

Who is taking an underground aerial ride? See page 4.

# August 1995 Ontario Division Vol. 54, No.7

A look at the books

## Summer shutdown projects total 118

The actual summer shutdown may have been shorter, two weeks as opposed to five, but the workload was heavier than ever this year.

Some 118 projects totalling more than \$16 million were carried out during the 1995 summer vacation shutdown.

By contrast, there were 102 projects completed last year at just under \$7 million.

"We were extremely busy — much busier than previous years," said Jim Tyers, supervisor of Contract Administration. "There were substantially more capital projects this summer than in past years."

The 118 projects in '95 touched virtually all operations in the Division, said Jim. Some of the larger ones included the Clarabelle Mill Tipple Repair, project, the SAG Mill trunion replacement at Clarabelle Mill, the cage hoist upgrade at Stobie #7 shaft, steel replacement work at Creighton #9 shaft, the anode furnace rebuild at the Copper Refinery and completion of the 25-cycle conversion

project for production cranes at the Copper Refinery.

In addition, the South Mine 2350 level loading pocket was rebuilt and structural repairs were made to the chute at the 2300 level crusher station. At Garson Mine, crash gates were installed at the 4100 level and at Crean Hill, ventilation work was carried out at the 2000 and 3000 levels and a vibratory feeder was replaced at the crusher station.

In the Smelter, anodes were replaced in the Acid Plant acid cooling tower, roof repairs were carried out at the nickel converter and Matte Processing shipping and handling area and sheeting was repaired on the slag return chutes for the flash furnace.

At the Copper Cliff Nickel Refinery, some 550 feet of pellet transfer belt was repaired as was the IPC decomposer Flexwell conveyor.

"For the most part all jobs were completed efficiently and safely, which is quite an accomplishment with this amount of work," said Jim.

Stobie Mine blaster boss Mike Lachapelle (right) discusses engineering prints for

underground emulsion loading with Chris Hodgson, Ontario's Minister of Natural

Resources, Northern Development and Mines. The visit to Stobie in early July was

the first underground mine tour for the new provincial Minister. For more on the

## Inco earns \$122 M in first six months

Higher prices and increased deliveries of metals together with significantly improved results in the alloys and engineered products business are the major reasons Inco earned \$122.2 million in the first half of 1995 compared to the \$74.8 million loss in the corresponding period last year.

Second quarter results this year showed net earnings of \$55.4 million compared to an \$11.2 million loss in the same time span in 1994.

First half 1994 results included one-time charges aggregating \$104 million, \$56 million after tax, associated with planned production shutdowns and employment reductions in the company's primary metals business. Relative to the first quarter of 1995, second quarter 1995 results reflected lower realized prices for nickel and copper, partially offset by increased deliveries of company-produced nickel.

In addition, the second quarter and first half 1995 results reflected the adoption of accrual accounting in respect of post-retirement health care and life insurance benefits. Previously, the costs of these benefits were accounted for on a pay-as-you-go basis after employees retired.

The company's realized nickel price, the key determinant of the company's profitability, averaged \$3.65 per pound in the second quarter of 1995 and \$3.81 per pound in the first half, compared with average nickel prices of \$2.86 and \$2.82 per pound in the corresponding periods of 1994. The company's realized nickel price averaged \$3.97 per pound in the first quarter.

visit, see page 9.

## Inco's modified work program 'superb' says Royal Commission board member

(Editor's Note: Although the Royal Commission on Workers' Compensation in Ontario, formed under the previous New Democrat government, was recently disbanded, we felt it important to run this article because of the Commission's positive reaction and our own pride in Inco's Modified Work program.)

side trip to Inco during a 20-stop provincial tour may have offered the best insight yet on injured employees at work.

The most valuable information for a three-member Royal Commission in Sudbury earlier this year for public hearings on what is right and wrong with Workers' Compensation in Ontario came during a visit to Inco's Reconditioning Shop and Modified Work Centre.

"I was very impressed," said David Smith, a former principal of Queen's University and professor of Economics. "I think Inco's modified work program is superb. It gives people a chance to do important work in an environment where their injury is not an impediment.

"It's good for the employees and appears to be good for the company as well. Employees seem to be positive about the work environment they're in.'

Sudbury was the sixth stop on the Commission's tour and in each centre they heard presentations from industry, labor and the pubic on how Workers' Compensation might be improved.

Tour requests are nothng new for either the Reconditioning Shop or the Modified Work Centre, where a highly acclaimed program puts injured workers back on the job doing meaningful work. In 1989, Inco and the United Steelworkers' of America received Certificates of Merit from the Workers' Compensation Board (WCB) in recognition of the joint effort that went into developing a modified work policy and program. More recently, in 1991, Inco was the featured employer in a WCB communications branch film production focusing on modified work entitled Workng In Ontario.

But post honors were not enough to shape the opinons of Royal Commission nembers. Instead, their glowing reviews were based on personal observations and conversations with empioyees in the program.

"From what I can see the inco program looks pretty terrific," said commissioner Jalynn Bennett, a management consultant out of Toronto. "We haven't seen a lot of modified work projects but it looks like a lot of attention has been paid to this one. The work is meaningful and people can see how their work relates to that of their fellow employees underground.

"The program has a very good feel to it. And all of this is being done in very tough economic times as well — not a lot of people realize that.

Bob McKerral has been at the Reconditioning Shop since being injured in 1987. A drill leg repairman, he knows the repair work he does on surface is important to employees using the equipment underground and important to the company meeting its produc-

He also recognizes the importance of Royal Commission members visiting sites like Inco to see how programs work and to hear what injured workers have to say.

It gives them a first-hand look at what we're doing and how we're contributing to the

company by repairing the equipment," he said. "It's good for us because we're working and it's good for the company because if the work was contracted out it would probably cost more.

"I wouldn't be surprised if they (commission members) wanted to come back and look at us again in more detail. It may even start a program somewhere else at some other company for light duty jobs."

Commission Chair Lynn Williams is a former International President of the United Steelworkers' of America. He was the most familiar with Inco and underground mining - yet he was equally impressed with what he saw during his visit.

'It's very impressive. Obviously it's just wonderful that these workers have an opportunity to be productive, to earn a paycheque and to do it by doing real work and providing real value to the company," he said. "Their pride in that opportunity is demonstrated in every conversation I've had with any of them, so I'm most impressed.

"I'm also impressed frankly with the fact that in many cases this is bringing work back into Inco that might otherwise not be here at all. So it isn't taking anybody's job or anything like that — it's really adding new jobs, which I think is a special bonus in this circumstance."

Williams said the positive psychological effects of a successful back-to-work program like Inco's are an important part of the healing process for any injured worker.

People want to work, peo-

ple want to make a contribution, people want to be usehe said. "People also want the company where they're employed to be a success. They want their needs to be recognized and all of that as well, but they certainly want to be able to make a contribution and this program makes that possible.

"Dealing with an injury, and the trauma that flows from it is difficult enough, but if you're not able to find your way back into productive work and be a productive member of society, that's a terribly demoralizing and destructive experience.

John Mohan, Reconditioning Shop foreman and an in-

jured worker himself, said Inco's modified work program deserves top marks for helping avoid the "destructive ex-



Drill repairman Bob McKerral, at his Reconditioning Shop work station, said visits by groups like the Royal Commission are important if others are to learn from Inco's successful back to work program.



Repairman leader J.P. Lefrancois of the Modified Work Centre shared his views with CBC reporter Denise Walmsley as well as members of the Royal Commission.



Royal Commission members Jalynn Bennett and David Smith listen intently to pump repairman Larry Guenette's views on Workers' Compensation during a visit to the Reconditioning Shop.

periences" Williams describes. "As far as I'm concerned

Inco should be rated number one as far as getting their injured workers back to work,"

said John.

"I've had no problems with Inco at all through my disability. They really helped me along by providing meaningful work for me instead of putting me up on a shelf somewhere and saying 'Let's wait until his pension years'. Inco shows that you can advance to be a foreman, even though you are disabled."

Following their tour of the Inco work sites, commission members — along with commission director Patricia Phillips and communications coordinator Jean Innes — met for close to two hours at the Copper Cliff Club with representatives of Inco and the United Steelworkers' of America for more detailed accounts of programs and initiatives under way in the workplace.

Attending from the union were Don McGraw, Richard Lagrandeur, Gerry Corby, Laine Fraser, Gary Patterson and Bernie Young. Attending from Inco were Larry Banbury, Gary MacLean, Brian Ewing, Tom Gunn, Eric Fenton and Gary Hughes.

