlier the better.

Dr. Nick Vagenas is the Head of the Laurentian University Mining Automation Laboratory (LUMAL) and an Associate Professor in the School of Engineering.

Inco plays key role in LUMAL activities

The Laurentian University Mining Automation Laboratory (LUMAL) is a unique partnership between industry and education.

And Inco is playing a key role.

Established by Dr. Nick Vagenas, LUMAL is supported by the Laurentian University School of Engineering and the Automation and Robotics section of Inco's Mines Research Department in Copper Cliff.

LUMAL aims to enhance undergraduate teaching in mining automation, research new mining equipment technologies and facilitate collaboration between Laurentian University and the Canadian mining industry.

LUMAL projects are administered by the Centre In Mining and Mineral Exploration Research (CIMMER).

Dr. Greg Balden, superintendent of Automation and Robotics in the Ontario Division, is an external advisor to LUMAL.

Inco phone book bigger, better, brighter

Let your fingers do the walking through the new and improved internal telephone directory.

The 1995 Inco phone book is hot off the press and Office Services and Communications supervisor Mary Sitko is pleased to announce the return of the 'white pages'.

"The hierarchical portion of the old binder format directory was the most requested item," said Mary. The new white pages make it easier for employees to find people by department and title.

Last year a switch was made from the costly and labour-intensive yellow binder format to the full sheet style. "The new directory is produced completely in-house and two of the three steps in the process are now eliminated," said Mary.

The process used to go from the plant, to Office Services and finally to the printers. Now, the information is input at the source and printed in-house.

The old book was updated maybe once a year at a cost of approximately \$15,000, said Mary. "We hope to update this directory at least twice a year. The entire process is much more automated and can be done at about 50 cents a copy. With 2,800 directories being distributed the savings are great."

Staff employees now enter information such as departments and titles directly into the system. "It is much more efficient to have the data input at the source," said Mary.



Arlene Julian of Office Services inspects a copy of the latest in-house telephone directory hot off the press.

This saves a great deal of time when proofing the final document.

Added features of the book include general telephone information, emergency numbers and process, and a fax number section. Now that

some of the bugs have been ironed out, Mary said they are working toward having telephone numbers placed directly beside employee names in the yellow pages. This was a common request. However, it will take some programming

to accomplish.

Mary reminds all Centrex users that offices and plants in Copper Cliff, the Froid-Stobie-Garson Complex, and the Levack Complex can be reached by dialing only the four digit extension number.

The long-term plan is to eliminate the hard copy altogether and have direct access on the computer system, said Mary. Until then the employees in Office Services will continue to produce Inco's answer to 'Ma Bell's' phone book.

EVH

FOR YOUR HEALTH

From the Occupational Medicine Dept.

It has been estimated that at any one time there are more than 5,000 germs, viruses or fungi around us.

Many can live for more than 15 hours in the air. Our immune system can fight off or live with most of the germs, viruses or fungi but sometimes it isn't successful and we get sick.

Why do we stay healthy sometimes and get sick at other times?

If we stay healthy, then our immune system is working well. If we get sick, then our immune system isn't strong enough to fight the infection.

What is our immune system?

Our immune system consists of the lymphatic system and white cells in the blood produced by the bone marrow and the spleen. There are 'T' cells and 'B' cells. The T cells coordinate the attack and the B cells produce special proteins for each type of invader. These attach themselves to the invader and disable it. Once these proteins are produced the immune system remembers them and if the same invader returns the immune system will fight it easily.

Unfortunately, with the common cold, there have been more than 100 different viruses that have been identified that cause it so we may not have a memory of the particular virus to which we have just been exposed. Vaccinations expose us to the weakened virus so we can produce antibodies to fight the germ the next time that we are exposed to it or they give us the antibodies that were produced by animals and purified.

Does all this happen in the bloodstream?

Some of the battles take place in the bloodstream but many of the battles between the white blood cells and the germs, viruses or fungi take place in the lymph nodes at the side of the neck, under the arms and in the groin. This often causes the lymph nodes to enlarge when we are fighting infections.

Protect yourself from every germ that comes by

What are auto-immune disorders?

Sometimes the immune system goes crazy and starts attacking parts of our own body. When this happens we say that the person has an auto-immune disease. Arthritis occurs when the immune system attacks its own joints as though they were foreign substances. Multiple sclerosis occurs when the immune system attacks the cells that insulate the nerves. The AIDS virus attacks the immune system itself so people with AIDS can die of many different diseases because their immune system is not working.

Can we do anything to make our immune system stronger?

We can do many things to keep our immune system strong and effective:

1. Eat fruit, vegetables and whole grains so that the cells have the right substances to make them strong.
2. Drink at least eight glasses of water a day so that kidneys have fluids to rid toxins from the battle between white cells and the invaders.
3. Decrease the amount of unresolved stress in your life so all the resources are used to fight the invaders.
4. Have a positive attitude so that your brain chemistry allows you to operate efficiently.
5. Get at least six to seven-and-a-half hours of sleep every 24 hours in multiples of 90 minutes so there is energy to fight the invaders.
6. Exercise to increase your heart fitness so that there is good blood exchange and all the cells of the body are nourished.
7. Stop smoking so that your circulation is at its best.

