

INCO Triangle

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Ontario Division

1990



Port Colborne's refinery is under siege by these odd invaders. See Page 4.

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Discoveries build urgency for neutrino observatory

Questions raised by startling new findings in the field of high-energy physics have made Creighton Mine's Sudbury Neutrino Observatory more crucial than ever for finding the answers.

Even while Inco miners are 2,000 metres below the surface carving out service facilities for the \$50 million observatory, discover-

ies in Russia have the international scientific community waiting with bated breath for the day they can turn the key on the Inco-based SNO.

A Soviet-American Germanium Experiment (SAGE) at the Baksan Laboratory deep inside one of the Caucasian mountains in Russia has shown no neutrinos in a low energy region where high

numbers were previously expected to be.

The result adds to the puzzle of two other neutrino measurements, one in the United States and one in Japan, which show only one third the number of solar neutrinos expected from the best theory for our sun.

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Public interest is the key to curing misinformation on mining industry

A general lack of knowledge about the mining industry, coupled with an obvious hunger for information, made Inco's involvement in Ontario Mining Week a success.

"Unbelievable" is how Karen DeBenedet described the interest shown in an Ontario Mining Week exhibit held in Toronto recently. "We had somewhere between 7,500 and 8,000 people tour our exhibit," said the Sudbury-based Ontario Division public affairs coordinator. "It was very evident that many people don't know much about us and the mining business. But it was also evident that people are very interested in finding out."

The Ontario Mining Association-hosted event, held in cooperation with the Ministry of Northern Development and Mines and other mining organizations, was part of Ontario Mining Week. The purpose of the event was to focus public attention on the importance of mining both in Ontario's social and economic development and as an investment opportunity.

The event also demonstrated the link between minerals and the products which are used in our daily lives.

The industry's contributions in environmental protection, worker safety and improved technology was also emphasized, as was the encouragement of mining as a career for young Ontarians.

Karen said the exhibit's location in the heart of the provincial corporate and commercial district made the display particularly effective.

The event was held in Commerce Court at the corner of King and Bay Streets.

"I found people not too well informed about Inco," said Karen. "While I don't think the increased awareness is going to boost sales

noticeably, I believe it will make a difference when we (Inco) try to present our side of the story. If people lack information, they often make negative assumptions. More information helps people to understand the mining industry a little better.

"There's no question that we met the objectives of the Mining Association and at the same time, heightened the profile of Inco.

Karen, one of several Inco representatives at the exhibit, said the display included pictures of end use products and Inco operations as well as pamphlets and literature that "disappeared fast."

"Torontonians carried away many samples and would have taken more, but we ran out."

Continuous Mining Systems of Sudbury also had a two-boom jumbo drill on display.



Big Booties

Denis Turgeon, 5, grandson of Special Mining Team member Earl Picott, tries to fill some very big shoes while Inco pensioner and volunteer fireman Walter Zieleniewski waits with the coat. The action was part of Fire Prevention Week activities, a cooperative effort in which Inco participated. For story and picture, see Page 15.

Symbolic Flyby

A fully-loaded Grumman Ag-Cat and the superstack have more in common than first meets the eye. The stack symbolizes Inco's continuing efforts to reduce sulphur dioxide emissions, while the biplane is Inco's latest experiment in its long-standing revegetation program. For more pictures and story, see Pages 8 and 9.

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Utilities safety record hits million hour mark

Central Utilities crews don't exactly sit around on their hands.

"A good 50 per cent of our people are involved in maintenance," said safety supervisor Vince Perdue. "They operate in places where safety is a major consideration."

That's why the approximately 160 members of the department point with pride at the banner that proclaims an admirable safety record of one million hours with no Lost Time Accident and a first-place standing in the Division's overall safety standings last year.

The record spans a five year period. The unit can barely remember the last lost time accident five years ago. Central Utilities handled the sewage treatment plant (now taken over by Central Mills) during the five year period. Crews operate the Oxygen Plant and do non-destructive evaluations that test lines, hoses and other systems. They survey in places as far away as the Spanish watershed where Inco operates power dams and plants.

"No doubt about it," he said, "our people do the kind of work that, if you're not careful, you can get hurt."

He credits the establishment of Inco safety-oriented programs such as Failsafe and the WHMIS (Workplace Hazardous Materials Information System) programs as contributing to the achievement, but points out that such programs require the cooperation of employees to work.

"Our people are conscious of safety," said Vince. "We have diligent Failsafe committees. It's an ongoing thing here. We wouldn't have reached this goal without the attention of everybody."

Morale, enhanced by good communication and a family atmosphere among all levels, is another reason for the impressive record. "We have an excellent working relationship with all levels of management here," he said. "That makes for good communications, and in turn, safety is enhanced."

Vince is hesitant about setting the next goal. "We'll go as far as we can," he said. "The Nickel Refinery's 1.8 million hours is in the back of our minds, but we don't want to set any goals just yet. We want to be the best in the business, that's all."

Like all Inco workplaces, the high priority assigned to safety can be seen everywhere at Central Utilities. Posters are everywhere and regular safety meetings are held where issues relating to safety are discussed.

"It's not just a once-a-year lecture," said Vince. "We keep at it all year."

The record makes the company smile as well. "On the surface, it may look like safe, cautious procedures reduce productivity, but that isn't the case. It is exactly the opposite. Working safely is working productively."

Utilities Superintendent Claude Kerr saw the accomplishment much

the same as Vince. "Without the commitment and effort by all our

employees to follow procedures and work safely, this outstanding record

would not have been possible," he said.



Central Utilities employees show off a banner marking their achievement.

Are we in a recession and how will it affect us?



Henry Fabianiak, miner, Creighton: "No doubt, we're in a recession, but the price of nickel is reasonably high and there aren't the stockpiles that there used to be, so I think we'll be okay. The international nickel demand will keep us afloat, at least I hope so."



Noel Caya, miner, Creighton: "We are definitely in a recession, but I don't think it will affect us here at Inco. We are more or less on an international market, so I don't think we'll be too severely hit."



Gary Murphy, Construction workman, Little Stobie: "I doubt that the recession will hurt us that much. I can't see a repeat of the early '80s when people were laid off. Unless the price of nickel drops too much, of course."



Oscar Baronette, garage mechanic, Frood Mine: "With the price of nickel where it is now, I think we can survive as a company. But it could drop more. I think what's happening in the Persian Gulf could affect us in the future. In the long run, everything is tied to oil and it could affect our costs."



Joseph Croteau, truck driver, Transportation: "The way everybody is talking, it sure looks like a recession is coming. I would say there's a possibility that it could get as bad as the early '80s, depending on how long it lasts. It's hard to tell."



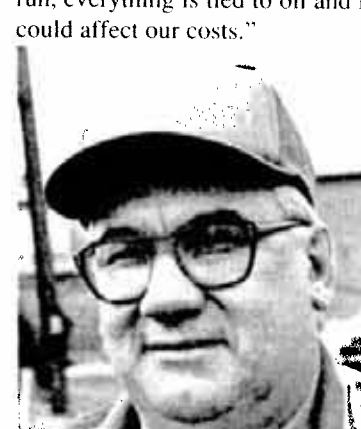
Michael Dopson, parks equipment operator, Agriculture Department: "I can't see much of an affect on Inco. We've had prices go up and down in the past and it hasn't caused any serious problem. I think the company's pretty efficiently run, so we will survive."



Dan Langin, miner, Little Stobie: "It might be a little too early to say if the recession is going to affect us here. There are a lot of other things happening right now, like in the (Persian) Gulf. We've weathered hard times before and I figure we can again. Conceivably, though, it could get as bad as the early '80s."



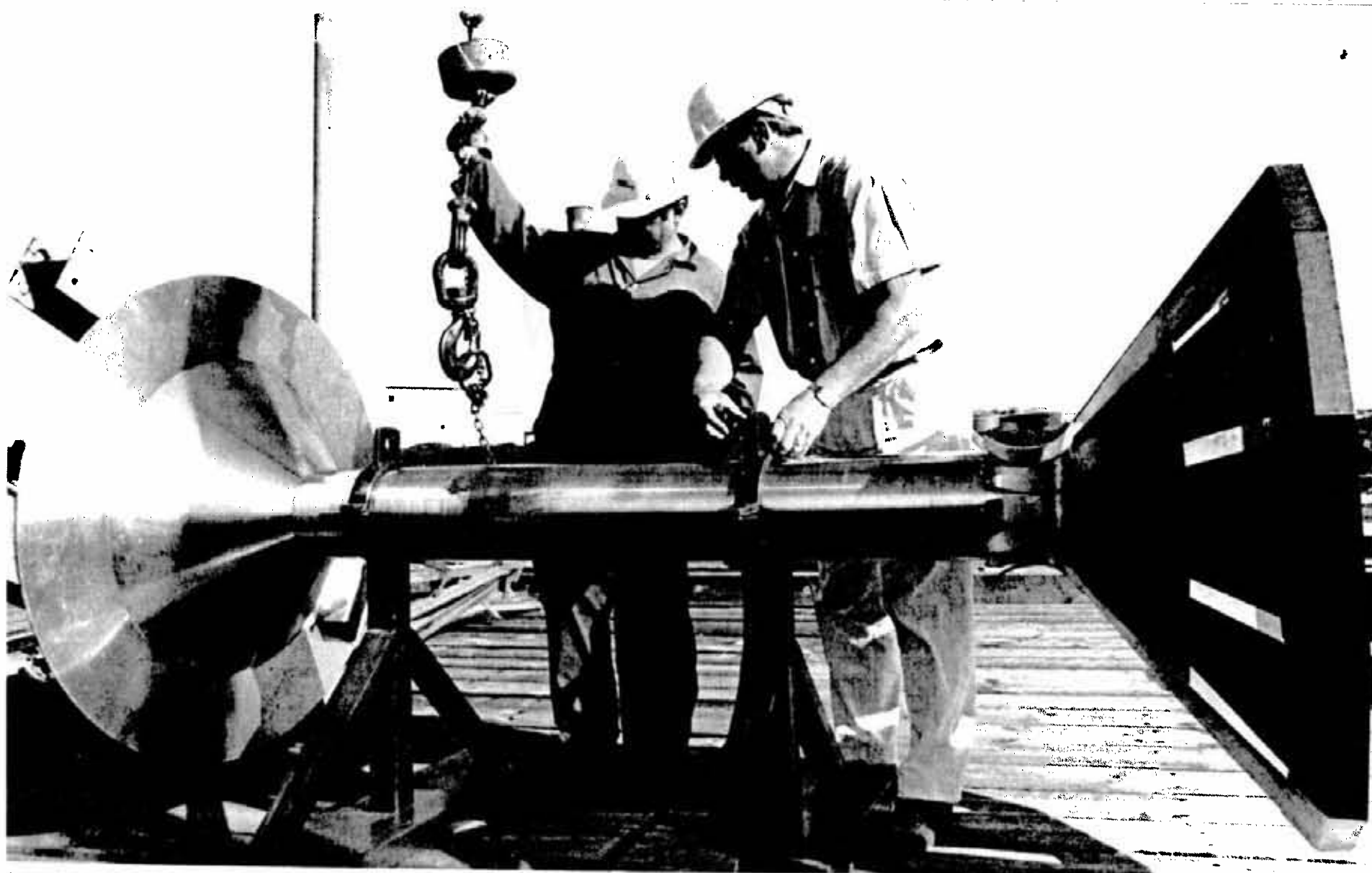
Paul Brouillard, garage mechanic, Stobie Mine: "Yes, we're in a recession and I think it is going to get a lot worse before it gets any better. The Conservatives (federal government) are blowing it. I think Inco is in better shape than 10 years ago, so we can make it through."



Ivan Richardson, mechanic leader, Stobie Mine: "It'll affect everybody. We're using a lot of oil and the price of oil is up. The only way to survive is to tighten our belts and I think Inco's done that."



Darcy Chenard, laborer, Smelter Services: "We've survived worse ones before and we are in better shape to survive this one. It's something to worry about. People talk about it a lot, but nobody seems too worried. I sure hope it won't affect us like the last one."



Smelter warehouse storesman Ron Cacchetto and Equipment Rentals coordinator Ken Heron prepare torch for delivery.

Inco torch still a beacon for athletic competitions

For 16 years Inco has provided a beacon to inspire Ontario's young athletes.

A gleaming, stainless steel torch, emblematic of athletic supremacy, was created here at Inco in 1974 when Sudbury played host to the second Ontario Summer Games at Laurentian University.

Mounted on top of the grandstand at the university stadium, the torch burned bright throughout the three-day event, inspiring athletes to new heights in excellence.

Created through the joint efforts of workers at the Copper Cliff plate shop, machine shop and combustion department, the torch has travelled the province to each ensuing summer and winter games since its auspicious debut here in Sudbury.

