

perhaps, but these two give their all. See page 15

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Inco volunteers donate skills to Careers 2000

nco volunteers, up to 25 at a time working during weekends and evening hours, began the wiring and other work in late April and early May for the Careers 2000 Exposition to be held May 4 to May 7.

The electrical work alone was expected to take about 120 hours to get the Bellgrove Arena ready for the event. By May 1, most of the wiring had been completed, but unexpected additional work promised to keep Inco volunteers busy for more evenings. Platforms had to be installed all around the arena floor to level out the first row of booths. Volunteers also did cement work around the perimeter of the floor to repair damage caused by the removal of the

By May 1, crews of 20 to 25 people were also being scheduled to clean up the arena floor in preparation for the installation of booths.

Preparations are also in full swing for the 12 Inco booths at the exhibit designed to give visiting students information not only about Inco, but also about the many trades and occupations availabale here.

There will be plenty of other Inco volunteers involved in the exposition, employees from a cross-section of skills, who will pass out information as well as anwer questions at the Inco booths.

The volunteers have been

given additional training to ensure they have enough information to talk about the industry as a whole as well as their own trades, skills and training.

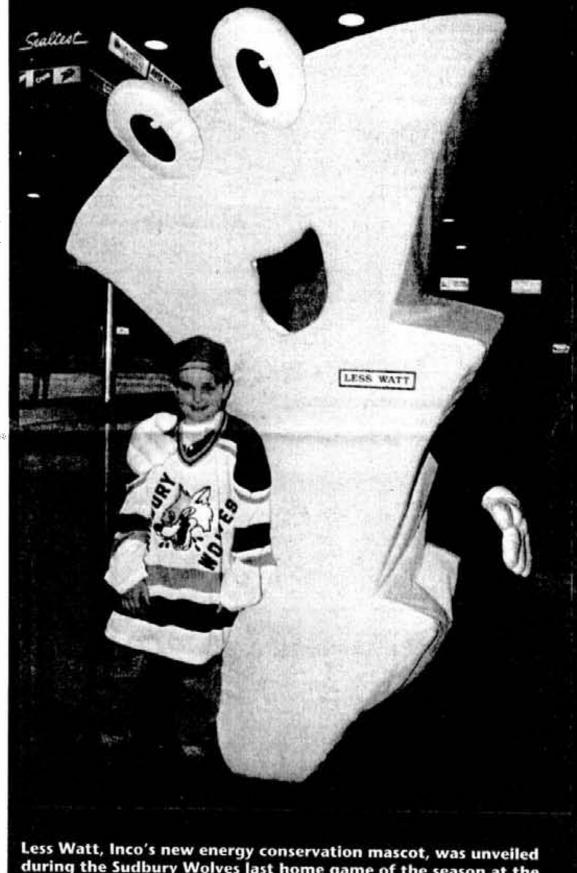
Inco pensioners have joined the 30 employees in volunteering their services for Careers 2000. Retirees from mines, laboratories, maintenance and smelter operations have come foward to help out with the exposition.

Most of the pensioners have offered to help without having to be asked, according to volunteer Reg Laurin, a training coordinator at the Smelter. "That helps us a great deal because the pensioners have more free time to help out when our people are too busy."

Reg said that the overall volunteer situation is overwhelming. "We are getting a lot more volunteers than we ever expected," said Reg. "The pensioners' contribution is a welcome addition. It makes it easier for the guys on the job, spreads the workload and generally adds to the team spirit of the project.

"People are really buying into this thing," he said. "One reason is because everybody's behind it, from Inco to the unions." He said Local 6500 is also involved in the planning of the exposition as well as providing volunteers for the actual event.

One of the pensioners continued on page 2



during the Sudbury Wolves last home game of the season at the Sudbury Arena. Less expressed a particular affection for nine-yearold Mathew Groves who won the mascot-naming contest. Mathew is the son of Paul Groves of Purchasing. The costume was designed by the mascot's creator Vic Theriault of Information Systems and fabricated by local artist Yvonne Morriseau.

Changing focus to growth: Sopko

etermined, candid, confident and outspoken, Mike Sopko's speech to shareholders at this year's annual meeting ranged from frankness about the continuing poor nickel market to a bold determination in making the company grow in its role of industry leader.

"At Inco, it's been a long time since we've talked about the prospect for growth. Too long, I think," said the chairman and chief executive officer. "It's time we got back to the realization that as an industry leader, growth is part of our mission and is essential to the long term well-being of

Inco, its shareholders and employees."

While much of the growth is expected to be outside Canada, Mike emphasized that the company is not going "to walk away from Sudbury.

"But the success of that operation depends on its cost structure," he said, noting that

production costs are lower at Inco's operations in Indonesia. He was responding to a query from retired Inco

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Inco volunteers swing into action to prepare for Careers 2000 Exposition

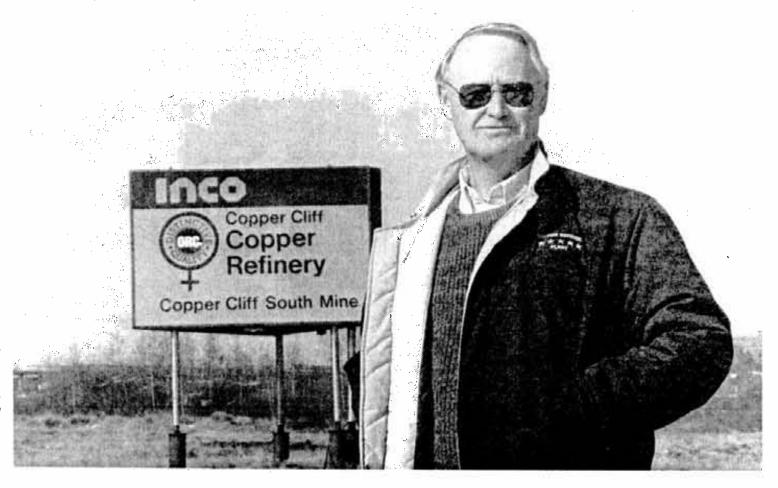
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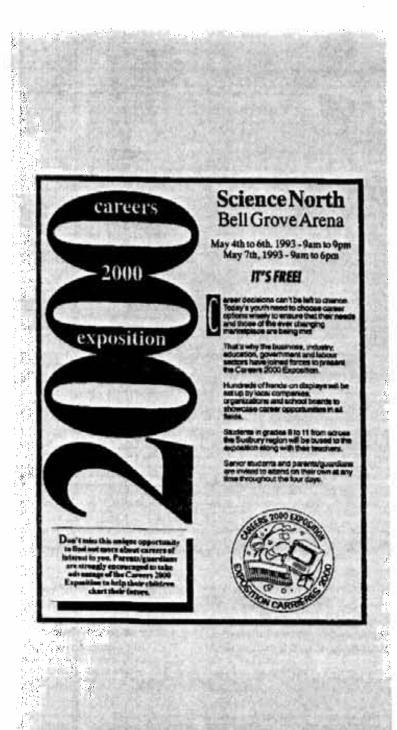
enthusiastic about the project is retired Copper Refinery analytical supervisor Jim Balleny.

"It's become apparent that careers and job success in the '90s and beyond will depend upon technical training and the knowledge of workers," he said. "This event is a marvelous opportunity for Sudbury District students to see what is available."

The four-day exposition is being held to introduce students from all over the Sudbury district to the opportunities available in many fields.

Pensioner Jim Balleny, a former analytical supervisor at the Copper Refinery will share his years of knowledge and experience with students at the Careers 2000 Exposition.





Inco pensioners have come forward to join Inco employees in volunteering for the Careers 2000 Exposition from May 4 to May 6. We asked why they found it important enough to give up their free time to help out.



Gilles Beauparlant, retired tram crew, South Mine: "I want to help students realize the importance of obtaining a high school diploma in order to expand their career opportunities so that they may compete successfully in the technological, highly competitive and ever-changing global economy."



Fern Benoit, retired Smelter foreman: "I want to help the students to stay in school to better their choice of a career for the future. They have to look today for tomorrow's future."



Louis Mourat, retired smelter foreman: "I think to-day's kids need to be aware of the industrial careers open to them and of the change in industry as well as the importance of education to deal with these changes. Education and industry go hand in hand."



Co-op student Robert Bowd credits the Inco experience with avoiding a major mistake in planning his future career.

Inco program helps students make career choices

erhaps there's no one better able to demonstrate the value of Inco's Co-op Student Program than Waterloo University student Robert Bowd, but for reasons you might not expect.

Inco has helped the 22-yearold Lively native avoid a mistake he might otherwise have regretted all his life.

"The experience I've gained in four work terms here has $been \, invaluable \, for \, any one \, who \,$ wants to go into the computer field," he said. "I've learned a lot of things here that I couldn't have picked up anywhere else,'

Ironically, the most important thing the Computer Science student has learned here is what he doesn't want to do.

"I got out of (Lively) high school with no idea what I wanted to do. I was good in mathematics so I chose computer science. With the experience here and at school, I've realized that this isn't what I want to do for the rest of my life. My experience at Inco has helped me decide what I don't want to do for the rest of my life . . . it's helped me do a career assessment."

He emphasizes that the decision is not a reflection of working at Inco. "I've enjoyed the atmosphere here and it's been a worthwhile experience. I just discovered that I don't have the $interest\,in\,math\,and\,computers$ that I had when I got out of school."

He's determined to complete his Computer Science degree, however, and hopes to come back to Inco for the remaining two work terms. But if the opportunity presents itself and the

money is there, he'll return to school to get a degree in Social

Regardless of his future career, Robert feels the Inco experience is an asset.

"Statistics show that employers look more favorably on people who have previous work experience. People in co-op programs average about \$5,000 more on their annual salaries."

The obvious advantage is one reason the program has become so popular. Although

versity.

For Laurentian Mining Engineering student Tammy Leeson, her first Inco work term has made her even more confident about her choice in careers.

"Even if I don't get an engineering job right away, I'd be more than willing to take a miner's job if I was given the opportunity.

"I find the underground environment challenging, different and exciting. There's always

ary on the first day, I was asked if I had my underground equipment with me because I was going underground.'

Since then, she's spent at least part of every day underground.

"A lot of what I'm picking up here would be impossible to learn in a classroom. You can pick up a lot of things on your own as you work and the people are eager to help you learn new things.'

In May, university and col-



South Mine planner Hank Haneberry and student Tammy Leeson look over some drawings on the light table. "Underground," Tammy says, "is challenging, interesting and exciting."

fewer students than in the past are accepted by Inco due to general downsizing, more universities and colleges are participating in the program that began in 1965 at Waterloo Unisomething new every day."

