

The Triangle

Editor, Rudolph Kneer



ON THE COVER . . .

The white woods of winter are a perfect study in still beauty. In the virgin forests of Northern Ontario sounds are numbered, and quiet prevails. Only the wind can be heard sweeping through the shivering, naked branches. Snow drifts, sculptured by the wind in cold perfection, create a pure carpet of white on the forest floor. Such immaculate loveliness provides ample temptation for snowshoers and crosscountry skiers alike to tread inside the white woods of winter and leave their tracks until the next snowfall.

January 1978

Volume 38, No. 1

Published for employees of the Ontario Division of Inco Metals Company, Copper Cliff, Ontario, P0M 1N0. Phone 682-0631.

Inco's Copper Cliff Greenhouse Is Colorful Setting For Beautiful Winter Wedding



Inco's Copper Cliff greenhouse provided a most appropriate and colorful setting for a series of winter wedding pictures taken recently by Roy Koronovich. Posing among the various floral arrangements are the Howson/Hawkey wedding party — from left, George Ginzinger, Brian Inkster, Jordon McLean, Kirk Meisenheimer, Brent Howson, groom, Tammy Hawkey, Barbara Hawkey, bride, Susan McGee, Brenda Howson, Debbie Burmaster and Eleanor Farbin. It's the first time wedding pictures have been taken in the greenhouse at Christmas time.

Inco Limited Statement To Select Committee Available To Employees Later This Month

Copies of a statement by Inco Limited to the Select Committee of the Ontario Legislature will be available to all Ontario Division employees later this month.

The report deals with the structure of Inco Limited and outlines the various factors and considerations which led to the decisions to announce production cutbacks and layoffs at Inco's Sudbury and Port Colborne operations.

In detail, the statement covers the background to the current situation and the impact of the layoffs. It also outlines Inco's expansion from Sudbury and the company's financial situation. The statement goes on to cover Inco's diversification and gives an outlook for the future, outlining Inco's long-term growth and commitment to Ontario and Canada.

Copies of the statement will be available from employee relations representatives at individual mines and plants. Copper Cliff general office employees may obtain their copies from their respective managers.

Members of the community may obtain copies by contacting the Public Affairs Department, General Office, Copper Cliff, Ontario, P0M 1N0, (705) 682-0631.

Family Album



Proud father in this family group is Mel Young, assistant to the Ontario Division president. An avid outdoorsman, who recently rebuilt his summer camp along Lake Penage, Mel here poses with wife Marie, daughter Vickie and son Brian. Vickie teaches school in Toronto, while Brian is a mine foreman at Copper Cliff South mine.

This is the Alex Gray family from Copper Cliff. Alex is with the agriculture department and is heavily involved with the Copper Cliff Highlanders in his spare time. With Alex are his wife Edlina and grand-daughter Alison, 2. In the rear are son Alasdair, 14, daughter Rita, 24, (Mrs. Barlow) and son Bryson, 20.





From Port Colborne, this is the Robert Laveille family. Robert, a toreman in the electro-nickel refining department, enjoys body building and woodworking in his spare time. With wife Betty, who likes sewing and bicycle riding, are daughter Michelle, 10, and son Robby, 7.

Active in community affairs, Wayne Lavallie, a plant maintenance co-ordinator at Garson mine, finds time to coach hockey and ringette in his spare time. That's his wife, Gail, along with daughters Beverly, 3, Donna, 11, and son Darin, 11.





If smiles are any indication of a good time, then the many Christmas parties sponsored by the numerous mines and plants were a resounding success.

The Christmas tree committees' functions this year were many. Santa had to be summoned from the North Pole, magicians and puppets had to be booked, candy and gifts ordered, clowns' costumes made and food and refreshments had to be prepared. Children giggled, babies cried, parents guided, and Santa listened.

From the very first child through the doors to the last to leave, the smiles were enough to let the committees know — 'twas the best Christmas ever!

"The Triangle" photographer was on hand to record the various Christmas gatherings, as outlined on the following pages:











My Name Is Jin Sook Doh

A year and a half of tender, loving care makes all the difference!



My Name Is
Lisa Jane Chute

Korea to Canada—coming home

Excerpts from the Heart: To Lisa, Our Very Own Little Girl

So you are with us at last! After nearly a year of waiting, August 22, 1976, was the end of the long waiting period. Your plane, a big Air Canada jet, arrived at 9:20 p.m. The doors finally opened and you were there, so sad, frightened, as you came down the stairs clinging to Rev. Beacham's hand. He was the missionary who looked after you on your long 16-hour trip from Korea to Canada.

