



Youngsters see first hand what parents do at work



Nickel Refinery sampler Phil Guy watches son Kevin, 12, do a laboratory test to determine the bulk density of nickel powder. The two were among scores of employees and their children who took part in a job Shadowing program that allowed the youngsters to join dad at work

Although 13-year-old lan Wilson has his sights set on being a lawyer when he grows up, he'll never be one of those who turns his nose up at today's high-tech blue collar work.

Armed with a screwdriver, the son of Clarabelle instrument technician Ted Wilson eyed all the "nifty" stuff to dismantle at the mill's instrument shop.

Awesome, he described it. The St. Raphael student was one of scores of young-sters who descended Inco plants, mines and offices for Stay in School Awareness Week."

The "Job Shadowing" program invited youngsters to tag along with mom and dad when they went to work, and Inco youngsters like Ian took full advantage.

"I've never seen dad at work before," he said. "Dad tells me about what he does at work, but it's not like being here. I get to see first hand. I'd like to work here and fiddle with all this neat stuff."

lan didn't just watch the goings on at the shop. "We had him calibrate a pressure transmitter, order material on the shop computer and run over to the warehouse to pick up shop supplies," said Ted. continued on page 3

Curlook first Canadian winner of NCRD award

ited and founding Chair of the Cambrian College Board of Governors, is the first Canadian to be presented with a Benefactor Award by the United States-based National Council for Resource Development (NCRD). Benefactor Awards are presented to individuals, foundations or corporations from each of NCRD's 10 regions and Canada. Recipients embody the ideals of volunteerism, community, sacrifice and

Inco Cup

airman of Inco Lim- technical and junior colleges. Nominated for his association with Cambrian College, Dr. Curlook, along with benefactors from eight regions of the United States, was honored at the NCRD's 26th Annual Conference which was held in Washington, D.C., in December. Dr. Curlook's association with Cambrian College precedes its official opening in September 1967. Appointed Chair of the Cambrian College Board of Governors in

Hall of Famer

r. Walter Curlook, vice dedication to community, 1966 by the Premier of Ontario. Curlook led the Board in the search and selection of the College's first President; in the selection of "Cambrian" as the College's name; and in the establishment of the College in Sudbury and of satellite compuses in Soult Ste. Marie and North Bay. (In 1972, the Sault Ste. Marie campus became Sault College and the North Bay campus became Canadore College.) He also played a key role in the purchase of Cambrian's continued on page 15

Airborne

A skier gets airborne on the Adanac slopes during the final day of racing in this year Inco Cup competition. More than 100 skiers took part in this year's racing series. Sault. Ste. Marie won the team competition. For more pictures and story, see Pages 8 and 9.

Having a Blast

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EDUCATION & INCO



Process clerk Angle Gagnon gets Interviewed by Michael Mayhew, son of Clarabelle energy reduction project manager Mike Mayhew.



Careers 2000, a four-day exposition in May to introduce students from all over the Sudbury district to the opportunities available in the technical trades, has the active support of many Inco employees. About 30 of them have volunteered their time and skills to help prepare and conduct the exposition. We asked some of these volunteers why they are so committed to the promotion of careers for young people.



Mike LeBreton, industrial mechanic: Smelter; "I am participating and volunteering my time and effort to promote the Careers 2000 Exposition 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 and highly competitive and ever changing global



Cliff Corelli, instrumentation man, Matte Processing: "I feel that the students of today think that only professional white collar lobs are the way to instant success. But this is not necessarily so. Industry is craving more skilled tradespeople in many fields. Therefore, I think it is my duty as a tradesperson to demonstrate what options there are."



Denis Levoie, instrument man, Matte Processing: "Having teenagers, I now feel that they do not have a full understanding of their options for their future career choices. I do not think that it's up to the educational system alone to show the students all the job possibilities, but it should be shared by industry as well."



Dan Foy, instrument man, Matte Processing: "Just finishing my education two years ago, I feel I can relate to the students and the uncertainty of what careers to choose. I also think it is good to present trades to students. This opens their minds to ideas that are not pushed in the educational system." economy."



Frank Moss, training supervisor, Training: "It is said that compelling goals and a positive, meaningful vision of the future provides purpose and direction in the present. My participation in Careers 2000 is driven by the hope that every student leaves the exposition with their goals intact and with a clear vision of their future." Benita Smith, clerk-stenographer, Training: "Our youth are a very valuable commodity. They require guidance in making important career decisions that will ultimately affect our future generations. Careers 2000 is one of the many ways we can assist them in choosing a suitable career path that we will all benefit from."

EDUCATION & INCO



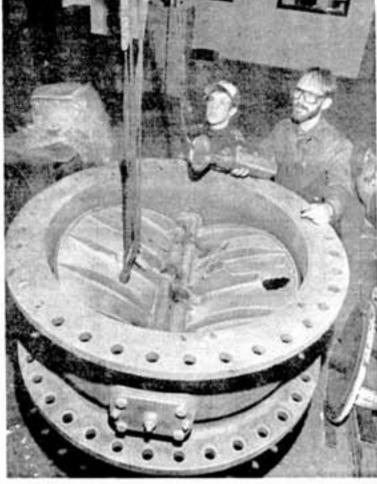
SOME JOB, GRAMMA!

So what's so hard about this job? asks Jonathan Beland, 12, as he demonstrates the classic view of captains of industry hard at work. Jonathan, grandson of Inco comptroller Joan Babij, commandeered his grandmother's desk during the Job Shadowing program.





Creighton Mine foreman Garry Merkley helps son David Merkley, 12, with his lamp. **David visited** several underground sites at the mine with dad, including the site of the **Sudbury Neutrino** Observatory.





Industrial mechanic Steve Cote and daughter Lyne, 13, were two of about 40 students and parents who took part in the Job Shadow program at the Smelter. Here the group is listening to a presentation on Smelter operations at the Pavillon. A tour of the operation followed.



Nickel Refinery operator Larry Perih shows son Dale, 13, some of the controls during a tour of the refinery. Looking on are operator Romeo Fournier and daughter Maureen, 12.

Jeff O'Brien, 13, turns his hardhat in after spending some time at work with dad, Industrial Relations representative Bob O'Brien.

Divisional Shops machinist Richard St. Denis prepares to repair a compressor valve while son Alain, 13, looks on.

Inco opens doors to employee's children

continued from page 1 "He got a pretty good idea of what goes on around here."

Ted is as enthusiastic about the Shadow program as his son. "When I was 13, this kind of thing was unheard of. How can kids make up their minds about what they want to do for the rest of their lives if they're not familiar with what's available?" he said. "And I think an experience like this lets these kids see for themselves how important it is to stay in school and get an education.

"And there's a benefit for the parent, too. I know I feel pretty proud when my son wants to see what I do at work, when he wants to come to work with me."

A senior analyst in the Nickel Refinery laboratory, Seija Binmore echoes Ted's point. "A number one concern for most parents is to keep their kids in school and I think having them come here and see what is required to get a good job is a good way to emphasize that. Inco should be commended for taking part in this program. It's a super idea, a big help in my effort to encourage my kids to get a good education."

Seija doesn't believe in "pushing" her kids where they don't want to go. "If they want to be lawyers or a mechanics

I'd be equally proud. I love my work and I want the same thing for them. But the key to that kind of a job is a good education and this (job shadowing) is a good way to emphasize that.'

Two of her four boys, Mark and David, toured the lab where mom worked and even assisted her in performing an acidity test.

The youngsters weren't satisfied just to sit, watch and listen. Armed with questionnaires, the youngsters interviewed employees about their jobs and opinions.

Clarabelle process clerk Angie Gagnon was one of those who answered some probing questions from student Michael Mayhew, 12, son of project manager Mike Mayhew. It was the youngster's third interview and he was impressed by the educational demands of most of the jobs.

"It was very interesting here," said Michael. "I think I'll stay in school. I need it to get a good job. I'm not sure what I want to do when I grow up."

He said he was doing "not bad" in school. "I got a 79.6 average in school last term," he said, "and mom and dad said that's okay."

Twins Alain and Adam Gagne's dad is North Mine electrician Richard Gagne, so when the Shadowing program offered a chance to go underground, they jumped at it.

"It was actually the second time underground with dad." said Alain, "but the first time was just a quick tour during a Family Day. This time we stayed with dad."

'We like it down there. It wasn't scary at all, even going down in the cage." said Adam. "Maybe we'll work down there when we grow up. I don't know yet what I want to do when I grow up." Alain said he'd like to go below again if he was given the chance. "It was neat," he said.

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Inco volunteers are 'source' of good advice

High school guidance counsellor Ada Della Penta puts it bluntly: "Frankly, these kids get tired of hearing us constantly repeating the same thing, to stay in school, work hard and get a good education. They need to hear it right from the source instead of from us."

For hundreds of Lockerby Composite Secondary School students, "the source" was a group of Inco volunteers, ranging from industrial mechanics to geologists, who took part in a school Careers Fair, spreading the word not only about staying in school but about the wide range of opportunities in industry.

People like Gilles Grandmaison, a seasoned maintenance mechanic for 24 of his 28 Inco years.

"When I asked the group of about 75 or 80 students at the start of my talk for a show of hands of how many would like to go into maintenance work, there were only about two or three who put their arms up," said Gilles. "Many had no idea of how well this kind of career paid. Many were amazed when I told them the pay scale, the skills and education that were needed and the high-tech nature of the trade. I think that by the time

Inco interested in school, industry link

E xpanding the link between education and industry is very much in Inco's interest.