Between trips, it rests at the Copper Cliff Smelter Complex

under the watchful eye of transportation department employee Ken Heron.

Its most recent excursion took it to Kitchener-Waterloo, host to the 1990 Ontario Summer Games.

"The torch is the actual visible means by which everyone knows that the Games are open," said Games co-ordinator Eugene Todd.

"Traditionally what happens is the Minister of Tourism and Recreation, the Lieutenant-Governor or the premier officially declares the Games open while the torch is symbolically lit.

"There's always somebody who runs into the stadium with a hand-held torch in the same way as the Olympics. It's the highlight of the Games from a media standpoint."

Standing eight-and-a-half feet high, four-and-a-half feet wide, and weighing 1,040 pounds, the torch

is an impressive sight. Similar to its Olympic counterpart, the torch is set alight after a symbolic run.

Last year, a torch relay was run from Hamilton, site of the 1988 Winter Games, to North Bay, site of the 1989 Summer Games. The entire run took more than a week to complete.

This year, in Kitchener-Waterloo, runners carried the torch from one end of the region to the other, culminating in the lighting ceremony to open competition.

The symbolism and importance of the torch is something the athletes respond to, said Todd.

"It sets the tone for the four days," he said. "It gets the athletes involved and makes them realize there's something more going on than simply one of their sport's normal championships."



Symbol of athletic inspiration in an industrial setting.



The torch is carefully maneuvered into the truck.

Inco vs. veligers

Invaders 'mussel'in on Port Colborne Refinery

What does the Port Colborne Refinery do when a large gang "mussels" in on its water intake?

It puts out a contract to wipe them out.

Millions of zebra mussels are mobbing industrial and municipal water intakes on the lower Great Lakes. Companies are using different strategies to run Driessena polymorpha off their turf before the miniature but menacing mollusc plug up process water supplies and jeopardize regular operations.

They've tried vacuuming the mussels, boiling them with hot water, frying them with electric grids, using ozone, chemicals or mechanical scrapers, but the tenacious critters keep coming back. There aren't enough naturally-occurring enemies to keep the mussels in check and they reproduce at a phenomenal rate.

Roy Harrington, co-ordinator of the zebra mussel control program at the refinery, says no one has the perfect solution for dealing with the mussel threat. Any treatment is at the research stage now, because the species just arrived on the lakes in 1986 and was only recently taken seriously.

Minute doses of chlorine have successfully removed mussels from Inco territory for now, but fighting them will be a constant battle and one which will be a continual expense for the foreseeable future.

He says the zebra mussel control program meets all environmental standards and is certified by the provincial Ministry of the Environment (MOE). It is being conducted by Aquatic Sciences Inc. of St. Catharines.

The underwater and environmental services firm is also researching the possibility of using

high frequency ultrasound to kill or damage the mussel, says Aquatic Sciences general manager Carmen Sferazza.

The tiny black and white striped shelled pest is thought to have hitched a ride to North America in the ballast water of ocean going vessels. It loves to fasten itself to underwater concrete and steel, even corroding the metal in some cases, he said.

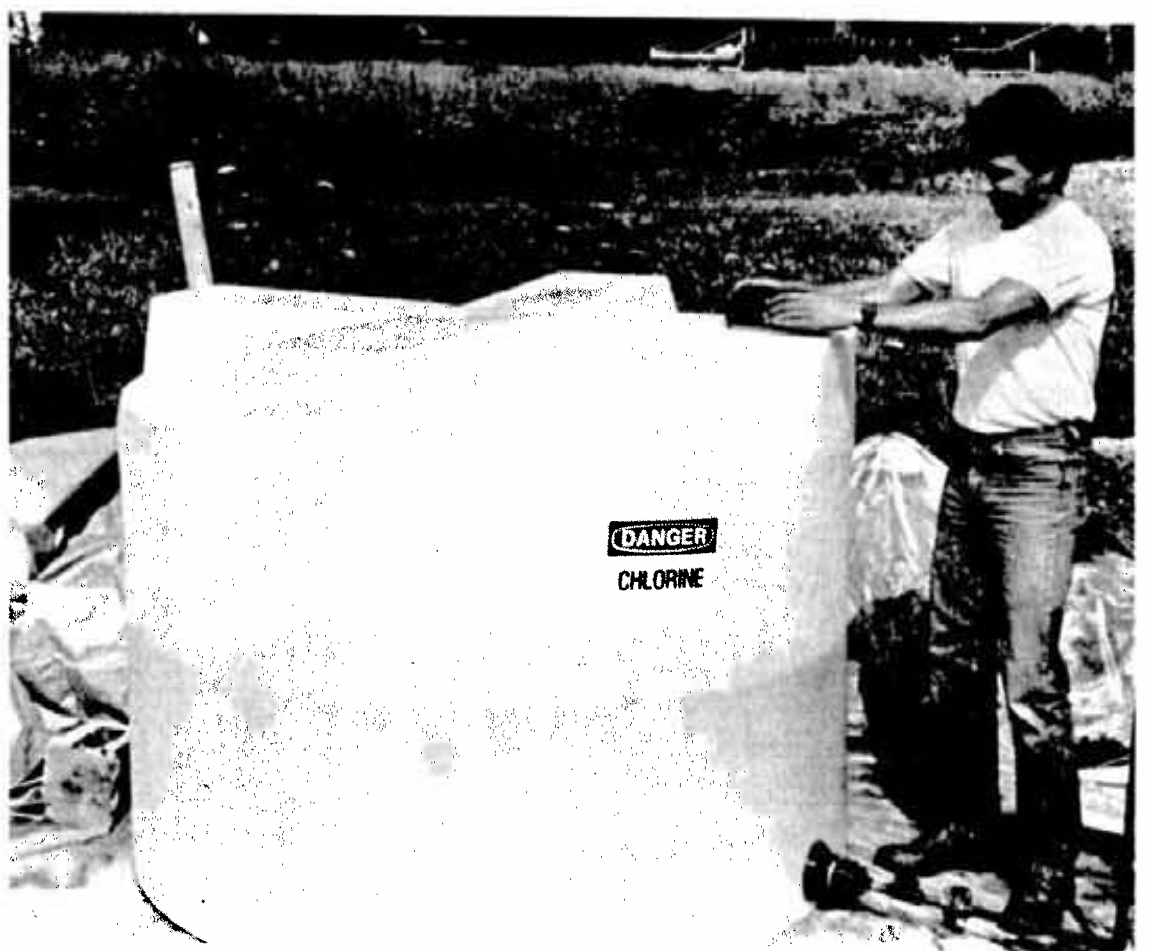
Because the refinery draws its water from the Welland Canal, it is vulnerable to the mussel in several ways, says Roy Harrington. The adult mussel can attach and detach itself from the hulls of ships. Dozens of small and large vessels up to 1,000 feet long transit up and down the canal daily, giving free rides to the harmless-looking enemy. But the creature mainly migrates in the form of larvae, which are swimming and swarming across the Great Lakes at an alarming rate.

These larvae, or veligers as they are called, love the action of canal water as it flows quickly down the Magara Escarpment. There is plenty of concrete and metal to which the baby mussels can adhere. The canal also gives the mussel a perfect passage to Lake Ontario, where the population is rapidly growing.

Mussels can live up to five years as they filter nutrients out of the water for food. They are incredibly prolific breeders, too. One female can produce 30,000-40,000 eggs, so large populations of the water creature can encrust an intake in no time. They have been reported to have clogged 36 inch diameter pipes down to a nine inch opening, Harrington said.

He illustrates further.

"They've fouled some areas up



John Sferazza of Aquatic Sciences checks to make sure the chlorine tank lid is on tight at the site of the mussel control program along the St. Lawrence Seaway's Welland Canal.

so much that 114,000 adult mussels have been found on one square metre. In comparison, less than half my desk is this size."

So rather than being shutdown unexpectedly by this collective force, Port Colborne's maintenance department decided to use a shutdown against the mussel. Regular fluctuating flows of water are more constant and of lesser velocity during the regular summer shutdown, said Tom Marshall, Harrington's assistant on the program.

Aquatic Sciences was then able

to use carefully regulated, minute amounts of chlorine to kill both the mussels and their larvae over a 10 day period that began in August.

Any levels of chlorine which exceeded .002 milligrams per million litres of water were automatically neutralized by the refinery's sophisticated water treatment plant before entering Lake Erie, noted Carmen Sferazza.

Though refining operations have been greatly reduced since the late 1970s, Roy Harrington says the Inco plant in Port Colborne takes 12-15,000 litres of water per

minute from the St. Lawrence Seaway along a three quarter mile long pipeline to its powerhouse. Ninety per cent of the volume is used for cooling purposes on the refinery furnaces, he estimates.

"Our refinery is the first Inco plant to receive MOE permission to treat the mussel problem. And we were one of the first water users along the canal to detect and treat the mussels. No one had thought they had travelled this far east along Lake Erie until last summer, when divers reported them in our water intake."

New technology the key

United Way newsletter a cooperative effort

Once more, the Inco employees' in-house United Way Campaign got off to a promising start, and judging by all accounts, should prove to be at least as successful as last year.

It's the second year that the campaign has been run in a way that allows individual departments and plants to use their own imagination, initiative and ambition to strut their stuff.

The move to a less centralized approach proved highly successful last year, with most of our employees demonstrating that independent initiative is the best motivation.

Like most other departments, Public Affairs has been caught up in the enthusiasm, and has taken on the job of publishing a newsletter to keep employees informed of what's going on in the month-long campaign.

Unlike last year when the special publication was first undertaken, this year's effort was kept in the family.

"Last year, only the rough copy (content material) and photography was done in-house," said Public Affairs officer Cory McPhee.

"The job of typesetting, layout, design and printing was carried out by outsiders under our direction." One reason for the change this

Campaign Kick-Off

Sharing is Caring

Published by Public Affairs for the 1990 Inco Employees' United Way Campaign

Vol. 1, No. 1

Last year's record may fall

United Way spirit is catching

The United Way Express is turned up and ready to roll at Inco.

With Sharing is Caring as its theme, the 1990 Inco Employees' United Way Campaign is looking to surpass last year's record-setting total of \$216,000. From October 15 to November 15, a dedicated team of 75 canvassers will be out in the Sudbury mines, offices and surface plants bringing the United Way message to their co-workers.

Backed by a promotional blitz featuring T-shirts, balloons and banners, the canvassers are contributing to the largest financial target ever for the Sudbury and District United Way.

The goal this year in Sudbury is to raise \$1,028,200.

In 1989, Inco employees and pensioners combined to raise a record \$221,715. The employee donations, coupled with Inco's corporate gift of \$120,000, accounted for 35 per cent of the entire United Way canvass in Sudbury last year.

That impressive performance was made new for Inco



Outgoing Inco Campaign Coordinator Bob Todd, left, shares a toast to good luck with Gerry Cullin, coordinator for the 1990 Inco Employees' United Way Campaign.

employees who have made a habit of generously supporting the worthwhile activities of the United Way.

What makes the achievement all the more remarkable is the fact that annual donations have increased by 35 per cent

while the number of employees has dropped to just over 8,000 from 10,600 in 1987 when the in-house campaign began.

"Inco and its employees have always played an important role in the success story of the United Way in Sudbury,"

said Gary Gray, 1990 campaign chairman. "The generosity demonstrated by the company and all of its employees and pensioners has helped allow the United Way to continue fund-

ing the vital community work

year was the department's move to desktop publishing, a function made possible by new computer equipment purchased last year. The equipment allows work, previously contracted out, to be done on a computer screen.

But the big reason, said Cory, was the cooperation and enthusiasm shown by others at Inco who made the project possible.

"Fact is," he said, "they made us look good. We couldn't have done it without them."

Concept, design, photography and content were done by Cory. Mike Barrette of the Audio Visual department screened the photographs to size, a process that transfers the photo image into a series of dots easily seen by reproduction equipment.

The publication was then printed in the Stationery Department through the efforts of Art Wennerstrom, Harvey Larson and Cy MacLeod, who were instrumental in making the project possible. Despite a busy regular schedule, the department accepted the task of printing 8,000 copies that were distributed to all plants, mines and

offices in the Sudbury area.

Mailroom staffers were also involved in the project by handling those copies that had to be mailed. Modified Work Centre supplied the manpower to deliver the thousands of copies to Inco locations in Sudbury.

"A lot of employees at Inco are working toward having another successful campaign," said Cory. "I guess this is a way that we can do our bit. You can't help but get caught up in all the enthusiasm."

Thompson's teeth a team triumph

A Manitoba Division process improvement team at the Thompson Open Pit has overcome some teething problems on the front end loader.

The team has come up with longer, pointed teeth on the loader that last much longer and reduce costs by three cents per ton.

The team estimates the savings will be about \$134,000 over the project life.

Investing In Our Community



Dan Kelly examines a copy of the Onaping Falls News, a weekly that he helped establish as a hobby almost 20 years ago.