For Hughes, who accompanied the commission during their site visit and presented a brief on behalf of the company during public hearings, the positive impressions left by Reconditioning Shop and Modified Work Centre employees were not surprising.

One of the things I heard

that is very important for all of us to appreciate is that the commission had heard rumors and suggestions that Inco was a model employer and would be a good place to visit to see what we were doing in areas of obligation that are spelled out under the Workers' Compensation Act," he said.

"I had the very distinct feeling that their expectations were somewhat lower than what they saw. One of the comments that Lynn Williams made was that he was particularly impressed with the positive attitudes of the people he spoke to - and he was referring specifically to people in the workplace in modified work opportunities who belong to one of those two areas.



Leader Rick Simpson of the Modified Work Centre explains what takes place in the component repair room to Royal Commission member Jalynn Bennett.



Moe Dubreuil checks stoper drills on a pallet at the Reconditioning Shop.

## Port Colborne

### Summer marks achievements at Port

It's summer in Port Colborne and everyone is watching for "up-bridges" along the canal and enjoying the odd visit to Nickel Beach.

Earlier this year laboratory employees marked an important achievement. After many hours of team work and dedication, the labs were certified by the American Association for Laboratory Accreditation. Analytical Services has been accredited since 1990 and this current recertification represents the third successful audit.

Special congratulations go to everyone who took part, with particular thanks going to Al Glaab, Gary Sargus and Bob Varden for their significant

To obtain this certification, the refinery's labs worked diligently to ensure the laboratory quality assurance system consistently met the internationally recognized ISO/IEC requirements. The external audit is conducted by registered experts in the analytical and quality fields and, like ISO 9002, the labs require continual monitoring of services to maintain the quality of their analytical test results.

Another pat on the back goes to the Precious Metals Refinery where an inhouse team effort resulted in the successful implementation of a new "Hypochlorite Destruction Process" this April. Among the many benefits of this process are substantial savings in reagent costs, a 75 per cent reduction in chlorine emissions, a 50 per cent reduction in the number of PM scavenging batches, the elimination of a \$9,000 expense in relining the hypochlorite tank every three years (due to much less corrosion) and an easier endpoint determination for the chlorine leach batches which, in turn, further reduces reagent consumption.

It was forman John Ruiter who suggested a monitoring program which showed that the hypochlorite solution contained no precious metals. Larry Torok's shift then conducted its own plant tests which showed the scrubber was under consistent high chlorine loading when acidifying the hypochlorite solution. Then, the PMR Process Tech Team, led by Mike Dinga, did bench scale

tests to optimize the conditions for hypochlorite destruction using a solution to form harmless sodium chloride and oxygen. Finally, a successful plant test proved that the hypochlorite destruction process was feasible and that the treated solution could be directly discharged from the refinery. Additional recognition goes to operations and staff who worked out the process details ded to successfully implement the new process.

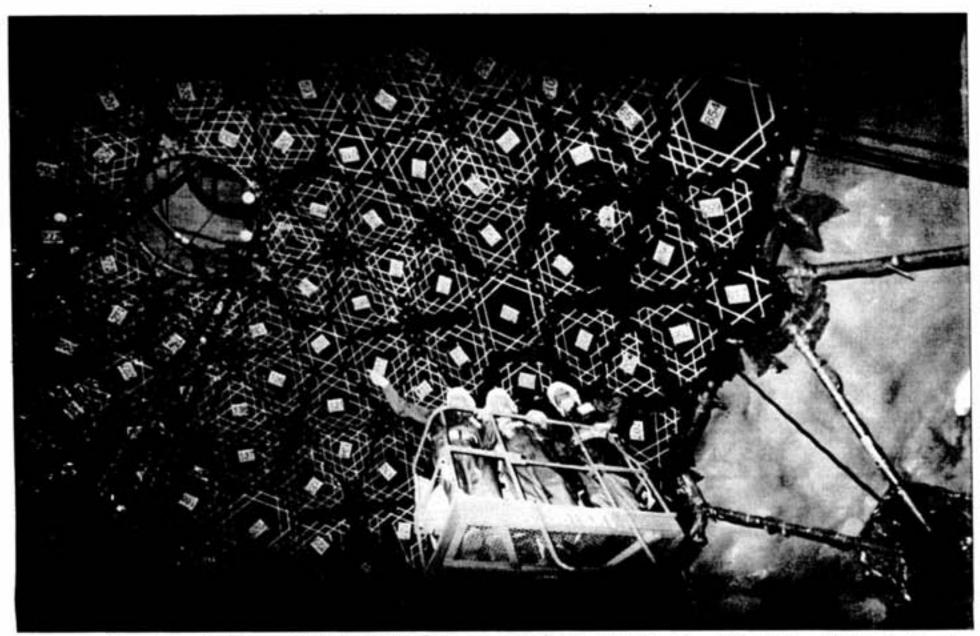
In other news, 13 new members were welcomed into the Quarter Century Club this May. The new members are Administration's Bob Reyburn; Analytical's Arnott Craddock and Frank Peichl; Electro Cobalt's Maurice Labbe; Maintenance's Larry Foster and Jim Orosz; the PMR's John Chunick, Vic Gatt, Paul Rubocki and Gerald Ursackil; Utility Nickel Foundry Additive's Gary Balon and the Y.S.S.S.'s Mark Pataran and Doug Schweyer.

The induction was held at the Roselawn Centre in Port Colborne where Del Fraipont served as master of ceremonies and the guest speaker was John Kelly, Ontario Division's Vice President of Mining. Former Port Colborne plant manager Haydn Davies made the presentation of gifts. The induction ceremony was followed with dinner at the Prince of Wales Hotel in Niagara-on-the-Lake and a performance of the play You Never Can Tell at the Shaw Festival Theatre.

This spring, an internal quality audit was also performed in the Yard, Shipping, Shearing and Stores department by lead auditor Howard Niece and auditor Ray Alexander. Doug Schweyer served as the department contact. No major non-conformances were raised. Procedures for all elements being audited were in place and being followed. The findings provide examples of objective evidence showing the effectiveness of the system at work in YSSS.

Later this summer, an encore presentation of Don Wheeler's "Understanding Variation-The Key to Managing Chaos" is scheduled for any interested employees.

Finally, in late May, employees from each department gathered to say good-bye to Del Fraipont and Bob Reyburn who have taken on new and challenging responsibilities in Copper Cliff.



Lawrence Berkely Laboratories director of Nuclear Science James Symons, SNO director Art McDonald and federal Science Minister Jon Gerard are hoisted upwards in the huge cavern to take a closer look at the light detectors being installed.

anada has always enjoyed some of the highest quality science in the world, but sadly, people haven't always recognized that fact.

But that's changing, according to Canada's Minister of State for Science Jon Gerard who points to the leading edge science going on deep underground at Creighton Mine as a good example.

The minister was the latest high-profile visitor to step into the Creighton Mine cage for the 6,800-foot trip underground to visit the \$68 million Sudbury Neutrino Observatory.

He said industry, government, academic and scientific cooperation within Canada as well as internationally makes these types of very expensive projects possible. "Without Inco's cooperation, not just in supplying the site but with their help, this project would never have been possible."

He said such projects not only boost our scientific selfconfidence, but attract some of the best scientists from around the world.

"The brain drain is coming our way. Rather than seeing people leave, we're attracting them."

The visit helped SNO officials celebrate another milestone, the installation of an array of sophisticated light sensors to announce the collision of the mysterious neutrino when the observatory's investigative work is in full swing.

Scientists calculate that about 10,000 of the countless billions of neutrinos that pass through the detector every year will interact with the nuclei of atoms in the 1,000 tonnes of heavy water in the observatory's glant acrylic container. Each interaction

will produce a brief burst of light that will be measured by the array of 2,000 photomultipliers (light-sensitive detectors) that are now being installed.

SNO Institute director Art McDonald outlined the project's history, development to date and the major discoveries that the unique facility could make. He emphasized the international cooperation and joint participation of industries like Inco, government, academic institutions and others that make this type of basic research possible.

With the availability of Canadian heavy water and Inco's participation in supplying the underground site where natural cosmic rays from space that interfere with the observation of neutrinos are eliminated, 90 per cent of the materials and facilities for the observatory already exist. That translates into huge savings. A project that would cost at least \$450 million could be built for less than 10 per cent of that amount.



Laurentian professor Doug Hallman explains to Science Minister Jon Gerard what is going on at the SNO facility two kilometres under the surface at Creighton Mine.



Television cameras roll as Canada's Science Minister Jon Gerard, wearing a hair net, hard hat and special overalls, takes an air bath to remove any dust before entering the superclean area of the SNO facility.