South Mine wasted no time in introducing the Webbwood (near Espanola) native to the job.

"When I showed up in Janu-

lege students from Laurentian, Waterloo, McGill, Ryerson, Haileybury, Sault and Fanshawe can be found at Inco plants and mines.

The program runs all year.

Students work at Inco in fourmonth terms after which they return to school. Students may or may not return for subsequent four-month work terms. Students work mainly in the Engineering, Computer Science, Environmental and Kinesiology

"I think the program has a lot to offer, both for Inco and the student," said the program's administrator Helen Gordon. "There isn't any doubt that the students do meaningful, valuable and needed work.

'We are in a good position to evaluate the student as a future employee and the student is able to evaluate us." said Helen. "More and more educational institutions are developing co-op educational programs. With its combination of academic studies and work experience, the program has a lot to offer the students.'

Yearly requirements at Inco are determined by management and filled through a formal process as established by the company and the respective university or college.

Students are hired to do project-type work. A typical job description could read: Under the guidance and direction of the Plant Engineering Group, the candidate will be responsible for design work involving field investigation proposals, design calculations, drafting, contract packages and commissioning. "The program is very popular here," Helen said. "We are getting a very high calibre of student. I don't recall getting a single derogatory comment about the program or the students."

Inco career information package offered to students

A career information package about opportunities at Inco has been prepared and will be part of the information available at the Careers 2000 exposition in May.

The information package is just part of the support Inco and Inco employees have shown toward the exposition. More than 50 employees

and pensioners are volunteering their time and efforts to the event, which is designed to inform students about the variety of careers in the trades and the importance of education in career planning.

The Inco outline includes:

OCCUPATION: MILLING\SMELTING\REFINING

EDUCATION REQUIRED: Minimum - Mining & Mineral Processing Certificate 1 year Preferred - 2 year Technician or 3 year Technologist

WHAT IS INTERESTING ABOUT THIS CAREER?

Continually changing environment - the level of technology involved is increasing all the time - creates a challenging workplace.

WAGE RANGE: Entry Level \$37,000 Avg. \$43,000 Top Rate \$46,000

BENEFITS: Medical, Dental, Vision Care, Life Insurance

HOW MUCH JOB SECURITY IS THERE?

Hard to say - this is dependent upon changing technology and world economic conditions.

ARE THERE OPPORTUNITIES FOR CAREER ADVANCEMENT? Opportunities exist for some employees through education and experience.

ARE THERE OTHER OPPORTUNITIES IN CANADA?

Many of the skills involved are transferable.

WHAT IS THE SIZE OF YOUR STAFF?
Overall 7,000 This Segment 1,200

WHAT ARE THE WORKING CONDITIONS? Variable - depending upon the processes involved and the job

location.

ARE THERE SAFETY HAZARDS? Yes - this requires attention to training, safety, etc.

IS TRAVELLING REQUIRED?
No - normally assigned to one

WHAT ARE THE COURSES I SHOULD TAKE?
Communication - technology - math - science.
All careers at Inco require a commitment to Life Long Learning in order to upgrade skills and stay in line with new technology.

OCCUPATION: MAINTENANCE

EDUCATION REQUIRED: Completed apprenticeship.

WHAT IS INTERESTING ABOUT THIS CAREER? Variety, challenge, continuous change.

WAGE RANGE: Entry Level \$38,000 Avg. \$45,000 Top Rate \$48,000

BENEFITS: Medical, Dental, Vision Care, Life Insurance.

HOW MUCH JOB SECURITY IS THERE?

As the technology of the workplace increases there is more demand for highly skilled trades and many of the core skills are transferable.

ARE THERE OPPORTUNITIES FOR CAREER ADVANCEMENT? Yes - there are opportunities for some people through education and experience.

ARE THERE OTHER OPPORTUNI-TIES IN CANADA? Most maintenance skills are transferable to areas outside of Inco.

WHAT IS THE SIZE OF YOUR STAFF? Overall 7,000 This Segment 1,800

WHAT ARE THE WORKING CONDITIONS? Variable depending upon the processes and actual job location.

ARE THERE SAFETY HAZARDS? Yes - requires attention to training and safety programs.

IS TRAVELLING REQUIRED? Possibly - but normally assigned to single location.

WHAT ARE THE COURSES I SHOULD TAKE?
Communication.- technology - math - Community College
Apprenticeship Preparation. All careers at Inco require a commitment to Life Long Learning in order to upgrade skills and stay in line with new technology.

OCCUPATION: TECHNICAL (Various Areas)

EDUCATION REQUIRED: Minimum Technician (College) Preferably A University degree in α related discipline

WHAT IS INTERESTING ABOUT THIS CAREER?
There are a wide range of jobs and opportunities available around the world. Some examples are:
Geological, includes mine surveying, Chemical Analysts, Computer Systems, Metallurgical.

WAGE RANGE: Entry Level \$36,000 Top Rate \$58,000

BENEFITS: Medical, Dental, Vision Care, Life Insurance. HOW MUCH JOB SECURITY IS THERE?

Fairly stable for present employees - depends on the requirements of operations.

ARE THERE OPPORTUNITIES FOR CAREER ADVANCEMENT?
Definitely - through education and experience - depends a lot on the actual job.

ARE THERE OTHER OPPORTUNITIES IN CANADA?
Yes - demand is high across
Canada - skills are transferable.

WHAT IS THE SIZE OF YOUR STAFF?
Overall 7,000 This Segment 600

WHAT ARE THE WORKING
CONDITIONS?
Varies with job category and work
location

ARE THERE SAFETY HAZARDS? Depends on the job and other factors.

IS TRAVELLING REQUIRED? Possibly - not normally.

WHAT ARE THE COURSES I SHOULD TAKE?

Communication - advanced level courses aimed at OAC and your career choice. All careers at Inco require a commitment to Life Long Learning in order to upgrade skills and stay in line with new technology.

OCCUPATION: ENGINEERING

EDUCATION REQUIRED: BSc. Engineering plus P.Eng. (minimum APO standing)

WHAT IS INTERESTING ABOUT THIS CAREER? Varied disciplines - environmental, mining, computer, robotics, design, mechanical, electrical, etc.

WAGE RANGE: Entry Level \$36,000 Top Rate \$58,000

BENEFITS: Medical, Dental, Vision Care, Life Insurance.

HOW MUCH JOB SECURITY IS THERE?
Very good job security - this is currently the only job classification in which Inco is actually recruiting at this time.

ARE THERE OPPORTUNITIES FOR CAREER ADVANCEMENT?
Yes - excellent opportunity to advance into supervisory positions.

ARE THERE OTHER OPPORTUNITIES IN CANADA?
Yes - all skills are readily transfer-

WHAT IS THE SIZE OF YOUR STAFF?

Overall 7,000 This Segment 100 WHAT ARE THE WORKING

CONDITIONS?

Variable - depending upon job location and classification.

ARE THERE SAFETY HAZARDS? Possibly - requires training and safety programs.

IS TRAVELLING REQUIRED? Not normally

WHAT ARE THE COURSES I SHOULD TAKE? Communication - business - tech math - science at advanced level

All careers at Inco require a commitment to Life Long Learning in order to upgrade skills and stay in line with new technology.

OCCUPATION: ADMINISTRATIVE SUPPORT

- clerks, stenographers, etc.

EDUCATION REQUIRED: Business College or equivalent.

WHAT IS INTERESTING ABOUT THIS CAREER? Varied - challenging - constantly changing to keep up with new technology.

WAGE RANGE: Entry Level \$27,000 Top Rate \$40,000

BENEFITS: Medical, Dental, Vision Care, Life Insurance.

HOW MUCH JOB SECURITY IS THERE?
This is hard to say. With new technology and computerization many of these positions within Inco

are being phased out.

ARE THERE OPPORTUNITIES FOR CAREER ADVANCEMENT? Yes - through education and experience - normally advance to other areas.

ARE THERE OTHER OPPORTUNITIES IN CANADA?
Yes - mostly at lower wages than we pay.

WHAT IS THE SIZE OF YOUR STAFF? Overall 7,000 This Segment 100

WHAT ARE THE WORKING CONDITIONS? Varied - depending upon the location of the workplace.

ARE THERE SAFETY HAZARDS? No - the same as any other office.

IS TRAVELLING REQUIRED? No.

WHAT ARE THE COURSES I SHOULD TAKE?

Communication - computer - keyboarding - business - math.
All careers at Inco require a commitment to Life Long Learning in order to upgrade skills and stay in line with new technology.

OCCUPATION: ADMINISTRATION

EDUCATION REQUIRED: College, plus experience, preferred University degree, plus experience.

WHAT IS INTERESTING ABOUT THIS CAREER?

There are a wide variety of Administrative positions at INCO ranging from first line supervisor to President.

WAGE RANGE: \$40,000 to \$100,000 plus.

BENEFITS: Medical, Dental, Vision Care, Life

Insurance.
HOW MUCH JOB SECURITY IS

THERE? At the present time there are very limited openings.

ARE THERE OPPORTUNITIES FOR CAREER ADVANCEMENT? Yes, through continuing education and experience.

ARE THERE OTHER OPPORTUNITIES IN CANADA?
Most skills are transferable.

WHAT IS THE SIZE OF YOUR STAFF? Overall 7,000 Administration: Less than 1,000

WHAT ARE THE WORKING CONDITIONS? Variable - depends upon actual job, location duties and responsi-

ARE THERE SAFETY HAZARDS? Depending on work location.

IS TRAVELLING REQUIRED? Depending upon position, not normally. The higher the position the more travel may become necessary.

WHAT ARE THE COURSES I SHOULD TAKE?
OAC level courses, good communication skills are critical. All careers at Inco require a commitment to Life Long Learning in order to upgrade skills and stay in line with new technology.

Inco's diversity a boon for high school program

o call Inco's involvement in the Sudbury Board of Education's High School Co-op Education program "appreciated" would be an understatement.

"The advantage in getting a large company like Inco on board is in the wide range of professions, trades and skills that make up the workforce," said school board program coordinator Marjatta Longston. "We've placed about 60 students at Inco since the company came on board three years ago in areas such as engineering, chemical technology, machine shop, electrical and plant protection. The diverse nature of the Inco workforce is a real advantage for us. The reaction from students and the company alike have been very good.

Students usually spend half the day at school and the other half at an Inco job site.