Dan shelves warehouse job for writing hobby

Dan Kelly seems at home among the shelves, drawers and cubbyholes at the Levack warehouse. It's a demanding job, but not high on

the excitement scale.

You'd think Dan would be kind of a dull guy.

Not on your life. Think Clark

Kent, Woodward and Bernstein, Lou Grant. Dan doesn't change in a telephone booth, but he's two guys in one.

Meet Dan Kelly, scribe. Note pad, pen, camera and a burning curiosity. Your everyday newshound.

"I like my warehouse job, mind you," said the 30-year Inco veteran, "but if I had to do it again, maybe I'd like to give writing a shot. It's been fun."

Dan was one of eight people who banded together in 1972 to publish the Onaping Falls News, a weekly community newspaper that sports a circulation of about 2,000.

Today, there are only two left, and Dan is one of them.

"It started as kind of a hobby, at least with me," said Dan as he leaned across a typewriter at the paper's office in a basement room of the Golden Age seniors' centre in Onaping. "I don't put as much into it as I used to. I have a regular job and I don't have that much time, but I still contribute."

He said the paper's co-owner, Joy Bell of Dowling, does the lion's share of the work and that's okay with him.

Two birds, one stone

"I'm a real sports enthusiast and I do much of the sports," he said. "I figure I go to most of the games anyhow, so I might as well write about it."

He used to be involved in the paper's layout and still takes the occasional picture or two. The News runs anywhere from eight to 12 pages, dropping down to four pages on "lean weeks," so any contribution is needed.

Dan said he covers house league sports, some ball tournaments, curling, golf and a tennis game or two. He's interviewed hours show champions during competition hosted by a local club and he's also interviewed Olympic cyclists and other sports figures.

But he doesn't take himself too seriously. "We're not really a hard news kind of outfit here. Instead, it's a way of people keeping in touch with all the things that are

happening in the community."

Not that he hasn't chased a fire engine or two. "We covered a train-truck accident in Dowling once, and there was a fire at the Dowling Plaza that we covered."

But fast breaking news doesn't excite him too much. "I'm sports orientated. That's what I like."

What began as a hobby almost 20 years ago became more and more a business as the original eight partners began to dwindle to overload the remaining partners. Mrs. Bell has taken over most of the paper's operation, he said, and he helps out with at least an assignment or two a week and perhaps a weekend assignment.

Perfect solution

"I don't consider it working hard. I still do it as more of a hobby. It certainly isn't making me rich."

Although Dan muses sometimes about the writing career he may have missed, he doesn't worry about it. In fact, he claims the way it worked out was perfect.

"I have a good full-time job that I like and I get to do some writing on the side."

While the modest circulation isn't exactly saturation coverage, the Onaping Falls News has survived some stiff competition.

"Other papers have sprung up in the past and tried to outdo us," he said. "All of 'em went under. We've had to compete and that's a good thing. We've had some good support from people here. When we close down for the summer, people ask us when we are starting up again."

Perhaps Dan enjoys himself most when he's working on Kelly's Korner, a periodic column that appears in the paper. Dan said it's a great way of "venting his spleen."

"Sometimes it's controversial," he said. "Sometimes I get people annoyed. I don't mind. At least I know they're reading it."



Dan Kelly at the Levack warehouse shelves: he enjoys his work but needs another outlet.

Inco's apprentice programs show w

Wally Amiri smiles like a Cheshire cat as he pries open the lid to his "little box of illusions," a box almost completely covered in switches, lights and plugs.

"I designed and built it myself," he said as the innards popped out, a maze of wires and splices that resemble multi-colored spaghetti. The grin turned almost sardonic.

"I can throw a monkey wrench into anything from here. Just the throw of a switch."

It's a new game for Wally, a relatively new breed of employee with Inco. He's kind of an Inco guru, an engineer turned teacher. Who better than somebody with a Master's degree in mechanical engineering and years of experience on Inco equipment to sabotage the works.

Wally will be head instructor when Inco's newest apprenticeship program gets off the blocks, hopefully by January. While he's waiting, he spends hours designing and building teaching aids like the little box of horrors that simulates just about anything that can go wrong with a remote control interface on the scooptram.

"I throw the switch and something goes wrong. The student has to find it," he said. You might say I got him wired up."

Wally is serious about his new job. "I'm determined to make our Garage Mechanics apprenticeship program here as good or better than anywhere in the country," he said. "And there's no question that we will have the advantage of running the course tailored to our own needs and equipment."

The course is the latest of almost a dozen apprenticeship programs run here at Inco, programs that range from welding, lineman and construction mechanic to plate-worker.

Such programs have been run at Inco "for years," according to Maintenance Training general foreman Jerry Pawlowski, but are getting more and more important with

today's expanding technologies.

In fact, Inco's training programs are becoming so thorough that they are starting to attract attention in educational circles.

"We are one of the first companies to be recognized by the Ministry of Skills Development as a training agency," said Jerry. "We qualify for provincial funds when we run some of these programs."

Most of Inco's in-house training programs have been reviewed, upgraded and expanded to reach a level of education hardly imaginable just a few years ago when many tradesmen were expected to pick up much of their training from experienced tradesmen on the shop floor.

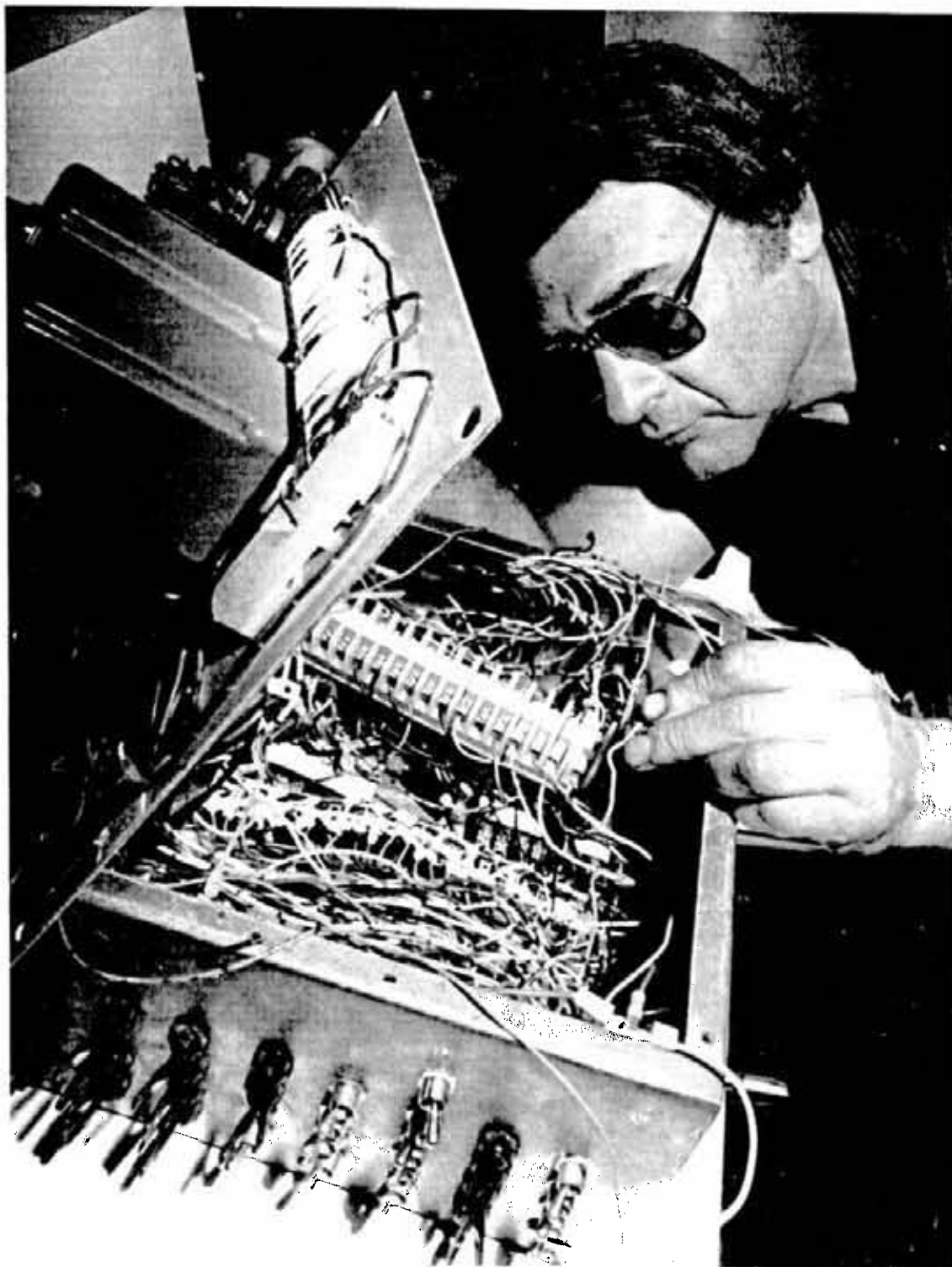
Even more surprising, Inco's "educators" are pioneering new philosophies that are being looked at with great interest by educators outside the company.

"We've adopted a philosophy of advancement based on skill," said Jerry. "Our courses are competency-based. We'll give you credit for knowledge and experience you already have and how fast you move along. It's based on standard tests and levels of competency that must be reached, of course. We feel the system is much more efficient than one based on a set period of time alone."

Training boards will be used in the hiring and selection procedure, and a candidate will have to demonstrate competency in the trade if he or she is to be hired as a qualified and competent journeyman.

"We can attain a consistent standard of measurement throughout the Division," said Jerry. "If a candidate shows a proficiency in certain areas at the trade, credit will be given."

He said it is important that apprentices develop a sound base of electrical, hydraulic and engines knowledge. "They require this knowledge to be able to apply it to the various types of equipment and systems we presently have in our mining industry. The training



Wally Amiri checks the wires, circuits and switches in his little box of horrors.

program we have developed will allow our people to adapt with no difficulty to the ever-changing technology and equipment in the mining industry."

There are about 200 apprentices in the various Inco programs

now. Once completed (average three years) the apprentice qualifies as an Inco tradesperson. If desired, a provincial examination can be written to get a province-wide licence.

Perhaps one of the major

hurdles to be overcome is the public attitude about blue collar jobs. Despite a pay scale that is often higher than white collar office jobs, many trades go begging for students.

"But I think that attitude is starting to change," said Jerry. "People are starting to realize that today's tradesman is a highly-skilled professional. It's not a dead end job."

In fact, Jerry thinks being a tradesman will mean being a student for the rest of a person's life.

"Not keeping up with changing technology can be very costly for the company and employees alike," he said. "Today's tradesman needs to be more than a part-changer. I can see upgrading being a constant for future trades people."

Wally Amiri agrees. He set up the Garage Mechanic apprenticeship program and even wrote the manuals. When the Rolling Mill teaching facilities get underway, it'll be up to Wally to make sure tomorrow's tradesmen will be the best.

"Our people want to learn. They've always been eager to learn, they want to keep up with technology," he said. "It's in the interest of the company as well. There's a lot of pressure out there, considering the costs of down time on a piece of equipment. It has to be fixed, and fixed fast."

In-house training, education a way to ensure future skilled workforce

If Inco keeps on its present...er, course, it may soon be considered the school with the biggest stack in the world.

And judging from rapidly-changing technologies and a looming shortage of skilled tradesmen, say the people who run Inco's vast array of in-house training programs and courses, on-the-job education and upgrading can only increase in the future.

"I don't think we can blame the school systems for all of industry's educational problems," said superintendent of Training Don Nadorozny. "With technology in just about every technical field changing constantly, it is virtually impossible for schools to turn out qualified people in every field. In the future, more and more of the educational process will be the responsibility of the employer."

Inco has always been committed to providing training and upgrading for its employees. "We've had apprenticeship programs here for years, but with the higher level of skills and education demanded today we can't rely on an employee learning all he has to know by just being out in the work force."

"We're doing a lot more actual teaching these days, although hands-on experience is still highly desirable as well and an integral part of any program."

In fact, the combination of in-depth skills development taught by Inco people with Inco equipment is highly-desirable for both the company and the tradesmen looking to develop their skills.

"Today, an employee's school record tells us that he has the aptitude and basic skills. In the future, it will be up to us to take him the

rest of the way, to train him on our mining and production machinery and equipment."

Industry shares

He sees the trend spreading to other industries. "Smaller industries that can't afford to do their own training may have to take advantage of companies like Inco to provide training," he said.

Today's programs are much more structured, detailed and thorough than they've ever been before. There are classroom and shop facilities, testing and evaluation systems in place, and even programs of ongoing upgrading and retraining that will be offered to employees during their years at Inco.