That's one reason, said Human Resources representative Pat Gallagher, that the company encourages plants, mines and offices in the Sudbury area to open their doors to sons and daughters of employees for a Job Shadowing program held as part of a region-wide "Stay in School Awareness Week."

The Sudbury Board of Education and Sudbury District Roman Catholic Separate School Board launched the Shadowing program, counting on industries like Inco to allow youngsters onto the worksites for a day.

All Grade 7 students and 30 per cent of Grade 9 students, about 3,2000 students in all, were issued a Job Shadowing kit. The students were instructed by their teachers to bring the kits home to discuss with their parents the possibility of taking part in the program. 'Inco has a history of participating in educational projects like this one," said Pat, "and although our employees are very busy these days, Inco was enthusiastic about the information that a shadowing project like this could provide for young people. "We want to improve the link between Inco and educators," he said. "I think it's good for us, good for the students and good for our employees. It helps these kids in their career planning by providing many more options for them and it encourages interest in today's high-tech, high-paid and challenging trades as well as white collar jobs." Equally important, he said, is to let families of employees know just what mom and dad

do at work. It not only allows parents to show their children careers that they are proud of, but it gives parents a boost in encouraging their children to stay in school.

"I think education in general is as important to Inco as educators. These kids will be tomorrow's employees and a skilled workforce will be needed if we are to keep ahead of the competition."

Inco was concerned initially about potential hazards of youngsters visiting some of the company's sites, but discussions between Inco and the school boards resolved the problem.

Even then, said Pat, the final decision as to specific plant participation in the program rested with each plant or mine manager. Program acceptance was directly related to the degree of hazard associated with the parent's work environment.

The program varied from plant to plant. In some areas, general group tours were offered to the young visitors and the tours included the worksite of their parents. In other areas, the students stayed with parents on the jobsite all day. I was through, at least some of them had changed their minds."

Gilles said the response from the students was encouraging. "They asked all kinds of good questions about educational requirements, pay scales, training requirements and future technology in the trades."

It was pointed out to the students, he said, that people looking for doctors and lawyers have no problem getting one, yet often you can't find a plumber, electrician or other tradesperson to repair your machinery.

"I hope my efforts were successful," said Gilles. "I think that a well-trained workforce is going to be needed in the future if we are all to compete worldwide. We have to let young people know about the opportunities in my trade and others. I feel a certain responsibility about getting the word out to young people."

Most of the other Inco volunteers who took time out to address the Lockerby students shared Gilles' views. "Today's students cannot leave their destiny to chance," said Inco training supervisor Frank Moss, another volunteer who spoke to the students. "Selecting a career path must be a well-researched decision."

Other volunteers included electrician Reg Laurin, geologist Chris Davis, mechanical engineer Ross McKague, Employee Relations representative Larry Arsenault and Mark Beaulne of Information Services.

For Lockerby, the participation of volunteers from industries like Inco is crucial to the success of the program. It's the third year Lockery has held the information sessions and Ms. Della Penta sees a gradual change in attitude among students about blue collar work.

"The need to get career information to today's students is even more critical than it has been in the past. With all the options available in the school system today, it is up to the student to make choices that could affect his or her entire life.

"We see a wide range of interests today," she said. "Students are looking at a wider range of things than just doctors and lawyers. There's less negativity seen today about blue collar work. Kids are aware that a university degree no longer guarantees a job anymore, that it often doesn't provide the training needed to get a job. Training and technical courses at school are doing very well."

Thistype of careers enlightenment is not a male phenomenononly, said Ms. Della Penta. "We are seeing more girls in these courses, particularly in science and technology. There's no question that there will be more and more females in non-traditional jobs in the future."

One reason for the upsurge of female students in technical courses, she said, is because the class environment isn't as intimidating for girls anymore. With girls having gone through these courses before and with girls in the courses now, others are more willing to jump in.

"When there are already girls in the class, it's much less intimidating for the new student. Once in these courses, the girls do just as well as the boys."

What industry representatives like Inco employees provide, she said, is sobering reality and believability. "When kids are told they need at least Grade 12 to work at Inco... and when they hear it from an Inco representative, it clicks in."

Exposition a source of information for career choices

The February issue of "Partners in Progress," a publication by the Sudbury District Chamber of Commerce, features an interview with Inco training supervisor Frank Mosson the importance of providing young people with career choices. Called "Preparing today's youth for tomorrow's career opportunities," the article is a good outline of why Inco and the educational community are actively promoting the Cagovernment, labour and education sectors have joined forces to present the "Careers 2000 Exposition" at the Science North Bell Grove Arena from May 4th to 7th, 1993.

The new economic realities and the restructuring of the business and industry sectors have fuelled the need to focus more attention on career education," says Moss. "The Careers 2000 Exposition will introduce students, their parents and the general public to the career opportunities available in order to promote the wise choice of career options to respond to marketplace needs. By raising the profile of career education, organizers of the exposition hope that today's young people will be more suitably equipped to make informed and responsible choices. "Today's students cannot leave their destiny to chance," says Moss. "Selecting a career path must be a well-researched decision." Hundreds of hands-on displays will be set up by local companies, organizations and school boards throughout the four-day exposition to showcase a wide variety of careers in all fields. Close to 80 per cent of the booths are already committed, proof that this type of a career education forum for students, their parents, as well as teachers, is long overdue.

Thousands of students from both public and separate schools from the Sudbury, Espanola, Manitoulin, North Shore and Sturgeon Falls areas will be bused in to tour the exhibits. Parents and the general public will also be encouraged to attend, during the day and at night.

"There's no doubt that chamber of commerce members will have a vested interest

"Young people today are facing a changing world," stated the information package that went out to parents. "With new systems in technology and a changing global economy, tomorrow's employers will have high expectations of their employees.

"Job shadowing brings students one step closer to meeting these challenges and being better prepared by helping them make the connection between work and their studies. It also expands our youth's knowledge of the many career opportunities available and how to access these careers." reers 2000 exposition in May.

The statistics paint a bleak picture. Unem ployment has reached more than 19 per cent for 15 to 24-year-olds; company restructuring to increase competitiveness has resulted in job losses in all sectors; some youth in their mid-20s have yet to find their first job; there is limited money to spend on job training programs; changing careers three or four times is a definite trend in today's society.

"Youth unemployment is reaching crisis proportions," says Frank Moss, a training supervisor with Inco who is leading the organization of an ambitious community event aimed at tackling the problem head on. Representatives of the business, industry, in this ambitious event, perhaps as participants or as parents, " says Moss. "We are sending a strong message to the community that we want parents to take advantage of this unique opportunity and visit the exposition along with their children."

The Careers 2000 Exposition is a key initiative being presented under the umbrella of Careers 2000, a community-based committee that is developing and implementing strategies to assist students in making a smooth transition from school to employment.

Close to 450 volunteers from all sectors in the community have been busy organizing the event for more than a year. "This event has received overwhelming support. We are absolutely delighted with the co-operation and response," says Moss.

EDUCATION & INCO



Heather Howard, 12, daughter of Central Mills trainer Doug Howard, shows off the certificate she earned while spending a day with dad for the Shadow program.



lan Wilson, 13, spent the day with dad, instrument technician Ted Wilson, and "all that nifty stuff" in the Clarabelle instrument shop.



Mark and David Binmore, 12, watch intently as mom, senior analyst Selja Binmore, carries on a test in the Nickel Refinery laboratory.



These young visitors to the Nickel Refinery couldn't resist the urge to perch in the bucket of some yard equipment. From left, Quentin Smith, son of instrument technician Dave Smith David and Mark Binmore sons of senior analyst Selja Binmore; Eric Duguay, son of maintenance foreman Leo Duguay; Steve Bisson, son of utilities operator jerry Bisson, Trevor Fowler, son of maintenance mechanic Russell Fowler; and Paul Leavoy, son of Wayne Leavoy of Quality Assurance and Technical Services.





North Mine electrician Richard Gagne helps his boys Alain and Adam, 13, with their equipment. The boys spent most of the day underground with dad.

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For 13-year-old Alain St. Denis, it was a second chance to see Divisional Shops where dad Richard St. Denis works.

"I really wanted to see where my dad worked, but the last time when there was a Family Day here two or three years ago 1 got the chicken pox and had to stay home. I was very disappointed."

He described his dad's workplace as "much better than I thought," although he said he didn't really know Clarabelle Mill tool crib attendant Marvin Polehoykie gets a hand repairing some equipment from daughter Terresa, 12.

what to expect. Alain said he's doing fairly good in school.

"I want to be a priest when I grow up and you need a lot of school to be a priest."

Liana Feltrin, daughter of Stobie preventive maintenance coordinator Gloria Feltrin, has snuck in with mom on several weekends, but this was the first time she'd spent the day there.

She got a chance to do some filing, use the computer and printer and even typed an assignment,"



Liana Feltrin, daughter of Stoble Mine preventive maintenance coordinator Gioria Feltrin, helps mom at the computer.

South Mine planner Ron Suomu and daughter Carrise, 12, do a little work together. She attended a Total Quality Improvement meeting in the morning with dad.

"I like it in here, but it sure is busy," she said.