Used to be, said Ms. Longston, that the board had to canvass industries and businesses for student work placements. Today, more and more



Machinist Charles Baird looks on as high school student Tim Tallevi makes an adjustment to the verci mill at **Divisional Shops.**



Julian "J.J." Bertrand (kneeling) checks out an electrical panel under the watchful eye of electrical leader Frank Haner at the South Mine Electrical Shop.

industries and businesses call the board about the possibility of getting students.

"Inco's engineering department will call and tell us what they need. There are seven students working there now and we've already scheduled four students for the next semester."

The success of the program, she said, is a two-way street. "Not only do our students gain from the experience, but they contribute their skills to the company as well."

She said the program is growing rapidly. This year about 1,000 students will participate.

While the actual hands-on work experience is something that the student can only get in such a program, she said, another major advantage is the career evaluation by the students themselves.

The students get a chance to try out the career they have chosen. Many confirm their choice, but others change their minds after the work terms.

"Some find that the field is not for them," she said, "and that's a very important lesson to learn.'

But perhaps the most important thing the student picks up on the job is the obvious need of education, skills and training.

We can tell them a hundred times to stay in school, that a good education is required to get the good jobs," said Ms. Longston, "but on the job site they can see for themselves."

Many students, after finishing the work term, say that the experience has been the best thing they've done in all their years in school.

Although 18-year-old Lo-Ellen Park student Tim Tallevi hasn't made up his mind about what career he wants to pursue, the Divisional Shops work term he's on has given him an insight on one of his choices.

"You learn a lot more here than at school," said the Sudbury native. "I certainly wouldn't rule out being a machinist and I can't say for sure if that's what I want to do. I guess 'maybe' is the best answer."

Tim said he's been given the opportunity to work on several of the shop's machines. "People here are eager to help you," he said.

Lockerby Composite High School student J.J. (Julian) Bertrand has been elbow to elbow with South Mine electricians, an experience that has confirmed his intention to go into the electrical field.

Being 19 years old, I get teased all the time," said J.J., "but when it comes to helping me learn, the people here are great. I can approach anyone here and they'll tell me what I need to know. Sometimes they'll ask me the next day, just to make sure I know it."

J.J. doesn't need to be convinced about the need for an education. "I quit school once already and worked in construction. That made me realize that I need schooling in order to get a worthwhile job.

"What this work term has done for me is to confirm my intention to go into the electrical field. I would hate to go through my entire schooling and then find out the job's not

Although no statistics have yet been compiled about the job-seeking success of the co-

op student, Ms. Longston said there's every indication that the co-op student has an advantage. "The word that comes back from teachers who try to keep track of what happens to their students indicates that about two thirds find work.

"This is definitely the way we'll have to go in the future, she said. "It's a partnership with educators, industry, teachers and employers working together to see what education, skills and training are needed for the next generation of employees."



Students Tour Smelter

In keeping with the Careers 2000 spirit, the Copper Cliff Smelter helped out a College Notre Dame school project by taking 15 Grade 13 students on a tour and gave them an an informative presentation and film at the Smelter Pavilian. The students' project involves Inco's Sudbury operations. While such tours of plants and mines can't be made on a regular basis, special arrangements are periodically made to help students and educators understand the industry. With the students on the far left is Bill Dopson, superintendent of Administration and

First female graduates First Line Supervisor course

Senior claims administrator Janet Wyman became the first female employee to go through the company's First Line Supervisors' course, an experience she wouldn't have missed for the world.

"It changed my life," she said. "It was eye opening to work with people from all over the Division, people from the mines and other operations. It's interesting to see what their life and their work is like."

Janet is one of more than 100 graduates of the intensive course conducted by Inco in partnership with Cambrian College.

The classroom and in-plant practical training earns the graduate a certificate from the Ministry of Colleges and Universities.

"I learned a lot, not only what was taught but what I picked up from others on the course. I made a lot of new friends while on the course and I learned a lot from them."

She expected . . . and got . . . no special treatment as the only woman on the course. "I was treated like everybody else," she said "and that's the way I wanted it. Nobody did me any favors. I'm confident that I graduated on my own

abilities."

Not that she wasn't nervous when she began the course. "On the first day when you start something new, there's some nervousness, but after a few days I got alone just fine. The guys on the course not only accepted me, but they treated me like a friend."

She found the public speaking portion of the course particularly rewarding. In fact, she said it changed her life. "Intimidated by an all-male audience? Not really. I don't think it would have been any different if it was an all-female audience."

Another valuable segment, she said, was the information she picked up on how to deal effectively with people. "If I ever become a supervisor, this information is going to be invaluable to me. But whether or not I get to be supervisor, I'll be able to use what I've learned in my daily life in dealing with people. We all have the opportunity to improve our human relations skills every day."

Janet wants to be given the opportunity to use what she's learned. "I want to be given an opportunity to show what I can do as a supervisor, to be



First Line Supervisors course graduate Janet Wyman gets her certificate and a warm handshake from Human Resources and Administration vice-president Jose Blanco. Janet is the first female employee to go through the course.

able to use what I've learned. It would be a waste if Inco gave me the training but didn't take advantage of it."

In fact, Janet was acting supervisor about two years ago, but when the time came for the permanent appointment she was passed over for lack of training.

"I was like a fish out of water," she said, "but now I feel I could handle it."

She'd like to see more women on supervisory courses, but she feels that if the issue is pushed, it won't happen the way it should. "It's going to come with the growing mutual respect between men and women. These changes will come automatically, but it'll take time.

"The time will come," she said, "when people will be recognized for what they can do, not who you are."

Supervisors course emphasizes brains, not brawn

I fthe challenges facing Inco are to be overcome, it'll be the knowledge, training and innovation of its employees which will put the company over the top.

"The challenges in our future will be conquered by brains," Human Resources and Administration vice-president Jose Blanco told a group of graduates of Inco's second First Line Supervisors course.

He told the more than 50 graduates that learning new ways of doing things is perhaps one of the most important components of a successful Inco team.

"The greatest investment you...and Inco...can ever make is in development of your brain," he said.

Graduates were told that training, education and adaptating to new ways of looking at problems is even more important "when times get tough. The leaner we get, the more important training becomes," said Jose.

He said the overall culture has to change for employees at all levels, including management. "We're not talking about eliminating supervisors, but a major role change for them," he said. "Teamwork, quality, they all boil down to

one thing: change will happen and will be a constant thing. Some things we've come to expect in the past such as health care and a good education all have a price. Our only advantage is a good education that gives us the ability to change, to be flexible. You are on the leading edge of that change," he told the graduates.

The recent ceremony brings to more than 100 the number of graduates of the intensive course that includes six weeks of Inco classroom training followed by four months of inplant practical experience. Upon completion of a further two weeks of classroom training, the participants receive a certificate of graduation from the Ministry of Colleges and Universities.

Subjects covered range from leadership, motivation and communications to human rights and decision making.

With a good number of graduates in the field, Inco's training department is using the opportunity to do an indepth analysis of the results and effectiveness of the training.

"We want to get feedback from the candidates, to



Marc Bidal was one of more than 50 people to graduate from the second First Line Supervisors course. He is seen here getting his certificate from Human Resources and Administration vice-president Jose Blanco.

find out ways we can improve the training," said Training supervisor Karen DeBenedet.

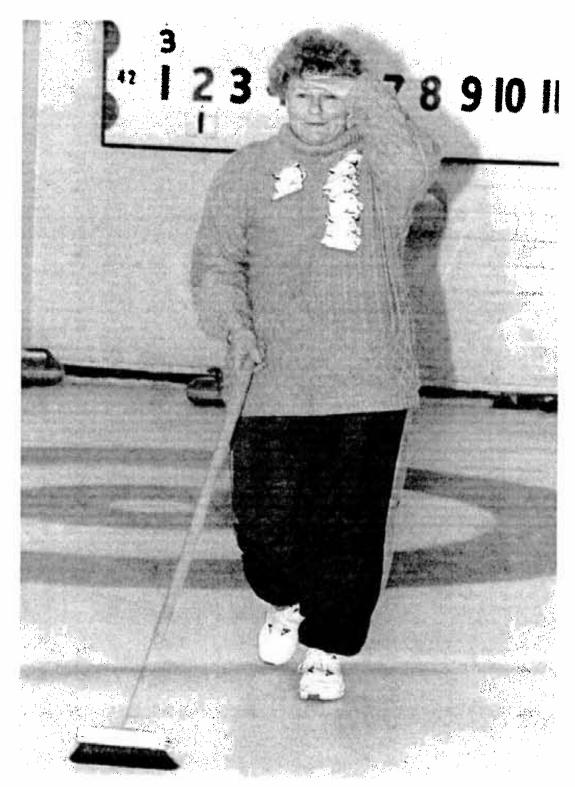
She added that about 30 per cent of the graduates are not currently functioning in a supervisory capacity and the planned program assessment

will provide an opportunity for them to gain leadership experience.

The Training department is developing a computer program that will allow managers to access a list of people available to them who have taken the first line super-

visors program but are not working in that capacity.

"Managers will be able to 'plug in' to more of the resources available to them when needed, providing more opportunities for graduates to gain experience," said Karen



Sally Maki had a little trouble getting her rock past the hogline. Note the pigs on the sweater.

Sally curls six pigs, earns pork roast

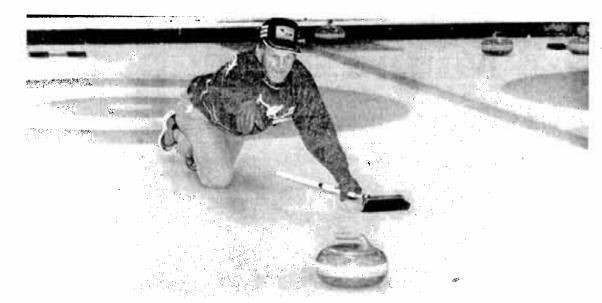
uest curler Sally Maki doesn't want to see an other pig for a while! After the Inco safety and plant protection department's bonspiel she has had her fill of them

As part of the fun tournament, curlers who were unable to throw their rock past the hogline received a paper pig's head to wear on their shirt. After three games Maki had collected seven pigs and was awarded first prize at the end of the evening - a pork roost

"I'm very proud of my pigs," she laughed. "Even though we lost I still won something."

Sally played alongside her son Calvin and brother Inco pensioner Albert Manninen and his son Gary at the bonspiel. About 48 Inco employees and their spouses participated in the department's first bonspiel.