The ambitious apprenticeship

program is just one of a wide range of educational projects covering everything from garage mechanics and first-line supervisors to new employee orientation. The programs not only assures an employee is trained to handle today's high-cost equipment, but provide a uniform set of standards for all of Inco's operations.

In the past, said Don, a lot of the training was done at individual plants, mines and offices. "Done this way ensures uniformity and avoids duplication. Training specific to the plant's needs can then be undertaken with the assurance that a basic level of competency has been reached."

A high level of training is even more important considering Inco's aging work force, said Don. "The people we are training now will be the teachers of tomorrow."

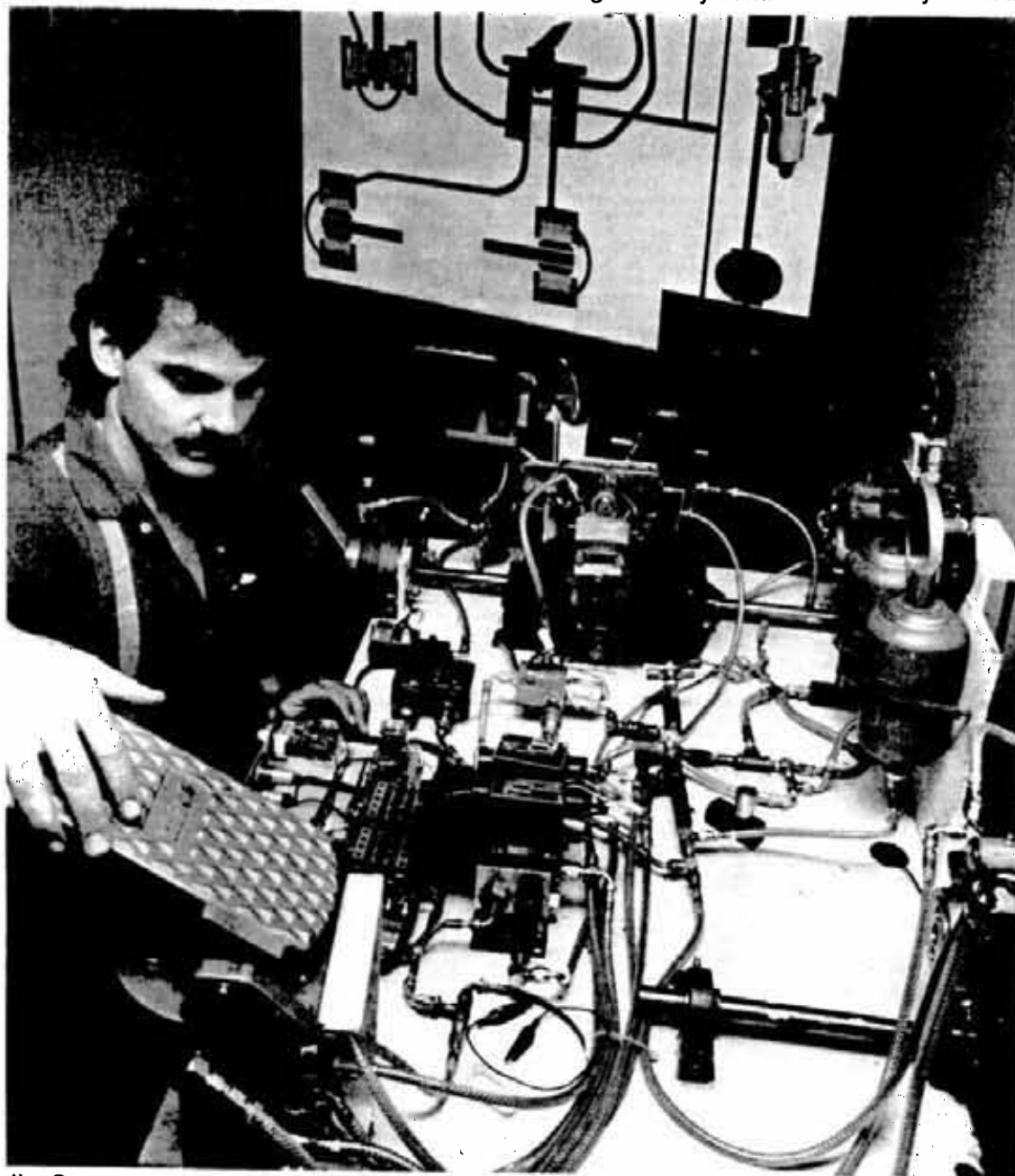
ay to job security and skilled labor



Jerry Pawlowski and Wally Amiri check out a training aid Wally built.



Wally Amiri in the shop to be used by new Inco apprentices.



Jim Savage works on a scooptram hydraulic systems model.

Jim takes motors over shirt and tie

Jim Savage knows what he wants. Better yet, he knows what he doesn't want.

"White collar job? I couldn't wear a tie if I had to," said the 28-year-old mobile equipment apprentice.

Jim already holds a Class A automotive mechanics' licence that he earned after a five-year apprenticeship working in Sudbury area garages. He's facing possibly another three years of apprenticeship training, but he's convinced his prior qualifications, hard work and extra effort will allow him to take advantage of Inco's emphasis on advancement based on skill.

"I expect that I won't have to do the full three years," he said.

One reason for Jim's optimism is his enthusiasm for his chosen field. "I love cars and motors," he said. "It's what I've always wanted to work with. I knew that when I graduated Grade 12 at Lively Secondary School 10 years ago."

Another reason is the experience of working with Garage Mechanics apprenticeship program instructor Wally Amiri.

For six months he helped Wally set up the equipment and training aids in the classrooms where the training will take place.

"I learned a lot working with him," said Jim. "I'm sure it will give me an advantage when I start into it."

Good pay, benefits

Jim signed on with Inco about 18 months ago. The lure of a well-paying career, benefits, security, and a stable life drew him away from repairing cars in the often-mobile field of auto mechanics. Raised in the Sudbury area, he sees employment with Inco as a guarantee of not only a good job, but a way of staying in the area as well.

He's not sure how he feels about going back into the classroom again. He's convinced that having gone through one apprenticeship already will give him a certain advantage.

"Sure, I've done five years of apprenticeship already," he said, "and I could be looking at another three before I'm finished, but I hope I'll be able to cut that back with some hard work."

He sees Inco's philosophy of advancement by merit as one of the best things about the program.

"I plan to go through it just as fast as I can," he said.

Winged vegetation pr On yell

The 600-horsepower Pratt & Whitney radial engine gives a deafening, deep-throated roar as it hurls thousands of pounds of bright-yellow biplane and one very attentive pilot at 100 miles an hour over a barren rock knoll.

Flying just a few feet above the landscape, every nerve and reflex are focussed on the joystick in Pierre Rouleau's hand as he counters the effects of a ton of payload dropping from the aircraft's belly onto a predetermined swath of black rock somewhere behind Inco's Clara-belle Mill.

It's an experience, he says, that brings you a little closer to life.

"There's little room for error," said the 32-year-old pilot and co-owner of Quebec-based Agric Air Inc. "At that speed and that close to the ground, you have to react instantaneously to any unforeseen obstruction."

With critical aerial response time reduced almost to intuition, Pierre tries to anticipate most hazards by careful studying the topography and any other possible hazards before making the run.

Despite the risks, Pierre admits he and his partners jumped at the chance to climb out from behind a pile of paperwork to do a little flying. He and partner Jacques Dubois haven't flown for about two years, he said. Scheduling up to 60 pilots and the company's 36 airplanes has kept the two flying a desk too long.

Inco's new \$250,000 aerial seeding project, offered at a time when most seeding and spraying work is over, was a perfect opportunity to soar.

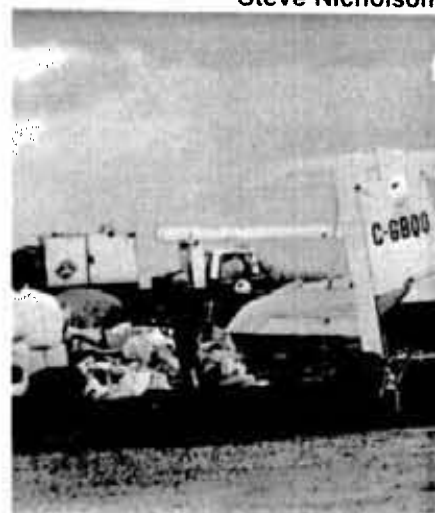
"The money was secondary," he said. "I love to fly."

Not that the job is secondary, judging from the attention to detail by Steve Nicholson as he climbed across the targeted rock outcrop. The non-flyer of the three partners at the site, Steve examined the cracks and crevices for spots missed by the aerial bombardment. With ground-to-air communication, he directed the small yellow speck in the sky to within inches of

Steve Nicholson



With a load in the hopper, the plane's ready to go.



A loaded plane waits for take-off



promises better environment

ow wings, from out of the blue. . .Green!

the bare spot on the rocky outcrop. "Your left wingtip should be over my left shoulder," he said into the hand-held radio to the pilot of the approaching aircraft that grew in size as it dipped below the horizon and began its run.

The roaring biplane began dropping its load at the bottom of the knoll and dragged a billowing light-brown cloud of seed to the crest where Steve stood . . . the yellow

wingtip just over his left shoulder.

"Perfect," said Steve as he brushed grass seed from his hair.

The wingtip looked like it passed close enough to have given him a brushcut.

Steve seemed as enthusiastic and determined about the project as his employers. "It's gonna work for Inco, I can feel it," he said as he scanned the knoll for more thin spots. "This is going to look a lot greener next year."

Inco's bold, new approach to re-greening its Sudbury properties began late in September. A first for the company, the aerial effort should accelerate a company greening program that has been going on for decades.

The experimental project involves about 125 acres of land near Copper Cliff. Results should be in as early as next spring when company agricultural experts assess the growth from the aerial liming and grass seeding.

Inco's agriculture department experts who have been doing the company's long-term revegetation work aren't the project's only promoters.

"For us at Inco, this aerial revegeta-



A load of seed goes on the knoll. Note the brown color of the seeded area (foreground)

tion program is innovative technology. If it is successful, it will be the first step in providing a new scope for our future reclamation efforts on our Sudbury land," said an enthusiastic Ontario Division president Bill Clement. "If it works out the way we think it will, it could mark the start of a new era of re-greening in Sudbury."

Although Inco has coaxed thousands of acres back to life over the years, it's been back-breaking work, advancing only a few acres a year as men and machinery edge their way into nearly inaccessible areas to do the work by hand.

It takes only a few seconds for the Grumman Ag-Cat biplane to spread its one-ton load on a 600 foot by 17 foot swath of terrain. Depending on how accessible the stretch is, doing the same work the old way with all-terrain vehicles and strong backs could take hours, perhaps days.

To be sure, the pilots are tired at the end of the day as well. A circuit from take-off with full load to the empty landing calculates out to about three to five minutes. Allowing about five minutes for taxiing and loading, the entire routine is repeated every 10 minutes. "We figure it'll take about 600 loads. That's 600 take-offs and landings before we're done," said Pierre.

Even love of flying doesn't compensate for the frazzled nerves after scores of take-offs and landings. "At the end of the day, you're ready to quit for the day," said Pierre.

The pilots work the daylight hours of the day, seven days a week until the job is done. In the first two

days, the two pilots dumped 133 loads, something of a record.

One reason, according to Steve, is the 1,700 foot runway that was installed by the agriculture department in close proximity to the target area. Pilots have only a short run to the drop zone with the gas-guzzling machines.

The runway is aptly located in a symbolic sense as well. It sits on the flattened crest of a mountain of years-old slag, the yellow wings of the aircraft standing out against the pitch-black slag like harbingers of greener things to come.

Built in just three days, including about 200 loads of dry packed slag packed down to form the surface of the airstrip, the facility proved perfect for the job.

"The runway is perfectly located and well-built," said Pierre. "It's hard on the props, though. The prop whips up the slag and sucks them into the prop."

The pilots downplay the risks of their form of flying and bristle at the "crop duster" stereotype they sometimes get stuck with.

"We are into aerial application, not crop dusting," said Pierre, lamenting the barnstorming, swash-

buckling, devil-may-care image that the public seems to have about crop dusters.

He said the "cowboy" flyers aren't hired by the company. If they occasionally slip through the screening process, they aren't kept long.

Pierre downplays the risks of his favorite form of flying. "It's not as dangerous as it looks, but you obviously have to pay attention. There's no point in creating unnecessary risk."

The Inco project's tree-top high flying is actually flying with room to spare, according to the two pilots. Sometimes the job is done at shoulder-high altitude.

Yet the problem is rarely flying the aircraft. "We were spraying locusts in semi-des-

ert in Jordan on one job. On the relatively flat land, the flying was easy," said Pierre. "The problem was that there are very few reference points to fly by and it was very easy to lose your direction if you didn't pay attention all the time."

Still, pilots who have flown the number of hours that Pierre and Jacques Dubois have inevitably have their share of close calls to talk about.