We picked you up and held you to give you comfort, but you never spoke then. We knew you had hardly eaten anything on your flight so I made you two large peanut butter sandwiches. Then as you ate them so heartily, you pointed for "pang" — that is, "bread", so you ate seven pieces. Unbelievable, but true. You then smiled for the first time.

When you came, all you would eat was rice and water; but now, six months later, it's spaghetti, pizza, and loads of fried chicken.

When you arrived, you were 39 inches tall and weighed 38 pounds. This was

August 22, 1976. Seven months after your arrival, you are 45 inches tall and weigh 49 pounds.

You started kindergarten class September 7, 1976. Although you did not speak or understand English, you learned very quickly.

Today, June 20, 1977, Daddy and I took you to the office to sign the final papers of your adoption. Now you are really "ours" and ours to love and take care of always.

Our thanks to Guy and Cecile Chute for allowing the Triangle to share with our readers some of the very personal thoughts and feelings surrounding the adoption of their little girl, Lisa.

Guy is an area maintenance foreman at Stobie and Little Stobie mines and has been with Inco for going on 30 years. With his job taking up so much of his time and wife Cecile rambling about their home — their five children are grown up and have families of their own — the idea of adoption became increasingly attractive. For many years they had made

themselves financially responsible for the support of under-priviledged children overseas, but adoption became irresistibly appealing.

World Vision, an agency which supports orphanages across the world, came up with Lisa, and from then on it was simply a matter of time.

Guy and Cecile immediately contacted the local Children's Aid Society and the Immigration Department to start proceedings. It took almost a year but finally, in August of 1976, Lisa arrived and has been a bright ray of sunshine in their lives ever since.

"It's unbelievable how she's grown since she's been here", says Guy. "She's taller by 10 inches in less than a year and a half."

"She's making wonderful progress in school, she can read, she knows her shapes and her animals, she's done remarkably for being here just over a year."

"She's excellent in English and she's taking French; she's losing her Korean language, but she really doesn't want to



Lisa enjoys a visit with Santa Claus.



Lisa has quickly taken to enjoying household chores with mom, Cecile.

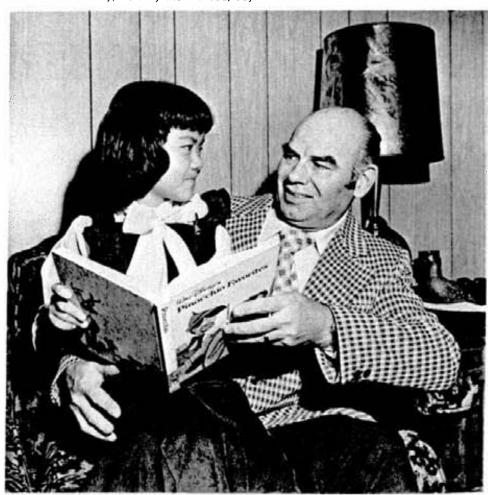
know anything about Korea at all. She gets along marvellously with everyone; she's a perfect child, that's all you can say."

Guy and Cecile had been advised that a Korean child cannot be adopted if there are any known relatives; once it was determined that Lisa had none, they knew they had only to wait. And even before they'd received final word as to whether or not it would be possible to adopt Lisa, Guy and Cecile redecorated a room in their home specially for their new daughter, complete with built-in dressers, new furnishings, and an extensive wardrobe.

Guy went on to mention that "Cecile's now looking at adopting again; this time, an 11-year-old Korean girl, and right now it looks favorable. Lisa's been a real little doll, and the wife has plenty of time and devotion to offer. And we both feel that the more we can do for the underprivileged children of the world, the better—that's our prime interest."

Guy and Cecile certainly have every right to feel warm and proud. They're sharing their home and their love with a little girl who might otherwise never know the security of being part of a family who cares.

At the end of the day, it's storytime with dad, Guy.



More than
30 years
with the
company —
and still
going strong!



Gordon Moore, left, a crusherman at Stobie number seven shatt and Art Rodin, a tippleman at Stobie number nine shaft have been with Inco for over 30 years. Here, they decorate a Christmas tree at Gordon's home.



Here, Gordon and Arthur share some fond memories of their 30-year friendship while leafing through one of Gordon's photo albums. Their wives have the same name, they each have three children, and they each have a daughter called Gloria.

It all began over 30 years ago, back in November of 1947. Gordon Moore and Arthur Rodin, one from the Ottawa area, the other from out west, both happened to be at Inco's Sudbury employment office at the same time. Both were intent on a mining career, and both were hired to start work on December 3, 1947.

And that was the beginning not only of two 30-year careers with Inco, but a 30-year-long friendship that's sprinkled with remarkable similarities and unusual circumstances.