"We're all here to have fun, it's not much of a competition," she said. "It is nice to meet the people that I work with over the telephone in person."





Albert Manninen throws his rock.

Plant Protection on guard for the next rock. At left is Len Leclair. At right is pensioner Albert Manninen. Chico Rodrigue, one of the bonspiel organizers, said he was pleased with the turnout at the recent competition.

"Hopefully this will become an annual event," he said. "In the past year we have held our first golf tournament and we're considering holding a bowling tournament."

It isn't always easy according to Rodrigue for people to participate. About 50 per cent of the people in the department are working at any given time.

"The main reason why we hold these tournaments is so that people can meet each other socially," he said.

Nancy Rebellato couldn't agree more with Rodrigue. "I just started in this department about two weeks ago and I think this is a great way to meet people and get to know them outside of work."

First prize went to Len Leclair's team which included Sue White, Brian Riajala and Nancy Rebellato for the most points. Some of the many prizes included blenders, coolers and workboots. No one went home empty handed.

Geologist at the right place and time for Garson Mine project

eologist Stephen Ball figures he was the right person, in the right place, at the right time.

"This is the kind of experience I couldn't hope to get anywhere else," said Stephen. "I don't know where last year went, that's the kind of year it's been."

Just a little more than 10 years out of school and after cutting his geological teeth in South African gold mines and in a small mining project in Red Lake, Stephen feels it was good luck that brought him to Inco in time for the Garson project.

"The advantage in a project like this one is that you get involved in all aspects of the mine, you get in on the ground floor, so to speak. You're not stuck behind a computer or a drafting board all the time.

"It was quite challenging and exciting, and now that it's been approved, it's all been worthwhile."

In only his fourth year at Inco, Stephen provided geological services for the Garson project which included evaluating the diamond drill hole data to calculate grades for the mining blocks.

He also spent considerable time underground. "We assessed the existing ground conditions and support requirements and identified potential problem areas. We looked at inventories of machines, assessed the extent of slimes and water underground and needed pipe work for air and

water lines." Stephen figures only about 50 per cent of his time was he working strictly as a geologist. The rest has been spent working at other jobs.

"In short," he said, "I've had a chance to get involved in just about every aspect of the mine and it's been a great experience."

As one member of an Inco team which included engineers Wally Dittburner (now retired), Tom Ryan and Matti Jousi, Stephen said it was the team effort that made the planning successful.

"There were good people on the team and we worked well together. That contributed to the project's success."

While the plan has been approved and full operations are scheduled to resume at Garson in 1995, Stephen doesn't doubt that there will have to be some minor adjustments made.

"Even the best plans demand adjustments as you go. We were conservative and if we erred, it was on the side of caution. I'm confident that we can improve on the plan as we go.

"Now we're at the point where we actually start the project. You feel a certain responsibility when you're involved from the start. The trick now is to make it work and keep control of the costs.

"That could turn out to be even more challenging," he said.

Geologist Stephen Ball considers himself lucky to be involved in the Garson project. He's seen here away from his computer, examining the paste fill that will be used to backfill Garson stopes.



For Garson Mine PPO, happy times are here again

t times, Paul Prudhomme's work has been that of a hermit, but today he's expecting company.

A flood of friends.

"This used to be a booming place at one time," Paul mused as he leaned back in his swivel chair and scanned his nearly lifeless surroundings at the Garson Mine gatehouse.

A plant protection officer at Garson, he's been at this the post here since 1975, including the period of the socalled "closing."

"Actually, there were always people around, even when the underground operations stopped," said Paul, "but sometimes it got down to just a few people and I hardly saw anybody all day. It got to be a pretty lonely job at times."

With the announcement of

Paul a \$40 million investment over the next two years to prepare for the resumption of full operations at Garson Mine in 1995, Paul expects the special Garson atmosphere will return.

"I figure a lot of the guys who worked here before will return," he said. "There was always a special atmosphere in this place, kind of a family thing. People from Garson were proud of where they worked."

No new mining jobs will be created when miners resume hauling ore from underground, but the operation will ensure jobs for 179 employees, most of them now at Frood.

"I know a lot of the people who were here before want to come back," he said, "and it's going to be great to see



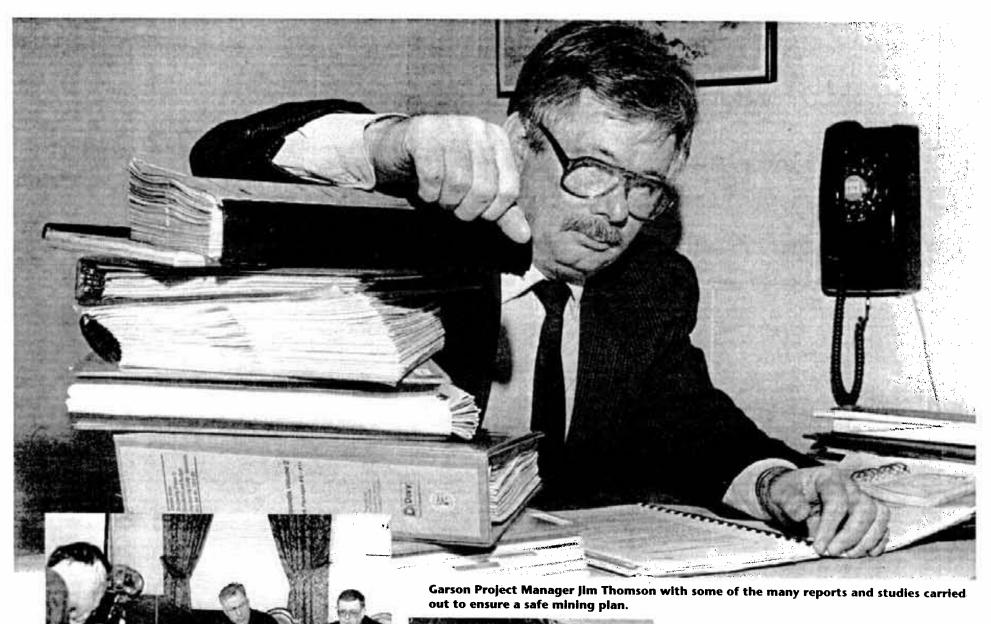
Garson plant protection officer Paul Prudhomme: "There'll be some life around here again."

familiar faces again. I'm looking forward to it.

"It'll be great to have some life around here again. This is home for me."

A major 15-month development and rehabilitation program has begun at Garson to prepare for the resumption of underground mining. When full operations resume, about 9,000 tons of ore per day will be produced for about nine years. The mine has further reserves of 14.7 million tons of higher grade ore that could provide at least another 20 years of productivity.

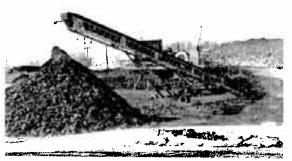
Ore from Garson, one of the higher grade ore bodies in the Sudbury region, will replace production from other mines now near the end of their life spans. The move will not add nickel to the burgeoning worldwide inventories.



At a Copper Cliff Club press conference, Frood-Stoble-Garson Complex manager Fergus Kerr and vicepresident of mining John Kelly announce plans to bring Garson to full operations



A truck removes ore via the ramp at Garson Mine. Small bodies of ore accessible by ramp were mined here for almost the entire time the mine was reportedly "closed."



A portable crushing plant crushes the small amounts of ore mined at Garson.

Four separate independent experts verify Garson mining plan

he piles of reports, studies and approvals on Jim Thomson's desk would convince even the most cynical that safety was Inco's highest priority before resuming full operations at Garson Mine.

"I'm confident," said the project manager, "that we've done and redone all that we

No wonder he's confident. After engineers, geologists and consultants submitted a \$40 million plan to resume full mining operations at Garson, Inco sought out no fewer than four separate independent authorities to verify its own endorsement of the plan.

"Two geotechnical companies came and looked at our plan and gave us a vote of confidence," said Jim, "and then we went to the Ministry of Labour to look at the plan as well."

For an academic review, Inco approached Dr. Peter Kaiser of the Geotechnical Research Centre at Laurentian University.

One of the highest grade ore bodies in the Sudbury re-

gion, Garson Mine ceased full operations in 1986 because of safety problems created by unstable rock conditions.

'To say that we closed down here would be incorrect," said Jim. "Garson shipped ore every year since 1986. We continued to mine small ore bodies close to the surface that were accessible from the surface ramp and I'd say an average of about 40 or 50 people worked here most of the time."

In fact, Garson was the scene of a unique two-year crown removal project that saw 130,000 tons of high grade ore removed from a manmade crater the size of 15 football fields while millions of gallons of water were pumped out of the ground faster than it could seep back in.

The "crown" or surface area ore of the 10.2 orebody was all that remained after underground mining was completed.

Reclamation efforts have completely rehabilitated the site, and today it resembles a park complete with high green grasses and a small lake that's already home to a flock of Canada geese.

But before resuming an underground operation that will employ about 179 people and produce 2,000 tons of ore per day for nine years following the scheduled 1994 resumption of mining, Inco wanted to ensure that concerns about mining the reputed unstable rock conditions had been settled.

While safer bulk mining techniques, improved blasting and ground support methods as well as the use of highdensity paste fill will alleviate ground control problems, the biggest improvement is in the mining plan itself.

Previous mining operations at Garson were in the middle of the ore body where miners removed ore by moving along inside the length of the narrow, horizontal "slice" of ore.

It is the ore itself that represents the unstable ground conditions at Garson, said Jim, and a better way had to be found to get the ore out.

The most crucial factor working underground is time, said Jim. "Ground instability is directly related to the time you spend in the underground

opening. The less time in an opening, the less hazard. The old method meant working from inside the orebody all the time."

The new mining plan calls for a different method of removing the ore. A haulage drift running the entire length of the orebody will be developed in the more stable, adjacentrock. Multiple short crosscuts driven from along the length of the haulage drift will approach stopes in the orebody from the side, much like sawing a log into sections.

Not only will the stopes be much smaller, they'll be open for much shorter periods of time. Once each "slice" of the orebody has been removed, the stope and cleared section of orebody will be backfilled.

"It's not a new method," said Jim. "It generally takes more capital to implement, but today's improved mining techniques and equipment, coupled with the high grade ore, will more than make up for the difference."

Not only will the stopes be backfilled quickly, but the backfill will be much stronger than the usual mixture. Called

'paste fill', the toothpaste-like mix of water and solids has a density of about 85 per cent.

"A mix of less water and more solids does the trick." said Jim. "It'll give a much stronger material to work with.