Continued on Page 14



Pierre Rouleau waits for another load.



via two-way radio, directs load to spot where he wants it.



the second aircraft, framed by the wings, lands on airstrip.



Tons of lime, fertilizer and grass seed wait to be loaded into Ag-Cats for a rocky delivery.



Nickel Refinery electrician Mark Laakso shows son Stefan some Rolling Mill stock.

Nickel Refinery, Crean Hill Family Day events get overwhelming response from employees

The Crean Hill Family Day event saw a doubling of the expected attendance and the annual Nickel Refinery event coped successfully with hundreds of hot dogs and Italian sausages.

Both, say organizers, were highly successful.

"We expected about 350 people," said safety foreman Frank Paradis, one of the organizers of the first Crean Hill Family Day celebrations. "About 700 people turned up."

One reason, he said, was be-

cause of the new equipment at the mine and detailed preparation and promotion that began back in May. "The cooperation was incredible. We had a good 30 per cent of our people here involved in one way or another as volunteers," he said.

The mine employs some 180 staff and hourly people.

Visitors got an underground tour of the mine's 2,850 foot level and saw remote control scooptrams and other mining equipment, fire fighting and first aid demonstrations.

It was the Canadian Alloys Ni. Oxide department's turn to host the Nickel Refinery complex's annual rotating event this year and almost 1,000 people turned out.

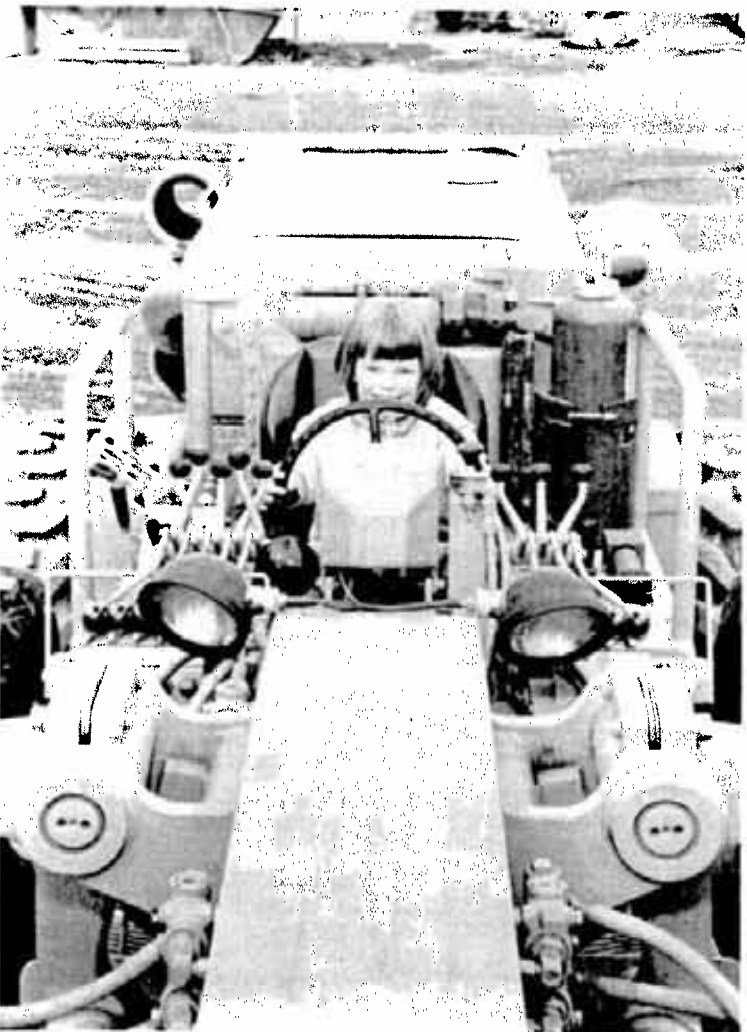
Complex general foreman of Safety and Administration Richard Sitko said that the event included pony rides and face painting for the youngsters, as well as tours of plants and facilities. A special attraction was a dunk tank that raised a \$260 donation to the Walden branch of the Canadian Cancer Society.



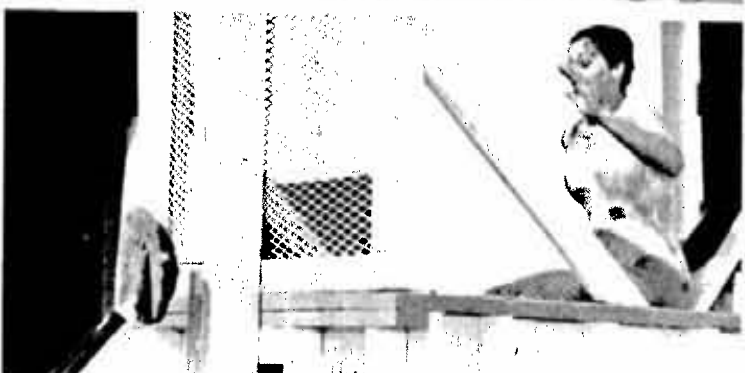
Stefan and Nathan Laakso examine a roll of nickel.



Peter Aelick, son of Creighton Complex Manager Ron Aelick, looks like he's ready to take dad's place. He's waiting for his underground tour at Crean Hill's Family Day.



Allison Thaxter takes the controls of a Crean Hill grader. She's the niece of welder Pat Thaxter.



Surprise, mom!

When Sulphur Products Process Clerk Brenda Adams volunteered to be the dunkee in the dunk tank at the Nickel Refinery Family Day, she counted on unpracticed throwing arms to keep her dry. But she didn't count on her son, Kevin Devruyn (top) and ammunition bearer Rick Sitko. While Rick held the ammunition, Kevin decided to give mom a "hand." The tell-tale evidence was captured on film, at left.



Melanie Quenneville, 11, douses the fire while dad, garage mechanic Ron Quenneville, holds the extinguisher during the Crean Hill Family Day firefighting demonstrations.

'Connections' keep rain at bay

Smelter, Transportation Family Days successful

Rumor has it that organizers of the Smelter and Transportation

Family Day events apparently had "connections upstairs."

"I got a sunburn," boasted Dorothy Cayen, the Smelter's General Foreman of Administration Services about the event that bucked the trend of washed out barbecues and family day events this year. "The weather was just beautiful."

The weatherman only threatened the Transportation event. Organizer Ray Sasseville said it rained the night before and right up to the 10:30 a.m. start time. "Then

it stopped and didn't start again until 2:32 p.m. The event was over at 2:30 p.m.

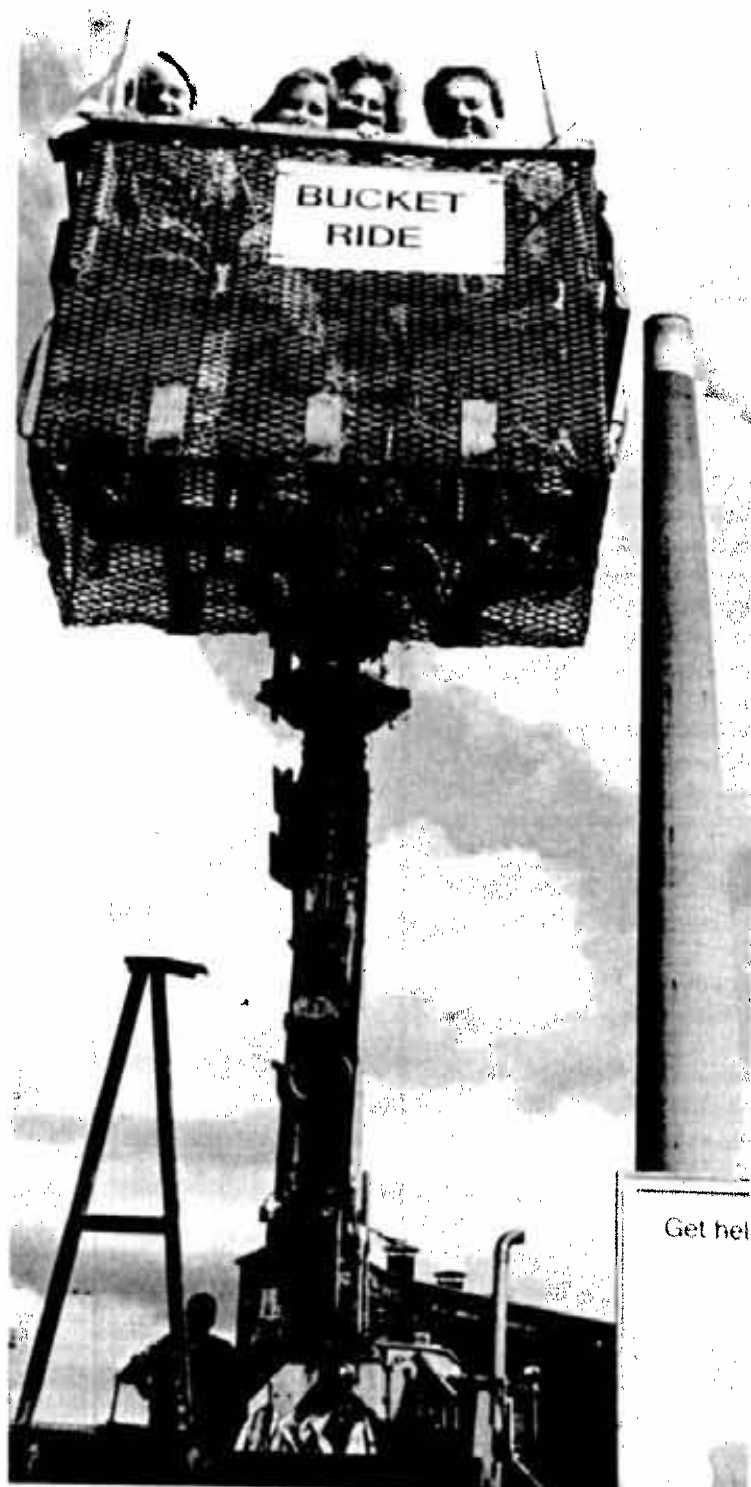
"It was real neat," said the department's training supervisor. "I guess we have a contact with the Big Guy upstairs."

It was Transportation's first Family Day since 1983, and Ray and fellow organizer Gary Crepeau reported some 700 people walked through the gate.

Highlighting the event were

train rides on five locomotives hitched together. There was a bucket ride, truck rides and track maintenance demonstrations as well.

The ambitious Smelter event included exhibits at both the Smelter Complex and Science north. There were Cortina cruises of Lake Ramsey and lots of food and drinks. Scheduled hot air balloon rides had to be cancelled due to high winds.

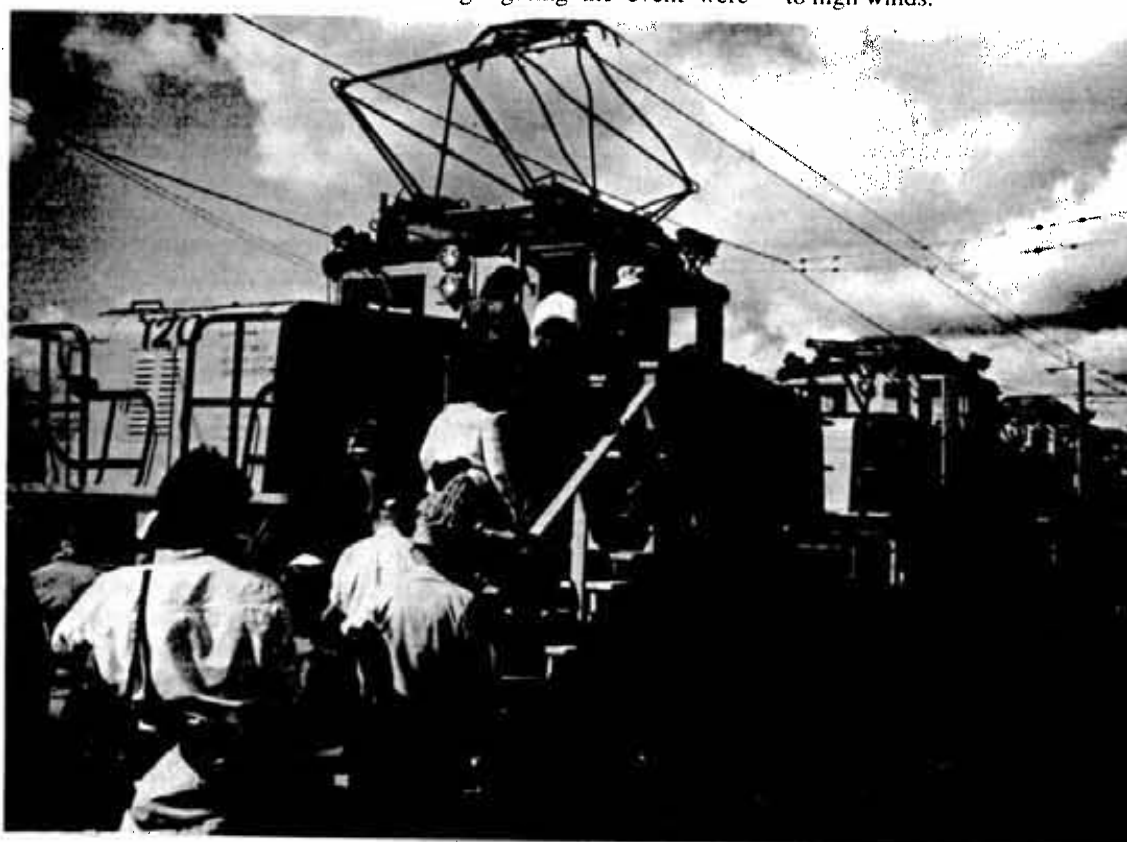


Get hel

Senior Shipper Alex Miglioranza and wife Rose take daughter Corrie and her friend Sacha Wagner on a bucket ride during the Transportation Family Day activities.