For example, their wives are both named Audrey, they both have three children, and they each have a daughter called Gloria. Their 30 years with the company have all been spent at Stobie mine but, perhaps most unusual of all. they've worked only one shift together in all that time. "That was back about ten years ago", says Gord, a crusherman at Stobie number seven shaft. "I've been working the midnight shift for the last 25 years, and it just happened that Art, who's a tippleman over at number nine shaft, came on that one time and worked with me. It's the only time we've worked together in the 30 years"!

Interesting, don't you think?!

Let it Snow Let it Snow Let it Snow

'cause our transportation department clears the way!

There's a lot more to this "winter wonderland" of ours than fluffy flakes and picturesque sceneries. There's the reality of heavy, wet snow. Slushy and slippery. And in sudden, great quantities.

Following a particularly heavy snowfall is when we can most appreciate the efforts of the "unsung heroes" of our transportation and traffic department — the fellows responsible for snow removal in and around Inco's various Copper Cliff operations.

They're the ones who tramp about in oftentimes knee-deep snow, clearing pathways, steps, and doorways; they're the ones who set out first thing each morning — or first thing each night — to clear our ambulance and fire routes, the central shops area, and all of our parking lots.

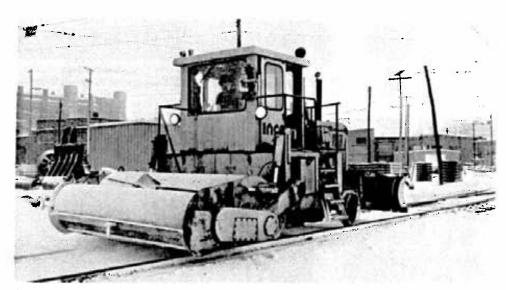
While specific members of the transportation department are assigned the task of snow removal, *all* members are responsible for reporting any icy conditions and ensuring that sand and salt are dispatched immediately. As a point of interest, some 10,000 tons of salt and sand mix are used each winter!

During and following a heavy snowfall, as many as a dozen payloaders and tandem trucks are available for dispatch; in addition, two "switchbroom" machines are on the go, clearing switches and keeping tracks open to the slag dumps and to various of our mines. The "switchbroom", by the way, is quite a unique piece of equipment; fitted with rotating rubber hose bags, it throws snow aside without scratching or damaging the tracks.

So go ahead, let it snow! Our transportation department clears the way!



Maurice Gauthier, left, tandem truck driver and Ernie Rheault, loading machine operator, scoop up the snow in the Copper Cliff smelter complex following a heavy late December snowfall.



One of the two unique "switchbroom" machines which cleans and efficiently keeps tracks clear throughout the winter.



Preparing for the day's snow removal assignments are Maurice Gauthier, right, tandem truck driver; Gerry Bradley, transportation foreman, and Ernie Rheault, loading machine operator.



Bradley MacDonald, Copper Cliff North mine, and wife Ella are greeted by Copper Cliff greenhouse hostess Anne Moors, centre. Over 6,500 visitors viewed this year's display.



Taking a close look at one of the hundreds of potted plants featured at the greenhouse are matte processing's Laurier Dupuis with son Paul and wife Helene.



This year's Christmas display at the Copper Cliff greenhouse drew an estimated 6,500 visitors. Among those who enjoyed the special floral arrangements were the Richer family — from left, Nicole, Kim, Jayme, and Roger from the Iron Ore Recovery Plant warehouse.

Fourth annual open house at Inco's Copper Cliff greenhouse — an estimated 6,500 attend

The sights and sounds of Christmas were in great abundance throughout the twin greenhouses. Admiring the tropical displays are, from left, Helen Depke, Gisela Depke, and Harry Kalaba, field exploration.

Amidst the hustle and bustle of the holiday season, thousands of Sudbury area residents managed to take time from already hectic schedules to browse through the special floral displays presented by the Copper Cliff greenhouse.

For the fourth year in a row, the displays drew capacity crowds — an estimated 6,500 — intent on admiring the festive arrangements. Specially featured were pink, white and red poinsettia, holly, ivy and mistletoe; in addition, the greenhouse was abloom with azaleas, cyclamen, gloxinia, bromeliad, amaryllis, Christmas peppers, and tropical plants galore.

A veritable myriad of color awaited visitors who were shown through the twin greenhouses by hostesses Ellen Heale, Debbie Olfert, Anne Moors, Valerie Pakkala, Danielle Brunet, and Ann Kossatz.

As well as housing tropical and temperate plants, the Copper Cliff green-house also serves as a working area for Inco's continuing program of agricultural research.



Colorful displays at the greenhouse attracted all ages. Here, Walter Byrko, of the Copper Cliff mill, enjoys the Christmas arrangements with family Pamela, Terry, Allen, and wife, Rose.