The immune system takes a few days to reach its full strength. This can be speeded up if you follow the above suggestions. If you are catching every germ that goes by try getting extra sleep, drinking lots of fluids, eating lots of fruit and vegetables, getting rid of unresolved stress and having a positive attitude to decrease the chance of getting sick.

in touch

Boys of winter beat winter blues

By Cathleen Feeley

Twice a week a spirited team of Inco pensioners generates heat on the ice at McClelland and Coniston arenas.

Many of their friends have hibernated for the winter while their "snowbird" pals can be found basking beneath the Florida sun. But this select squad of northern boys battles the winter blues with hockey.

From November to April, every Tuesday and Thursday morning means lacing up skates, fastening helmets and pulling on jerseys.

The Copper Cliff-Coniston pensioner hockey club has existed since 1978. For the players, hockey is more than a pastime. It is a life-line to staying young.

"You gotta keep moving," said Vern Johnston, mines maintenance retiree on a cold February morning.

This, he explained, is the key to staying young and maintaining a positive outlook on life. Severo Zanatta, machine shop pensioner, claims that after a morning of skating circles around the bunch, Vern can be found cutting a rug on the dance floor. The two banter back and forth on the way from the dressing room to the rink.

Severo hollers, "He plays double duty... dancing after he has been shinnying. I think he's trying to make us young fellows look bad."

And with that the two set off as their blades slice the ice of the McClelland Arena in Copper Cliff. Graceful captain of the team, 81-year-old Vern races for the puck, showing his youthful attitude on ice.

Meanwhile out on the ice, the rest of the squad starts to limber up. Elio Flora, retired maintenance supervisor, stretches his legs and makes a break for the puck. He and Hilton Fowler, retired Mills manager, reminisce about the shift leagues at Inco after the



Why do these northern boys look so young and healthy? Playing hockey is the answer for this wild bunch. Standing from left to right are Vern Johnston, Hilton Fowler, Jack Rumball, Ray Campbell, Bob Brawley, Tommy Houston and Ron Santala. Kneeling from left are Severo Zanatta, Gerry Forest, Bill McDonagh, Elio Flora, Frank Zanatta and Red Maier.

Second World War.

"Northern Ontario, Sudbury for that matter, has seen a lot of talented guys come out of this area. It has always been a popular sport here," said Elio.

He jokes that their wives never come to watch. "They are probably worried they may have to give the guys a rub-down after one of the games," he said.

There is no crowd to cheer.

The bleachers are empty.

Are these glory boys discouraged?

Definitely not. They have memories of screaming fans and overtime goals racing through their heads.

The late 1930s to early '40s offered great hockey in the north. The Sudbury Froid Tigers won the Allen Cup in 1937 and with that lured many players to town through job offers. Many young men jumped at the chance and players like Mel Hill, Murph Chamberlain and Don Grosso went on to NHL careers. Memories of these hometown greats are part of what attracts these Inco pensioners to hockey. The fellows spend a lot of time discussing the history of hockey in Sudbury and

past shift league matches.

Retired Inco garage mechanic Gerry Forest reflected on a game he played in Sault Ste. Marie with the shift league. "It was a pretty big thrill to play for 5,000 people." With a smirk he added, "we don't have those numbers watching the pensioner games, but we're not here for that, we're here because of the sport."

The rules are simple — no fighting, no body checking, no referees or goalies. The old-timers are playing on common ground.

"Most of the guys are in good shape... they know when to zig when the other zags... hockey know-how that comes with years of playing the game. We've been lucky no one has gotten hurt this season," said Gerry.

The conversation is light both on and off the ice. The fellows reflect on Inco days gone by, hockey highlights and the recent Super Bowl. A retired foreman from Copper Cliff Mills, Ray Campbell describes the weekly matches quite simply. "We just pass the puck and shoot. It's a great sport. Every Canadian boy's

dream is to play in the NHL. Every time we touch the ice our boyhood dreams are remembered."

Ray sees the shinnying as an excellent way to stay in shape and it keeps him young. "Besides," he said, "these are a great bunch of guys and none of them know how to fight."

Despite frequent breaks by players the game goes on. There is no time to be wasted while someone warms up the bench. The passion of the game and jeering from teammates slowly spurs them back on the ice.

"What's the hurry," hollers one player to another, "do you sense a break-away coming on?"

"Hey, hey, get out there Vern before I hit ya," teases Ray. While Vern retaliates with "you already did why do you think I'm on the bench." They shake their sticks at each other and before you know it are back in the swing of things on the ice.

A spectator at a Tuesday game would witness laughter and camaraderie. Ageless jocks just trying to keep up with the next guy. These men have passed the tradition of hockey in the north down to their sons and grandsons. Their fathers once took them to 6 a.m. practices and today some of these pensioners trek out to games with their grandchildren. To these pensioners



Trying to get the puck past veteran Elio Flora, 69, retired maintenance supervisor, is no easy task for the opposition.

the history of hockey is more valuable than even the richest ore body mined at Inco.