Advances in seismic equip ment will also be used to monitor the Garson rock.

'Here the hazard has been rockfalls," said Jim, "and that's directly related to the amount of time miners spent in the orebody before. With the new mining plan, it shouldn't be a major problem."

Nevertheless, measuring devices will be installed to show the amount of ground movement.

"That should give some warning about any increase in hazard," he said.

An expanded system of roofbolting and screening will be employed as well.

'We'll be doing the bolting all the way to the floor, and not just the shoulders and the roof," said Jim. "Gradual wear of the walls here creates problems, so the extra bolting should help control that."



Ontario miners set safety record

igures released by the Mines Accident Prevention Association of Ontario (MAPAO) reveal that in 1992 the Ontario mining industry achieved the lowest injury rate ever recorded in its history.

The frequency rate of total injuries requiring medical attention dropped 9 per cent to 15.5 injuries per 200,000 employee hours. The previous record was 16.8 set in 1989. The rate of injuries resulting in time lost from work fell by 23 per cent to 2.3, eclipsing a record also set in 1989. There were two fatalities in the industry last year the fewest ever. The previous lowest number of fatalities was five in 1979.

Dave Mellor, the Labour Vice-Chair of MAPAO, said "Our record last year shows that our goal of zero fatalities is not only realistic, but is achievable in the very near future, hopefully this year. Ron Ellis, the Management Vice-Chair of MAPAO, attributed the new safety records to "... the commitment of the workplace parties to continuous improvement in health and safety. The mining industry has been a leader in terms of co-operation between management and labour where safety is concerned and we intend to continue to lead."

Six of the seven WCB rate groups that compose the mining sector reduced their rate of total injuries in 1992. All seven improved the rate of lost-time injuries. In addition, the actual number of work days lost declined by 60 per cent, indicating that the severity of injuries also decreased significantly.

Employment in the mining industry fell by 10 per cent in 1992. According to Mr. Ellis, this might have had some impact on the injury rate as the remaining workers are more experienced and hence less likely to be involved in accidents. However, he also pointed out that the previous year set a record for the amount of health and safety training conducted by MAPAO and that this training may also have been a significant factor in reducing accidents. "It's hard to measure exactly the extent to which each of the various factors contributed to the improvement; but in the end it all comes down to commitment and co-operation."

Mr. Mellor added. You only have to look at the safety records of the various companies to see which ones are truly committed and which ones aren't. Our job is to encourage that commitment from every mining operation in the province and to provide their joint Health and Safety Committees with the help they need to achieve their goals."

Employee ideas, suggestions, comments requested

The emphasis at Inco is to come up with ideas that improve everything from safety and quality to productivity and the environment. Those most qualified to come up with these suggestions and ideas are our employees, and the Total Quality Improvement teams are asking for their help. Here is a list of TQI contact people at mines, offices and plants around the Division, along with an invitation to call with any comments or suggestions you may have.

| <u>Name</u> | | <u>Area</u> |
|-----------------|------------|-----------------------------|
| Don Campbell | 682-6424 | Quality & Training |
| Paul Campbell | 682-5370 | Information Systems |
| Larry Cochrane | 682-5201 | Mines Technical Services |
| Bill Cook | 682-5498 | Legal |
| Tom Corkal | 966-4410 | Coleman Mine |
| Steve Deighton | 682-6170 | Central Mtce. |
| Ugo Dorigo | 682-6944 | Copper Refinery |
| Claude Gravelle | 682-5231 | CIT |
| Frank Grieve | 682-5498 | Human Resources |
| Graham Hodder | 682-6344 | Engineering |
| Jack Kenny | 682-5751 | Central Process Tech. |
| John Lemon | 682-5562 | Central Process Tech. |
| Bob Kerr | 525-3101 | Frood Stobie Complex |
| Bill Kipkie | 682-5899 | Central Process Tech |
| John Lafleur | 682-5241 | Accounting |
| Wayne Leavoy | 682-7326 | Nickel Refinery |
| Rick Lebourque | 682-5331 | Copper Cliff Mines/Research |
| Terry McKenzie | 682-5189 | Central Mills |
| Ron Quenville | 866-3792 | Crean Hill Mine |
| Gerry Rancourt | 682-5360 | C.I.T |
| Bob Reyburn | 1-333-6224 | Port Colborne |
| Jerry Rogers | 682-5204 | Public Affairs |
| Sean Romenco | 682-6766 | C.I.T. |
| Ray Sasseville | 682-6404 | Transportation |
| Don Stewart | 682-6404 | Smelter |
| Scott Stewart | 692-2300 | Creighton Mine |
| Stewart Tait | 682-5379 | C.I.Ť. |
| Pam Tobin | 682-5176 | Occupational Medicine |
| Walter Ukrainec | 682-5441 | Purchasing/Warehousing |
| Paul Yearwood | 682-8226 | Safety, Health, Environment |

MAKING

Streamlining savings at Divisional Shops

Time is money.

You've probably heard this cliche many times in your life. The Material Availability Continuous Improvement Team in Divisional Shops is working at saving time to save the company money. When a re-order point is broken, the purchasing department supplies a work order to Div Shops to produce the necessary items. The team analyzed the length of time that it takes to process a work order. Their findings showed that improvements were needed.

Team members are machinists Hubert Seguin, Ron Menard and Bob Simon, Central Maintenance Manager Al Cruthers and planner Norm Belanger. Streamlining the flow of work through the shop was identified as a necessity to improve turnaround time. This will be done partially by having one person responsible for processing the work order. Also, to allow the speed at which a job proceeds in the machine shop itself to increase, the team decided to mainstream warehouse work orders. This allows a job to continually flow from one load centre to another. Paper shuffling and handling was substantially reduced. It is hoped that with the decreased turnaround time more work can be brought into the shop.

The Steering Team, especially general foreman Willy Metson, fully supported the team's efforts and offered to help implement the recommendations. Keep up the progress.

Awareness Tour '93 . . . The Ore Flow Team and the CRC Repairable Team

is in the midst of conducting tours to inform the heavy equipment mechanics of Inco of the potential savings that can be found in the area of repairable items. Daily tours are currently being conducted and will continue until all Inco personnel that deal with repairable items have taken the awareness tour.

The tour consists of a short presentation at the home plant, then the group travels by van to Divisional Shops. While at Div Shops the groups are taken through warehouse 64, the Component Repair Centre (CRC) and the Machine Shop where they learn the repair route of an item. After an item has been tagged underground for repair by in-house Scrap in the Muck teams, it goes to surface where it is sorted and is sent either to the vendor or to Div Shops. This sounds simple, but complications often occur when an item is improperly tagged or not tagged at all. This is the message that the Ore Flow and the CRC Repairable Teams are hoping to give to all of the tour participants. Another problem is that broken parts sometimes end up in the ore-pass (scrap in the muck) or buried in the sandfill. The teams wish to thank all those involved and look forward to seeing them on a tour. . .

Closing the Loop . . . Continuous Improvement members move on to share the word about teamwork. Richard Marois heads back to Transportation. Sandy Roberts moves over to General Engineering.

Rodney Shewchuck is now working with Geist on Maintenance Systems. To these people who are leaving the CIT, thanks for all the hard work and congratulations for a job well done.

Low-cost Little Stobie radio system has high-value advantages.



Florian Rainville and Mike Demers stand beside a section of the 2.1 km looped cable aerial for the underground communications system.



in-the-hole driller Don Rivet often works alone. He holds a cap lamp battery with the PED attachment.

ust about everybody at Little Stobie is taking an active part in trying to extend the life of the mine by finding ingenious ways to cut costs while boosting productivity. Spending here is done in the same innovative fashion.

There's no better example than the mine's new communications system. By combining energy savings with the installation of a new bargain-basement Personal Emergency Device system, the mine will meet safety requirements, enhance efficiency, save a bundle in energy costs and earn a hefty Hydro energy rebate cheque.

eque. Bottom line?

The system will pay for itself in about 18 months.

With safety a first priority, the mine needed an effective way to keep in contact with people working underground, often by themselves. Under the company's policy, a person working alone underground must telephone or radio in at least once every two hours.

Existing systems used at some other Inco mines, such as the hand-held radios and elaborate systems of transmission lines run underground, were much too expensive and hard to justify with the relatively short life expectancy of Little Stobie.

Little Stobie's Personal Emergency Device (PED) is a paging system that transmits messages without cables from a single surface aerial to portable receiving units underground. Messages are typed

into a personal computer and then sent by transmitter in the form of low frequency electromagnetic waves via a 2.1 kilometre looped aerial on surface to 32-character liquid crystal screens on underground receiving units that attach to lamp battery packs. To ensure that the person carrying the unit is aware of the incoming message, the unit is hooked into the battery pack and causes the lamp to flash on and off when a message is being received. The unit acts only as a pager and does not allow two-way communications. The system is used in conjunction with the mine's existing telephone network. Once the message has been received, it's up to the individual to go to the nearest telephone and call in.

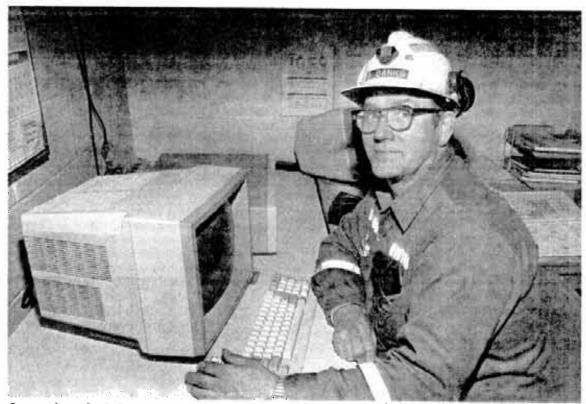
Each of the 19 receiving units can be contacted individually or all units can be called as a group.

Using the system to trigger underground auxiliary ventilation fans and other electrical devices such as pumps and lighting circuits has meant a reduction in energy costs, earning the mine a \$20,000 Hydro energy conservation rebate.

Easy and inexpensive to install, the system can be just as easily moved. About 90 per cent of the system is salvageable.

It's the first of its kind for Inco and only the second PED system operating in Canada. The system is in wide use in Australia.

As well as enhancing the



Operating shaft boss Bob Banks gets ready to enter a message into the computer, the first stage in Little Stobie's new underground communications system.

man-working-alone policy, the system vastly improves the mine's regular communications as well. All mine foremen, shift electricians, drill fitters, heavy duty equipment mechanic leaders as well as anyone else working alone carry the units.