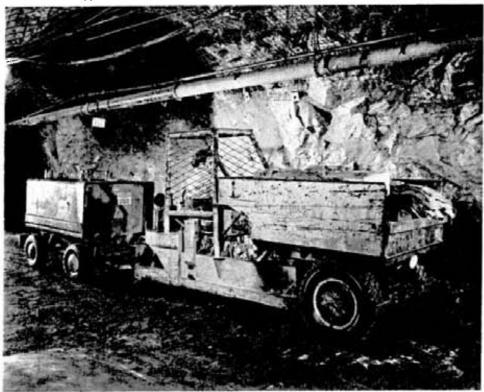
Ernie Lachance, 'dozer operator, loads the 375-gallon hydraulic oil tanker with HD-30 oil for transfer underground.



Operator Gerry Levac demonstrates one of the methods of moving the hydraulic tanker on surface.

New Bulk Oil System Copper Cliff South

Young buggy operator Stan Golob pulls the hydraulic tanker to the fueling station at the 1500 level of Copper Cliff South mine.



A new system of receiving, storing, transferring and dispensing oil in bulk, as opposed to handling it in small containers, has now been implemented at Copper Cliff South mine.

Before the new system came into operation, the underground oil requirements at Copper Cliff South mine were met by using quarts, five-gallon pails, and 45-gallon drums; the handling was slow and costly.

The main objectives of the bulk oil system are to reduce lubricant and ware-housing costs, to lower the possibility of contamination, and to provide more efficient servicing; other benefits include a reduction in oil waste, and a greater flexibility in the purchase of oil.

The bulk system involves the transfer, via pumps, of HD-30 oil from buried surface storage tanks into a mobile 375-gallon tanker mounted on solid rubber tires. This tanker is moved underground into the dispensing station,

375-gallon tankers mounted on solid rubber tires move the oil underground

tested at mine



Loading a bulldozer from the hydraulic tanker at the loading station on the 1500 level is 'dozer operator Nick Perih.

where suction lines are attached by quick disconnects. The mobile tanker thus becomes a storage tanker underground.

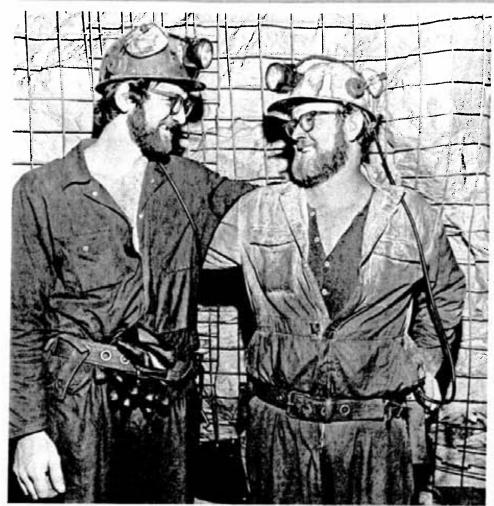
The oil is then routed by pumps through filters and over to dispensing reels and automatic nozzles that dispense 10 gallons per minute. This method provides a closed system from refinery to equipment, therefore reducing the possibility of contamination from partially-used containers, while providing a self-serve service station style of handling oil.

The bulk oil system has been in operation at Copper Cliff South mine for just over a year now, and plans to convert other Inco underground facilities are currently underway. The new method is particularly attractive because no excavations are required underground.

HD-30 oil is used in all hydraulic systems as well as in the torque converters and transmissions of all load-haul-dump equipment.

Unloading the hydraulic tanker from the cage at Copper Cliff South mine are cagetenders Moe Jolly, left, and Wayne Friel.





These are the "Singing Miners" from Coleman mine, driller **Rolly Duguay**, left, and driller **Don Green.** Believe it or not — but the popular duo was responsible for collecting over \$1,200 in pledges during the recent 27th Annual Telethon. Well over \$345 of this amount was pledged by co-workers at Coleman mine. Don's son, **Kevin**, assisted his dad by playing the base guitar.



A profusion of Christmas ornaments, ranging from garlands to Christmas trees, was evident throughout Inco's Copper Cliff offices during the recent festive season. Decorations were brought in by spirited employees, anxious to maintain the holiday feeling during working hours. No exception to this festive practice were members of the Copper Cliff accounts payable department, from left, Gloria Trezise, Margaret Wong, Carolyn Robertson, Lorna Fleury and Donna Raivio.



Coleman mine driller **Serge Huard**, left, was scaling in 1440 stope on 1880 level recently when a piece of muck struck the right lens of his safety glasses. What's the value of eye protection? Ask Serge, who is pictured here receiving a new pair of glasses from his mine foreman, **Blaine Parrington**.