A leisurely skate off the ice. It is 11 a.m. and another Tuesday game has come to an end for these players. Aches and pains may be felt yet not a word is uttered about them. Jokingly, the 'three stars' of the match are determined, activities of the week discussed and echoing through the halls of the arena are promises and challenges for the next match.

The Copper Cliff-Coniston pensioner hockey club also includes Inco hockey enthusiasts Ray Campbell, Bob Brawley, Frank Zanatta and Albert Rebellato. Other die-hard players are Jack Rumball, Bill McDonagh, Ron Santala, Tommy Houston, Dave Gobbo, Steve Buchowski, Bill Pakkala, Bill McLelland, Buddy Ellis, Bob Mulcahey and Bill Drury.

The skaters' waltz

Free skating is available to all Inco pensioners. Join fellow pensioners at the McClelland Arena for winter recreation, a sure cure to fight the winter blahs.

The skate takes place in Copper Cliff at McClelland Arena Monday 9 a.m. to 10 a.m., Tuesday 11 a.m. to noon, and Friday 9 a.m. to 10 a.m. On Thursdays adult skating takes place at Countryside Arena from 11 a.m. to noon.

Familiar faces at the skating events include Inco pensioners Owen O'Reilly, Bob Pawson, Bill Doherty, John Rickaby, Frank Zanatta and Ross Elliott. The skating is offered through Parks and Recreation and no registration is necessary.

Sharpen your skates for free wintertime recreation.

In Memoriam

NAME	BORN	DIED	YRS SERVED
Bastiani Giuseppe	03/27/13	01/10/95	21
Beaudry Avery	10/16/16	01/22/95	38
Bourgoin Gerald	12/05/30	01/27/95	26
Boulton Albert	10/14/12	01/21/95	32
Burke Frederick	04/22/05	01/19/95	31
Carbone Frank	05/20/49	01/02/95	24
Davidovic Ray	10/05/19	01/05/95	29
Farmer Paul	09/23/21	01/10/95	40
Gaudette Rene	04/21/28	01/18/95	37
Hickey Peter	01/15/34	01/26/95	35
Hutson Garven	06/30/14	01/02/95	35

Laliberte Joseph	06/21/19	01/16/95	20
Langlois Osias	03/09/02	01/22/95	23
Levesque Michel	08/23/50	01/23/95	23
Minor Nelson	02/11/28	01/09/95	33
Nadjiwan Robert	04/05/14	01/15/95	39
Pilon Archie	10/31/11	01/23/95	26
Sauve Robert	10/06/42	01/09/95	31
Slater Wilfred	05/03/06	01/06/95	34
Smith Joseph	03/28/35	12/27/94	16
Tang Howard	04/28/33	01/18/95	26
Van Den Elzen Martinus	04/01/31	01/30/95	26



HERITAGE THREADS

by Marty McAllister

I love bookstore bargains.

And the thrill of acquiring a beautiful new hardcover at 75 per cent off is further enhanced when I get back home and methodically peel off the sale sticker . . . proudly shelving my latest addition, binding to brazen binding, with volumes that may have cost \$20 or more.

If, when I get around to reading the book, I find myself liking it too much, it isn't uncommon to feel a fleeting twinge of guilt that a fellow writer was paid so little. That's exactly what happened with *There's A Country In My Cellar*, by Russell Baker.

Learning from a master . . .

For this precious book, Baker intended to select the best of the columns he had contributed at the New York Times, twice weekly, for nearly 30 years. "Reader," he writes in the introduction, "until you have tried it, you cannot imagine the stupor that results from reading 2,945,000 words spread through 3,800 newspaper columns. First, you lose the power to tell good from bad, then to tell what time it is. Somewhere around column number 600 you start hating everything this man writes. By column number 1,500 you hate the man who writes it. Never mind that this man is you . . ."

"The mental distress produced by this exercise quickly destroys all judgment, making it impossible to tell best from worst."

I think he could simply have chosen at random, because Baker's worst would likely read better than the best of most . . . mine included. Indeed, this Pulitzer-prize winner from one of the biggest papers on earth has a lot more on me than just 13 birthdays, but it's gratifying to know that he, too, is his own worst critic.

Baker makes no claim that his book responded to the urging of friends and colleagues . . . but I can't help wondering if there's a Bob Bryson in his circle.

Threads or yarns?

Bob may think I've forgotten, but flattery is a very good glue for slippery memories. Maybe three years ago, at one of Sudbury's recycled restaurants, while our wives got to waiting, Bob and I got to chatting. He said a kind word or two about my columns and opined that I should put them all into a book. "I'll buy the first copy," he offered.