Liana wants to be a veterinarian, actress or model, although she's determined to keep her options open. "I'm doing pretty good in school," she said.

Carrice Suomu, 12, daughter of South Mine planner Ron Suomu, attended a Total Quality Improvement meeting on the morning of her stint with dad at work.

"I learned a couple of things about slimes," she said. "It was all very interesting." 6 MARCH 1993





Blaster boss George St. Amant, scooptram operator Roger Roberge and mine planner Larry Tessler look over details of a study investigating blasting procedures.

The team approach to having a blast

hey're having a blast at secondary blasting that's re- Roberge, planner Larry

Tessier, explosives representative Terry Lynds, surveyor John McLean and foreman Francois Tremblay quickly identified the causes and the adverse effects the blasting was having on South Mine operations. 'It's a very expensive proposition," said team leader Larry Tessier. "The extent of the problem is hard to measure because it varies with the stope, how many chunks there are and other variables, but we knew that it was causing major delays, unnecessary expensive production setbacks, equipment downtime, and wasted man hours. Often the secondary blasting created damage to the drift as well. "We always knew the problem existed," said Larry, "but the team approach gave us the tools and procedures to identify the exact causes and tackle the solutions."

rapidly changing technology

mine at a time and will move

South Mine. In fact, they're studying to do it even better.

Employee involvement is the major ingredient that has helped the mine dramatically enhance the quality and quantity of blasting, an improvement that will reduce costs, increase productivity and improve the South Mine environment.

"Teamwork is the only way to go at it," said scooptram operator Roger Roberge, one of a team of South Mine employees ranging from miners and planners to outside suppliers. "It's the people that do the work every day who have the best idea where the problem is. The attitude around here has definitely changed. These days everybody has their input, not just upper management. 'Inco' means everybody these days."

A South Mine team is examining the mine's blasting techniques, particularly the quired to reduce large chunks left over from the initial blast. "It's very time-consuming,

dusty and frustrating work," said blaster boss George St. Amant. "Nobody likes to repeat a job already done."

Secondary blasting is required when primary ore blasting dislodges chunks too large to be removed in the subsequent mucking operation. Chunks too big to be removed and dumped into the ore pass must first be moved out of the way to allow scooptram ore removal. At the end of their shift, blasting crews had to go in, apply charges and then blast the oversized chunks.

The secondary blasting was not only a pain in the neck for blasting crews, but it was an expensive proposition for the operation of the mine.

Using detailed procedures outlined in Inco's quality improvement methods, the team of crewmen George St. Amant, Claude Courchesne and Roger

Training, the team discovered, wasn't keeping up with and types of explosives.

Explosives supplier representative Terry Lynds helped develop an expanded training program that enabled the mine's blasting crews to keep ahead of the rapid changes in their field.

The retraining began almost immediately and to date about 52 unit employees, five foreman and a trainer have taken part in the educational program. Explosives suppliers are putting together films and other training material, and a program to visit an explosives supplier is planned to further familiarize blasting crews with the tools of their trade. "The training program isn't just a one-shot deal," said Larry. "It'll be part of an ongoing program."

An orderly process of absorbing new products and methods has also been established. Training and new procedures using new materials will be applied one level of the to the next level only after training is completed on the previous one.

South Mine is also pioneering a better diagnostic method that involves lowering a specially-designed camera into the hole to examine the area to be blasted. Still in the experimental stage, the camera work promises to help blasting crews examine the area to be blasted. Although it's too early in the experiment to show any results, team members are enthusiastic about the project's potential.

Larry said that it'll take an extended period of time for the secondary blasting improvements to show up as black ink in the South Mine ledger. "It's hard to point to any clear figures on a shortterm basis, but already there are fewer complaints about secondary blasting hang-ups. It used to be almost a daily thing, but now the frequency is definitely down."



Tracks to South Mine laid with teamwork

outh Mine is back on track. A team approach to investigating solutions to tramming deficiencies on the mine's main tramming horiton has earned major paybacks in safety, production, efficiency and reduced cost.

"It's too early to come up with exact figures on savings, said team member Mel Bray of South Mine Engineering, "but there's little doubt that the improvements are going to have a major impact."

The 8,000-foot long Grandesberg Tram on the mine's 2,050-foot level required significant attention. In a drift driven in the early '70s, the track was installed as the drift advanced by development crews.

But heavy production demands during ensuing years did not allow for regular upgrading and track maintenance, taking its toll on the rail. Crews maintained the track, but had difficulty keeping up.

With mining in the 865 and 880 ore bodies in the future, the trum line had to be revamped to handle the expected traffic.

A team was formed consisting of tram crew members Gilbert Mayotte, Lionel Lavalley, Jim Crowe and Mark Gammon, fuel truck operator Paul Bourre, Barry Hanneberry and Mel Bray of Engineering, foremen Larry Baker and Gaetan St. Jean and general foreman Keith Dupont.

"We went to the people on 2,050 level first," said Mel. "They're the people who are in the best position to know what



Mel Bray and tram crewman Jim Crowe in front of one of the cars to be overhauled for operations on South Mine rail.

the problems are. We used to do maintenance on the track, of course, but it was a hit and miss kind of thing. With the detailed improvement programs in place today, it not only includes everybody on the job but it gives you a systematic and detailed procedure for examining the problem. This way, it's hard to miss even the most minor detail."

While everybody has a general interest in making the company more competitive, said Jim Crowe, most of the improvements also improve conditions in the workplace.

"It was a daily job. Sometimes you had two trains go off the track a shift. Putting the trains back on track is hard, delicate and sometimes hazardous work for tram crews," he said. "Fully loaded cars weigh over 20 tons and sometimes they would rip up long sections of track when they derailed. Production would come to a standstill for an entire shift while repairs were made."

Although not a production priority, one of the first measures implemented was a safety and environmental project that eliminated dust problems at the main ore pass. Dust control doors were installed at the ore pass along with a light system to control dumping above the 2,050 level. The light signal system at the dumping areas on the upper levels indicates when the dust control doors at the main ore pass are open.

"It's simple," said Mel. "When there's a red light, nobody dumps."

"It's made a world of difference," said Jim. "We had to wear masks before. Often the dust became unbearable and we had to stop the tramming operation until the dust settled.

Track conditions, however, proved the major problem, and almost 2,000 feet of the old track and ties were replaced.

All 8,000 feet of the 2,050 level track was re-bonded. Pioneered at Levack, the new bonding system features much quicker installation and much less maintenance.

"The new track has made quite a difference," said Jim. Instead of going off the track once a day, it's about once a week now. It's safer and there's a lot less downtime."

The tram drift doubled as an access route to bring supplies to the 850 ore body and power had to be cut during deliveries. The double usage of the track drift meant regular interruptions in tram operations.

Work is under way to develop an alternate access to the ore body, further eliminating tramming stoppages. Construction is under way to replace several small tankers with a single 600 gallon fuel tanker for transporting fuel for underground equipment on 2,050 level. The new tanker should reduce fuel transfer trips by about 40 per cent, representing about two trips a week rather than once a day.

Car maintenance has also been enhanced with the re-establishment of a two-man repair crew on the level. Cars took a heavy beating on the old track.

With many of the improvements in place, tram crews can now meet scheduled development and production requirements.

According to Jim, the changes have not only saved the company money, but it's made a world of difference for tram crews.

"It's made a big difference in the work environment. It used to be a bit depressing when you knew even before you got to work that you were going to have track problems. We have top notch development crews here and if we didn't pull the rock and ore fast enough, they had to stop working and the development and production work would fall behind."

Calling the 'Contract Busters'

Who are you gonna call ???

Inco adopted the Continuous Improvement philosophy with the long term oals of improving production and saving money. And what costs Inco big toney? Contracting out! That's right - Contracting out. So a CI Team was set up to look at ways to reduce our dependency on the contractors. The team has weloped the name "Contract Busters".

The fact that the company wanted a team to look at contracting out and

Controlled Lathe. And they certainly found some.

Team members are NC operator Gilles Albert, machinist Frank Lesk, warehouse supervisor Murray Edward, and planner Richard Coupal. Objectives for the team were to maximize machine use, reduce set up time, reduce Quality Control time, improve quality and reduce the amount of work orders. By proposing changes to the parameters in the warehouse system everything started to fit. Why have 12 work orders to make 13 pieces? Make two orders of seven instead. Just think of the set up time that could be saved! Frank Lesk also mentions the reduced operator frustration. With these and a few more ideas the team could reach their objectives. This was presented to the Divisional Shops Steering Team where it received much praise from general foreman Willy Metson and also superintendent Lloyd Strong. The team will continue to analyze some 57 other work orders. Great effort, team! Closing the Loop. . . Continuous Improvement Members move on to spread the word about teamwork. Scott Steward has left Central Maintenance to become a TQI/CIT Coordinator at Creighton Mine. . . Terry Van Kempen has left the Energy Team and gone to Levack to be a General Foreman. . . Reg Gareau has switched teams, moving from the Injured Worker Recovery Team to the Energy Team... Lawrence Dagenais has left the Copper Refinery team and gone back to be a general foreman at Coleman ... Mike Swiatek has also left the Copper Refinery team and gone to North Mine. . A new team has been formed at Coleman with veteran George Robinson teaming with newcomers Wayne Cummings, Jerry Pawloski and Phil Lindsay as a resource person. Katherine MacNeil has left for the Frood Stobie Complex... Laine Fraser has left CMP&U and gone back to continue his fine work in the Smelter. To all those who are leaving the CIT, thanks for all the hard work and congratulations for a job well done.

ays to streamline, if not eliminate it altogether in some areas, shows a serious commitment.