That's storeman **Claude Henry** at the controls of this battery-powered forklift, powerful enough to lift and transport even the heaviest item stored in the Copper Cliff South mine warehouse. Here Claude is in the process of moving a 75 KVA transformer for final shipment underground.

The employee benefits department is waiting to answer your inquiries regarding the many company-sponsored benefit programs. From time to time, employees experience situations which are difficult to explain. Assistance will be provided by calling 682-4438.



When it comes to decorating a Christmas tree, take a tip from **Jack Laking**, a first-class electrician at Garson mine. This tree, set up in Garson's electrical shop, boasts "decorations" not usually found on your average Christmas tree. "It's the spirit of the season that counts," says Jack, pointing out that all "decorations" on his tree were readily available "from stock".

Appointments

Bill Bateman, shift foreman, roaster-kiln department, Iron Ore Recovery Plant.

Mary Buchanan, environmental control analyst, environmental control, Copper Cliff.

W. W. Dopson, general foreman, decomposing, packaging and shipping, Copper Cliff nickel refinery.

V. A. Englesakis, supervisor, contract administration, engineering, Copper Cliff. G. R. Gavin, senior process assistant

G. R. Gavin, senior process assistant, process technology, Copper Cliff.

J. A. Henry, salary administrator, Copper Cliff

R. D. Hyde, systems analyst, computer systems, Copper Cliff.

J. K. Lynn, industrial relations assistant, employee relations, Copper Cliff.

A. D. Sherlock, general foreman, pressure plant and utilities. Copper Cliff nickel refinery.

Don Wylle, shift foreman, roaster-kiln department, Iron Ore Recovery Plant.

Inco Metals Company Toronto

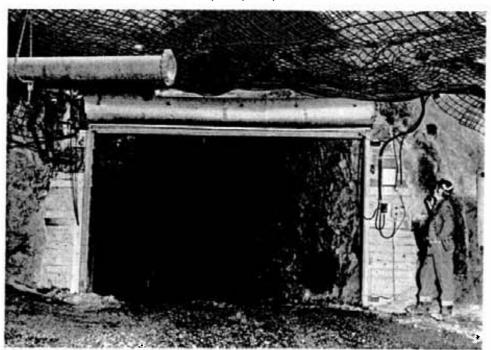
N. M. Kemp, director, market planning, copper and precious metals.

D. C. Lowney, manager, contract administration, Toronto, engineering department.

J. C. Mehltretter, chief project engineer, Toronto, engineering department.



Rev. Father Brian McKee, right, secretary of the Sudbury District Boys' Home, recently accepted a \$7,000 cheque from **Ron Taylor,** Ontario Division president of Inco Metals Company, as the company's 1977 contribution to the Boys' Home. In making the presentation, Mr. Taylor extended best wishes for the continuing success in Father McKee's worthwhile work.



That's Coleman mine's **Ray Joly** inspecting the 1564 ramp overhead door which was installed as an effective means of controlling air flow up the ramp in the event of a fire underground. The door can be operated electrically at the door location or remotely from the refuge station on 1520 level. Horns and rotating red lights indicate to the traffic on the ramp when the door is closed.



These are members of the Garson mine yard crew, who have gone since October 29, 1976, without an accident of any type. Pictured, front row, from left, are services foreman Al McCausland, Earl Vail, Lenard Giguere, Bob Badgeron, Rick Jones and Bruno Castellan. Back row, from left, Antti Vakkurl, Nick Basaraba, John Tait, Tauno Perala, Don St. Pierre, John Laronde, Andy Gaudry and John Byrko. Below, congratulations are also in order for the 3400 level Garson mine crew who have gone 12 months without a reported injury, an extremely good safety achievement. Front row, from left, Denis Champagne, Paul Laplante, Bob Decaire, Bob Caverly, Al Arseneau and Albert Landry. Middle row, from left, mine foreman Norm Woito, Alf Palement, Don Marier, Denis Noël, Fred Falardeau, Paul Rainville and Maurice Brisson. Back row, from left, Morris Lamothe, Willy Dominque, Ray Charron, Gil Beauparlant, Ray Bergeron, Ron Decaire and Bob Savoie.