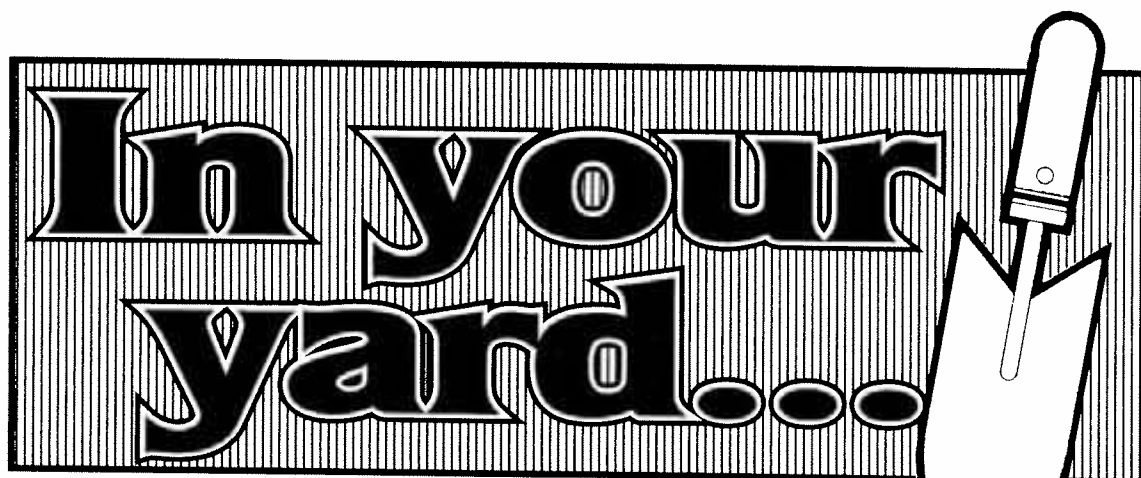
Erin Noble and Cara Tarini, granddaughters of retired Smelter superintendent Tom Antonioni load up on goodies.



Train rides were the highlight of the Transportation Family Day activities.



From such a low angle, the Smelter Family Day activities looked extra impressive, as can be clearly seen on the face of Hank VanEmbden. Looking on are parents Henri and Kim VanEmbden. Henri is stepson of Smelter skimmer Norman O'Connor.



Inco a partner in Region's environmental success

Inco's contribution to improving the local environment was recognized with the attendance of a company representative at a ceremony that bestowed the Lieutenant Governor's Conservation Award on the Region of Sudbury.

Environmental Control coordinator Ellen Heale attended the Toronto ceremony that saw Lieutenant Governor Lincoln Alexander present the prestigious award to the municipality for their 12-year program of land reclamation.

"Inco has been an active supporter of the program over and above what they've done on their own properties," said the Region's director of long range planning Bill Lautenbach. "Inco is a member of the Vegetation Enhancement Technical Advisory Committee and has been working with the Region for the past 12 years to improve the environment."

He said the municipality's program has seen 4,000 hectares of barren land, or about 40 per cent of "severely impacted" areas, reclaimed. In the last seven years, he said, over one million trees have been planted.

"We've done that primarily with the help of the committee, made up of representatives from the mining industries, government agencies, service groups, municipal representatives and others."

While he said Inco's own program on its own lands is over and above what the community has accomplished, expertise and help provided by Inco, Falconbridge and others helped the community in its efforts.

Also receiving the same Canadian Council of Ontario award at the ceremony was Energy Probe Research Foundation, a non-profit environmental group.

"In addition to our program, Inco and Falconbridge is doing work on its own properties and reducing their emissions," he said, "and that's certainly contributing to the overall improvements in our area."

Mr. Lautenbach said Sudbury's image has been enhanced by environmental efforts going on here.

"People are starting to stand up and take notice of what's happening here," he said. "I think our image is starting to change for the better."

Recognition such as the environmental award has helped create the awareness. This past summer, the Region was presented with the Government of Canada Environmental Achievement Award.

"For Sudbury to come away with two major awards in one year is quite an achievement and can't help but present a different image of the community."

Promoting a cooperative approach to environmental problems is what gets a boost by the Sudbury example, according to Mr. Lautenbach. "What this is saying is that major environmental problems can

Continued on Page 14

Soil basics

By Ellen L. Heale, P.Ag.

Soil is a product of our environment, it is the outer layer of the earth's crust. It provides water, nutrients and oxygen for plant growth and development and anchors roots. Soil is formed as physical, chemical and biological processes combine to alter rock or rock debris. Environmental factors such as climate, parent material, topography, organisms, time and drainage control the intensity of those processes.

Soil consists of four major parts. Mineral materials are fragments of rock. Particle size varies from gravel and sand to silt and clay. Proportions of each determine soil texture. Soil texture influences the depth and penetration of roots and the ability of plants to withstand drought. Deeper root systems are able to obtain water and nutrients at lower levels.

Soils with a high percentage of sand or gravel are porous (have large spaces between particles). These soils also have good drainage, good aeration, but a low water holding capacity. Plants growing in sandy soils require extra attention to watering. On the other hand, silt particles are very small with small spaces in between the particles. High silt or clay soils have a high water holding capacity, slow down the movement of air and water through the soil and are easily compacted. Lawns established on a heavy clay soil will need to be aerated frequently. Spaces between the soil particles, large or small, determine soil drainage, soil aeration and the growth of plant roots.

Organic matter is composed of plant roots, leaves, stems and fruit, living and dead microorganisms (bacteria, fungi, algae), insects, worms, remains of animals and by-products of decay. Organic matter also includes additions to the soil such as compost, manure and crop residues. These materials are all natural sources of nitrogen and phosphorus, store essential plant nutrients, improve the physical condition of the soil, including its water holding capacity and reduce soil erosion. The decomposition of organic matter is affected by pH, aeration, temperature, moisture and the type of organic residue.

Water is held in soil spaces and contains nutrients required by plants. Soil that contains more clay or organic matter retains more moisture.

Air in the soil is nitrogen, oxygen and carbon dioxide. Oxygen is essential for root growth. Growth may be limited by a deficiency of oxygen or an excess of carbon dioxide. Soil bacteria use nitrogen and carbon dioxide combines with water to release nutrients from mineral materials. A regular exchange of gases occurs between the atmosphere and the soil and if, for example, soil fill (especially clay) is added to the surface or if flooding occurs, the balance of gas exchange is seriously disrupted and plant growth will deteriorate.

The amount of each of the above four parts in the soil, its texture, structure, porosity and water flow determines the soil's physical properties and how suitable the soil will be for plant growth.

Another important soil characteristic is the degree of acidity or alkalinity. This is measured by pH on a scale of 0 to 14. A pH of 7 is neutral. A value below 7 indicates acidity and a value greater than 7 indicates basic or alkaline conditions. As the soil becomes more acidic some nutrients become more soluble, such as iron, manganese, zinc, copper and boron. With increased solubility some of these elements may be toxic to plant growth and reduce yields. Increasing acidity, decreases the solubility of molybdenum and it may become deficient. The excessive use of high nitrogen fertilizers will also increase the acidity of the soil over time and corrective actions may need to be taken. If you apply urea or ammonium nitrate fertilizers, the pH of the soil should be carefully monitored.

Plants such as azaleas, rhododendrons and blueberries are called acid-loving plants and will tolerate soil acidity. In fact they require a soil pH value of less than 6. To correct a soil acidity problem apply finely ground agricultural limestone. Limestone may be either calcitic or dolomitic (contains magnesium). It must be applied evenly and mixed with the soil. The amount of limestone required will depend on the soil acidity, soil texture, the organic matter content, the crop (or plants to be grown) and the type of lime.

Plants require 15 essential elements for growth, including carbon (from carbon dioxide), hydrogen (from water) and oxygen (from the atmosphere). The source of these essential elements in the soil ranges from limited to readily available. Elements required in relatively large amounts are referred to as macronutrients and include nitrogen, phosphorus, potassium, calcium, magnesium and sulfur. Elements required in small amounts are micronutrients and include boron, copper, iron, manganese, molybdenum and zinc.

Nitrogen, one of the macronutrients promotes plant growth. It gives the dark green colour to plants (such as greening up your lawn in the spring with a high nitrogen-containing fertilizer). Nitrogen increases the protein content of crops, improves the quality of leafy crops and is required by microorganisms during the decomposition of organic matter. When composting that is why the addition of nitrogen is important.

Phosphorus stimulates the early root development of young seedlings. It is beneficial to incorporate bonemeal (15 to 25% phosphorus) in the soil when planting bulbs or transplanting shrubs, trees, etc. Phosphorus promotes rapid and vigorous growth, favors seed development and increases the winter hardiness of fall-seeded crops.

Potassium promotes the build-up of starch in plants, increases vigor and disease resistance and improves seed quality. Plant growth and/or survival will be reduced if the supply of nutrients in the soil is either deficient or excessive.

Fertilizer (and lime) requirements should always be based on soil test recommendations. The excessive use of fertilizers will damage plants and alter nutrient availability. Fertilizer is expensive and should be applied only as necessary for economical reasons. Other factors in addition to fertilizer will affect the growth, development and yield of plants. These factors include poor drainage, competition from weeds, temperature, time of planting, insects and disease, unsuitable varieties, etc.

Follow the instructions for soil sampling on kits available from your local Ontario Ministry of Agriculture and Food office [Soil Analysis Service - Home Lawn and Garden Soil Samples]. Instructions on the submission form outline the directions for sampling lawns and gardens as follows:

General Garden

Clear the surface of trash. Insert a shovel or trowel to a depth of 15cm. Discard the first spadeful of soil. Clean out the hole. Slice off about a 2-3cm layer from the side of the hole. Trim off the sides of the slice, retaining only the central core. (soil sampling tubes are available at some farm supply stores and are easier to use than shovels or trowels.) Collect 10 such samples from 100 sq. meters or less and proportionately more from larger areas. These samples should be taken from scattered points so as to represent the whole garden. Mix these individual samplings thoroughly in a clean pail or basket, breaking up any lumps as you mix. Place a poly bag in a soil box (from the kit) and fill with thoroughly mixed soil from the pail or basket. Be sure to send a full box of soil.

Lawns

Using a soil sampling tube and knife, or other sharp instrument, cut out plugs 2.5cm in diameter and 15cm deep. Take such plugs from a minimum of 10 places, for an area of 100 sq. meters, or less, and proportionately more for larger areas. Follow the instructions given above for mixing and packaging.

Soil analyses results and recommendations will only be as good as the sample you submit. Sample now so that you will know what types and amounts of fertilizer are required for use in the spring on lawns, gardens, trees and shrubs, flowers, etc. Sample your soil every three years to maintain optimum fertility levels.

Looking for 'missing' Neutrinos

Continued from Page 1

Additionally, the U.S. experiment sees changes in these neutrino numbers which appear related to the sunspot cycle of the sun.

A possible explanation for all of these results may lie in a new

theory that neutrinos can change their nature as they come to the earth from the sun, thus the "missing" neutrinos may only have changed to an undetectable form.

While all past neutrino experiments have seen only one "flavour"

of neutrinos, the Sudbury observatory's unique heavy water core will be able to detect all neutrino types with great sensitivity. SNO should be able to show if the solar neutrinos change their identity.

Six months of excavation work have been completed on the massive project, mainly on such things as switchrooms and washrooms. In 1991, excavation of the 30 metre high by 22 metre wide cavern for the detector is expected to begin.

Needed boost for Kidney Foundation

Inco donation goes long way for service group

It may not sound like a giant step in the fight against kidney disease, but Inco's \$1,000 donation to the Northeastern Ontario Chapter of the Kidney Foundation of Canada is expected to make quite an impact.

Operational efficiency is the key, according to chapter executive director Gwen Doyle, and the donation will be the catalyst that allows the Foundation to greatly increase its workload.