I figured then, and still fear, that Bob's 'first' copy might be the only paying copy, absorbing all production costs . . . with the rest ending up on the bargain table (never mind the justice in that). I doubt he wants it that badly. Nevertheless, it was a nice thought . . . and it recently bubbled to the

There's a family in my cabinet

(Part One)

surface as I reviewed all my past Triangle columns and stories to see what I had perhaps duplicated or left out.

There was too much paper to spread out in my little upstairs study, so I brought the pile of semi-old Triangles down to the kitchen table, in happy proximity to the fridge. I leafed through, cutting out my intellectual offspring, and then sorted them into the good, the bad, and the readily-forgettable.

And I read every column since April, 1989 . . . all 58 of them. Even with my brag file fattened by a handful of feature stories, I was still a full career away from Baker's 3,800 columns. My chore should have been simple and straightforward.

Staying with the pattern

In the preamble to my first column, I promised I would "try to gradually weave a tapestry that would give some appreciation of events that played a role in establishing one of the world's truly great industries and its surrounding communities."

Talk about a driver's side windbag.

Now I'm scolding myself, although the flaw in my objective wasn't intentional: "It wasn't the events that played the roles, stupid . . . it was the people."

It wasn't hard to figure out, even for me.

My computer, I finally woke up and remembered, has a dandy little program that the hackers among you would recognize as a data base. It only made sense to use it for listing all these resurrected columns and stories by category. Incredibly, then, that's what I did. The resulting report tells a lot about how I've used my space, and, more importantly, helps me identify what categories you folks like (and dislike) most. It told me, in fact, exactly what you've been telling me in writing, and to my face, all along.

And what was that? Well, surpassing even the common fondness for stories about our early days, your greatest preference has been for tales about people, places and events that you either remember personally or identify with in some way. Those stories, big surprise, all ended up in what I call my 'Inco Family' group. So, if I expected to do more of a good thing, it seemed appropriate to go back for a closer look.

As I did so, I was struck by the profound changes that have occurred within this family in so short an eternity as six years. Many stories, written to stay relevant for decades, are already in need of an epilogue.

I knew change was coming, of course, but . . .

**** to be continued ****

Coordinating benefits 'a win-win situation'

Inco has broadened its guidelines for coordinating medical benefit plans to include cases where both spouses are employed by Inco.

Until now the procedure for coordinating these benefits contained no provision for situations where both spouses were Inco employees or pensioners.

"The original guidelines for coordinating benefits still apply where an employee's spouse is employed elsewhere," said Benefits administrator Diane Olivier.

"It's a win-win situation. The proper coordination of benefits allows the company to contain costs and allows employees to enjoy the coverage to which they are accustomed. Coordination simply allows us to allocate the costs to the proper source."

Under the benefits coordination program, if an employee's spouse has medical coverage from another source (i.e. an employer other than Inco) they must use those benefits first, then submit claims under Inco's plans.

"The important thing for employees to realize is which benefits plan is used first in cases where claims are submitted," said Diane. "Obvi-

ously, if an employee or a spouse submits a claim, they must use their own benefits first.

"If a claim is filed on behalf of a dependant, then the benefits plan used first is that belonging to the parent whose birth date falls closest to the beginning of the year."

In both scenarios, secondary or surplus claims are made under the partner's benefits plan.

Here is an example to explain how coordination of benefits applies when both partners are employed at Inco:

Husband John and wife Mary are Inco employees who have \$225 coverage.

Their daughter Jane has been prescribed a pair of \$300 glasses.

Mary's birth date falls closest to the beginning of the year, so the vision claim for Jane is processed under Mary's plan first, with any remaining balance being processed under John's claim. Here is the calculation:

Jane's glasses	\$300
Mary's plan	\$225
	\$ 75 — balance

The balance is then submitted under John's plan as follows:

John's plan	\$225
Balance	\$ 75
	\$150 — Remaining coverage in John's plan for Jane.

By coordinating the benefits the entire vision claim was paid.

"Employees have the same amount of coverage or more," said Diane, "but it's coming from two different sources."

The coordination of medical benefit plans is also available to pensioners. However, in order to provide this service the Benefits department must update its records.

Since the department's records have already been updated to reflect coordination of benefits coverage provided from a source other than Inco, only those employees and pensioners who are either both employed or retired from Inco are requested to complete an application form which may be obtained from the Benefits office at the Copper Cliff Clinic or by calling (705) 682-6676.

Note: Any changes to your personal status must be reported to ensure proper payment of claims: (i.e. marital status, date of birth, full-time student, coordination of benefits, addition or deletion of dependents).

Heavy reading



Nickel Belt MP Ray Bonin studies some of the 1,500 names of Inco employees and suppliers who signed petitions stressing the importance of the mining industry in Canada. Bob Shaw, a training supervisor in the Mills and Transportation department with 30 years of service in March, presented the Keep Mining in Canada petitions to the Liberal member just before Christmas. Mr. Bonin told his House of Commons colleagues that in this age of technological transformation, Canadians often forget that mining and natural resources continue as an economic force. He said he agreed with the Keep Mining in Canada Campaign's call to the government to do all that it can to improve "the slumping mining investment climate in Canada" so that mining will continue to provide jobs for Canadians.