## Teamwork, commitment to detail earn certification for Port Colborne labs

ertification has proven to be the right equation for the Analytical Services personnel at the Port Colborne Refinery.

They have a lot to be proud of and have proven countless hours of teamwork and a commitment to detail pay off.

Earlier this year, the PCR labs were officially A2LA recertified. Analytical Services, explains laboratory supervisor Al Glaab, has been accredited since 1990 and the current recertification represents the third successful au-

But it wasn't easy.

The A2LA, or American Association for Laboratory Accreditation, is one of the largest and most respected laboratory accrediting agencies in North America and the external audit process is conducted by registered experts in the analytical and quality fields.

"The objective," he says of the recertification, "was to be registered as accredited analytical facilities supplying external customers with quality test results."

To obtain this important accreditation, the labs worked diligently to ensure the quality assurance system consistently met ISO/IEC Guide 25 -1990 requirements. This is extremely important, Al points out, because these are the internationally recognized laboratory guidelines.

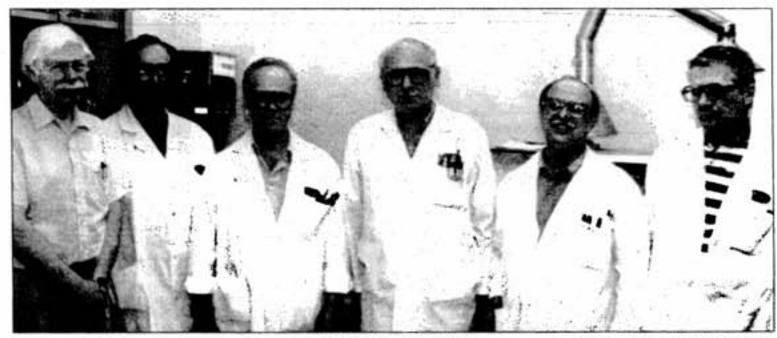
"The scope of accreditation is for specific PCR market products and analytical procedures used to analyze these materials," he says.

Although the two Port Colborne laboratories are located in different buildings, they function like a well-oiled machine with impressive results.

Their history of accreditation speaks for itself.

"The 1990 accreditation efforts revolved around nickel and cobalt products in the North Lab," says Al. "In 1992 the South Lab came on stream with its market product platinum liquor, thus encompassing all PCR analytical facilities."

Such major accomplishments as A2LA certification don't happen overnight and require hours of commitment on the part of every lab employee. Al congratulates everyone who helped make the goal a reality. He also recognizes Gary Sargus and Bob Varden for their significant contributions towards accredi-



Members of the North Laboratory team are: Al Glaab, Maas Koudijs, Gary Sargus, Paul Feduck, Frank Peischl and Albert Alakas.



South Laboratory members are: Al Glaab, Bob Varden, Arnie Craddock, Peter Mari and Richard Pengelly. Absent for the photo were Fred Daley, George Pisch and Adam Sunday.



Frank Peischi operates the atomic absorption spectrophotometer.

But the PCR labs have even more to be proud of than their A2LA recertification.

"We were a pioneer in high purity cobalt analysis," he says. "The products we analyze are unique in the world.

To this end, Analytical Services has developed a number of their own meth-



Bob Varden in the PMR lab.

ods on site.

Most importantly, however, PCR lab personnel are determined to maintain the high standards which achieved this spring's commendable A2LA recertification.

"Like ISO 9002-1994 we require continual monitoring of services to maintain the quality of our product which is analytical test results," says Al.

## Corporate-wide attendance at workshop



While the recent Inco International Environment, Health and Safety Workshop in Sudbury kept participants very busy, recreation and relaxation weren't ignored. Here the visitors are taken on a Cortina Cruise of Lake Ramsey. Casting off are Jim Clarke of John Clarke Inc. of Denver, John Kerry of Inco Europe and Phyllis Proctor of Inco Alloys, North Carolina.



David McKelvie of Inco Engineered Products in Leeds, England gives a review of IEP safety programs and results at the Copper Cliff Club.



It was a packed house for most sessions of the all-inco International Environment, Health and Safety Workshop at the Copper Cliff Club.

Inco's Environmental, Health and Safety Policy hangs prominently on every office, workplace and meeting room wall in Canada and around the world, but just how serious Inco is about putting the words into action was made amply clear at a recent corporate-wide conference in Sudbury.

"This first Inco International Environment, Health and Safety Workshop is a testament to our company's commitment to the concept of sustainable development," said Ontario Division President Jim Ashcroft, calling those attending the conference "our frontline leaders on these issues."

Delegates from almost all of Inco's international offices, operations and subsidiaries, some from as far away as PT Inco in Indonesia, Inco Europe in London and Inco U.S. in North Carolina took part in the Copper Cliff conference.

Expertise from every corner of Inco's operations was shared on a variety of subjects ranging from the rehabilitation of injured workers and decommissioning mine sites to ground water studies and the environmental assessment on the storage and commercial uses of nickel slag.

According to Inco President Scott Hand, the higher priorities placed on environmental issues by government, the legal system and the public in general have not been lost at Inco.

"The geologists and the mining and metallurgical engineers have been joined by engineers and scientists trained in such fields as physics, biology, meteorology, ventilation, and occupational health and safety. Here in Copper Cliff, our agricultural department has been hard at work regreening waste tailings and disturbed lands for more than 40 years," Scott told the delegates. "Departments of environmental control were established a quarter of a century ago, prior to the passage of most of today's environmental legislation. To further meet the increasingly complex world we live in, the company adopted in 1989 a corporate environmental impact policy. In 1992, this policy was expanded to encompass health and safety matters.

"Our standard procedures require that all capital requests be accompanied by an environmental impact statement and be signed off by the environmental official responsible for that part of the operation. Capital requests requiring Inco board approval must obtain the additional review and signed approval of the senior corporate environmental officer prior to proceeding to Inco's board."

Scott said the policy is backed by corporate environmental, health and safety audits that are applied to all operations where the company is a majority owner or has operating responsibility. "In some locations we have expanded the audit team by inviting union participation. We believe this latter move can serve to improve the credibility of the audit process."

He said audit findings are reported to each facility's manager and following receipt of an action plan by the facility, the audit results and action plans are summarized and reported to Inco's board of directors.



Bob Francis (left), Manager and Medical Director of Inco's Occupational Medicine department, explains the department's activities to Jarrell Bledsoe (right) of Inco Alloys and Ken Money, Inco U.S. Vice-President of Government Affairs, Environment, Health and Safety. They took part in a three-day, all-Inco International Environment, Health and Safety Workshop recently.



Process Technologist Rod Stuparyk and Decommissioning and Reclamation engineer Mike McCann near the listing of subjects featured in an afternoon session of the conference.



Scott Hand, President of Inco Limited.

"The mining industry has changed," he said, "and our technologies and practices have changed and we accept the imperative that the environment must be protected. We must, however, take on the job of telling our story and changing our image of a dirty, dangerous and potentially environmentally unfriendly industry. We have come a long way but our past deeds are better known than our present actions. "Inco's new smelting facili-

"Inco's new smelting facilities provide major reductions in energy consumption, dust and gas emissions while at the same time make major contributions to improved safety and productivity. Costs went down and productivity went up! This was a win-win situation for everybody.

"Several years ago, the company brought into operation a new gold mine located immediately adjacent to Yellowstone National Park, America's first and perhaps most beloved national park. Through lengthy and open dialogue with public and government agencies and development of a unique

zero-discharge mining process based on filtering tailings within the mill and depositing the filter cake in a double-lined secure basin, we were able to overcome the initial serious public and government objections and ultimately gained the necessary approvals.

"Subsequent operation has confirmed our ability to operate in harmony with the very demanding environmental restrictions imposed. The property received awards from major environmental groups and the U.S. Forest Service for the environmental management systems developed at Mineral Hill.

"While this mine is no longer part of Inco, this demonstrates the ability of Inco engineers and scientists to balance environmental and economic goals. There are many other success stories out there but if we don't tell our story we will not alter public opinion nor improve our prospects for playing a continued active role in the world economy. We can meet the challenge but must be seen to be doing so."

## Port Quarter Century Club celebrations bring 13 new members into the fold



PMR operator Vic Gatt and his wife Jackie, Del Fraipont and Haydn Davies.



Relaxing at Roselawn are, from left, plant engineer Neil DeKoning and his wife Gall, Jim and Robbin Orosz, Maurice and Janis Labbe and (foreground) Bob and Lois Reyburn.



Cobalt foreman Gary Balon and his wife Christine, Del Fraipont and Haydn Davies.



Cobalt operator Maurice Labbe and his wife Janis, Del Fraipont, former Port Colborne Refinery manager Haydn Davies and Vice-President of Mining John Kelly.