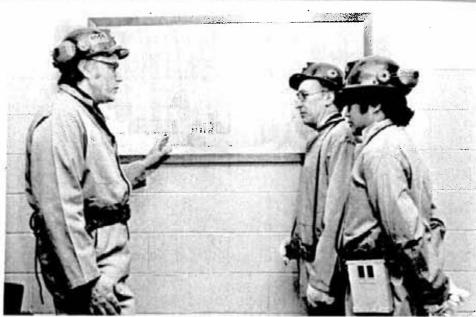
Inco's mail room in Copper Cliff was a beehive of activity just prior to the recent festive season. According to **Gall Assmann**, supervisor of travel and communications, in excess of 70,000 pieces of incoming and outgoing mail were handled in December, well above the usual month's norm. Pictured here is **Patti Larouche** sorting part of the morning's mail which arrived on December 22.



That's first-class electrician **Dennis Bean**, of Copper Cliff South mine, checking the automatic pumping panel on 2300 level. Dennis built and installed the unit, equipped with a unique schematic which utilizes light emitting diodes to provide a simplified view of the status of the three 12-stage dewatering pumps. Each pump is capable of delivering a maximum of 750 gallons per minute.



Captain **Andrew Gibson**, left, commanding officer of the Sudbury Irish Army Cadets, recently accepted this sword from **Mel Young**, assistant to the Ontario Division president, Inco Metals Company. The hand-crafted sword will be worn on all ceremonial parades by the cadets' commanding officer.



Recent visitors to Copper Cliff South mine were **K. H. Belcher**, centre, managing director, marketing, International Nickel Australia Limited, and **James Shih**, a sales representative of ICI (China) Limited, Taipei Branch. Here, Copper Cliff South mine superintendent **Bill Moffat** explains the workings of the mine prior to the trio's extensive underground tour.



That's machinist **Dennis Levesque**, of Copper Cliff South mine, at the controls of a sandblasting gun, removing corrosion from a Sulzer pump diffuser. Sandblasting of this type is carried out during major overhauls of all underground pumps.



This 5-cubic-yard capacity JarcoScoop is now operating in a mechanized cut-and-fill stope on 6400 level of Creighton mine's No. 9 shaft. Instead of the conventional diesel engine, the unit is powered by an electric motor. Mine power, 550 volt D.C. current, is transmitted through a trailing cable, wound on a self-winding reel — 350-foot capacity. A solid-state rectifier converts A.C. current to D.C. to drive the 220 h.p. electric motor, reduced to an output of approximately 150 h.p. The electric machine is more efficiently powered, is quieter, cleaner, requires no ventilation, produces very little wheel-spin and is well accepted by operators.



These are some of the members of **Maurice Ouellette's** shift in the roaster section of the Copper Cliff smelter's furnace department, who recently completed more than a year without a lost-time accident. Superintendent **Tom Antonioni** was on hand to congratulate the shift on their fine achievement and wished them continued success with their safety program throughout the new year.



Concerned about your telephone charges? How would you like to sift through a monthly stack of telephone statements amounting to well over \$78,000? That's the average bill paid by Inco Metals Company for its 1,800-odd telephones throughout the Sudbury district. Here **Gail Assmann,** right, supervisor of travel and office services, and **Arlene Julian,** of the Copper Cliff mail room, scan through a month's statements, scrutinizing local charges and the thousands of long-distance calls.



This is proof positive that Little Stobie mine isn't alone in boasting a "tropical garden" in its hoistroom. These 11-foot palm trees in Frood mine's hoistroom illustrate the successful effort in creating a tropical atmosphere. Here **Paul Barchette**, stationary engineer, cares for one of the many thriving plants.

MEMORIES and MUSIC

Have you listened to "Memories and Music" on Sunday at noon over the FM channel CIGM, 92.7 on your dial? If you haven't, why not tune in the program this Sunday, we think you will enjoy it. On the show we interview Inco pensioners who have some fascinating reminiscences of their early days both in this area and elsewhere. In addition, appropriate music is played and announcements of interest are made.

Here are the guests on "Memories and Music" for the next few Sundays:

January 15: Bredo Hoel January 22: Dick McInall January 29: Albert Morin February 5: Martin Quinn February 12: Gerry Mahon

We always welcome requests from anyone who wishes to appear on the program, so if you would like to share your experiences with others, or if you know of someone who would make an interesting guest, please call **Bert Meredith** at **682-0631**. If he is not available when you call, just leave your phone number. Most everyone has a story to tell, and we would like to share yours with our listening audience.



That's **Richard Thibeault**, yard laborer at Levack mine, at the controls of a snow-blower during the recent heavy snowfall which blanketed Northern Ontario. The blower is used in areas too narrow to be serviced by larger, conventional snow-removal equipment.



Graham Ross, manager, Garson area, was recently appointed to the advisory committee of the Haileybury School of Mines campus of Northern College, having been nominated by the Sudbury Branch of the Canadian Insti-

tute of Mining and Metallurgy. He was born in Kitchener where he attended elementary school. Following his move to Toronto, he attended high school and later graduated from the University of Toronto as a mining engineer. His working life has been spent with Inco.