Inco pair help 'police' city streets



Constable Jerry McElrea and Sergeant Ben Proulx serve the Sudbury Regional Police Auxillary when they're not working at Inco.

It's a well known fact that many Inco employees are very community oriented and donate their spare time as volunteers. Some are involved in sports or service clubs and some are even firefighters.

Another organization a select few are involved with is the Sudbury Regional Police Auxillary. This program was initiated to assist regular officers of the Sudbury Regional Police Service who would otherwise work alone. The group was formed in 1992 and is comprised solely of volunteers with an interest in police work.

The Police Auxillary currently has a complement of 24 officers and two sergeants. Their main role is to bolster the number of regular police officers on the street.

Two members of the Sudbury Police Auxillary are Sgt. Ben Proulx and Constable Jerry McElrea.

Ben has been involved with the Police Auxillary for three years. When he's not patrolling a beat, he works for Inco at North Mine and has 28 years of service.

Jerry is a two-year volunteer who works at Inco's Crean

Hill Mine where he's spent four years as a maintenance mechanic.

"A Police Auxillary officer rides along with the regular officers and performs duties under their (regular officer) direction," Ben said. A few of these duties include spot checks, traffic control, first aid, parade control and going into schools to talk to students.

"Normally officers ride alone and we're not considered as a two-person operation and we're not a back-up. We just assist the offic-

ers," Ben said. The Police Auxillary is headed by Inspector Brian Jarrett and Staff Sgt. Brian Grisdale. Their job is to coordinate assignments and time schedules with the volunteers.

Mostly, the auxiliary officers are based in the downtown core. However, they can be sent anywhere in the Sudbury Region. It all depends on where they are needed the most.

Training to become a Police Auxillary officer is not as intensive as the training required for regular police offic-

ers. Nevertheless, the training lasts three months and includes a crash course in law, as well as a physical fitness program.

"We have to know our rights as citizens, like the power of arrest. We also have to know the Liquor Control Act and all the other Criminal Code Acts," Jerry said.

"Basically it's what to do and what not to do," he said. Other training includes first aid and tactics in the use of force and firearms training, even though auxiliary officers do not use firearms.

"We still have to be qualified in case of emergency," Jerry said. "It's the same as Inco, you have to be qualified to use Inco equipment."

After all of the qualifications have been met, the auxiliary officers have to volunteer a minimum of 20 hours per month, with each shift lasting at least 10 hours. However, the volunteers have the opportunity to contribute as many hours as they wish.

Reasons why people volunteer as auxiliary officers are as varied as each individual. "It's something I've always wanted to do. It gives you the opportunity to look at the other side of life and that's why I've been involved from the beginning," Ben said.

In Jerry's case, it has been a life-long dream. Becoming a police officer is a dream he's never had the chance to pursue.

"Basically it's something I've always wanted to do, so when this came along I tried it out to see what it was like," Jerry said.

Both men agree that volunteering for the Police Auxillary is rewarding. They also agree it doesn't have the non-stop, heart pumping action depicted on some television police shows.

Port Colborne

Port Colborne Refinery achieves ISO certification

There was more to celebrate this Christmas than the holidays in Port Colborne. The employees of the UFAP Department set a plant record by producing the 173rd heat on the #5 Utility Nickel Furnace.

Supervisor Dave Stremmlaw credits teamwork for the success of the furnace which operates at 2,900 degrees Fahrenheit and is charged with 500,000 pounds of feed materials per heat.

Dave also cites several design improvements which have taken place over the past few years. The use of a higher alumina content brick and the re-design of the refractory layout, he points out, have helped increase the longevity of the furnace.

The members of the Cobalt Hydrate Action Team also marked a first with their ideas on how to reduce nickel powder dust in the workplace. Historically, fine nickel powder has been used as a reducing agent in the copper removal process. In the past, final product Chemical Grade Nickel Powder was removed from stock and vacuumed into nickel bins. The problem was, however, this required extra manpower, reduced the final product inventory of powder and led to scrap drums. In addition, it was a cumbersome job which could potentially lead to a dusty work area if there was any spillage from the MaxVac equipment. After careful consideration the Cobalt Hydrate Action Team decided to send the nickel bins to Copper Cliff where they have the equipment to fill them in bulk.

The results speak for themselves — the cost of obtaining the nickel is roughly the same and the dust problem has been eliminated ensuring improved environmental conditions in the workplace.

The Cobalt Hydrate Action Team consists of leader Heintz Mantej, Moreno Francescangeli, Jack Bidgood, Chris Szalkai, Heiko Leers, Marc Banning and Don Peressotti.

In other environmental news, the Port Colborne Refinery is now recycling cardboard. Cardboard recycling bins have been placed in various areas around the plant. These bins will in turn be emptied into a 30 cubic yard container at the west side of #6 building for subsequent collection and recycling.

To date, PCR employees have done an impressive job of recycling and their efforts have reduced domestic garbage pick up from three times per week to once a week.