The process of change is more often than not a slow one. The team knew this, so rather than looking at the whole problem in the Sudbury district, it was ecided to break it down.

The first topic was the always controversial overhead doors. Data was collected on the job of repairing the doors in the plants and mines. The results showed that (if properly trained) our own people could do the work! Imagine that. The plants and mines are now in the process of training people to repair the doors.

Another issue for the team was overhead cranes. The team collected data and presented the results to management on Feb. 24.

When Inco does need a contractor it should be made clear that

quality is a constant. In this area the team is in the editing stage of their

Request For Work form. The final topic being looked at by the 'Busters' is high pressure washers. Why can't we do this? Why can't we have our own equipment to do it? A separate team has been formed at Clarabelle Mill, with notable interest being town at Copper Refinery and the Frood-Stoble Complex. Good work, 'busters'

Work smarter not harder - that seems to be the theme of the N.C. abrication Quantities Continuous Improvement Team at Divisional Shops. The team is looking at ways to increase production on the Numerically

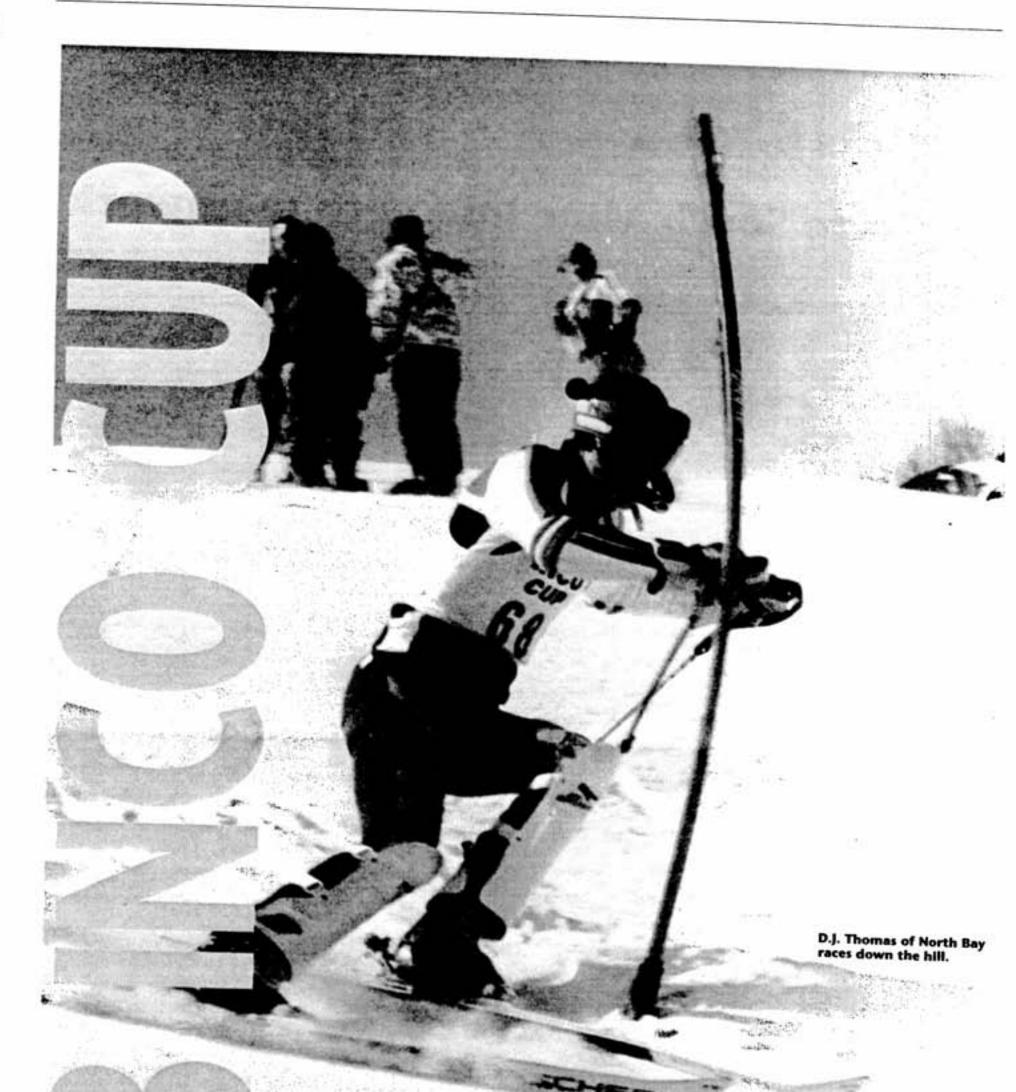
And to all of our new members, welcome to the team.

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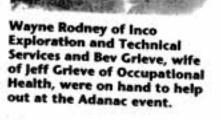
(tis



Randy Dutchburn of Inco Exploration and Technical Services repairs the corral at the bottom of the ski run.

The Par

z





son Murray, 13, of Sault Ste. Marie sharpens his skis before his run.





Kathy Ferneyhough and Cam Culbert of North Bay were the top male and female skiers.



Peter Valin of North Bay sends up a rooster tail of powdered snow.



Gary Foy, recently retired from Inco's Employee Relations department, talks with a guest at the inco-sponsored closing banquet at the Copper Cliff Club. Gary was honored for 30 years service to local skiing and the inco Cup. In back, at right, is jeff **Grieve of Occupational Health**, another long-time inco Cup volunteer.

North Bay's Bruno LePage readies for his downhill run while starter Paul Prosperi looks on.



ouncer Wendy Ellen and chief timing officer Tom Tario of Divisional Training.



The 1993 Inco Cup winning Sault Ste. Marie team gives a victory pose.

Inco Cup spawns world-class competitors

ault Ste. Marie captured at various hills in the region have been seen on the heads the Adanac-Laurentian Ski skiing at the national-level he Inco Cup this year, for the last 20 years

of skiers around the world.

Club were very close heading into the final races at Adanac, one reflection of the keen competition that has been a constant feature of the Inco Cup races. Those who come out to watch the skiers at the Adanac Hill could possibly be watching future Canadian, World Cup or Olympic champions. It s the pinnacle of all area club racing programs," said Nels Conroy of the local Inco Cup organization. Conroy said those who race at the Inco Cup are at the stage in their skiing lives when they are deciding whether to become serious in the sport.

system has gone through the

followed by Sudbury's Adanac/Laurentian University Ski Club.

North Bay Ski Racers Kathy Ferneyhough was named best female competitor in the series while Com Culbert of North Bay won top male honors.

just a week before the final event of this year's competitions, Inco Cup "graduate" Kate Pace of North Bay captured the world championship in downhill skiing.

Pace, along with all Northeastern Ontario skiers who move on to bigger and better things, go through an important phase of their careers at the Inco Cup races.

The company has been sponsoring this series of races

The longest running corporate sponsorship of any sporting event in the country, the Inco Cup competition has contributed quite a list of Northern Ontario skiers on the provincial and national teams.

The list of Inco Cup graduates includes such athletes as John Mealy, who won the Canadian Men's Downhill Championships in Sault Ste Marie, the Kreiner sisters Laurie and Kathy along with Diane and Gord Acton.

As part of the sponsorship, Inco supplies medals, a stainless steel trophy, it holds a banquet, and takes care of the cost of setting up the races.

Inco also supplies the much-coveted touques which

But, perhaps the most valuable thing Inco has given to the event are volunteers, many of whom are also employees at the company

One such volunteer, Jeff Grieve, is an occupational health and safety analyst.

"The Inco Cup hasn't changed much over the years, other than it's kept pace with the rest of the skiing," he said. However, Grieve said the event, along with skiing in general, has seen tremendous growth.

For example, approximately 120 skiers competed in the Sudbury portion of the Inco Cup. The skiers can be as young as 11 and as old as 20.

In this year's team standings, Sault Ste Marie and

"Everybody in the last 20 years in Northern Ontario who has gone on to participate in Inco Cup program," he added.

He said Pace's Success gives Inco Cup skiers this winter an added push. Most have skied with Pace and Conroy said other skiers believe if she can do it, so can they.

Sudbury skiers in particular must train a little harder because they often must travel out of town to find more challenging hills.

We have to plan to train out of town," said Conroy.

Conroy said that the Inco-Kate Pace connection almost went unnoticed, but he sent letters to the company thanking Inco for its support of skiing.

One of the problems with long-term sponsorships is that people take them for granted.

Thanks, Inco!!

Dear Sir;

On behalf of ur club, I would like to sincerely thank Inco for their continued spasors hip ad suppa of ski racing in Northern Ontario. It is difficult to express the feelings of appreiation we have toward Inco. Many young racers have started their climb to glo from the podium of an Inco Cup race. Kate Pace and John Mealy are twourrent examples. We recently participated in the Inco "Cup #4 at Adama. The fact that Jim Ashcroft was able to take time from his busy schedule to participate athe banquet and race was very much appreciated by all

Congratulations to Inco ad its employees for their 20 years of sponsorship. Our organization will continue to try and make Inco proud they are backing ski raicing. THANK YOU!