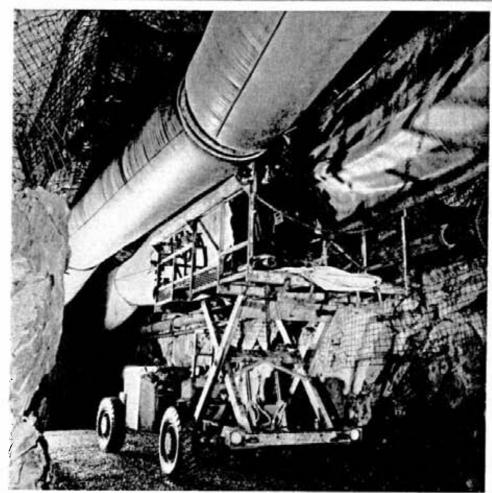




Thomas Parris, seated, centre, Ontario Division vice-president, Inco Metals Company, and vice-president of District 3 of the Canadian Institute of Mining and Metallurgy, was one of the guest speakers at the recent inaugural meeting of the North Bay branch of the CIM, the youngest and 57th branch in Canada. Back row, from left, Leo MacDonald, treasurer; Rudy Warren, second vice-chairman, and Fred Edwards, secretary. Front row, from left, Pat Patterson, founder and honorary past-chairman; Dr. Ron Lord, CIM president; Inco's Thomas Parris; Alex Speirs, branch chairman, and Bill Laing, first vice-chairman.



Inco scholarships and engineering technology bursaries were recently presented to Cambrian College students at a luncheon held at the Copper Cliff Club. Recipients were, front row, from left, **Richard Gagnon**, third year metallurgical engineering technology; **Jane Maki**, third year chemical technology; **Glenn Zeebregts**, second year geology engineering technology; **Dennis Trevisiol**, third year geology engineering technology; **Jason McKenzie**, second year mining engineering technology. The awards were presented by **Mel Young**, rear, left, assistant to the Ontario Division president, Inco Metals Company. **John Koski**, president of Cambrian College, rear, right, also attended the luncheon. **Terry Ward**, third year geology engineering technology, was absent.



Installing flexible ventilation tubing on the 1500 level of Copper Cliff South mine are jumbo drillers **Fred Elliott**, left, and **Jim Plummer**. Compared to conventional vent ducting, the flexible tubing offers increased safety and easier handling during installation. It also shows significant cost advantages in handling, installation time and initial purchase.



Copper Cliff South mine drill fitters **Herman Kochems**, centre, and **Nick Skuro**, right, receive first-hand instructions on the breakdown and proper maintenance of this Sandpiper pump from serviceman **Ivan Brown**. The versatile pumps have proven efficient in their application for fuel transfer, cement grouting, general mine dewatering and the refueling of mobile equipment underground.



lan McDougall, a senior vice-president of Inco Limited who has corporate responsibility for finance, has been elected a member of the board of directors, J. Edwin Carter, chairman and chief executive officer, announced recently. Mr. McDougall is a director of the National Trust Company and the Toronto-Dominion Bank Trust Company. He is a member of the Financial Executives Institute, Pace University President's Advisory Council and the Accounting Committee of the American Mining Congress, lan McDougall has been senior vice-president of Inco Limited since February, 1977. Prior to that, he had been comptroller of the company for four years. Mr. McDougall joined Inco in 1947 as a staff member in the office of the comptroller. A native of Hamilton, Scotland, Mr. McDougall received a Bachelor of Business Administration degree from Pace University in 1954 and a Master of Science degree from Columbia University in 1958.



Justin C. Crawford of Inco's Port Colborne research station, was awarded the Hartford-Nicholson Award at the Society of Research Administrators' annual meeting, held in San Antonio, Texas, recently. The award is given to

members who have contributed outstanding service to the society. Among numerous contributions to the society, Mr. Crawford has been president of SRA Canada and chairman of the industrial division of the society. He has been a dedicated contributor to the society and has undertaken each endeavor with the highest standards of excellence. The Society of Research Administrators, founded in 1967, is a professional association whose members are devoted to improving the efficiency and effectiveness of research administration.

Copper Cliff North mine's Santa Claus (Andy Pilon), decked out in his traditional garb, and complete with hard hat and safety belt, took time out from his busy schedule to pose for "The Triangle" photographer with Mrs. Yvette Lemire and her two sons Gilbert, left, and Gerry, right, both shaft inspectors at the North mine. Mrs. Lemire recently took part in a ladies' tour when she had a chance to view underground operations. Another son, Norman, a chute blaster, also works at the mine.