And don't forget about Santa Claus.

The jolly old elf outdid himself at this year's Children's Christmas Party held at Port Colborne's Guild Hall December 4. Many children turned out to sit on Santa's knee, enjoy their gifts and even take part in some balloon sword fights.

There was also plenty of Christmas cheer for the adults. On December 10 the refinery held its annual Christmas Dance at the Croatian Hall in Welland. There was a good turnout for the event which was enjoyed by all.

Yesterdays todays



40 Years Ago

Doing things in reverse is usually clumsy and inefficient, but driving a shaft from the bottom up, instead of from the top down as it is usually done, speeded up the work at Frood-Stobie by 20 months and saved many hours of labor.

Completed in 1953, No. 8 shaft was excavated by driving upwards at the same time from each of five crosscuts, opened from No. 7 shaft 100 feet away, at 400-foot vertical intervals.

The pilot raise was then widened to full size and concreted, by working from the surface down and drawing off the broken rock at the bottom.

Used exclusively for hoisting ore, the shaft was equipped with a semi-automatic hoist, driven by two 3,000-horsepower motors capable of delivering a 15 ton payload 3,000 feet per minute to the surface.

Other stories that month were: 'Pick Best Brigades in Annual Contests for Fire-Fighters', 'Big Activity Range at Inco Recreation Hub, Port Colborne', 'Almost 15,000 Inco Children Thrilled at Annual Christmas Entertainments'.

25 Years Ago

"Shaping the destiny of International Nickel's metallurgical operations both at home and in many countries abroad, the Inco research station complex at Port Colborne has during the past 10 years been the proving ground for sweeping innovations in the nickel industry," said the Triangle.

That was the lead paragraph in its February issue in 1970, describing the Port Colborne research complex.

Taking new process ideas which were brought through the 'test tube' and mini-plant stage at Inco's J. Roy Gordon research laboratory in Toronto, the Port Colborne complex was credited with developing two new processes — the oxygen top-blown rotary converter and the Inco

pressure carbonyl process, used in the Nickel Refinery in Copper Cliff, plus many other innovations.

Twenty-five years ago, the largest known reserves of nickel in the world were in Cuba, Guatemala, New Caledonia and Indonesia. In its small-scale facilities in the three basic areas of metal extraction — pyrometallurgy, hydrometallurgy and vapometallurgy — the Port Colborne complex was also making a determined effort to develop new, more economic processes to develop these lateritic deposits.

Other stories that month were: 'Five New Vice-Presidents Elected by Inco Directors', 'Did Mighty Meteorite Blast Sudbury Basin', 'More Fun Than Fury But Shift League Going Big'.

15 Years Ago

After 40 years of servicing Inco and, in its younger days, the city of Copper Cliff, the main switchboard at the General Office in Copper Cliff was being partially replaced with a new SL-1 telephone system that was capable of providing speed calls, setting up conference calls and notifying a user when an internal number he tried was no longer busy.

"It increases our capacity to handle all calls," said Mary Sitko, then office communications co-ordinator. "The whole system will have the ability to expand because it's computer-controlled and software programmable."

The old switchboard had been a stalwart performer in its time, said Pat MacDonald, Inco's switchboard operator before modern technology put it on the scrap heap. "It needed very few repairs, just routine maintenance and replacement of telephone plugs," she said. With faster push buttons on the new system, instead of a dial, she expected it would save a lot of wear and tear on her dialing finger, too.

Other stories that month were: 'Inco Metals To Study Snow Protection Devices for Railway Switches', 'First Of Company/Union In-Term Talks Held', 'Garson Mine Wins All Mines Safety Award'.



INCOME ideas

by Susan LeMay, CMA

Two big issues to remember when filing '94 tax returns

It is almost time to file 1994 tax returns and although the year is over there are still a couple of things you can do to ensure that you pay only as much tax as is necessary.

There are two big issues. These are your RRSP contribution and, for this year only, there is also the Capital Gains exemption. Then there are the smaller issues like making sure you have:

1) Receipts: charitable donations, safety deposit box, investment counselling, interest expense on money borrowed for investment purposes, RRSP administration fees, children's tuition and education deduction receipts (if the student has not earned enough to claim these for credits).

2) Any receipts for medical/dental expenses not covered by insurance plans. You probably won't get to make any claims here unless someone has had a lot of orthodontic work done in the past year. But if you do have a claim,

then every receipt counts.

Capital Gains — no action required

Capital Gains and using your Capital Gains exemption are the most discussed issues for your 1994 tax return.

Should you be concerned? There are a number of areas where there will be no effect.

1) Your principal residence currently attracts no Capital Gains when you sell it. So, the increase in value that occurs between the time you buy and the time you sell is not a tax concern.

2) Capital Gains inside your RRSP are taxed as regular income when you withdraw funds from your RRSP. No need to be concerned about these Capital Gains.

3) Real estate, other than your principal residence, purchased since March of 1992 is not eligible for any Capital Gains

exemption consideration, so there is nothing to do here.