"We are swamped with work right now and we are doing our best to keep up," said Mrs. Doyle. "This will keep us well ahead of the game."

She was referring to a \$6,488 computer system purchased with funding from Inco and the Ministry of Northern Development and Mines. Inco's donation helped the group take advantage of the ministry's offer of providing 75 per cent of the funding for the purchase.

"This will help our chapter take the next step towards operational efficiency," she said. "It's the time consumption of much of the work

we do that we are trying to cut down," she said, "and this equipment will allow us to make a drastic cut in it."

Not only that, she said, but promotional material once jobbed out can now be done almost completely in-house at a fraction of the cost.

"Prior to this, we had only a typewriter and piles of files. It was hard and very time consuming to access most of our material and carry out such work as analysing campaigns."

She said files will be stored on the computer where access is as simple as a few key commands.

With as many as 150 patients to serve at one time, the Foundation is hard-pressed to find funds for such basic improvements. As much money as possible is used for patient services.

The Northeastern Ontario Chapter of the Kidney Foundation provides direct support to patients with kidney failure and other kidney related disorders. These patients are scattered throughout

northeastern Ontario but they must often come to Sudbury to the Laurentian Hospital Renal Unit, the only Dialysis Unit and Training Centre Satellite Units in northeastern Ontario.

As of September, the Renal Unit was treating 144 patients with kidney failure. Of those, 66 have functioning transplants, 46 receive hemodialysis treatments on the 6th Floor Renal Unit, 10 receive hemodialysis treatments in the self-care Renal Unit, six receive hemodialysis treatments at home, and 13 receive peritoneal dialysis treatments at home. An additional six are being treated at a satellite location in the Timmins/Porcupine area.

Over 20 pre-dialysis patients are being treated by nephrologists Dr. Fay and Dr. Goluch.

Most kidney transplant operations take place at London's University Hospital.

The Chapter provides patient services for patients in: Blind River, Cutler, Espanola, Elliot Lake, Gogama, Iron Bridge, Haileybury, Earlton, Kirkland Lake, New Liskeard, Massey, Manitoulin Island, Parry Sound, South River, Pickerel, Notre Dame du Nord, Swastika, Worthington, Schumacher, Whitefish Falls, Wahnapiatae, Chapleau and the Region of Sudbury.

The foundation also helps with emergency funding for unorganized territory: Timmins, Hearst and Kapuskasing patients.



Kidney Foundation secretary Heather Comfort at the helm of the new computer equipment purchased with Inco's help.

Inco hoist specialist gets another award

The testimonial reads: "In recognition of Largo Albert's generous and unselfish contributions to the mining industry and his dedication to mine hoist safety."

There was a measured reluctance in Largo's voice as he talked about this latest of many awards, his election as a Fellow of the Canadian Institute of Mining and Metallurgy. "It's nice to be nominated — to have the recognition of my peers — but it isn't something I've done alone. Inco has a lot of talented, worthy people who support the work I do, and who make this kind of achievement possible. Sure I'm happy and proud, but not just for myself."

Once past the talk of celebrities and awards, Inco's hoist specialist settled comfortably into the subjects he loves best: hoist technology and hoist safety. "It's very flattering that we get calls from around the world, from people with some kind of hoisting problem, but Inco has earned this leadership role. How many companies have 33 hoists, including every possible breed? If there's anything to experience with hoists, we've experienced it — at one time or another. Our safety envelope (the whole package of hoisting safety features) is widely known and respected."

Don't rush up to Largo's office,

Thanks to you
It works...

FOR ALL OF US



United Way

expecting to see his prestigious new certificate on the wall; typical of his modesty, he intends to keep it at home — with all the others.

Safety hits the roof

Ron brings Failsafe program home

With only a few months to go before retiring, locomotive mechanic Ron Tennant won't have to worry much longer about work place safety.

Son, Barry, however, is a different story.

"It's not that he's careless or reckless," said the 63-year-old loco shop mechanic, "it's just that he's in such a hurry to get the job done, that he sometimes lets things slip a bit."

With 32 years with Inco under his belt, a few of them as safety supervisor, he's never failed to bring the message of safe working practices home. That's one reason he was so frustrated when Barry fell off a roof he was preparing to shingle.

"No broken bones or anything serious, mind you. Just a few cuts and bruises, but it could have been a whole lot worse."

Ron, an enthusiastic supporter of company safety and health initiatives is particularly keen on the company's Failsafe system. Fellow workers have even tacked a Failsafe poster over his desk.

He's taken a Failsafe poster home to Barry who runs his own home renovation business. At 25, Barry has a lifetime of hazards ahead of him and his father hopes the material will sink in.

Ron figures it'll take just a nudge rather than shoving.

"He's well aware of safety practices and he's not fooling or



Ron Tennant secures the Fail safe poster on his loco shop workbench: Safety is a family affair.

reckless," said Ron. "It's just that the enthusiasm for the job takes over."

He said that when he fell off the roof, Barry was just about to attach the safety line. "He had it up there

with him, but he didn't have it on. He was just beginning the shingling job.

Barry, a determined fellow, climbed back up on the roof after the fall and finished the job.

Ron said he's not the kind who pays attention to safety only at work. He'll take it on pension with him next summer when he plans to begin a Christmas Tree farm on some "moose pasture" he owns.



HERITAGE THREADS

Fathers, watches and heroes of sport

By Marty McAllister

In 1889, snow fences hadn't even been invented. Still, the tennis 'net' they built that year in Copper Cliff sure looked like something left over from a hard winter. But F.L. Sperry and his friends didn't care that they had to improvise. They wanted to re-create a pastime that had been an important part of their lives in the older communities they had left, to help found a new industry. Fancy trappings would come in due time; for the moment the game was the thing.

So it was with Lacrosse, in the same year, and the big games weren't far behind.

The centennial

If Sudbury and Copper Cliff wanted to get together today, to celebrate their centennial of hockey and baseball, and of the rivalry between the two, Regional Chairman Tom Davies would have to form a mini-royal commission (probably made up of Creightonites, because they'd be independent and objective, right?) — to decide exactly what to highlight and when to hold the celebration. Which sport was first? Which community had the first team? Well, at the risk of being attacked by a sports statistician, I have to say it looks like baseball came first — but only because the summer of '90 preceded the winter. And (now I'm really pushing my luck!), the first team was in Sudbury, organized by Donald Frood — apparently some relative of Thomas Frood, discoverer of the great orebody that carries his name. It must have been a lonely season, though, with no other team in the area. So, it was Copper Cliff to the rescue.

The "centennial commission", then, might focus on the fact that the Copper Cliff baseball club challenged the Sudbury club to their first game on Victoria Day, 1891. Besides, it's too late to organize a baseball party in 1990, now that the hockey season's underway.

So, baseball it is — about to celebrate 100 years as an organized game in the region — and what wonderful stories there will be to tell!

Stars of the glory days

Charlie O'Reilly, the tall, quiet electrician from the Central Utilities department, has a very special watch.

It's a gold Elgin pocket watch, complete with fob and chain, and it's more than 65 years old, lovingly preserved from an era when it was much more than just a timepiece. With such a watch as this adorning the vest of his good suit, a man stood a little taller than he might on weekdays.

It was the crowning touch to a gentleman's ensemble, and how carefully he practised its use — when he thought no one was looking. One didn't "make a display" of such things. The trick was to retrieve

the watch from the vest pocket without looking down and deftly thumb open the cover. Next, he would raise the watch upward and outward without tugging the fob against the fabric of the vest (a sure mark of the amateur), and only then glance down — not to tell the time, but to nod sagely, merely confirming the time. Finally, with equal subtlety, the mark of distinction would be returned to the safety of the pocket, leaving the un-snagged chain to hang in a gentle curve.

Charlie's watch, however, is more special yet. It belonged to a father he knew only too brief a time — and bears the inscription: "Charles O'Reilly, for Highest Batting Average, NICKEL BELT LEAGUE, 1924, presented by J.L. Agnew."

To merit such an honour, "Home-Run Charlie" had batted .500 that year for Copper Cliff.

Those of us who've grown up around here know of the scores of great players, former pros and otherwise, who came to the Nickel Belt for the great baseball and the security of a steady, good-paying job. But there were home-town heroes as well, and Charlie was one of them. The legendary Bert Flynn, long a mainstay of the game in Copper Cliff, once said that Charlie O'Reilly was the greatest hitter he ever saw in amateur baseball.

In 1925, the Copper Cliff senior team went on to win the Ontario championship and O'Reilly was there. But so was a teammate who would two years later join the elite group of Agnew Watch winners.

The teacher

Bill and Doug McLaughlin have chewed the rag for years about which is the greatest of sports: baseball or hockey. Most times, though, they agree on politics. They have no argument at all, however, on who is their greatest hero, sports or otherwise: Charlie O'Reilly's teammate, 1927 winner of the J.L. Agnew watch, their dad, Leo McLaughlin.

Like Charlie Jr., eldest son Leo McLaughlin Jr. (Tuner) is the proud custodian of his father's prized timepiece. He doesn't let the heirloom out of his sight, so I must to catch up to him one day soon, to get a firsthand look at it. But I don't really have to see it. I've already seen the sparkle it brings to Tuner's eyes. And I've heard the quiver in Doug's voice when he recalls the father who was a player, a coach, a friend and a teacher, in the true sense of the word.

This patriarch of the McLaughlin clan taught lessons that benefitted more than his own family, and that went beyond the mere how-to of sports. He encouraged a passion for, and a love of, the greatest game of all.

In that game, how we play is everything. Whether we win or not is for Someone Else to decide.

Environmental partnership

Continued from Page 12

be solved with the major players getting together."

Inco's contributions have been substantial, he said. Inco's tailings area (revegetation of mining waste) expertise has been very helpful in our own program, he said.

"What we are seeing now, is Inco doing more on their own barren sites and that's great from our end as well. We all have to work together in trying to portray the community in the best possible light."

Third quarter earns \$97 M

Inco Limited reported that net earnings for the third quarter of 1990 were \$97 million, or 92 cents a common share, compared with \$129.3 million, or \$1.23 a share, in the third quarter of 1989.

Earnings for the first nine months of this year were \$368.6 million, or \$3.50 a share, compared with a record of \$601.3 million, or \$5.67 a share, in the corresponding period of 1989. Third quarter and nine months 1990 results reflect lower realized nickel prices. Nine months 1990 results include a gain, recorded in the second quarter, of \$112.2 million after tax or \$1.08 a share, from the sale by the company of a 20 per cent common equity interest in its Indonesian subsidiary, P.T. International Nickel Indonesia.

All dollar amounts are expressed in United States currency.

For the 12th consecutive quarter, there will be a bonus payment for employees. Third quarter bonuses for both hourly and staff employees were scheduled to be deposited to employees' accounts on Thursday, November 8, 1990.

Under the nickel price bonus clause, with the average realized price of nickel being \$4.46 a pound, an hourly-rated employee will receive a bonus of \$2.31 for each hour worked in the third quarter.

Airborne seeding promises green future

Continued from Page 9

Jacques, a mechanic/flyer who doesn't care if he's fiddling with the engine from the throttle or under

the cowling, recalls when he pulled off a blind landing in a corn field.

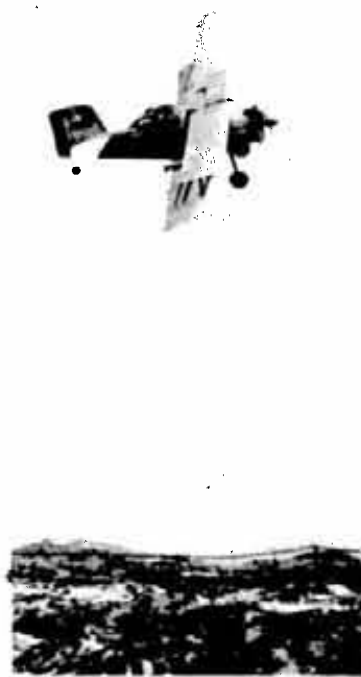
"A rod in the engine broke and there was oil all over the windshield and my side windows," he said. He cut the engine and opened a small side vent window that allowed him a limited view of the terrain he was flying over. He couldn't see forward at all.

"I remembered there were hydro lines along a railroad track, and a corn field on the other side of the tracks," he said. "I waited until I saw the hydro lines pass under me, and I put her down in the field. It was the shortest landing I've ever made. When I took off, the plane was white, when I stopped in the corn, she was green."

Jacques has been flying for about 20 years, and like his partner, can't tell you why he likes it. "I just like planes. Either working on them as a mechanic, or flying them. I prefer flying them, of course."



Jacques Dubois gets his windshield cleaned by ground support crews before another circuit.



Empty Ag-cat returns to base

Boxing Day comes early at Inco

Edgar urges co-workers' support in food drive

Edgar Burton is about as far from your typical supermarket Santa as you're ever going to get.