Marianne and plant technologist Doug Schweyer, Christine and cobalt foreman Gary Balon with former superintendent of operations Del Fraipont.



Lab analyst Arnott and Cathy Craddock, PMR operator Paul Rubocki, PMR operator Vic Gatt and his wife Jackie.

Aquarter century of dedication is some thing to be proud of. With that in mind, Inco's Port Colborne Refinery welcomed its 13 new Quarter Century Club members in style with an event to remember.

The newest members of this valued group began their

day with a cocktail reception at The Roselawn Centre in Port Colborne. Del Fraipont served as Master of Ceremonies and the guest speaker was John Kelly, Ontario Division Vice-President of Mining. Haydn Davies, the former Port Colborne Refinery manager, had the honor of providing the opening remarks and assisting Mr. Kelly with the induction of the new members.

After the induction and presentation of gifts, everyone boarded a bus and headed towards lovely Niagara-onthe-Lake for dinner at the prestigious Prince of Wales Theatre. After dinner, the new members and their wives enjoyed a presentation of You Never Can Tell at the Shaw Festival Theatre.

The 1995 Quarter Century Club members are: Administration, Bob Reyburn; Analytical, Arnott Craddock and Frank Peischl; Electro Cobalt, Maurice Labbe; Maintenance, Larry Foster and Jim Orosz; Precious Metals Refinery, John Chunick, Vic Gatt, Paul Rubocki and Gerald Ursacki; Utility Nickel and Foundry Additives, Gary Balon and Yard Shearing Shipping and Stores, Mark Pataran and Doug Schweyer.

## **Keen competition at Inco Regatta**



Don Young of Mines Research and Falconbridge pensioner Fred Miller relax at the barbecue during the first day of racing.



Indrek Aavisto receives the first place Laser trophy from past commodore Ray Hortness.

(from Ajax) (from Winnipeg)

(from Toronto)



### Overall results were as follows:

- Optimist
  1. Daniel Cunningham
- 2. Raif Richardson
- 3. Brian Doris

- 1. Indrek Agvisto
- 2. Justin Smith
- 3. Stephen Koop

#### Y Flyer

- Pierre Dignard / Lilliane Dignard
- Dave Sivers / Dave Shantz.
- 3. Chuck Hartleib / Don Young

#### Miscellaneous other boats (Planing Hulls)

- Jackie Balleny / Michael Courtin Laser
- 2. John O'Toole / Will O'Toole Soling 3. Gil Samoila

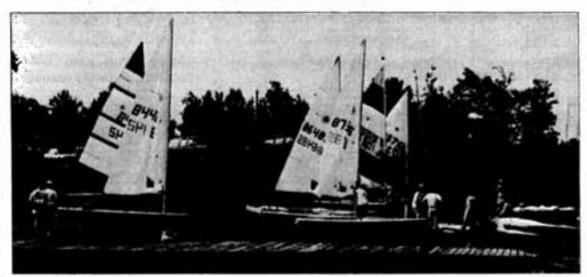
#### Miscellaneous other boats (Displacement Hulls) 1. Ray Hortness / Natalie Hortness/John Lewko

- 2. Liam O'Toole / Bridget O'Toole
- 3. Bob Lumley / Nadine Barmania

Catalina 25 Explorer Georgian 20



Indrek Aavisto of Accounting explains the fine points of rigging a Laser to his daughter Tiina while Inco pensioner Jim Balleny looks on.



Lasers are rigged before the start of the races.

bout 66 sailors in 44 boats from as far away as Montreal, Winnipeg, St. Catharines, Sarnia, Hamilton and Toronto hoisted their sails at Ramsey Lake for the 21st an-

nual Inco Regatta. The regatta has a tradition of serving up a wide variety of challenging wind conditions and this year was no exception. The regatta started off in hot, muggy weather and light winds, while the last race was completed just as a thunderstorm struck, resulting in a wild ride back to the Yacht Club from the race course. The conditions were a test for both the competitors and the race committee. The

latter was again chaired by Judith Aavisto who has been running races for well over 20 years.

Many of the out of town visitors competed in the Optimist fleet and they dominated the racing. The Optimist is a small one-person boat about 10 feet long and is raced by children 15 years and under. This boat is considered the nursery for future Olympic athletes.

Indrek Aavisto of Inco's accounting department won a very closely fought battle in the Laser fleet over Justin Smith and Stephen Koop. Indrek's daughter, Tiina, sailing in her first major regatta in a Laser, ended in fourth

position overall in the 14-boat

Michael Courtin, with crew Jackie Balleny, swept the miscellaneous other boats (planing hulls) with first place finishes in all five races. Jackie is the daughter of former Copper Refinery Lab supervisor lim Balleny.

Liam O'Toole of Garson Maintenance with the able assistance of his wife, Bridget, sailed his Explorer to second place in the miscellaneous other boats (displacement hulls) class. Liam's sons, John and Will, also pulled off a second place finish in the faster miscellaneous other boats (planing hulls) class in their Laser.

### **New Mines Minister visits Stobie**



Chris Hodgson, Ontario's new Minister of Natural Resources, Northern Development and Mines, takes a turn at the controls under the tutelage of Stoble scoop operator Rolly Lalande.

Blaster boss Mike Lachapelle inserts the emulsion loading wand into a hole on the rock face as an interested Mines Minister Chris Hodgson looks on.

o understand something better, you look a little deeper or go right to the source.

Chris Hodgson, Ontario's new Mines Minister, did both when he visited Stobie Mine early last month to familiarize himself with mining and mining people. It was the first underground visit for the rookie Minister whose portfolio also includes Natural Resources and Northern Development.

"It was a pretty good visit as far as I could tell," said forklift operator Richard Labrosse, who met Mr. Hodgson underground. "He asked a few questions and was interested in the new cement hole from surface to 1,800 level which allows wet cement to come down for underground shotcreting.

"The only way to learn is to see the people doing the work and talk to them. He's new at his job and to understand the underground environment you have to visit a mine."

Scoop operator Rolly Lalande, who gave the Minister a turn at the controls, described Mr. Hodgson as a "very interested" visitor.

"He asked a lot of questions about how the machine worked and how many hours we put on the machine," said Rolly, a 25 year Inco veteran.

"If he's the Minister of Mines he has to know what's going on and visiting Stobie will help him. The employees of the mine realize that and were happy to have him visit."



Operating shaft boss Rick Rousseau explains Stoble Mine's automated hoisting system to new Mines Minister Chris Hodgson.



Chris Hodgson takes a seat on surface at the remote console of the high-tech Tamrock 1000/60 underground drill. Providing an explanation on how the automated, state-of-the-art drill is controlled from surface is Mines Research project manager Peter Golde.



Frood-Stoble-Garson Complex manager Joe Loring, right, introduces Mines Minister Chris Hodgson to forklift operator Richard Labrosse.

## **Batty times for mining industry?**

id you know just 150 Brown Bats can protect farmers from 18 million rootworms each summer? That a colony of 100,000 bats can eat two tons of insects nightly? That some bats are important pollinators of 60 species of plants? That bat droppings support entire ecosystems of unique organisms including bacteria useful in detoxifying waste? That a single bat can devour 600 mosquitoes an hour? That half of the 43 species of bats in North America are either endangered or approaching endangerment?

And what, you may ask, is Bat Conservation International doing at the Sudbury '95 Mining and Environment Conference in Sudbury?

The little flying mammals love mines.

"Inco has obviously done some great stuff here for the environment," said BCI representative Dan Taylor. "We know this is the kind of company that would listen to what we have to say.

"With caves frequently disturbed by humans and roosts in old hollow trees diminishing due to lumbering, abandoned mines have become key year-round homes for bats." Dan told all who visited the BCI booth at the conference.

"Loss of a single mine hibernation site can eliminate many summer colonies of bats over thousands of square miles," he said.