4) The Capital Gains exemption remains in place for gains on shares of qualified small business corporations and for qualified farm property.

Capital Gains — What to lock in

You may choose to take action on other Capital Gains if you have not already used your \$100,000 Capital Gains Exemption. There has been a great deal of publicity about electing to declare your Capital Gains up to February 22, 1994. This sounds complicated but it really is not. You simply assume that you sold items which attract Capital Gains to yourself as of February 22, 1994. You can choose which capital items to claim a gain on and which to leave alone. You do not claim capital losses until the property is sold.

1) If you own shares in publicly traded companies like

Inco, or units in mutual funds, you can 'elect' to recognize the gain in value since you purchased these.

2) If you own real estate, other than your principal residence, you may lock in the gain and use your Capital Gains exemption. This gain is subject to an adjustment for the period from February 1992 to February 1994. I wrote about the steps you should take regarding your camp last summer, and the rules for getting an appraisal also apply to rental properties and to other real estate investments.

Is it worth claiming your Capital Gains now?

If you have any part of your exemption left and you are not receiving any government tax credits like Ontario Tax Credits, or GST rebates, or the Old Age Security supplement, then yes, it is worth the extra time now. At an income level over \$30,000 including the gains you claim, you will

save at least \$30 in future tax payments for every \$100 in capital gains you elect to claim now. The cost of making the claim is \$0 in tax owed this year.

RRSP Contributions

We all know that RRSP contributions are important, both for the future and for the immediate reduction in personal taxes. One of the rumors concerning the upcoming budget is that the government may change the rules for RRSP deductions. Making your contribution before budget day is a wise move since changes in the rules usually take effect on the day of the budget, just as the Capital Gains changes did last year.

Most of us have very few options for minimizing the tax we pay, so we have to take advantage of all that are available. No one is going to ask if we have forgotten to claim deductions we are entitled to.

I heard it down at . . .

The Dry



by Jerry Rogers

An inventive decade in the making, Inco's \$630 million Sulphur Dioxide Abatement Project has understandably garnered a number of rave reviews of late. The most recent, under the headline of *Big polluters pass acid test*, came in the Toronto Star in late December. The Star analytical commentary tells the acid rain story from the political perspective. And while an adequate description of the political times of the late 1980s, it doesn't really capture the magnitude of effort carried out by Inco scientists, engineers, employees and consultants.

Meeting the Ontario government's tough provincial regulations for sulphur dioxide emissions — in Inco's case, reducing emissions to 265,000 tonnes from 685,000 tonnes — was a staggering undertaking. It was considered especially ambitious because when the program was announced in 1985, the technology to meet the target didn't exist.

Three years later, Inco announced it had accomplished what was thought to be unachievable. It had developed new technology and processes to meet the targets. Most of the research was conducted by Inco scientists and engineers at the J. Roy Gordon Research Laboratory in Mississauga, the Port Colborne Research Station, Sudbury's production facilities and the Thompson operations in Manitoba.

The story of how the Smelter was designed to become a state-of-the-art facility for the 21st century has been able to tell in the Inco documentary, *Clearing the Air*.

To get a sense of the size and scope of the Smelter program, consider these intriguing examples (courtesy of the folks at General Engineering) of materials and manpower that were needed:

- 34,000 cubic yards of concrete;
- 22,000 tonnes of steel;
- 70 miles of piping;
- 800 miles of electric cable;
- 1.4 million engineering manhours;
- 3.86 million construction manhours;
- 4.5 years of construction, from the time the first shovel was put into the ground until completion.

Seedlings shine in Sudbury events

Now in its 11th season, Inco's pine tree seedling program continues to flourish with a lot of tender care.

But, fingers are crossed that this winter is less harsh than last year when frigid temperatures and the lack of snow cover took their toll on the 1994 seedling crop. More than 27,000 seedlings overwintering outside the Copper Cliff Greenhouse were killed last winter while another 19,000 fell victim to a fungus at the Creighton greenhouse. Up to six per cent of each crop is normally lost because of poor germination or through thinning by hand since each small, round peat pellet bears two pine seeds.

Coordinator of Decommissioning and Reclamation Paul Yearwood is the source of these arcane facts. As this winter's crop of 135,000 red and jack pine seedlings is nurtured, did you know that:

- Inco planted 118,000 seedlings in the Nolin Creek Watershed last year and another 3,000 at the Howland Pit.
- More than 75,000 seedlings were gifted for such events as Prime Minister Jean Chrétien's visit (1,000), Ontario Mining Week (1,500), the Coniston Improvement Committee (1,500), two special tree planting activities for the Boy Scouts (6,000) and the Copper Cliff Public School (4,000), the Walden Regreening Committee (5,000), and Science North for the Big Nickel Mine (3,000).

Inco still an attractive employer

Ray Joly has seen a lot of changes in his close to 30 years in Inco's Employee Relations' department. But even Ray was dumbfounded by the surge of applications when news circulated by word-of-mouth a couple months back that Inco was doing some limited, selective hiring for miners.