Yours sincerely, Tom Tario, President Lively-Creighton Ski Club

Dear Sir;

Hello! My name ' is Jill Culbit. I'm from North Bay and I've been in all your Inco Cup races. Since I've beerin all your Inco races I have just qualified for Ontario's. I'm very happyand I'm thanking you for the great races you've organized this yearEvery Inco Cup I've been in there has been no problems. (That's great!) I've met lots of great people at your races. Thank you very much for organizing and giving me the opportunity for being able to race in the Inco Cup races. Keep up the good work with your races!

From: Jill Culbert, North Bay racer

Dear Inco:

Thank you for supportings racers. I love to ski in the Inco Cup. A lot of big companies would not support ski race that is just in Ontario, but you did. From all the racers and parents ofacers, thank you very much.

> Ross Evans, North Bay Ski Racers

To Inco:

I have been racin g in thinco Cup now for three years. This has been an ejoyable experien ce for sponsting this race series because without your coopertio n it wouldn't be possible. I also enjoy the banquet that is held for us because it givens a charter to socialize with the other racers. I hope I will be able to race in the Inco Cup series next year.

Eli Adamson

Dear I nco;

The ank You! I am North Bay Ski Racer and enjoy your races very much. I look forward to everyne! I am proud to wear your hats. If it wasn't for you we would thave world champion Kate Pace!!

Thanks again, Jasmine Jessen

Thank you foall of the leo Cup races. I have really enjoyed them. I think my skiing has really improved, thanks to your races. Thank you, Jamie Newfeld

Dear Inco;

Inco;

Thanks for all your support in the Inco Cup series. I enjoyed skiing in the races fothree years and the always get better every year. Sincerely, George Evany

To Inco;

Thank you for supporting all of our Inco Cup races. Also thank you for the hats. I think it was a good idea. They are great in cold weather. I think that most people would agree with me. I can't stop thanking you for supporting our races. I hope you keep on supporting our Inco Cup races in the future.

> Sincerely, Marissa Aro, North Bay

Dear Inco;

To whom it may concern. I would like to say thank you for sponsoring us this year. We have enjoyed ourselves. Thank you for making the hats. They are very warm. I hope you will sponsor us again. Thank you.

Yours truly, Kristy Storey

Dear people at Inco;

My name is Jessica Jessen and I am from the North Bay Ski Racers club. I would like to thank you very much for all your support with our Inco Cup races. Without your help we would not be able to participate in as many races we would have liked to. I also enjoy travelling to many different cities for your races. Thanks for all your support Jessica Jessen

Dear Sir;

My name is Dave Woltz and I ski on the North Bay Ski Racers. I have skied in a lot of your Inco Cup races. What you are doing to run all these races is a really great thing because if we didn't have the Inco Cup there would be very little ski racing in Northern Ontario.

Yours truly, Dave Woltz

Dear Inco,

Thank you very much for sponsoring the Inco Cup races. The races have been a great experience for me since this is my first year participating. I really like the Inco Cup hats. They come in handy in 40 below weather. I enjoy missing school and I am looking forward to attending your races again next year.

Sincerely, Kristine Jordan

Dear Inco;

I am a 15-year-old ski racer from North Bay who participates regularly in the races you have sponsored. I feel that sponsorship is great and also very important to the ski racers in Northern Ontario. Without you there would not be a great racing series such as this one. One case of many where your help has become important is in the early years of Kate Pace's racing career. She got there with your help.

Yours truly, Brian Woltz

Dear Inco;

Thank you very much for helping out with our ski racing. I enjoy ski racing a lot and if there were no skiing I would go crazy. Ski racing is very expensive and we need all the help to make it possible to ski. I respect you for sponsoring our ski league and I thank you very much.

Yours Truly, D.J.

n ew frieds who sh are ouinterests in the sport.

We realize that times are difficult and for you to sponsor us is not without cost. Thank you for all that you give us including the hats that we wear proudly, the medals ad the banquet. I truly appreciate your sponsorship.

Your racer friend, Bruno Lepage

E Jear Inco,

My name is Pet er Valt. I ski race for the North Bay Ski Racing team. I have been Inco Cup races for five years. I would like to thank you for your sponsaship of Northern Ontario ski racing. You have made it possible for racers like me to improve their ski racing ability, and given us a chance to compete against other racers uNorthern Ontario and Ontario. Thanks for these past five years and more to come! hope you continue to sponsor Northern Ontario ski racing.

Sincerely, Peter Valin

Thank you for making the Inco Cup races possible. They are so much fun! It gives me a chance to travel and without your sponsorship it wouldn't happen. From Tom Sapinski, North Bay

Dear Inco;

I am a racer with the North Bay Alpine Ski Racing Team and I would like at this time to thank you for your sponsorship of the four alpine races that are held in Northern Ontario. These races are very important to us because they allow us to compete against racers from all over Ontario and also permit us to meet

Dear Sir or Madam;

I would like to thank you for yet another successful year of skiing. Your sponsorship and support has been wonderful and, without you, we couldn't do it. I'd also like to thank you for supporting the races because, like most kids, school is not one thing we always enjoy. So, without Inco, we'd have to go to school more each year instead of racing in the Inco Cup series.

I think your company should be a good example to all racers and all athletes. Through the thick and thin of the Canadian economy your company was determined to go on and try to finish that year, just as a ski racer must strive to finish a race course. Not many kids my age would think of it like that, but I'm not like most kids my age.

In closing, I would like to thank you all again for your support and your money that you have put into the Inco Cup racing series, not to mention the time put in. There are no words we can use to thank you, and if there was anything else we could do to thank you, it would probably be writing a letter four times the length of this one and many other things besides that. We appreciate it!

> Sincerely yours, Nathan Lennie, North Bay

New mining Hall of Famer began as Inco shoveller



Dr. Louis Renzoni (right) gets a warm handshake from Dr. Robert Ginn, master of ceremonies for the Canadian Mining Hall of Fame Induction event.

Dr. Louis Renzoni, the newest member of the Canadian Mining Hall of Fame, began his 40-year working career at Inco wielding a shovel.

When he was finished, he was recognized as one of the mining greats after developing new and better chemical and metallurgical processes for treating and refining nickel-copper ores.

His friend Charlie ferguson, Inco vice-president of environment, health and safety, recently compared him to the "first person to step on the moon" for his pioneering impact on the company's environmental policies.

And his reputation is such that in 1990, almost 15 years after his retirement, Louis Renzoni was called "the most inowledgeable scientist in the nickel refining business in the entire world," by Anatoliy Filatov, General Director of the Russian nickel complex.

Still, the people he worked with over his career in the mining business provide Louis Renzoni with many of his most pleasant memories.

Mining people, he says, are people of character.

As an example, he recalled an incident in Thompson during the early development of the Thompson complex. It was 2 a.m. and 50 degrees below zero outside the refinery. Inside, Dr. Renzoni and the crew were working through a critical problem.

Ken, a young sub-foreman told the exhausted scientist: "Louis, you are dead on your feet. Go and lie down for a few hours. We well have this plant in shape by the end of our shift." The Canadian Institute of Mining and Metallurgy honored him with its prestigious H.T. Aired Memorial Lecture Award in 1964 for outstanding contribution to metallurgy in Canada.

Dr. Renzoni was also presented the R.S. Jade Memorial Award in 1968 by the Chemical Institute of Canada for exceptional achievement in chemical engineering. He is a Fellow and Past President of the Chemical Institute of Canada and a Fellow of the American Association for the Advancement of Science. His induction into the Canadian Mining Hall of Fame took place earlier this year.

During a recent interview, Dr. Renzoni recalled that he was born near the smelter in Copper Cliff. His father was a mason in Inco's maintenance department and a community leader who helped build the Italian-Canadian Cooperative building which still stands in the town. that his field would be chemical engineering. He enroled in Queen's University and as a student found summer work at the Coniston smelter, usually at the end of a shovel.

In 1934, itching to work in the laboratory, the young chemical engineering student extracted a promise from a supervisor that he could substitute for the resident chemical engineer when he went on holidays.

"When the engineer found out there was a young chemical engineering student waiting in the wings, he decided not to take holidays and 1 stayed working on the scrap heap that summer," Dr. Renzoni laughed.

graduated from He Queen's at the height of the Depression and his first job was with a Brantford company doing analysis at their consulting laboratory. About a year later, he began his Inco career at Port Colborne and soon became leader of a small group of researchers at the Company's principle electrolytic nickel refinery. In 1941, there was a call for cobalt and Dr. Renzoni and his staff were asked to put in a cobalt recovery system. Cobalt was separated from the nickel using chlorine and soda ash and a new electrolyte was required. The new electrolyte process was in operation within a year and Port Colborne was able to achieve increased nickel output without increasing plant size or power requirements, at the same time

recovering the elusive cobalt.

Dr. Renzoni moved to Copper Cliff in 1948 as assistant superintendent of research and development. He invented the sulphide anode electrolysis process, which eliminated the need to grind, roast and reduction-smelt at high temperatures to produce nickel metal anodes. The process was ready in time for installation at the company's newly-built nickel mining and processing operation at Thompson in the early 1960s.

But it was in his leadership of the drive to reduce sulphur dioxide emissions in Sudbury where Dr. Renzoni may have left his most lasting impact on the community. He was a pioneer in the "regreening" of Sudbury.