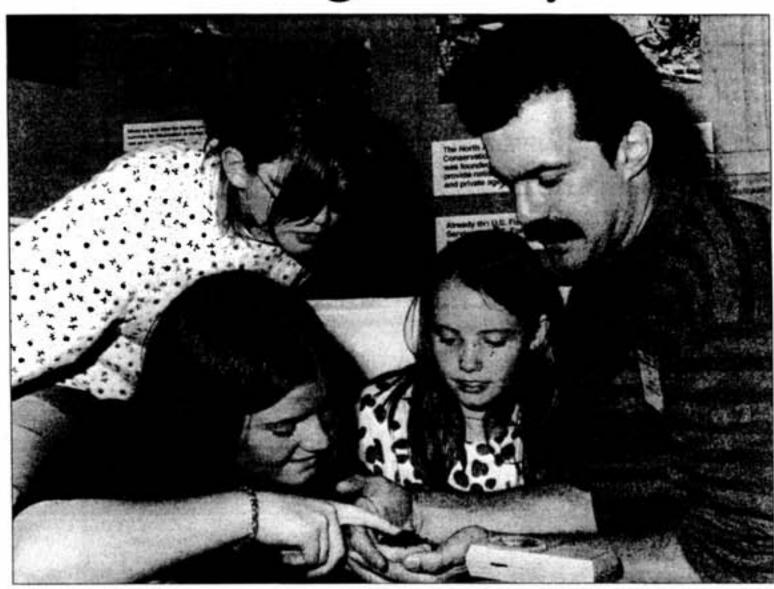
While the Sudbury area's high water table floods most of the predominately vertical mines, Dan suggests that there could be a few old abandoned mines that were dug into the side of a hill or other elevated ground that could be homes for bats.

"We're just trying to get this information out to the mining industry. Lack of public awareness is a major concern and one of our primary objectives is to create awareness."

BCI's efforts have had considerable success already. One of the world's largest population of hibernating bats about a million living in a Michigan mine - were saved from destruction when a BCI campaign made the local community aware of the disaster that would result if entrances to the mine were bulldozed shut as planned. Local residents, businesses and the state government teamed up by donating time, materials and funding for a speciallydesigned steel cage placed over the 300-foot-deep vertical shaft that provides protection from the hazards of an open shaft while providing access for the bats.

"The public's attitude in the past has been that bats are rabies-infested vermin," he said. "But people are starting to become aware of what these gentle friends and essential allies do for us. As for rabies, many more people die of bee stings and lightning than rabies-infested bats."

Does the name 'vampire bat' conjure up visions of



Don Taylor of Bats Conservation international shows Ashley St. Amant, 12, Jennifer Hewitt, 11, and Heldi Perras, 10, the gentle and beneficial bat, the only mammal that can fly. Jennifer is the daughter of Frood-Stobie engineer Dan Hewitt. Dan points out that the captive bat is unique and used specially for education programs, but no wild animal should ever be approached or touched.



Could this bat be carrying her nursing young home to a Sudbury-area abandoned mine? Mines are now home for about half of North America's 43 species of bats due to human encroachment and destruction of their natural habitat. Bat Conservation international official Dan Taylor told delegates at the Sudbury '95 Mining and Environment Conference that the winged mammals are extremely beneficial to humans and should be considered when examining options about what to do with abandoned or decommissioned mines.

horror? That vision would best be seen with hope. An anticoagulant from this species may soon be used to treat human heart patients, according to BCI.

The shy creatures are not always easily seen. Dan said they will fly straight down several hundred feet and another several hundred feet along an underground drift to their roosting area.

"I don't think most of our mines are suitable for bats because of flooding," said grounds supervisor Darl Bolton of Inco's Decommissioning and Reclamation department, "but I think it is certainly something we should look into. I don't think there are too many people here who were even aware of the problem."

For Dan, Darl's new awareness confirms the success of BCI's attendance at the conference.

"From here, we would be eager to provide you with our knowledge and experience, to help you with any such projects you undertake. We want to actively work with mining companies to help them with their conservation efforts," Dan said.

Slides are proof

## Inco regreening 'remarkable'

Holding up a clear plastic folder con taining dozens of slides, Timothy Richmond took another close look at a

particular slide, then viewed the scenery beyond.

"That's remarkable,"
said the Department of
Environmental Quality,
Abandoned
Mine Land
Division
project officer for the
State of Wyoming. "The
changes are
unbelievable."

Participating in the Sudbury '95 Mining and Environment Conference, Tim didn't miss the chance for a

return visit to the tailings area.

tailings area.

"Clearly Inco is a leader in tailings revegetation."

Tim has a unique view of the tailings area, as well as the community as a whole. Tim was last here in 1976 and took slides of what he, even then, considered pioneering work in reclama-

tion. He takes great pleasure in returning, 20-year-old slides in hand, to where they were taken and comparing them to what he sees from the same spot.

"When I look at these slides, it doesn't even look like the same place. I have noticed Inco people take great pride in their en viron-mental efforts. And so they should. It is certainly justified."

Tim said he was taking slides again for showing back home. "It'll show the skeptics what can be done. A lot can be learned from what you are doing here."



### International interest in '95 conference

I f there was any doubt about Sudbury's status as a powerhouse in environmental accomplishments, the recent Sudbury '95 Mining and Environment Conference erased it.

"We had participation from 18 different countries, representing just about every continent, said Inco's Decommissioning and Reclamation superintendent Marty Puro. "The response was overwhelming. In attendance alone, we underestimated. We expected maybe 300 or 350 people. We got just under 500. Every exhibit space was taken up. It's great to see so much environmental interest in this industry, even on a global scale."

An astounding 25 per cent of conference participants were visitors from other countries, including Brazil, Algeria, Australia, South Africa, Germany, Holland, Norway, Sweden, Finland, Burkina Faso (in Africa) and the United States.

"Ithink that says a lot about what's been accomplished by this community and by the mining industry," said Marty. "It shows that we are becoming known as a center of excellence in the field of mining and the environment, and Inco has been a major part in that accomplishment.

"We should take pride in theinternational recognition," sold Marty, "but at the same time recognize that we have a unique opportunity to help others by sharing what we've learned here. In Sudbury there are a high percentage of experts in all areas of reclamation and environmental expertise. It's become a selling feature of this area."

He said many have commented not only on the environment here, but the successful cooperation of educators, industry and government to get the job done.



There wasn't an inch of exhibit space left when Sudbury '95 Mining and Environment Conference got underway. The sell out of the 36 available exhibit spaces was just one indicator of the success of the event.



Getting a first-hand look at reclamation work at inco's tailings area are, from left, Louis Taour, Raymond Sidibe and Abovbakar Sy-Savane of the Ivory Coast, Norman Rethman of South Africa, Jaako Teppo of Finland, and Rolb Schwinn and Wolfgang Helms of Germany. All took the tour while attending the Sudbury '95 Mining and Environment Conference.

The cooperation in putting the conference together is just one example of what must be done to achieve success. Inco, Falconbridge, Laurentian University, the Sudbury Regional Development Corporation and federal and provincial governments worked together to stage the event.

"The education at such a conference isn't just one way," said Marty. "We learn as well as teach," he said. "This conference had a good mix of practical, research and academic information. There was something here for everybody."

In his address to the confer-



Port Colborne
Environmental Control
supervisor Dave Reed:
good Information on a
wide range of subjects at
the Sudbury '95
conference.



Kevin Morin and Tony
Whalen, seen here
looking at the map of
Inco's tailings area, best
represent Canada's coastto-coast participation in
the conference. Kevin's
with a Vancouver-based
mining sites drainage
assessement consulting
group and Tony is with a
New Brunswick
environmental consulting
group.

ence, Region of Sudbury chairman Tom Davies said that while some of the world's leading hardrock mining technology and mine rehabilitation methods were developed by Inco and Falconbridge, a critical mass of scientific activity has begun to emerge from research in other disciplines. In partnership with the mining industry, he said, Laurentian University has become a catalyst for research in areas such as mining automation, electronics and computer technology.

He pointed to the Sudbury Neutrino Observatory, a research facility at the razor's edge of science that is taking shape 6,800 feet below the surface of Inco's Creighton Mine.

"We are reversing the brain drain," said Mr. Davies. "On any given day there are international scientists visiting the area to learn from the technology being applied and developed."

He said the region has assumed international leadership through the work of the vegetation enhancement technical advisory committee, a group that has provided a major thrust in regreening more than 4,000 hectares of damaged lands in the area with the participation of the mining companies, government agencies, Laurentian University and interested citizens."

For Port Colborne Environmental Control supervisor Dave Reed, the conference provided some good information on a wide range of subjects. "I was mainly interested in groundwater," he said. "We just finished a groundwater investigation in Port Colborne."

While Port Colborne is smaller than the Sudbury operation, there is as much concern about environmental issues in Port as there is in Sudbury.

"We get full support from Inco in our efforts," he said. "The Sudbury group has the greatest experience, so we use their knowledge to help us out."

Inco also hosted tours during the conference that included a visit to the tailings

## Bill Luciw's hole-in-one

Lucky Luchw.
On june 30, he became a pensioner.
A few days before that, he sunk a hole-in-one.
"A good sign, I guess," says the retired Smelter maintenance foreman. "I just couldn't believe it. I saw the ball go up to the green and then roll toward the hole. I even heard the 'tick' when it hit the pole and then the ball disappeared, but even then I never figured it went in."
When the bewildered Bill Luchw couldn't find his ball, he asked golfing buddy Rick Trottier of the Smelter where it was.