"My job is to keep track of the people who are working alone underground," said operating shaft boss Bob Banks. "We usually have around three working alone at any one time and the system makes my job a lot easier."

Hoistman Ashley Comeau fills in on afternoon shift. "Be-

fore you relied on the guys to call in. If they didn't phone in you had to scramble to find somebody to check on them. There was no way of knowing if the person was pinned under a piece of rock or if they were in some other kind of trouble or just forgot. Sometimes you couldn't get a hold of anybody else to check on them. It's taken as long as an hour to get a hold of somebody using the old telephone system. It was frustrating."

In-the-hole driller Florian Rainville said the new system provides an added sense of security for people working underground. "You know that if you can't reach the telephone, they'll send somebody to check."

Shift boss Mike Demers said the system is a big help in his job.

"Within minutes they can get hold of me so I can respond right away to any problem. That's vital in an emergency situation, but the improved communications also makes the operations here much more efficient."

But on days Mike receives lots of messages, he refers to the system as the "Pest System."

Inco chairman outlines major accomplishments by Inco in the face of economic gloom

adies and gentlemen, I would now like to offer some comments on Inco's results and prospects. After I have completed my remarks, I will ask Scott Hand to discuss the growth opportunities available to Inco as we look beyond the immediate future, as well as the important changes taking place in our alloys business. We will then open the floor to your questions.

As you know, 1992 was a challenging year for Inco. Reflecting low nickel prices, your company incurred a net loss, its first in eight years. As nickel prices fell, we worked even harder to reduce costs and conserve cash. We took many actions, including reductions in capital expenditures and common dividends as well as curtailing production. We also turned the corner in terms of unit production costs, reducing the unit costs of our Canadian primary metals operations by five per cent from the 1991 level. As a consequence of these and other actions, we were able to reduce debt by \$129 million in $1992, a \ noteworthy\ accomplishment$ in light of the continued low price of

Over the years, as we have focused on productivity, we have also been relentless in our pursuit of safety improvements. Safety and productivity go hand in hand. Processes and techniques that are more productive, such as those employing new technology, are also inherently safer. The overall safety performance of our employees improved again in 1992. However, I am deeply saddened to note the death in October of Robert $Williams \, in \, a \, raily ard \, accident \, at \, the \,$ Clarabelle Mill in Sudbury

Fatalities in the workplace are absolutely unacceptable. We continue to seek a total quality operation characterized by zero accidents.

Yesterday, we announced our financial results for the first quarter of 1993. Inco had a net loss in the quarter, due mainly to an after-tax charge of \$14 million in our alloys business and to the low level of metal prices; however cash flow remained positive, and our unit cost of nickel production was reduced by 13 per cent compared to the first quarter of 1992. Cost reductions are being achieved through more productive mines, implementation of new processing technologies and employment and other cost reductions. Costs are also being aided by the weakness of the Canadian dollar.

Given the productivity improvements and cost reductions already being achieved, we anticipate that Inco could break even in 1993 at an average realized nickel price of approximately \$3.00 per pound. This compares with a breakeven price of some \$3.25 per pound in 1992. 1 want to make clear that these figures are not our cash production costs for nickel, but take into account price realizations on our other metal products, the performance of our alloys and engineered products businesses, interest charges and other factors.

Currently, the cash nickel price on the London Metal Exchange is about \$2.66 per pound, which is below our projected breakeven price for

However, there's an interesting twist. At low nickel prices, Inco's average realizations actually exceed the LME price by approximately 20 to 25 cents a pound. So when we say that Inco can break even at an Inco average realized price of approximately \$3.00 a pound, we believe we can achieve those realizations when the LME price is only \$ 2 .80 a pound. That distinction is very important, because it enhances Inco's staying power, relative to its competitors, at low LME prices.

Our average price exceeds the LME for a number of reasons, including price floors in some of our sales contracts and the premiums we earn on sales of proprietary, value-added products. Conversely, at high LME nickel prices, price ceilings in our



Michael Sopko

contracts will be triggered and our average realizations could be lower than the LME.

So, despite a difficult nickel market environment, Inco is in the favourable position of earning a premium price for its nickel and achieving steady reductions in its costs. In other words, we are well positioned to benefit from any increase in the nickel price — and, meanwhile, we continue to drive down our costs in order to assure Inco's viability even if low nickel prices should persist.

Although nickel demand remains quite healthy, the market continues to be afflicted by over-supply.

Toward the end of last year, some producers, including Inco, announced production cutbacks. These actions have mitigated the oversupply situation, but of themselves have not been sufficient to bring supply and demand into balance. Unless demand improves, as forecast, in the second half of the year, further producer cutbacks may be necessary to bring the market into balance.

Importantly, Russian nickel exports continue to overhang the market like a cloud, creating uncertainty. Two years ago, in 1991, Russian nickel exports increased by some 60 million pounds, contributing to a small supply surplus in that year. Then in 1992, we saw the emergence in our marketplace, of fabricated nickel-bearing "scrap" —and let me put quotation marks around the word "scrap". Certain stainless steel mills and alloys plants in Russia, as well as in other C.I.S. countries, were purchasing Russian nickel at low domestic prices, reprocessing it and selling it on the world market as so-called "scrap," thus raising hard currency while circumventing the Russian export tax on primary nickel.

Not only have these exports disrupted the world nickel market, they have also short-changed the Russian nation itself of desperately-needed revenues that could be derived by openly selling the same nickel in primary form at world prices. Some knowledgeable scrap traders as much as 60 million to 80 million pounds of nickel in secondary forms reached the West from Russia in 1992, equivalent to the output of a major operation such as P.T. Inco, our production facility in Indonesia.

We cannot tell the Russians how much nickel to produce or how much to export. That's their business. However, we hope they will recognize that such "backdoor" practices add confusion to the market place, hurting them and us — and, I might add, causing some concern among nickel consumers, who generally prefer stable markets and assured sources of

Fortunately, there are some signs that the Russian authorities have recognized the problem and are taking measures to abate such practices. Already this year we have seen some reduction in the flow to the West of both primary and secondary nickelcontaining materials.

Now let me turn to Inco and our position in the nickel industry. As you know, we have worked hard in recent years to achieve a 25 per cent share of the global nickel market and at the same time to assure customers that Inco will continue to be a reliable supplier. We intend to maintain our market share. Given the oversupply that currently exists, we are prepared to play an appropriate role in addressing the problem. However, although we have a 25 per cent market share we are not prepared to take the full brunt of necessary production cutbacks for the entire industry. We will continue to produce at levels essential to satisfy our customers' nickel requirements.

I would now like to turn to a much more exciting subject, and that is "growth". At Inco, it's been a long time since we've talked about the prospects for growth. Too long, I think. It's time we got back to the realization that as an industry leader growth is part of our mission and is essential to the long term well-being of Inco, its shareholders and its employees.

Inco president sees bright nickel lining in today's dark clouds

our years ago, Inco an $nounced\,a\,strategic\,plan\,that$ included a fundamental decision to stick to what we know best — mining and metals. Our goal was to do all we could to realize the full potential of our core businesses.

We continue on that course today. As we look for opportunities to grow, we believe we can find them right in our core businesses. In particular, we see a bright future for nickel, as it continues to capture new markets despite competition from other metals and materials.

Some 60 per cent of nickel is consumed in the manufacture of stainless steel, a versatile material which is finding new and expanded applications in markets ranging from construction to environmental control.

We also see excellent growth po-, tential for specialty nickel products in such markets as rechargeable batteries and electronic materials. And apart from market growth in traditional nickel-consuming regions of the world—that is, the United States, Europe and Japan — we see very strong growth prospects in newly industrialized countries such as Taiwan and Korea and in emerging economies such as China and

Overall, we expect nickel demand to increase at an average annual rate of approximately three per cent in the coming years. So the nickel market is going to get bigger, and Inco intends to expand, with the market. Given our current sales of approximately 500 million pounds of nickel annually, and assuming arowth in demand of three per cent \bar{a} year, we should add some 15 million pounds of new nickel capacity each year, on average, just to hold onto

our market share. Looked at another way, we need to add 100 million pounds of new capacity every six or seven years — roughly the equivalent of our Manitoba Division operation.

Plans are under way to develop that capacity. In Canada, we face a major challenge to sustain our existing capacity. As older mines are depleted, we are developing new Canadian mines that utilize the most modern technologies to enhance safety and productivity. Just two months ago, we announced plans to spend \$32 million to reopen the higher-grade Garson mine near Sudbury.

But given the limited options for expansion in Canada, a major portion of our growth must come from low-cost laterite deposits around the world. In our 1992 Annual Report, under the section discussing ore reserves, you will note that for the first time our laterite resources, containing some seven million tons of nickel, exceed our sulphide deposits in Canada, containing some 5.6 million tons. That's a major shift and suggests the increasingly global direction of the Company in the years

In Indonesia, our 58 per cent owned P.T. Inco operation is one of the lowest-cost nickel producers in the world and offers excellent potential for expansion. Last year, P.T. Inco produced a record volume of nickel in matte and continued on schedule toward increasing its production capacity to 100 million pounds annually by 1994. That new capacity is already paid for. When it comes on stream, it will help support our goal to expand production as the nickel market grows. Just as important, it will increase the proportion of low-cost nickel in Inco's total output and, thus, will contribute significantly in our drive to reduce unit production costs.

At current mining rates, our reserves in the Soroako area alone should last nearly 50 years, with the potential to prove up additional reserves at this site. At the same time, P.T. Inco has stepped up its



Scott Hand

exploration activities outside the Soroako area, with a view toward developing additional resources for possible future expansion as market conditions warrant. So P.T. Inco remains very important in our plans.

Another of our laterite deposits is in Guatemala. This smaller project, with a production capacity of 25 million pounds of nickel annually, has been mothballed since 1982. A feasibility study is under way to determine whether the project might be brought back into production under appropriate market conditions. If and when we did decide to restart the Guatemalan plant, we could do so in about 12 months from the decision date at a relatively modest capital cost in comparison to a greenfields

As to our laterite deposit in New Caledonia, we are now in the preliminary stages of studying possible mining and production plans for this major resource, which could provide a source of nickel into, and beyond, the next century. Assuming we move ahead with the New Čaledonia project, the first nickel would probably be shipped within the next decade.