The projects directed by Dr. Renzoni were part of Inco's early steps — and successes at managing its sulphur problem. followed because the ground was broken by Louis," Mr. Ferguson said. "Somebody had to start it all."

Dr. Stuart Warner, Inco vice-president, health services, said Dr. Renzoni's discoveries played a major role in improving environmental working conditions at Inco facilities.

"And he still has a keen interest in scientific challenges," said Dr. Warner, who still sends scientific materials to his friend.

During the last 17 years of his career with the company, Dr. Renzoni worked from Toronto and served as a vicepresident of the company from 1967 until his retirement in 1976. He has authored papers and articles on chemical metallurgy and has been granted many patents on extraction and refining of nickel, copper and precious metals. Michael Sopko, Chairman and Chief Executive Officer of Inco, described Dr. Renzoni's contributions when nominating the scientist for the Canadian Mining Hall of Fame. "Today, decades after his retirement, Inco is still benefiting from the implementation of ideas and processes that have stemmed from research directed by Dr. Renzoni," he said.

"I did and they did," Dr. Renzoni recalled in the speech prepared for his January induction into the Mining Hall of Fame.

Now 80, Dr. Renzoni lives in retirement with Germaine, his wife of 55 years. They live in a Toronto apartment filled with Mrs. Renzoni's remarkable paintings and the rewards and mementoes achieved over the scientist's long career.

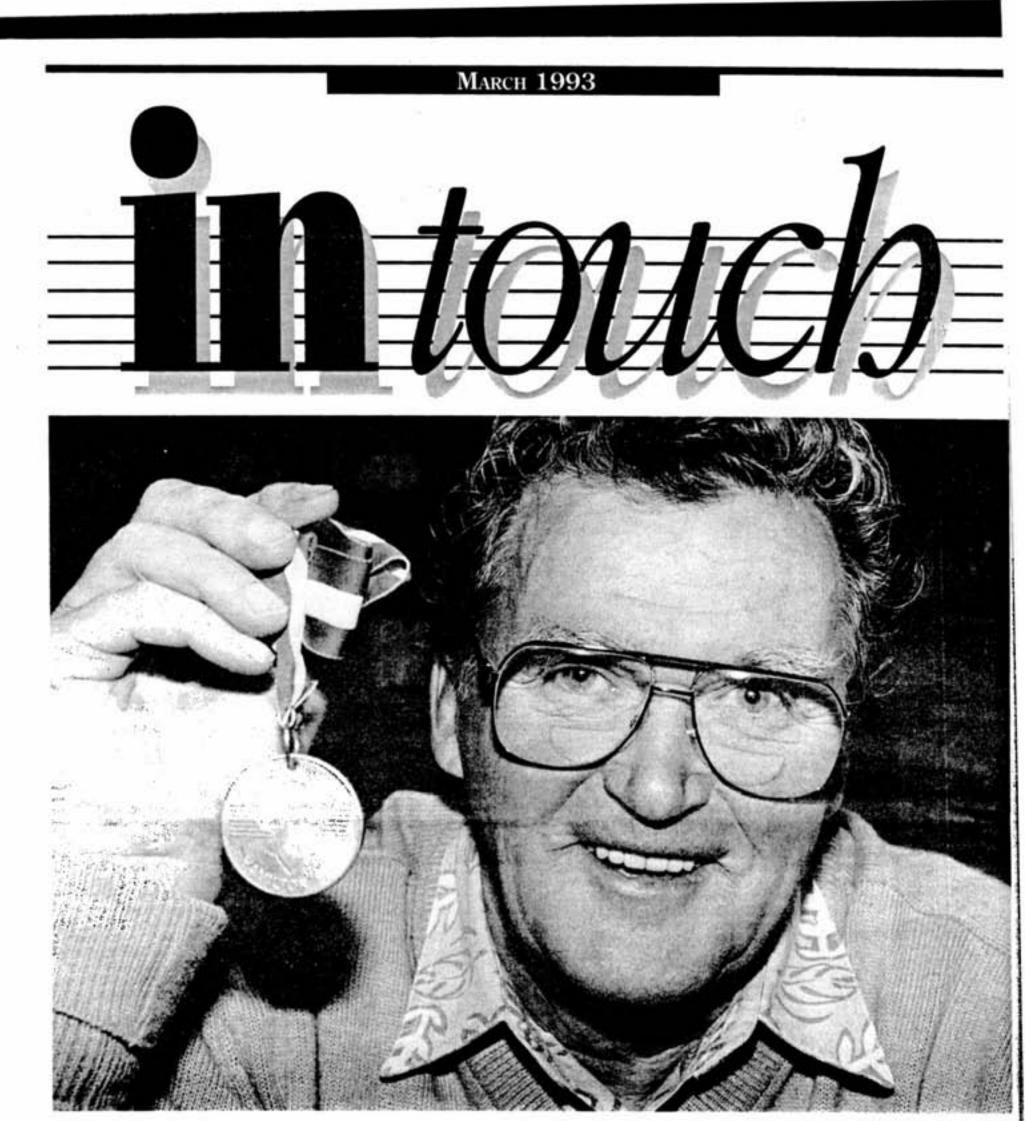
In 1960 and 1963, he received the Gold Medal Award of The Extractive Metallurgy Division of the American Institute of Mining Metallurgical and Petroleum Engineers. Seven months after his birth in 1913, his mother took Louis and his older sister on a visit to Italy. The outbreak of the First World War prevented their return for six years.

After returning home, the young Renzoni spoke only Italian and was mistakenly enroled in a French school because of the language difficulties. He learned French before transferring to an English language school and retains the three languages to this day.

From his early years, there was little doubt in Louis' mind He recalled the construction of the Sudbury "superstack" in the 1970s and revealed that even as they worked toward new solutions the stack was considered even then as mainly a short-term measure. "It was built not as a solution to the long-term problem but as a means of relieving the pollution situated in Sudbury while we worked at methods of solving the longrange problems" he said.

Mr. Ferguson describes him as the first corporate environment officer. "He was the first to put things in place — the first to put a structure together. "It was easier for us who For his part, Dr. Renzoni said that he did everything that had to be done — with a lot of help from his friends.

"It didn't matter about position, or title, or anything else," he said. "We did it together."



Pensioner John Sarkans took home the silver medal in golf from the Senior Olympics.

Inco pensioners earn medals at Seniors Olympics

ohn Sarkans is an Olympic medalist but he didn't compete with the youngsters at Barcelona, Spain this past summer.

John earned his medal competing in the senior event.

The Inco pensioner brought home a silver medal for placing second in the golfing event at Seniors Olympic event in Hamilton, Ontario last summer.

"I was really surprised that I won," he said. "It was

a lot of fun."

John has been golfing for the past 25 years. He started golfing when a friend from work asked to play play with him in the Creighton golf tournament. "I didn't even know how to play the game at the time," he said.

He's been an avid golfer ever since.

"I used to go out on weekends and after my shifts to play a round of golf," said the miner and hoistman who served 35 years with Inco.

Now that he's retired he has more opportunity to play. "I try to get out to golf every day when I can," he said.

Only inclimate weather caused the ardent golfer to stay off the Lively Golf and Country Club greens. It's favorite course, he says, and the weather has to be pretty bad before he calls it quits. "Right now, I won't golf if it's snowing," he said with a smile. John took first place in golfing at the Sudbury Seniors Games last summer, qualifying him for the provincial games in Hamilton.

Over 30 men and women from Sudbury competed in the three-day event. Inco pensioner Darryl Balsom also came home to Sudbury with a gold medal for swimming.

John is no stranger to competing at the provincial level. Four years ago he competed at the Brampton Seniors Games, but it wasn't until last year that he came home a medallist.

John's secret for competitive golfing is relaxing and having fun. Stay loose and have fun, is how he puts it.

Upon returning home, he and Darryl were surprised at the reception they received from the community, includinga certificate and congratulations from Mayor Jim Gordon at a Civic Square ceremony.



Retiring is no big deal for Reg: He's done it all before

t is the little things that bring a big smile to Reg MacNeil's face.

The former administrative austant to the smelter manager has hung up his safety hat twice. After retiring from lato in January 1978 he couldn't get his fill of working to he returned to act as and exort and guide.

In August, after 11 years of showing visitors around Incobehad his name taken off the lat. But the 79-year-old hasn't slowed down since. Besides keeping active by exercising, he works for Telecare at least once a week.

MacNeilstarted working at Inco in 1947. "It is a different company now than when I started," he explained. "Sudbury used to be called the "hunch box town". There was an amazing number of men carrying their lunch boxes at shift changes. Now there microwaves and vending machines which eliminate the need for the lunch box."

Now, the Coniston resident looks back at his younger counterparts who are retiring in their early 50s. "It makes me feel old," he said. "I can't understand why they would retire so early, it's disgracetal." He paused and offered some understanding, "I guess there is more stress involved now."

MacNeil has a lot of good memories about working at the Coniston smelter. "I knew at least 85 per cent of the men and at least half of that group I knew them personally," he said. "It was a special place, we had become a family."

He said that he was quite happy and enjoyed his work in Coniston from 1960 until 1972 when he was assistant superintendent. "It's true, I probably would have moved up the ladder had I gone to Copper Cliffearlier but I never regretted it."