"He told me it was in the hole. I never thought of looking for it there. I'd heard about these lucky shots, but never dreamed I'd ever get one."

With only eight years of golfing behind him, Bill considers himself a beginner. The shot on the 140 yard hole began with a slice, he said. "I swung hard because the wind was against me. The ball went over some trees."

## Inco sails for hope



Inco claims administrator Al Burns, daughters Erin and Nora, and friends Steve and Jean Beynon took part in the Sudbury and District Unit of the Canadian Cancer Society's Sail for Hope at the Sudbury Yacht Club on Lake Ramsey. Inco was a sponsor again this year, and the company's corporate flag flew proudly on the sailboat for the duration of the regatta.

and with the more

## Summer means Inco is on the greens



So what's Central Maintenance pensioner George McDonald doing fishing at the inco golf tournament?



Smelter maintenance mechanic Don Belle attempts a soggy shot during the inco golf tournament.



Garson Mine hoistman Fraser MacLeod coaxes the ball to a proper trajectory with a ritual dance.



Denis Champaigne of Mansour Mining looks on while Chris Langille of Creighton Ground Control attempts a somewhat difficult shot during the Frood-Stoble-Garson golf tournament.



Compiling the score sheets for the Frood-Stoble-Garson Complex Tournament are Employees' Association president Wayne Tonnelli and tournament chairman J.C. Marion.



Susan Dagostino of Central Process Technology shows her style at the Copper Refinery golf tournament. Looking on is refinery maintenance foreman Phil Lachance.



Pensioners Roger Houle, Buddy Eles and the Smelter's Dave Violette keep score at the Copper Refinery golf tournament earlier this summer.



From the Occupational Medicine Dept.

There are many things a traveller must consider when travelling abroad. Here are some helpful tips to help you enjoy your travels.

A good rule of thumb when travelling is "BOIL IT, COOK IT, PEEL

Food preparation must be considered when planning your meals out of country. Sanitation practices in some countries do not follow the same standards as in North America. Some of the foods are prepared or grown in contaminated water. Some of the risky foods are:

- reheated or stored food
- white-fleshed tropical fish
- raw meat, fish, vegetables and shellfish
- mayonnaise
- unpasteurized milk products
- · cold cuts.

Be prudent when buying food from a street Vendor or eating at buffets as the sanitation practices cannot be assured in the food preparation and these foods are usually kept warm at a low grade temperature which promotes bacterial multiplication and increases your risk of contracting disease. It is recommended that you order right off the menu if possible.

#### Water

Drinking water in some underdeveloped countries can also be risky. It is recommended that canned or bottled carbonated beverages including bottled water, mineral water, soft drinks and juices that are uncapped in your presence be substituted for tap water. Your teeth should also be brushed with bottled water. It is recommended that water be boiled instead of filtered if you have the facilities to do so. Make sure that ice cubes and ice are made from safe water.

#### Immunization

It is very important that four to eight weeks before your departure date you consult your family physician or your district health unit to find out what prophylactic immunization you may require. The Sudbury & District Health Unit offers a fee for service clinic for travellers. The

## Tips for travelling

Travel Clinic enables international travellers to obtain comprehensive, up-to-date affordable travel advice and immunization to help reduce the incidence of high-risk, travel-related diseases (malaria, typhold, yellow fever, etc . . .). Planning is very important because some vaccines cannot be administered at the same time.

When travelling, you may want to consult with your family physician and prepare a travel kit. Your travel kit should include the following:

Ointment for:

infection (polysporin)

burns

#### Medication for:

- nausea or vomiting
- diarrhea
- infection (general antibiotic)
- pain
- stomach upset or heartburn
- allergies
- water purification tablets
- handy wipes
- Make sure that you have enough of your regular prescription medication to last you while you are away and that travel insurance is purchased.

Finally, when travelling to a foreign country, take the time to consider the following and determine if it is a health consideration or requires a change in your itinerary:

- possible jet lag climate
- altitude travel and security within the country
- time of year political climate
- impure water
- customs
- poor sanitation
- anti-malaria prophylaxis
- cultural and language barriers
- disrupted eating schedules access to hospitals or clinics
- The Sudbury & District Health Unit can provide the names of English-speaking physicians that service the area you are travelling.



by Harvey Wickenden

### Cutting energy costs at the office

Electrical energy costs for heating, ventilation and air conditioning comprise the largest controllable portion of the operating costs of buildings.

Finding ways to reduce energy costs significantly and permanently while improving or maintaining the building environment and generating a strong return on investment was the challenge.

Along with significant successes in reducing hydro costs, we have also worked hard to reduce steam and water consumption as well.

These dramatic energy savings were achieved at the General Office primarily through facilities management control systems hardware and installing software.

From a host computer, I can monitor and start/stop almost any HVAC equipment in the General Office. We monitor room temperature, hot water heating, outside air, chiller water, supply and return air temperatures, damper position pneumatic valves and control equipment status.

About 99 per cent of all building HVAC equipment runs only during occupancy time. The system monitors changing weather conditions and optimizes the start and stop schedule to maintain a comfortable office environment.

The DOS-based Windows application (Signal) provides the administrative tools necessary to manage our buildings successfully. The dynamic graphic monitoring screens, alarm handlers, exception handlers, trend graphs and reports provide excellent trouble shooting capabilities. Alarms can be routed to any terminal or mainframe network printer for timely affective response.

We plan to network, via fibre optics, other facilities such as the Clinic and Copper Cliff Club. I see great potential for expansion into other areas as well. I believe we have just scratched the surface for this technology. It has been my pet project and I will find it difficult to let go of it.

Other initiatives taken to reduce energy costs were the upgrade of our mainframe computer equipment which significantly reduced air conditioning costs and water consumption, installation of light sensors, setback thermostats and energy-efficient fixtures, turning temperatures down and unnecessary equipment off.



## Of pipers, royalty and blasting

JULY

40 Years Ago

It was quite a day for Copper Cliff 40 years ago at the Highland Games in Sault Ste Marie. Held at the Soo's Queen Elizabeth Park as part of that city's centenary celebrations, 12 bands competed in the games.

The Copper Cliff Pipe Band won top honors in the piping competitions and the Copper Cliff Highland Cadets, with Lieut. Col. Robin Swain, commanding officer, won the march, strathspae and the reel competi-

They were very impressive in their new uniforms of Douglas tartan with dark green jackets, too, said the article.

But the honors did not stop there. William Livingstone, instructor of the Copper Cliff Pipe Band, won the competition for marches by a piper and placed second in the march-strathspaereel event. His son Billy captured the individual junior piping championship.

Following the competition, a large crowd greeted the musicians at the CPR station in Sudbury and heard them give an impromptu performance in appreciation of the crowd.

Other stories that month were: 'An Experiment in Community Service Pays Off in A Big Way at Creighton Mine,' 'Driving Tunnels to Release More Ore for Surface Mining' and 'Frood Tigers Lead Nickel Belt League.'

25 Years Ago

A model mining community of 23,000 people, Thompson officially celebrated becoming a city on June 10, 1970 by inviting Queen Elizabeth, Prince Philip, Prince Charles and Princess Anne to the party.

The Royal Party drove over paved streets that had been nothing but bush and muskeg less than 15 years before and saw the cause of the magical transformation - the International Nickel complex, the largest fully-integrated nickel producer in the world.

Welcomed by thousands, Her Majesty smiled radiantly at the hearty western welcome. Later, she and members of her family moved leisurely through the crowd, stopping to chat here and there.

At a huge community barbecue, the Queen was given articles of traditional beadwork by young Maise Sayese on behalf of the Manitoba

Accompanied to Thompson by Hon. James Richardson, federal Minister of Supply, and Joe Borowsky, provincial Minister of Transport, the royal visitors were officially welcomed to Manitoba earlier at Churchill by Lieutenant-Governor Bowles and Premier Ed Schreyer.

Other stories that month were: 'New Caledonia Project Outlined in Inco Report,' 'Community Bond Forged by Canadiana Festival' and 'Battling and Boating Record Big Game Fish.'

15 Years Ago

Take detonating cord that burns 22,000 feet per second, manage delays between the detonation of each row or blasting hole and do it all non-electrically and you have non-electrical sequential blasting - the most effective blasting ever accomplished.

Developed by a local explosives manufacturing company and introduced by Inco's Mines Research and Development group, non-electrical sequential blasting reduced vibrations and the amount of rock fragments thrown by a blast. It also achieved better rock breakage, making the handling and transporting of blasted material easier.