According to the Guinness Book of World Records, man's deepest penetration into the earth's crust is 31,441 feet, which is almost six miles. It was reached by Loffland Brothers Drilling Company in Washita County, Oklahoma. The temperature at the bottom of the hole was 264 degrees Celsius.





Willie Perreault



Claude Larose



John Luptak



Reg Violino



Ed Zimolag



Harry Boulrice



Maurice Paradis

Just In Time For Christmas - Awards Total \$7780

The new year was ushered in well, with a large number of Inco employees benefitting from the suggestion plan. Total payout for the month amounted to \$7,780. Topping the list was Willie Perreault, of the Copper Cliff nickel refinery. He received \$610 for his suggestion to fabricate a new mounting bracket for the D.B. crane limit switch. The combined efforts of Claude Larose and John Luptak, from the Copper Cliff central shops, gave them a \$545 award for their new design of commutators for 10 h.p. crane rack armatures. Bill Gagnon, of Creighton mine, received \$400 for his idea of replacing Eimco loader controls with Nopak valves. John Barsalou, of Copper Cliff North mine, was awarded \$360 for designing a cable pusher for the installation of cable grouting. His suggestion for purchasing a thermostat to eliminate the installation of contactors in switchrooms brought Herbert Squirell, of the maintenance field force, a \$330 reward. Reg Violino, of central utilities. earned himself \$290 for suggesting the fabrication of new spacers for trash racks

in the gatehouse at High Falls. Ed Zimolag, of the Port Colborne nickel refinery, was awarded \$265 for his proposal of a new method of fitting ceramic coated sleeves on titanium emulsifier shafts. Ron Matheson, of the Levack mill, and Harry Boulrice, of Copper Cliff North mine, each received a \$220 suggestion award. Ron recommended using rubber Denver-cell feed pipes for mag separators on Pyrro floor, while Harry's idea was to install an I-beam on Clayton trolleys to keep the brake shoes lined up. A suggestion to install a clock-timer in the battery charging circuit in the Nickel Street pumphouse earned \$200 for Maurice Paradis, of central utilities. An award of \$180 went to Carmen Spadafore, of the Levack mill, for his idea to install a prefilter and air-dryer in the air line. Levack mill's Kevin Robinson was awarded \$130 for recommending the replacement of the controller "FC" auxiliary contacts with a single Dunco relay. Fraser Dunlop, of Stobie mine, received \$105 for his suggestion to fabricate a Koepe hoist relay tester. His recommendation to have

proper hook-up for installation of a platform in a new skip earned Herman Labelle, of Copper Cliff North mine, a \$75 award. A \$70 award went to Tom Kaczkowski, of the Copper Cliff copper refinery; the other \$70 award was shared by Silvio Brkljacich and Ed Bailey, of the Levack mill. Winners in the \$50 category were Peter Ulrich, of matte processing: Bohumil Kopp, of central utilities: Paul Bidal, transportation; Ron Wigmore, of the Iron Ore Recovery Plant; Andy Artindale, of the Copper Cliff copper refinery; Wolfgang Reiner, of Creighton mine; Blair Purvis, of Creighton mine, and Jan Szot, of Garson mine. Con Kelly, of the Copper Cliff copper refinery. and Bob Lalonde, of Copper Cliff South mine, each received \$45 awards. The following received \$40 suggestion awards: Herbert Squirell and Art Leroux, of the maintenance field force; Martti Vanttinen, of the Iron Ore Recovery Plant; Andre Dequanne, of the Levack mill: Michel Miljours, Dillon Kensley, George Jenkins and Gerry Bradley, of Copper Cliff South mine.

Logo Writer



Len Kitchener

Our logowriter this month is mines equipment engineer Len Kitchener, a native Sudburian and a graduate of Michigan Technological University.

Len joined Inco in 1967 as a mines research engineer in the mines drilling department, and in 1971 attained his current position. He now is responsible for recognizing mine operating equipment needs, introducing and judging the performance of new equipment, and offering his qualified opinions on machine design, improvements and new applications.

"I find that the greatest challenge is to help discover and implement new methods of improving performance and reducing costs," says Len, adding that "most enjoyable is the daily contact with company personnel and those of the suppliers."

Len's dad, Leonard, was chief engineer at the Copper Cliff copper refinery until he retired in 1962, after 30 years' service; however, he's since served on six assignments with the Canadian Executive Service Overseas (CESO) and now, at the age of 80, is anticipating returning to the Philippines in the New Year.

Len married the "girl next door", Susan Dunbar, daughter of the Triangle's first editor, Don. Both Len and Susan are active skiers and enjoy Northern Ontario's great out-of-doors to the fullest.