From the hundreds of calls and applications that poured in, Ray is convinced that Inco is still a powerful draw as an employer of choice.

"From my point of view, it means that Inco is a good employer, a place where people really want to work," he says. "I've heard so many times in the last year that Inco's been around for a long, long time, Inco is security while the new economy today isn't like an Inco kind of company. The new economy, to me, seems part-time work, no benefits, no security."

Cycle of Life II

For sports trivia buffs, Ron Dossenbach's 24-hour record for stair climbing last month in Detroit is a milestone.

For North Mine foreman Bill Narasnek, Dossenbach is his old racing nemesis. Dossenbach, 41, set a world record by climbing 85,420 steps in 24 hours. Put another way, he climbed to the top of Detroit's Westin Hotel 78 times.

Dossenbach's moment back in the limelight rekindles memories of the summer of 1991 when Bill shattered the Windsor man's record for crossing Canada on a racing bicycle. In 1988, Dossenbach, an organist and church choir director, rode into the record books after 13 days, 15 hours and 4 minutes on the Trans-Canada Highway.

Bill claimed the record in 1991 by making the same trip in 13 days, 9 hours and 6 minutes. His rival tried to take back the record two years later but ended up in hospital with

Glowing reviews for Smelter of the 21st century

a damaged Achilles tendon.

There hasn't been a day since setting the record that Bill, 48 and closing on 30 years' service with Inco, hasn't thought about what he achieved running under the fundraising banner of Cycle for Life. Pressed by friends and supporters, he's even written a book about the record and is shopping around for a way to publish it.

"I think about it every day," Bill says from his Lively home where he trains daily on a bicycle in the basement. "Things just come into my mind. In terms of the number of miles, the physical aspects of it, it's too staggering, it's scary. When I look at it now, yes, it was impressive."

Bill wishes old foe Dossenbach the best but he's too much the gentleman to criticize stair-climbing as an athletic event. It has yet to be recognized even by the Guinness Book of Records.

Bill still gets requests to speak about his record-setting pace and it blows listeners away when he tells them what it was like cycling from Vancouver to Halifax.

"My son lives in Burlington and I tell people, as a reference point, it (racing across Canada) was as if I got up in the morning in Lively and rode to Burlington every day."

That's 451 kilometres a day on a bike for two weeks. Ouch!

Francophone play has Inco ties

By the time you read this, Eddy, Montreal playwright Jean-Marc Dalpe's play about a small-time Montreal boxing trainer, will have come and gone from the Theatre Francais de Toronto. But the play has strong Sudbury and indirect Inco ties. Eddy, the aforementioned trainer, hails from Sudbury and pins his hopes on making it to the big time on his young nephew, Vic, who arrives in Montreal from Sudbury and Inco to become a boxer. Vic first appears on stage wearing an Inco baseball hat from Copper Cliff. An English language version of the play called *In The Ring* played at Stratford this summer . . .

South Mine supplyman Michael Paquet and construction leader Fred Belanger were highlighted in the Jan. 30 edition of *The Northern Miner* for their success story in discovering a wealth of recyclable scrap steel, repairable equipment and refundable items in the mine's backyard. The article was reprinted from the Triangle . . .

Whatever happened to . . . ?

Watch for an upcoming Triangle feature on Georgette Bergeron. Georgette, who retired seven years ago with 25 years' service as a nurse with the Copper Cliff Clinic, still works part-time at the clinic two days a week while studying at Laurentian University. Her 20-year passion has been working in Third World countries. She and some other Sudburians leave next month for two weeks in the slums of Kingston, Jamaica. There, they'll build houses, paint and repair schools, nursing homes and orphanages. "It's the need, I think," she says by way of explanation. "I look at the people in need. They're not stupid. They were born at the wrong time in the wrong place." Anyone wanting to help out with the Jamaican project can call Georgette at 969-2192 . . . Dan Topo is as busy volunteering today as he was for 36 years as an industrial relations representative. A member of Cable 7 TV's advisory board, Dan is a community television volunteer when he's not travelling or putting around the house. While he misses Inco people and the action, he adds that a pensioner can always be found around the corner . . . George Franco spent a lot of his 39.5 years as a cottrell operator at the smelter on shift work. So he's happy with retirement, swimming in the Gatchell pool, visiting other pensioners and travelling to Florida one year, Germany the next . . . Walter Byrko took retirement in 1991 after 31 years as an industrial maintenance mechanic with Central Mills. Retirement suits him since he's busy at home, weathering winter . . . Nobody ever said that Fred Neubert didn't pull his own weight when he was a South Mine welder for 33 years. Now, in retirement, Fred easily benchpresses 290 pounds, laughingly noting that "those young fellows can't even do 225." Staying active is the key, says Fred, 62, who downhill skis, swims, walks the dogs and works out daily at Cambrian Fitness.

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for employees and pensioners of the Ontario Division of Inco Limited. Produced by the Public Affairs Department. Members of the International Association of Business Communicators.

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