When used in open pit blasting, it left the pit wall intact without creating excessive breakage, which in turn ensured a good pit slope and avoided damage to surrounding structures.

Don McGinn of the engineering office at Clarabelle open pit explained how it worked: "When we put a long delay, which may be 175 milliseconds between rows, the first row moves out, creating an open space for the next row, and with proper delay time, we are able to decrease the back pressure created by the first row.

Other stories that month were: 'Tours,' 'Ideas + Ride + Work = Money

for Charity' and 'From Old to New.'

## Big holes with Australian drills

40 Years Ago

Although it had been introduced to North America from Australia half a century before, it was the first time Inco had used it. It was the Calyx core drill, a drill capable of drilling a hole three feet in diameter.

With a mild steel bit attached to a 20-foot core barrel, the drill worked by rotating chilled steel shot under the bit into the rock. The weight of the rotating bit on the shot caused the cutting action.

The chilled shot was fed under the bit with water and carried down the inside surface of the core through slots to the cutting edge. Only enough water pressure was used to remove the rock cuttings to the sludge receiver at the top without disturbing the heavier shot. The shot did the cutting, thus the other name the drill sometimes had: the shot drill.

Although the drill's operators did not have experience drilling norite before, they were able to cut as much as 18 feet of three-foot core a day

using a 160 h.p. diesel motor. Other stories that month were: 'Biggest Attendance in History at Windy Lake Camp,' 'Silver Jubilee of the Monel Family' and 'Recordmaking Group of 269 Joining Quarter Century Club'

25 Years Ago

Inco's long-range program for pollution control was to be completed by 1978.

The three parts of the program were that sulphur dioxide emissions were to be reduced at the Copper Cliff Complex by 15 per cent by 1974, 30 per cent by 1976 and 85 per cent by 1978; at the Iron Ore Plant, sulphur dioxide emissions were to be reduced by 90 per cent by 1972 through the enlargement of the suphuric acid plant; and at the Coniston Smelter, emissions were to be reduced by 90 per cent by the end of 1978.

Work to reduce emissions at the Copper Cliff Smelter Complex were already underway with construction about to begin on the installation of the steel liner in the new 1,250-foot chimney along with the new precipitation plant and new flue system. Plans were also well underway for the \$25-million construction of the new 2,300 tpd sulphuric acid plant and acid storage facilities.

AUGUST

Work was also progressing at the Iron Ore Recovery Plant, but at the Coniston Smelter the company was not yet sure how to proceed to reduce its emissions - maybe a new process, maybe by some other means.

Other stories that month were: 'New Wire Line System Diamond Drilling Boon,' 'Port Colborne is 100' and 'Exciting Future Prophesied for Powder Metals'

15 Years Ago

The design was coordinated through a Divisional Shops task force which was established in 1976. Built at a cost of \$14-million, Inco's new Divisional Shops complex incorporated some of the latest concepts of design, materials handling and equipment found anywhere.

The complex was designed to provide a wide range of shop support services for the company's mines, mills and surface plants and it centralized services that were previously provided in individual shops located at each mine and plant in the area.

With 140,000 square feet of floor space, it included a machine shop, a component repair centre, a winding shop and a self-sustaining warehouse.

The intention was to add a steel fabrication and repair centre, a welding shop, a skip and cage repair shop, a bucket repair shop and a sand-blast and paint shop in the future.

The machine shop was divided into four parts: a production area with an automated, numerically-controlled lathe and turret lathe for high volume and repetitive work; an emergency machining area for emergency work; a random machining area for fabrication and repair of low volume items; and an assembly area for the dismantling, cleaning and inspection of machinery that was to be repaired.

Planners, schedulers and programmers supported the skilled tradesmen in the shops to obtain maximum efficiency of equipment and

Others stories that month were: 'Blasting Caps . . . Extremely Dangerous,' 'Rolling Strikes for Championships' and 'Second Quarter Report.'



## INCOME

ideas

by Susan LeMay, CMA

## Investment basics

Getting your hard earned money to work as hard for you as you did for it is a challenge. Sometimes there are so many options that sound the same, or all sound so confusing that you just want to leave the money in something very safe and not think about it.

The terminology can be confusing. Here are a few of the more common questions that need to be answered.

Compound Interest

How does compounding affect my interest income?

Interest income is pretty straightforward with a few exceptions. One of the most important things to consider when comparing interest income opportunities is the compounding period. Compound interest just means earning interest on your interest. As a result, the oftener the interest compounds, the more your money earns. The issue when you are choosing is to get the most you can, but figuring this out isn't easy. The institutions each offer different rates and combine that with different compounding periods. Would I prefer to invest \$5,000 in a Guaranteed Investment Certificate that pays eight per cent compounded every three months, or in one that pays 8.2 per cent compounded annually? In fact, in this case the eight per cent investment is a bit better if it is a one year investment, and the difference increases the longer you leave the money in the investment. At the end of the year the one that compounds every three months is \$5,412.16 while the annually compounding one is \$5,410. Not much difference on that amount of money in that period, but at the end of two years the difference has gone from \$2.16 to \$4.68. The increase in the difference is dramatic.

#### Variable Interest Rates

How can I compare interest rates when they are different for different years? When the interest rate varies over the years you hold an investment, you may have to calculate the interest you will earn over the whole life of the investment with each option. Take a five-year \$5,000 Investment Certificate. Both investments compound annually, and your choices are seven per cent for each of five years or a rate that is six per cent for the first two years, and then increases to seven per cent in year three. 7.5 per cent in year four and eight per cent in year five. You want the one that is seven per cent for all five years, even though the other one is the same or higher in three of the five years. Your earned interest with the constant interest rate of seven per cent is \$2,011.53. The other option only earns you \$1,979.07.

Shares

How are common and preferred shares different?

Common shares are held by the owners of a company. That means that there are risks involved in holding these shares because if the company gets into difficulty these shareholders are the last to get their money back and there usually is no money for them. On the other hand, these are the shareholders who have voting rights and who can control the management of the company.

Preferred shares have many more possible options. They pay dividends, and may be retractable, redeemable, or convertible, or they may have a

cumulative dividend.

Owners of preferred shares usually have no voting rights and so no say in the running of the company. They trade away their voting rights for increased security. If the company makes a profit they may be guaranteed a dividend of a certain amount. A seven per cent preferred share will pay a dividend of seven per cent of the face or par value of the share.

If preferred shares are 'cumulative' then the company that issued the shares are obliged to pay the dividend to the preferred shareholders for every year. This doesn't mean that dividends will be paid every year, it just means that before common shareholders are paid in any year, all the back dividends owed to preferred shareholders must be paid. These dividends are paid to the person holding the shares when the dividend is paid, not the people who held them in earlier years when the dividend was missed.

If preferred shares are retractable, then the shareholder may sell the share back to the company on a specified date for the issue price. If they are redeemable, then the company may buy them back from the shareholders, at a specified date for a pre-determined price. The two dates are often, but not always, the same. The closer you are to the redemption/retraction date, the more important it is to consider the price for selling the shares back to the company. Most preferred shares are now redeemable and this is an important feature to consider.

Preferred shares may also be convertible into common shares by a specified date. The shareholder may trade preferred for common, or the company may have the option of buying back the shares for the original purchase price of the shares.

Analyzing the options on preferred shares is a topic for a future column.

NAME	BORN	DIED	YRS SERVED
		THE REAL PROPERTY.	
Ackland Albert	04/03/15	, 06/25/95	CONTRACTOR
Baker Victor	04/03/07	06/11/95	35
Bedard Leonard	08/05/23	06/07/95	43
Braskys Antanas	08/17/13	06/22/95	29
Buczek Franciszek	10/08/15	06/01/95	31
Christiansen Nikola		05/20/95	26
Gervais Gilbert	12/20/33	06/18/95	32
Gravel Albert	10/26/15	06/20/95	30
Hamilton Arthur	01/17/23	06/29/95	15
Horeck Steve	01/08/15	06/15/95	29
Hughes James	09/19/23	06/22/95	32
llenseer John	10/08/25	06/27/95	35
Jackson Clarence	03/16/16	06/29/95	36 5
Jameus Daniel	08/11/63	06/01/95 06/13/95	35
Koleszko Teodor Lee Albert	08/25/27 08/12/47	08/24/95	26
Montle Elvin		06/27/95	32
	07/17/13 07/06/17	05/14/95	26
Mackey Peter Marshall Wilfred	12/10/29	06/03/95	38
McTaggart Jesse	06/25/40	06/16/95	25
Patterson Clifford	04/11/17	06/06/95	37
Roy Stephen	04/01/22	06/04/95	35
Thibault Nelson	08/12/24	06/21/95	30
Toyich Miodrag	11/30/08	06/18/95	25
Uhryn Mykola	12/14/20	06/26/95	25
Vaillancourt Aldeo	07/09/17	06/24/95	27
Waiston Harry	07/20/12	06/06/95	25
Wozniak Andrzej	11/25/13	06/24/05	29

### AND HANGING WALL SOCIETY GOLF TOURNAMENT WILL BE HELD ON SUNDAY, AUG. 20 AT THE PINE GROVE GOLF CLUB STARTING AT 8:30 A.M. DEADLINE FOR REGISTRATION IS MONDAY, AUG. 14. THE ENTRY FEE IS \$35. FOR MORE INFORMATION. CONTACT: PETER DUHAMEL 682-8108 OR MIKE DUDAR 692-2514.