There are no pillows stuffed behind the belt, no beard, not even a scarlet uniform. In fact, Inco's own version of St. Nick looks like any of the other machine operators at the company's plate shop: safety boots, windbreaker and a baseball cap with a fish crest on the front.

But the heart, if you could see it, is pure Santa Claus.

"It's silly to say that in every case it is better to give than to receive," said the 17-year Inco veteran. "But it sure feels good to help somebody else out. Kind of pays back for all the blessings you always took for granted."

In just three years, Edgar's Christmas Canned Goods for the Needy project has grown from three collection boxes at Number One Dry, Number Three Dry and General Offices, to seven boxes.

Since the third week in October, Edgar's now-familiar green wooden boxes have been set up at the three original locations and at Smelter Technical Services, Crean Hill, Frood, Stobie, and South Mines.

"It's grown every year," said Edgar. "People are becoming more and more aware of what I am trying to do and are willing to pitch in. I'm getting lots of people to help out

with the project as well. Sometimes they even approach me and offer help. I know I never have to ask twice for any help I need. As this project grows, it is getting harder and harder to handle it myself."

People like Joyce Donohue, a Smelter Technical Services secretary who is taking care of the collection in her department, have made the project easier to handle.

Safety and Administration Supervisor Scott McDonald pitched in, arranging for the manufacture of the additional collection boxes as the project grows. Safety Foreman Don Dumontelle is helping to coordinate the effort, and South Mine's Andy St. Amour is handling the drive there.

Again this year, Transportation driver Roger Goudreau will help collect the cans about a week before Christmas for their delivery to the Salvation Army.

No hero

Edgar claims no halo. The initial impetus for the project three years ago was more of an example than a revelation. "My sister's place burned down in Chelmsford and everybody in the community pitched in to help out. I guess I just realized from first-hand experience that there are people out there who

won't have the Christmas that most of us take for granted."

He never went without in most of the Christmases he remembers, he said. "Compared with the way it is for some families today, I feel that I am very lucky."

Doesn't the scope of the problem demoralize him?

"Not really," he said. "Sure, it's a drop in the bucket, but you got to start somewhere. Every drop adds up to a flood. If everybody

figured their own efforts can't make a difference, nothing would ever get done."

He feels his efforts are the best example of how things can snowball. "Obviously, more and more people are participating. There are over 30 plants, mines and offices in the Sudbury area. Who knows how big this could

get in the future.

One side benefit, he figures, is the example he's setting for his three children—Lynn, 17, Christine, 13, and Jennifer, 11. I think they're proud of their dad. It kind of demonstrates that if something needs to be done there's nothing wrong with going out and doing it.

Edgar may be the windmill-charging type.

"I guess I tend to be a little aggressive. . . no, . . . determined is a better word. When I get a direction to go, few things can stop me. And when people tell me it can't be done, or it's futile, it makes me all the more determined to see it through."

Edgar feels the company has been cooperative at every turn. "I've had no problems putting the boxes out. I try to take as little time away from work as possible, but sometimes it can't be helped. Divisional Shops has given me the time I need to take care of the things that I can't do on my own time."

Edgar is asking fellow employees to fill the boxes to the rim this year with nonperishable goods.

"Your generosity will be greatly appreciated," he said, flashing an undaunted enthusiasm from under the baseball cap that reminds the listener of somebody else he once knew.

Santa Claus.



Edgar Burton with one of the boxes for an in-house Christmas food collection drive: No Santa, but close.

Inco participates in Fire Prevention Week

Firing up youngsters on hazards of flame

One look at the beaming face under the fireman's hat was all that was needed to understand the resounding success of Fire Prevention Week.

"I'd like to be a fireman when I grow up and drive a fire truck," said five-year-old Denis Turgeon as he struggled to don a fireman's boot that weighed almost as much as he did. "But I can't yet. I'm just a kid. I'm not big enough."

Denis, grandson of special mining team member Earl Picott, was one of thousands of kids who swarmed over the fire truck and firefighting equipment display at the New Sudbury Centre during Fire Prevention Week. The display and other activities during the week were a joint effort of Inco, the United Steelworkers, Sudbury Region fire departments and McDonalds Restaurants.

Like most of the youngsters, wide-eyed interest served as an inducement to remember the message drilled home during the week.

"I don't play with matches," said the would-be fireman. "I give them to mom when I find them. They can start you on fire, you know."

According to Safety General Foreman Fred Nicholson who coordinated Inco's in-house campaign as well as Inco's participation in the community-wide effort, the week was a resounding success.

"We got boxes and boxes of submissions from kids," he said.

It's going to be a lot of fun judging them all."

He was referring to a safety slogan/picture drawing contest held during the week. Youngsters, prompted by radio, television and newspaper ads, were asked to circle an appropriate safety slogan and draw a picture that explained the fire safety slogan. After filling out an entry form, the youngsters were asked to drop off the form and picture at local McDonalds Restaurants or at local fire halls. (Many forms were picked up at local schools as well.)

Denis seemed to have learned his lessons well. "You can get 'lectrocuted if you're not careful when you plug things into the wall. I wouldn't stick anything in there. I like fires but only when grandpa (Earl Picott) does it in the fireplace at camp."

It was children like Denis that this year's campaign was aimed at, although other areas of fire prevention were included in the campaign.

Inco's in-house effort included the showing of the film "Plan to Get Out Alive" at safety meetings at Inco locations throughout the Sudbury area. Letters encouraging fire safety from Ontario Division President Bill Clement and United Steelworkers Local 6500 President Dave Campbell were sent out to employees and Inco's internal inspection program was carried out with special emphasis on fire prevention. Occupational Safety and Health inspections also used the

theme of fire prevention.

Posters were developed emphasizing safety slogans and distributed throughout the plants and mines.

"We had a lot of people both

here at Inco and from the community involved," said Fred Nicholson. "We had no shortage of volunteers eager to help."

Winners of the slogan contest were chosen in five categories based

on age. McDonalds Restaurant gift certificates went to first-place winners in each category and all entrants were eligible for one \$20 gift certificate presented in each category.



Inco pensioner-turned volunteer fireman Walter Zieleniewski gives a delighted Denis Turgeon (centre) and friend Keith Picott a turn at the controls of the fire engine.



Getting high on paint

Mike Toth of Chenard Painting gets a bird's eye view of the comings and goings around Shops Alley in the Smelter Complex while painting a nearby overhead trussel.

Inco families are prominent at foster parents' gathering

Inco families were among those honored at a Foster Parent Recognition evening recently for the vital role they play in the community.

"For many decades, Inco miners and their families have opened their homes to children in need," said Children's Aid Society planning committee member Marion Roberts.

There are approximately 25 Inco families participating in the foster parents program.

The event featured local and provincial government representatives assisting the society in honoring foster parents.

The District of Sudbury and Manitoulin branch of the organization presented certificates, gifts and plaques to parents. The planning committee approached various companies and organizations in Sudbury for donations to defray the considerable costs associated with the event.

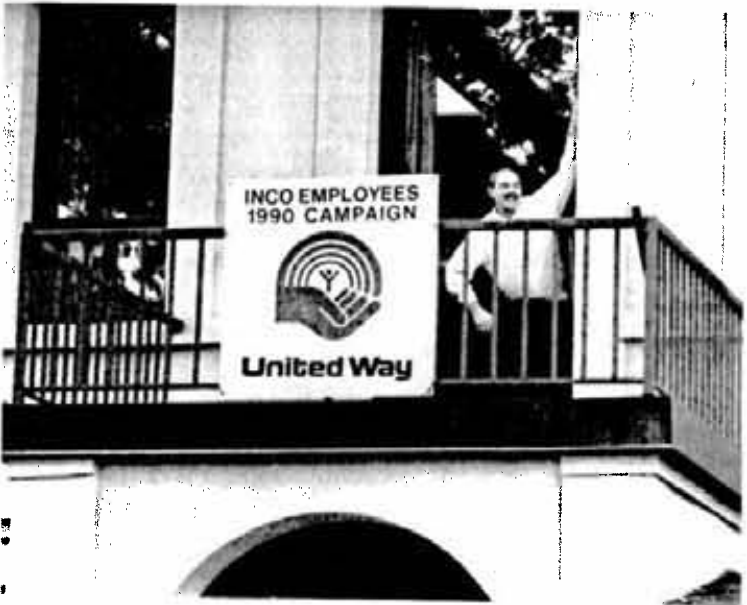
Inco donated several prizes given out in draws at the event.

Foster Parent Trainer Gail Haas said Inco parents' participation has been traditional, going back to when the Sudbury organization was launched.

"Inco people have always played an active part," she said.

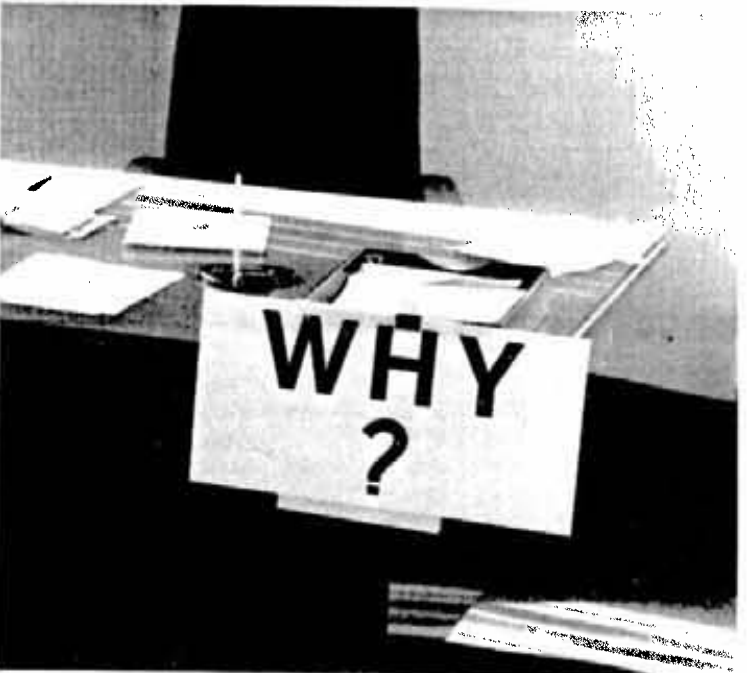
But there is still a need, she said, and she invited people interested in being foster parents to contact the agency.

"People can take a mini-training course with us to see what it's all about and then decide if they want to participate," she said.



High Sign

Mines Research industrial evaluator Ross Dixon showed his enthusiasm for the United Way campaign by climbing through the window at the Copper Cliff Clinic to hang a banner on the balcony railing. When the sign looked like it might fall, however, he called a maintenance crew with ladder to fix it permanently. Now that's the kind of spirit that makes for winning campaigns.



Miner's Musings

Is the world really round? Is a handful of might better than a bag full of right? Is the universe unfolding as it should? Do toads give you warts? It's a misconception that miners are a practical lot who think the great philosophical questions of the ages are useless metaphysical speculation and a waste of valuable time. Not so. Frood Mine Superintendent Jim Thompson says tacitly with this sign hung almost threateningly from his desk. Jim may not have all the answers, but he sure knows the hard questions.

INCO
Reserved Scholarship
Competition for Children
of Canadian Employees
and Pensioners
1991 Awards

Up to twenty 4-year university admission scholarships will be awarded in the 1991 competition. The awards are valued at \$10,000 each (\$2,500 annually). Up to five \$1,000 finalist scholarships may also be awarded.

ELIGIBILITY Children of Canadian employees, pensioners, expatriates from Canadian locations and of deceased employees are eligible to enter the competition. Candidates must have a strong academic record and be enrolled in a secondary school program of studies required for university admission. Award winners are expected to enter university in 1991.

SELECTION An independent committee of high school principals will select award winners on the basis of the complete academic record, SAT scores and information supplied by the applicant and the high school. Award winners will be announced in mid-August.

APPLICATION The application deadline is April 5, 1991. Application forms and SAT Test material will be available from September 2, 1990 at the applicant's school, or from:
Administrator, Scholarship Program
Inco Limited
Box 44, Royal Trust Tower
Toronto-Dominion Centre
Toronto, Ontario M5K 1N4
(416) 361-7844

SAT TEST APPLICANTS MUST WRITE THE SCHOLASTIC APTITUDE TEST ADMINISTERED BY UNIVERSITIES AND SCHOOLS ACROSS CANADA. PLEASE NOTE REGISTRATION DEADLINES AND TEST DATES: TEST DATES IN OTHER COUNTRIES MAY VARY.
REGISTRATION DEADLINES September 24, 1990
October 22, 1990
December 17, 1990
TEST DATES November 3, 1990
December 1, 1990
January 26, 1991

APPLICATION DEADLINE: APRIL 5, 1991

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