Apart from the nickel business, we have opportunities for growth in a number of other areas. In Chile, we have teamed up with CODELCO, that country's leading mining company, on two fronts. Firstly, our Continuous Mining Systems subsidiary is building a jointly-owned mining equipment manufacturing plant. Of potentially greater significance, we have joint venture opportunities, on CODELCO'S mineral properties, currently under consideration. Also, we have important exploration programs underway for base metals, gold and platinum group metals in Canada, the United States, Turkey and Indonesia.

We own 62 per cent of TVX Gold, and this company continues to meet our expectations. Its basic strengths include long-life quality reserves, modern facilities and low cash operating costs. Last year, TVX increased its production of gold and gold equivalent by 45 per cent.

Despite the low price of gold, TVX improved its profits by continuing

to reduce its costs. On the other hand, our alloys business has not lived up to expectations. We are determined to bring this business back to profitability by reorganizing operations, reducing costs and better serving customer needs. Last month we announced a major workforce reduction, asset writedowns and other actions resulting in an after-tax charge of \$14 million to our first quarter 1993 results. It is anticipated that the workforce reduction will reduce employment costs on an ongoing basis by approximately \$15 million a year. Other improvements and cost cutting actions will

The alloys business continues to face a difficult business environment, as indicated by excess industry capacity and low alloy prices. However, with the actions we have already taken, and the actions we will be taking, we expect the allovs business to move toward breakeven during 1993. Our goal is to reduce costs to a level where Inco Alloys International can break even under today's difficult business conditions and can achieve satisfactory profitability over time as initiatives are fully implemented.

In summary, although Inco is currently going through a difficult period because of low nickel prices and problems in the alloys business, we continue to make significant progress in reducing costs and improving productivity.

We remain extremely optimistic about Inco's prospects as the Company emerges from the current down cycle in the nickel industry and pursues growth opportunities worldwide.

Pensioners Bonspiel trophy leaves Inco's grasp

hat do Falconbridge, Steel Electronics, Beaver Lumber and Canada Post have in common with Inco?

They commandeered the Inco Pensioners Curling Bonspiel Trophy.

"We gotta quit having so much fun and do some serious curling," kidded one Inco pensioner as he watched Inco's vice-president of mining John Kelly present the trophy to a team made up entirely of guest curlers.

The winning team consisted of retired Falconbridge miner Reno Prenol, retired Steel Electronics employee Tom Smith, Beaver Lumber retiree Lorne Hanson and Canada Post pensioner Art Trottier.

While most Inco pensioners were determined to win back the trophy next year, they admitted that the main objective of the event was to have a good time.

They succeeded.

The event was held at the Copper Cliff Curling Club.



Inco Security pensioner Wilfred Duguay takes a shot.

John Kelly presents the Pensioners curling trophy to a team made up of non-Inco bonspiel guests. From left, Reno Prenol, Tom Smith, Lorne Hanson and Art Trottier.



Watching the curling action are Mills retiree Hilton Fowler, Stobie Mine pensioner Doug Malloy and Bell Canada pensioner Dave Parks.

Maintenance pensioners enjoy 55th annual banquet

on Harry was just happy to see the guys again. He never expected to win anything but when his name was called he quickly accepted his \$50 prize.

The 55th annual pensioners' banquet was a time for meeting old friends and sharing stories. Several men like Harry were lucky enough to take home a door prize.

More than 1,150 people turned out to honor those pensioners retiring on April 16 at the Caruso Club in Sudbury. This year 82 men joined the Copper Cliff Maintenance Pension Club.

Harry, a pensioner himself since 1991, attended the banquet to honor the new pensioners. "I like to see all the fellows I worked with," said Harry, who worked in the transportation maintenance locomotive shop. "That's the part you miss the most. Before you saw them eight hours a day now you only see them now and then."

The night couldn't have

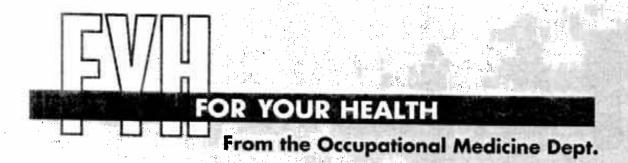


Don Harry reaches deep into the barrel to pick out the next lucky door prize winner during the banquet.

been more enjoyable for Harry after winning the \$50 cheque in one of many draws that evening. Tim Foucault, club president, said that this year there was about \$1,700 worth of prizes. Lucky ticket holders

picked up prizes ranging from patio furniture to a barbecue. Top prizes included a 70" television and a rubber boat.

"The turnout was great, we were very pleased with the evening," said Foucault.



You can do something about back pain

Repetitive Strain Injuries of the Back

This is the first of a two-part series on muscle injuries from Repetitive Strain (RSI) of

Have you ever had an ache or pain that you can't explain or from an activity that you have been doing for a long time without problem, and then one day you do the same activity and get a pain or ache!

You may have experienced a Repetitive Strain Injury and it may have been from some of your habits at work and play," says Janet Martindale, upervisor of Occupational Medicine.

About 63 per cent of the lost time accidents in the mining industry are related to the back. Most of these are not caused by an actual accident but are muscle strains and sprains which are often caused from Repetitive Strain

What is a repetitive strain injury?

An RSI is an injury of the muscle, joint, ligament or tendon from a movement, habit or an activity that is not necessarily very strenuous but is repeated many times. The muscles and joints are used in an unbalanced way so one group of muscles is over-used and tight and the opposite muscles are weak and loose.

RSIs take place in most parts of the body. In this article we are only going to talk about RSI of the back.

RSI to the back can cause pain or discomfort in the back, hip, groin or legs.

What happens? A muscle or groups of muscles are over-used.

They don't get a chance to relax.

- * Blood circulation is slowed down from muscle tension.
- * Fatigue products build up in the muscle

* This irritates the muscle.

* This makes the muscle contract more and the circle of pain begins.

Our habits are the major reasons for RSI

In Occupational Medicine's weekly early intervention group, workers learn how habits can cause of contribute to back and leg pain, cramping, numbness etc.

Habits that we have had for several years feel "comfortable" but they may be contributing to or causing us pain. One employee, a plant protection officer, learned that when he got a leg cramp he shouldn't rub it but lean the other way to relieve cramping. He found the information very helpful.

Habits will cause RSI if:

- * They change the natural curves of our back
- * They cause the back to lean forward or are mainly toward one side.
- * We stay in the same position more than 10 minutes.
- * Our back is in the same position and our muscles are used in the same way at work and

How do you know if your habits are causing or contributing to your aches

- 1. Pay attention to what you are doing when you get the pain. There may be more than one thing.
- 2. Stop the activity or change the way that you do the activity. The pain should decrease
- 3. Repeat the activity and pain should increase if it is causing or contributing to the pain or discomfort.

WHAT CAN I DO. I CAN'T JUST STOP DOING EVERYTHING?

- DO NOT stay in one position for more than a few minutes at a time.
- DO shift your position or your weight every four to five minutes.

DO pay attention to any discomfort and try to change sooner next time.

* DO NOT wait for the ache or pain to start.

* DO figure out a different position to do the activity in.

* DO alternate jobs or routines often.

- DO change any contributing habits.
- * DO pay attention to pain or discomfort that lasts more than a day.
- * DO exercises for the muscles of the "stomach", short back muscles and muscles opposite to the ones we use every day.

* DO warm up and warm down before and after any physical activity at work and home.

What can we do right away to get rid of the paid?

* Wrap a soft gel ice pack in a thin towel and put it on your back for at least 20 minutes. Use it often, every hour or so if needed.

Use heat for only five minutes at a time and do gentle exercises.

* Alternate heat and cold with a maximum of five minutes heat at one time.

* Keep your back covered to avoid a draft.

* Wear an elastic back support. * Do things in a way that does not aggravate your back. TRY ANOTHER WAY.

* Stop all habits that aggravate your pain.

Find your best resting positions. Use them often.

Complete the following questions and see if you should change some of your habits:

Habits that lean you back to the: RIGHT LEFT

I am right handed and I usually work, reach and turn to my right. I lie mainly on my left side

I cross my right leg most of the time I walk with some one on my right often

I usually drive with a passenger

I eat lunch with my chum on my right

I carry things with my right hand I watch the TV to my right I usually carry things in my right hand

I often put my left hand on my hip I usually put my right leg up

I like to put my hands in my front pockets

I do a lot of work leaning forward

l like to slouch in my chair

I rest with my knees or feet up

I put one leg up on something

I sleep curled up

I cross my leg often

I lean forward a lot

I usually sit in a lazy boy

I carry my battery, tool bag on my right

left

right

left

left

left

Teff

lett

right

alone or I'm a passenger

Possible solutions

arch backwards often sit up and use a roll

use your back pockets

 sleep straighter · use a small roll behind your back

* Do not cross your leg

Lean backwards

* use a small roll

* keep shoulders up and back

Try to keep your back straight with equal movement to each side.

Habits that cause you to lose the natural curve of your back

In the next issue we'll discuss how to prevent RSIs of the back

Sopko's address a determined, confident, but sober view of Inco's survival as industry leader

continued from page 1 employee and shareholder Sirio Bacciaglia about the company's commitment to a Sudbury facing economic

downturn.

He said the reduction of debt by \$129 million in 1992 was a noteworthy accomplishment in light of the continued low price of nickel. The reduction was achieved by determined efforts on many fronts, including the lowering of capital expenditures and common dividends as well as curtailing production and reducing the unit costs of the Canadian

primary metals operations by five per cent from the 1991 level.

Referring to production cutbacks late last year designed to mitigate the oversupply situation, he gave notice that Inco will no longer take remedial action unilaterally to its own detriment.

"Ás you know, we have worked hard in recent years to achieve a 25 per cent share of the global nickel market and at the same time to assure customers that Inco will continue to be a reliable supplier. We intend to maintain our market share.

"Given the oversupply that currently exists," said Mike, "we are prepared to play an appropriate role in addressing the problem. However, although we have a 25 per cent market share, we are not prepared to take the full brunt of necessary production cutbacks for the entire industry. We will continue to produce at levels essential to satisfy our customers' nickel requirements."

Mike expressed a particular pride in the continuing improvements in safety,

although he said he was deeply saddened by the death last October of Robert Williams in a railyard accident at the Clarabelle Mill.

"Fatalities in the workplace are absolutely unacceptable," he said. "We continue to seek a total quality operation characterized by zero accidents."

In a separate address to the annual meeting, Inco president Scott Hand outlined promising growth opportunities beyond the immediate future. He sees strong growth prospects for nickel in newly industrialized countries

such as Taiwan and Korea. as well as in emerging economies such as India and

He expects worldwide nickel demand to grow three per cent annually for the next several years, and that the major portion of growth must come from low-cost laterite ore deposits around the world.