THE FOOT

### "50 Year" Union History

The Education & Training Committee...

Is compiling information about Union activities of Inco employees during the fifty year period 1944 - 1994

#### PURPOSE...

Establish a library of documents oral and written as well as pictures about this historical period

#### LOOKING FOR ...

Leaflets, collective agreements, newspaper clippings, pictures and names or documents

Would like taped interviews as well

#### PLEASE CONTACT:

John Duggan, Chairperson 675-3381

### I heard it down at . . .



## Fish spawning in George Lake a 'poetic' moment

George Lake in Killarney Park helped catapult the acid rain issue to North American prominence in the late 1960s with accounts of how fish species had been wiped out over decades.

So when biologists last fall detected fish spawning in the lake beside the Killarney campground for the first time in three decades, there was a natural euphoria.

The significance was not lost on Ed Snucins, a biologist with the

Cooperative Freshwater Ecology Unit in Sudbury.

"1966 was the last time for spawning in George Lake. Nobody had seen it 'til last fall. The water quality has recovered and the fish that we'd stocked have started to spawn. We're quite excited about it," Ed said the other day in conversation as half a dozen university students spend the summer sampling animals in Killarney Park lakes. Inco Limited is a major partner in sponsoring the biodiversity survey that will give an inventory of the fish, plankton, insects and invertebrates in 30 lakes at Killarney Park.

"George Lake was where the whole acid rain issue started," he added, recalling that University of Toronto researchers in the 1960s and 1970s discovered that Killarney Park lakes were acidifying. Their studies gave the first scientific evidence that the thin soils and quartzite rock surrounding the lakes had little impact on neutralizing acidic rainwater.

"So to have the original lake coming back is pretty exciting. It's very

poetic, in a way," Ed noted.

He said the three-year study also includes water sampling of 90 lakes and 40 ponds to establish baseline acidity levels across the park and will document the changes as a result of the reduction in sulphur dioxide emissions

Improving public education at the park is also vital. With 90,000 visitors annually, Killarney Park is popular for city dwellers out for canoeing, trekking and camping. Inco's involved with updating the permanent display at the park as well as assisting with the one-page insert on the biodiversity survey that goes into the park tabloid newspaper.

survey that goes into the park tabloid newspaper.

The goal, of course, is to identify the bodies of water suitable for reintroduction of native fish species and then create a restoration strategy.

Victor spurs adrenaline rush

There is an air of excitement and discovery swirling around the Victor advanced exploration project that you feel the moment you leave the highway on the way to Skead.

From a rugged, wooden copse eight kilometres in the bush back of the Sudbury Airport to a bustling construction site today, Victor gives even the

occasional visitor a sense of being in a frontier mining camp.

Only two months ago, Victor was just a clearing carved out of the wilderness. Today, up to 40 men are at work, sinking the 200-foot concrete sub-collar to handle the head frame, pouring concrete for the hoist room, and getting ready for the shaft sinking this fall. Rimming the entrance to the approximate five-acre site are office trailers and a maintenance shop while near the site of the headframe a healthy crop of grass bears witness to the first round of regreening in what's being touted as a showcase for modern mine development.

Sprinkled among the youthful workers are a handful of 'greybeards' who are as caught up in the excitement of a potential new mine as their younger colleagues. Not surprisingly, the seasoned men on site have strong Inco ties and look upon Victor as an opportunity to round out their experience in the mining industry.

Jack Mikkola retired in the fall of October after 37 years as an instrumentation man. But only three-and-a-half years into retirement, he was lured back into the business by J. S. Redpath of North Bay, the company shaft sinking.

Seven days a week, he leaves his Lake Penage retirement home at 4:30 in the morning and doesn't get home until 7 at night. He's loving every minute of his job as maintenance man on site.

with the Copper Refinery and is winding up as construction foreman for J. S.
Redpath on a project unlike any he'd seen at Inco.

"It's a different experience for me, the whole project, especially the pouring of the first collar," says Dunc who had his own handyman business when he retired in June, 1994 as the supervisor of the Modified Work Centre.

"It's six days a week out here," he says. "But it's only for a few months."

As surface construction superintendent for Kilborn Engineering, Bob

Donaldson is overseeing a portion of the \$72 million exploration project for
Inco. This is his second major project for Kilborn since his Inco days in the
early 1980s when he'd been a project coordinator for General Engineering.

He, too, finds the early days of a possible mine startup to be invigorating.

The buzz about Inco in the media

You can't eat awards but they're often a good benchmark of how well you're doing against other professionals. Inco Public Affairs has captured an award of excellence from APEX '95, the seventh annual awards program from Communications Concepts, for the way the company welcomed Prime Minister Jean Chrétien to Inco Limited in 1994 at the Garson Arena. With nearly 3,600 entries in 12 major categories, Inco won one of 10 awards of excellence for Community Relations campaigns. One highlight of the special celebration came when Inco Chairman and Chief Executive Officer Mike Sopko and the Prime Minister planted the 1,000,000th pine seedling grown underground at Creighton

The last time British journalist Kyran Casteel was in Sudbury was 1988 to write an article on Crean Hill for World Mining Equipment magazine. He returned recently to see how the company is doing with automation and left clearly impressed. "It's good to see Inco is staying innovative despite the ups and downs in the nickel business," Kyran told us by trans-Atlantic telephone. "Inco is pretty much in the forefront. Inco and LKAB, the big Swedish iron ore producer, are the world leaders certainly in terms of automation. You both have large mines, the technology, the R and D and the clout to make these innovative changes." His article, which appears in the July/August edition of World Mining Equipment, focuses on automating haulage at Stobie. Inco people featured include Stobie's Mike Grace and Al Epps and Mine Research's Al Akerman...

Dr. Horst Rademacher, the San Francisco-based science and technology correspondent for Germany's largest daily, the Frankfurter Allgemeine, is another international journalist who's been won over by high technology at Inco. "A journalist shouldn't say he was impressed but it was very good," Horst said of his recent underground tour of Stobie Mine where he saw automated production machines in use and saw a simulation of the remote control scoop tram. "The idea of automating a mine with that kind of technology was very impressive." Piqued by the notion of the transferability of Inco's mining experiences to other mining operations, especially in European coal mining, he said he hadn't encountered a mining complex quite like Inco's. "The size—enormous. Looking at the geological map and all the different mines, it was a pretty impressive place."

Inco and education at work in the schools

Inco Limited has been a true partner with education at all levels for decades. That thought hits strikingly home when you think of Inco Bursaries which will be announced later this month and when you peruse the most recent winners of Inco Limited scholarships from the Sudbury Board of Education.

Twenty-eight Sudbury area students this year are benefiting from Inco awards.

From Capreol High School, award winners are Shawn Keown, Amanda

Taylor and Jena Michelutti.

At Chelmsford Valley District Composite School, Lara McCann and

Larry Marshall are winners.

Ashleigh Jessup, Andrea Leclair, David O'Neill, Clare Beatty and Beverly

Dawson won at Confederation Secondary School.

Ecole secondaire Hanmer winners were Marc Denis, Kelly Joan Morrow

Jody Moland captured an award at Levack District High School.

Winners from Lively District Secondary School were Franz Kirk and Jo-Anne Clarke.

Jeremy Sylvestre received the Inco award at Lockerby Composite School while over at Lo-Ellen Park Secondary School award winners were Sara Kirchhefer, Shaen Stesco, Stobham Long and Chad Aul.

At Ecole secondaire MacDonald-Cartier, the winner was Josee Labrecque. Northeastern Secondary School's winners were Michelle Hazell, Betty Weppler, Carrie Holder and Kristi Leore.

Michel Turcot and Summer Atkinson were the Inco winners from Ecole secondaire Riviere-Des-Français.

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