But in 1972 the smelter dosed and MacNeil said he will never forget that day. "Every year I mark in the April 16 with a black square, that was the last day."

When MacNeil finally retired in 1978 at 65, he wasn't gone from the company long when Inco called him back to do some consulting work for six weeks. Than he was asked to be an escort and guide where he stayed for 11 years. MacNeil started off showing large groups around Inco and later would pick valued customers up at the airport and take them to the plant. "I have had visitors from all over including England, France, China and the United States." He remembered a visit by two people from Indonesia just last year. "I took them around and in no time we were on a first name basis," he said. "The chap started to add up the



Bee Machall estirad econtly from Inco for the second time

Reg MacNell retired recently from Inco ... for the second time.

numbers in his head and asked me how old I was. He couldn't get over how fit I was for my age." So he told him straight out how he exercised by walking and bicycling. "It keeps me in good condition."

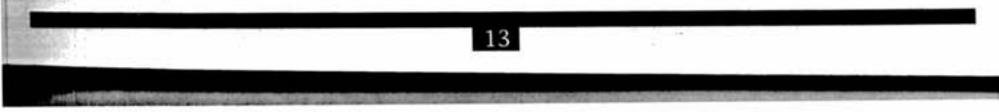
MacNeil's interest in history and his work in research paid off for him as he toured his visitors around. There was one time he was explaining a part of the operation to a group of Chinese delegates. Their translator didn't understand one of the names of the equipment that MacNeil described. So thinking quickly on his feet he simplified the name and the translator understood immediately and could explain to the delegates what was said.

Last year he had a group of buyers and purchasers from the United States who were touring Inco. MacNeil said he and the president struck up a conversation about growing up in a small town. "Here I was able to relate to this fellow and make him feel at home. When he left he remembered his visit." Though MacNeil won't be walking the corridors at Inco anymore he is still working indirectly for the company. Once-a-week he does a fourhour-shift with Telecare which is sponsored in part by Inco.

MacNeil provides a good ear during his shift at the 24 hour listening and counselling service. "Loneliness, it is one of the worst things that anyone could experience," said MacNeil who has given his support to many people who have called needing to talk to someone. The father of three grown men now enjoys visiting with his grandchildren and great grandchild when they come up to visit from across Ontario.

A flood of happy memories come back to MacNeil when he looks at his Quarter-Century Club pin and a thankyou card given. to him from a group of young people that he worked with one summer as a guide for the Path of Discovery tours.

"It is the little things that mean so much to me."





Energize yourself while you sleep

Answer yes or no to the following statements to see how well you are preparing for a good night's sleep that makes you feel great when you get up.

- I usually have a snack of chips, pizza, ice cream or a meat sandwich after supper.
- I usually have at least one cup of coffee at supper time or in the evening.
- I usually sit around and watch TV or do something else that isn't very active.
- I seldom do any exercise in the evening.
- I usually watch the news or action shows close to bedtime.
- I am often tense or wound up when I go to bed.

If you answered "YES" to one or more of the above questions, you are probably not getting the most benefit from your sleep.

Facts

Poor sleep or ineffective sleep affect all aspects of your life. It makes you:

- tired when you get up; * unable to think clearly;
- * less motivated;
- · less productive.;
- * less safe in your job.; not as well coordinated;
- less adaptable so small things bother you; * less tolerant of change at home or work or within yourself;
- * Ill more often.

Absenteeism is six to 10 per cent or more in many industries. That means that one worker out of 10 to 17 workers will be off work every working day. A poor night's sleep is a common direct reason for people being off and probably an indirect cause of last time due to filness.

Most of us spend more than 1/3 of our life sleeping but often don't get the full benefit of our sleep - even when we may feel that we have slept all night.

Help yourself to wake up refreshed

Have you ever wondered why sometimes when you sleep longer you feel worse?

There are two main aspects of sleep, each with several stages. Dream sleep refreshes your mind. Deep sleep refreshes your body. For the body and mind to feel refreshed you have to sleep complete sleep cycles.

For most people one sleep cycle is about 90 minutes. This means that we should sleep some combination of go minutes, such as three hours, 4.5, 6 or 7.5 hours. When you go to bed later than usual you may feel better if you get up earlier, if your regular time gets you up in the middle of your sleep cycle.

Sleeping at least six hours in 24 is usually recommended for good health. We can get away with less from time to time but should not make it a habit if we want to stay healthy

What if you can't sleep

If you can't get to sleep, or you wake up and can't get back to sleep, don't wony about it, especially if you feel good. Try to think of something pleasant and get to sleep but if you can't after a few minutes, get up and putter around quietly until you feel tired.

Plan to go back to bed at least 90 minutes, three hours, 4.5 or 6 hours before you have to get up so that you will sleep complete sleep cycles and feel refreshed when you get up.

Power nap

Have you ever felt tired and had to do something but didn't have time for a rest?

If you sleep much longer and get up in the middle of your deep sleep, you'll feel like a truck run over you. If you wake up in the middle of your dream sleep, your mind will not feel alert. You will then have to sleep about 90 minutes for your mind and body to feel refreshed.

Do you wake up feeling you are 90 years old?

That isn't very good even if you are 90.

Prepare yourself to wake up refreshed

If you get up in the morning with a lot of energy, ready to start anew day and this feeling lasts all day, then you are probably doing alot of the right things for you to get the most out of your sleep. How you feel in the morning has a lot to do with what you did the evening before.

Most of us may spend more than 1/3 of our life sleeping but many of us do not get up feeling refreshed because our deep sleep or dream cycles have been interrupted by what we did in the evening.

To get the most from your sleep:

* Eat less meat and fat at supper and do not eat fatty foods or meat for an evening snack.

* Relax before bedtime to stabilize your natural rhythms and feel well rested.

* Sort out things that are bothering you or get some help from a trusted friend, relative or professional counsellor. Stress before bedtime changes your brain chemistry in a way that decreases the effectiveness of your sleep.

Plan to get up at the end of a full sleep cycle (usually a combination of 90 minutes).

* DO NOT watch violence - even the news, a few hours before bedtime, will affect your dream sleep.

* DO NOT have alcohol or drinks with caffeine several hours before bedtime.

* DO NOT have a long hot bath just before bedtime. This will make your muscles tighter in the morning. If you find a both relaxing do a gentle exercise program afterwards or have your bath a few hours before bedtime and then do some activity around the house. Do not just sit and watch IV.

* Do gentle exercises before bedtime. Do not do vigorous exercises too close to bedtime or they will keep you awake.

Sleeping pills disrupt your dream sleep. You may feel restedphysically but not mentally alert.

Is your bed right for you?

How you feel in the morning is also a measure of whether you are sleeping in the right positions and in the right bed for you. It is easier and cheaper to change your sleeping position than to change your bed so

experiment with different sleeping positions before buying a new bed.

Try pillows between your knees, under your knees, under your arms, hug a large pillow, or try a small roll under your back. Use the one that make you feel the best.

If this doesn't help then sleep in different beds. Try putting your mattress on the floor or put a 4-inch foarm camping mattress on the floor. Try an egg carton-type foarm pad on top of your mattress. See how you feel in the morning and sleep in the bed that made you feel the best. The most expensive mattresses are not always the best for you.

If you get up feeling good then you know that you slept in the best position, on the right mattress and you did the right things before you went to bed and you slept a complete sleep cycle.

Sleep Apnia

If you ld your breath while you're slee

Teach your body to power nap. A power nap is sleeping for less than 20 minutes so you don't get into the deepest stages of your deep sleep. To learn to power nap set the alarm for 20 minutes or less. Think of something pleasant or count from 100 backwards or repeat a word such as "rest" over and over. Make sure that you get up as soon as the alarm goes off. After some practice your body will get used to waking up after a short power nap.

ig you should see your family doctor and get a referral to a sleep clinic to be assessed to see if there is anything that can be done.

Sweet Dreams!

INCO RECOGNIZED FOR CORROSION RESEARCH

Inco Limited has been awarded distinguished recognition for its long history of research into corrosion.

The company is a recipient of the distinguished Company Award of the National Association of Corrosion Engineers.

The citation recognizes Inco "for its pioneering research and market development activities in establishing the role of nickel in combating corrosion and the worldwide dissemination of the resulting technical in-

formation."

For decades Inco has carried out research and technical studies of corrosion, mainly in laboratories at Inco Alloys and at the LaQue Center for Corrosion Technology, Inc. in North Carolina.

The award was accepted by Dr. Walter Curlook, Inco vice-chairman responsible for research and development, at the 50th annual conference of the National Association of Corrosion Engineers in New Orleans.

Correction

On Page 5 of the February edition of the Triangle, Jack Ricard was incorrectly identified as Jack Davidson in a picture Illustrating a story about Creighton sump pump improvements. We understand Jack has been the brunt of a lot of razzing from co-workers as the result of our mistake. Sorry, Jack.



Dr. Walter Curlook

Leadership forms basis of Inco-Cambrian partnership

continued from page 1 permanent 150-acre site on Barrydowne Road in Sudbury.

Dr. Curlook's involvement and leadership in Cambrian's early years formed the basis of a partnership between Inco and Cambrian that, over the past 25 years, has encompassed continual participation by Inco employees on the Cambrian Board of Governors and on program advisory committees; the delivery of educational and training opportunities by Cambrian to Inco staff; and the joint development of training initiatives for the minerals industry.