Canadian nickel reserves are in sulphide ores, which are generally located deeper than laterite and therefore more expensive to mine.

For a complete transcript of both speeches, see Page 12.

All stops out for 1993 inductees to Inco Quarter Century Club

ow that she's up on the billboard, people will finally have someone to look up to, claims Fi Ceppetelli with the same sense of humor she's had in her 25 years with Inco.

'Looking back, Inco has been very good to me. I have no reason to regret my 25 years," said the Transportation shipper. "I've worked with some great people over the years.

Fi is one of 14 people who are featured on four Sudbury area billboards (centre right, back row) announcing the "Class of '93" new Quarter Century Club members.

The billboards, located on Lasalle, Lorne, the Kingsway and Highway 69 North, are part of the preparations for the annual Quarter Century Club event, to be held in the Palladium Room at the Holiday Inn on Wednesday and Thursday, May 12 and 13. The group photo under the caption "Honoring A Sterling Performance" is also displayed on billboards at Inco plants and mines.

"I'm kind of amazed that it's been 25 years already," said Fi. "I guess I was one of the many people who figured I'd take a job with Inco for a few years and then move on. But then you get married, have kids and settle down, and part of the settling down is the job.

"So here I am, after 25 years, still at Inco. I don't regret it."

Month to prepare

The May event is the culmination of months of preparations, from choosing wine, floral table settings, color schemes, menus and entertainment to making sure the 464 invitations are processed and reply cards are received.

"We began preparations months ago," said Diane Flynn of Public Affairs. "Every year, we turn to volunteers who offer their services and make the event the success it is. It always turns out to be a memorable event for our celebrants."

The entertainment this year will be two of Canada's top comedians, backed by an exciting group of versatile musicians who have broken attendance records at clubs across the country. Called the Malton & Hamilton Show, it features Wayne Malton and Mike Hamilton. The two claim they were in the Guinness Book of Records for the longest time of continuous joke telling for 52 hours.

They're a combination of Laurel & Hardy's glorious buffoonery, Abbot & Costello's comic genius and Martin & Lewis' versatile song and funny expressions.

Club growing

With Inco's senior workforce, the Quarter Cen-



Mines office senior secretary Carol St. Laurent "puts her stamp" on the upcoming Quarter Century celebrations . . . hundreds of times. She's one of a small army of volunteers helping to make the event a success.



Malton & Hamilton

tury Club's membership is growing by leaps and bounds. Long gone are the days when the club grew by only a dozen or so members. Forecasts show that as many as 700 people annually will be reaching their 25th year at Inco by 1996.

As in past years, the coveted Quarter Century Club gold pins will be presented to new members by managers. Spouses are presented with a cup and saucer or stein.

Smile, please

Again this year, commemorative polaroid photos will be taken of new members in a backdrop specially designed for the event. Corsages are supplied for the ladies.

The billboard portrait will remain in place until after the event. Also included in the group picture are Denise Rochon, Brian Rogers, Isabel Scott, Vincent Lacroix, Brian Bell, Stanley Haskett, Ray Brazeau, Bob Martin, Ron Garbutt, Terry Antonioni, Don Malo, Brian Nadjiwon and Harry Will.

Volunteers on May 12, the first night of the two-day event, include co-ordinator Carol St. Laurent of the Mines Office, hostesses Laura Diniro of Safety, Claims Administra-tion, Coleen Cascanette of Purchasing, Darlene Williamson of Plant Protection and Faye Wafer of Purchasing. Polaroid pictures will be taken by Janet Wyman of Safety, Claims Administration and Sandra Hammond of Information Systems.

At the registration and pin tables will be Ron Orasi of Property and Office Services, Dave Bradley of Benefits, John Ticalo of Purchasing and Mary Sitko of Property and Office

Handling security will be Jim Chevrette and Tom Moland of Plant Protection. Sandy Muzia of Central Maintenance and Utilities will handle the corsages.

On the second day, Carol St. Laurent will again help coordinate the event as well as help with the hostess duties. Other hostesses include executive secretary Cathy Senior, secretary to the president Pat Valentini and Lise Philipow of Levack.

Polaroid Pictures will be taken by Tammy Latendre, a co-op student with the Adult Alternative program, and Donna Cameron of the Comptroller's Department.

Registration and pin tables will be handled by Doug Mazerolle of the Transportation Department, June Stelmack of the Comptroller's Department, Reg Gareau of the Energy Team and Marcel Bigras of Transportation. Security will be handled by Kevin Gibson and Robert Tracy of Plant Protection and corsages will be handled by Norma Morin of the Comptroller's Department.



Miles of Frood-Stobie carpentry

40 Years ago

They were making ventilation doors, concrete forms, underground square sets, ladder sides, skip and cage guides, saddle blocks for drifts, grizzley blocks for stopes, chute sides, pillar and jaw blocks and thousands of blasting spacers, plus much more.

It was a busy place, the Frood-Stobie carpenter and framing shop, fabricating 750,000 feet of timber a year, just to make underground square sets for the mines.

The big producer in the shop was a double end framing machine that cut horns (square pegs) on the ends of square sets. Other equipment used by the shop's 40 employees included a gaining machine, a planer, a swing saw, a rip saw, a band saw and, to keep the shop's dozens of saw blades sharp and reliable, an automatic filing machine.

Other feature stories that month were:

"1952 Production Of Ore Highest Ever For Inco." "Frood-Stobie vs. Copper Cliff In First Aid Contest."

25 Years ago

"They're Called 'Hams'... But Don't You Believe It," the caption said. It's a highly skilled hobby, and of 35 of these hobbyists more than half were employees of Inco. They were the largest part of the group that formed the Amateur Radio Operator's Club, which was founded in 1947.

To establish oneself in the hobby was no easy task. All 'hams' had to be licenced by the Department of Transport, which had two grades of operators, A and B. To qualify for an A licence you had to have a B licence and to get a B licence, which qualified you to transmit in Morse code only, you had to pass a test on electronics theory, radio operations procedure and radio regulations, and be able to transmit and receive 10 words of Morse code per minute.

An A licence could be obtained after you operated with a B licence for one year, passed a stiffer test on electronic theory, equal to a second year technology course and could handle both transmission and reception of Morse code at 15 words per minute.

Other feature stories that month were:

"Manitoba Explosion." (The \$100,000,000 expansion program to boost nickel production to 170,000,000 pounds annually at Thompson.) "Young Skaters In Colourful Show At Copper Cliff."

"Cambrian Takes Care Of Serious Education Gap."

15 Years ago

Just a year previously Stobie Mine had been selected the central training area to teach underground operating skills to new mine trainees and transfers from surface facilities who had no underground experience.

MKore than 650 employees had been put through the training program by April 1978 and according to Doug Anderson, training foreman, organizers of the program were getting good feedback from both the trainees and the mines regarding the quality of training.

Said Anderson: "We stress hands-on training, with a requirement to demonstrate the skill level attained, which gives the employees a feeling of confidence in their abilities when they leave the training area with their newly demonstrated skill."

Not only were the trainees given instruction in the use of mining tools, such as jack legs, stopers and slushers, they were taught about the rules covering underground and plant behavior, personal protective equipment, first aid, explosives, blast guarding, fire procedure, scaling and

For in-the-field hands-on training, the trainees were taken to the work site by their instructors to do the actual work.

Other feature stories that month were:

"Copper Cliff's McClelland Community Centre Now Officially Open."

"Modular Training At The Silver Plant."

"Inco Metals Company Donates Collection Of Paxy Carvings To Laurentian University."

Dividends pay



Don't ignore tax-saving dividends.

When thinking about where to stash those few extra dollars you $might \, have \, lying \, around, \, dividend$ bearing shares should have a place in your plans.

Too risky you say? Not if you buy preferred shares in any number of Canada's blue-chip public companies.

Why not just buy GICs (guaranteed investment certificates) or Canada Savings Bonds you ask? In a word - tax. Dividends paid by Canadian corporations are taxed much more lightly than the interest you might earn on that GIC. In theory, this prevents some double taxation since the corporation has already paid tax on its

If you are in the lowest tax bracket (17 per cent federal rate), you'll pay about \$7 tax on each \$100 of dividends received, depending on the province in which you live. If you received \$100 of interest, your tax bill would be about \$27. For middle bracket taxpayers, the difference narrows a bit to about \$25 tax on dividends and about \$42 on interest. The numbers for top bracket employees are about \$32 and \$48.

So, you might very well ask,

why doesn't everybody earn dividends instead of interest? There are two reasons. One, shares in companies are generally more risky than buying securities such as GICs. And two, dividend rates are usually lower than interest rates.

Dividend attractive

But not that much lower if you take a look at preferred shares. In fact, current dividend rates ranging from nine per cent to 10 per cent compare favorably with current longer term interest rates at 10 per cent to 11 per cent.

No matter which tax bracket you are in, your after-tax return is the same when interest rates are 10 per cent, and the dividend rate is about 7.8 per cent. If the dividend rate is nine per cent, you earn more with the dividend-paying share

than the interest-paying GIC.
Preferred shares are sort of a hybrid - a cross between stocks and bonds. They are shares that trade on the stock market, but their price varies only slightly compared with common shares. Preferred shares rank ahead of common shares, which means that dividend payments must be made to preferred shareholders before dividends are paid on common shares. And, if

the company gets into financial trouble, preferred shareholders rank ahead of common shareholders on any distribution of assets.

Preferred shares generally pay a fixed dividend, although variable or floating rate preferred shares have become popular. The dividends are usually paid quarterly. Preferred shares may be cumulative, which means missed dividend payments must be made up before dividends are paid on common shares. Most don't carry voting privileges at shareholders' meet-

Lots of options

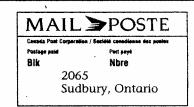
Redeemable preferreds can be bought up by the company from you at a specific price before a specific date after appropriate notice has been given by the company. Retractable preferreds give you the option of selling the shares back to the company at an agreed upon price before a certain date.

Convertible preferred shares can be converted into common shares of the corporation at your option usually at a specific price on a specific date. The value of convertible preferred shares will generally vary more than other preferreds because they are closely fied to the change

dividends

in value of common shares. Don't forget that all preferred shares carry some risk, although most debt securities also do. You will incur brokerage charges if you buy preferreds, which should be

figured into the return you expect. And remember that they should not be held in an RRSP. Since all income in an RRSP is tax-sheltered, you are better off earning the higher rate of interest on GICs.



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