Dr. Curlook's commitment to education, Cambrian College and residents of the North has been constant.

A founding member of the Board of Directors of the Cambrian Foundation, a public charitable organization which was established in 1983 to assist Cambrian College in strengthening its financial base, Dr. Curlook Was instrumental in the establishment of the Foundation's first Board. In 1989, he was named Campaign Chair of the Foundation's first capital campaign "Investing In Our Northern Heritage."

A three-year, \$3 million campaign, "Investing In Our Northern Heritage" was launched to assist in the construction of a \$10 million student residence at Cambrian College's Barrydowne campus.

The National Council for Resource Development represents a network of more than a thousand members in more than 600 community, technical and junior colleges that serve the broad public interest providing access to quality higher education for millions of individuals.

A primary function of NCRD is to assist its members in the acquisition of financial resources necessary to support the educational programs of their community institutions.

Bill's mechanics is nearer to art than just work

Have your scooptram overhauled by Cole man Mine's heavy equipment mechanic Bill Gibson and chances are you'll get back a superbly-tuned machine.

Bill's off-duty activity can't help but rub off on the job and that's probably one reason why Inco is supporting his hobby.

Bill asserts that his love of mechanics is closer to art than occupation, and his "masterpiece" is a 1956 Chevrolet show truck that's taken him about 15 years to bring to mint condition.

Like any "Olympic" event, the preparation was intensive, detailed and unceasing. But instead of pumping iron and running around a track, Bill spent about \$30,000 and long hours repeatedly dismantling and reassembling the vehicle until it met his tough standard of a work of art.

At one point, dismantled vehicle parts took up the entire garage floor and left no room to work.

The answer?

Bill built a new, bigger garage...and a house to go with it. "I needed more room," said Bill, "so I sold the house, bought a lot and built a garage big enough for four cars. Then I built a house." take years to do it," he said. "I knew I would have to manufacture a lot of the parts myself."

To further complicate matters, Bill's restoration ambitions now included a 1969 Chevrolet Nova. Like the truck, he dismantled the car down to the bolts.

It was when the car and truck parts were spread out on the garage floor that he made the decision to build a larger garage.

He rebuilt the Nova and was rewarded with several first-place wins at car shows.

With the car restored, he once again tackled the truck that he had partly reassembled. It wasn't up to his standards, so he took the truck apart for the fourth time.

Bill feels the experience with the truck influences his attitude on the job. At the same time, he figures the continual training and experience he gets working on high-tech Inco equipment helps his hobby.

"It keeps me up-to-date on new techniques and equipment," he said. "It can't help but make me a better mechanic. At this job, you learn continually."

Up to his elbows in grease



He's not intimidated by starting from the ground up. He's done it several times with his '56 Chev.

"I picked up the truck from a wrecking yard for \$50 back in 1977," he said. "I spent months restoring it, but then I took it apart and restored it again in 1983. It was a lot better the second time and I drove it for three or four years until I got tired of it. I wanted something better."

It was back to the drawing board again. This time he stripped the entire cardown to the last nut, bolt and washer and rebuilt it from the ground up. "I knew it was going to under the hood of a vehicle is an artistic inspiration for Bill. "I love my job. I'm lucky that my job and my hobby match up," he said.

Sometimes, his hobby seems to swallow him up. He often works in the garage as soon as he gets home from work and quits at bedtime. Often, entire weekends are spent in the garage.

Luckily I'm with a woman who is very understanding, he said, admitting that his social life dips to near zero.

Understanding is an understatement. She often serves Bill supper in the garage. She often lends a hand and Bill recalls once when he put her to work in the trunk with safety goggles and grinder. "It takes

Bill Gibson works on the engine.

a special woman to put up with that," he admits. Even daughters Shannon, 12, and Sheri, 11, pitch in with wrench in hand. Bill figures it'll all die down a bit now and return to a more normal routine with the show behind him.



40 Years ago

In 1953, blasthole and induced caving mining demanded crushers much larger and more powerful than the machines formally in use to accommodate the size and quantity of ore now coming from the Frood-Stobie and Creighton blasthole operations.

Jaw crushers, with an opening of 66 by 48 inches were pressed into service, handling 500 tonnes of ore per hour with an 8-inch setting.

Two of these crushers had been installed at Creighton and three at Frood-Stobie, one in the Frood section and two in the Stobie section.

Considered massive at the time, the complete crushing unit weighed approximately 185 tons.

Installed in an excavation 37 feet long and 30 feet wide, 51 feet below the level, the ore was crushed in the crusher before being hoisted to the surface.

Other feature stories that month were: "4,500 Took Part In The Eighth Annual Kiwanis Music Festival." "Now The Talk Is Wolves For The Allan Cup."

"Southern Stars Took The Titles In Badminton."

25 Years ago

Recently introduced, the five-day basic safety training program for new employees at Copper Cliff was producing remarkable results, allowing new employees to step into their jobs with confidence and interest.

Setting the guidelines for the program, which was divided into lectures and field trips, was the company's manual of standard safe practices. Functioning as instructors were a full-time senior shift boss from each department and a part-time assistant.

The program was a counterpart of the school stop system in the

New crushers needed

company's mines.

Before a new employee was put on a regular shift, where he received further training by understudying an experienced man, he had to pass the course. If he did not pass the course, he joined the next class for a second round.

Other feature stories that month were: "Fully Automated Sand Plant Feature Of Garson Expansion." "Year-Round Enjoyment Provided By Port Colborne's Classy New Pool."

"Inco Recommends All Process Plants Be Taxed Municipally."

15 Years ago

The Frood-Stobie central repair depot, recently affiliated with Copper Cliff central shops, was now known as Inco's component repair centre and would soon be relocated in the new Divisional Shops Complex.

Capable of repairing 700 different items, from the smallest pneumatic valve to a 12-cylinder engine, it was divided into four main areas: engine rebuilds; power train repairs; air, hydraulic and electrical repairs; and hydraulic cylinder repairs.

Said Al Wiita, shop co-ordinator: "We're a repair facility for all the mines in the Ontario Division and we've become very critical of quality control. Wherever possible, all replacement parts are original equipment and we're striving to increase the scope of our repair work."

The centre worked on Deutz, Mercedes and Dorman diesels, pumps, motors, air compressors, differentials and dozens of other pieces of equipment right through to scooptrams and jumbos.

Other feature stories that month were: "Inco Chairman And President Calls 1977 A Disappointing Year." "North Mine Dismantles Production Equipment." "Well-Known Creighton Craftsman Retires." (The retirement of Charles Paxy.)



Every couple can save tax dollars by income splitting. But first you should know the rules so you can choose the techniques that will work for you.

Income splitting is simply an

come from one spouse to the other isn't always easy. If you are normally in the 40 per cent tax bracket the government of course prefers to see your income above the \$29,000 level taxed at 40 per cent. So a variety of rules have been put in place to discourage couples from shifting income from one to the other. These complex sections of the tax law are called the attribution rules. Basically, they say that any income including capital gains earned by your spouse that normally would have been earned by you will be taxed in your hands, not in the hands of your spouse. The rules apply even though your spouse may now actually own the income generating assets. In fact, virtually any method of transferring assets is caught under these regulations.

goals and they are actually encouraged by our legislators. With a spousal plan you contribute to your spouse's RRSP and receive a deduction for the amount contributed on your tax return. However, the funds contributed now belong to your spouse and will be taxed in his or her hands when received later in life as retirement income. Note that if your spouse immediately withdraws funds from a spousal plan, the amounts Income splitting tax savings for couples

the dollars are quite small at first. But within a few years, the lower income spouse could be earning hundreds or even thousands of dollars of interest that would otherwise be taxed in the hands of investments brought into the marriage by one spouse are considered to belong to that spouse. So any income earned on them also belongs to that spouse. This will be the case even though the

ranging for one spouse's income to be taxed in the hands of the other spouse. The tax savings are dramatic if one spouse's tax rate is higher than the other's.

For example, if you are taxed at 40 per cent and your spouse is taxed at 26 per cent you'll pay \$14 less tax for every \$100 earned (\$40 minus \$26) if that \$100 is taxed at 26 per cent not at 40 per cent. Tax rates jump from approximately 26 per cent to 40 per cent when your taxable income climbs above about \$29,000 (1991)

If your tax rates are the same, there could still be benefits in the future if one spouse will be out of the workforce for a period of time, or if one spouse's retirement income will be considerably smaller than that of the other spouse.

Income splitters road blocks

Unfortunately, shifting in-

However, there are a few exceptions. And there are a few instances where the attribution rules don't apply.

Looking for exceptions

Spousal RRSPs (registered retirement savings plans) can accomplish your income splitting will be taxed back to you. If you are close to retiring, you should be aware that you and your spouse can split your Canada/Quebec Pension Plan benefits. This will produce tax savings if the two of you are taxed at different rates.

Interest on interest is not caught by the attribution rules. What this means is that if you give your spouse \$1,000 that earns 10 per cent, the \$100 will be taxed in your hands, even though your spouse actually earned it. However, any interest then earned by your spouse on that \$100 (interest on interest) will be taxed in your spouse's hands.

This type of planning doesn't yield a big pay-off immediately - the higher income spouse. Finally, remember that any two of you have been pooling all your income for many years.



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