

# INCO TRIANGLE

VOLUME 29

COPPER CLIFF, ONTARIO, JANUARY, 1970

NUMBER 5

## *"And Have You Been a Good Boy ALL Year"*

Faces of Christmas at Inco — Pages 10, 11, 12





Published for all employees of The International Nickel Company of Canada Limited

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## Huge Expansion Seen in World's Nickel Industry

Free world consumption of primary nickel in 1969 was expected to reach a level of some 820 million pounds — 10 million pounds below last year's — according to preliminary estimates by The International Nickel Company of Canada, Limited.

The cause of the 10-million-pound drop in consumption from 1968, and a major factor in the inability of producers to meet industry's 1969 nickel requirements, was a four-month strike at the Ontario operations of International Nickel and a three-month strike at Falconbridge Nickel Mines Limited. Because of these strikes, free world production for the year is estimated at about 750 million pounds, down 150 million pounds from the figure originally estimated.

Despite the production losses resulting from the strikes, a number of factors kept nickel consumption above 800 million pounds for the fourth consecutive year. They include:

- (1) Japanese production (chiefly from lateritic ores from New Caledonia and Indonesia) increased from 124 million pounds to 144 million pounds.
- (2) Producers in Australia, Greece and South Africa increased their production in 1969.
- (3) Consumer inventories of nickel were reduced.
- (4) The U.S. government released 9½ million pounds of Treasury nickel for defense uses.
- (5) Nickel consumption during the first half (pre-strike period) of 1969 was higher than the first half of 1968.
- (6) In the first half of 1969, production rates at Inco and Falconbridge showed increases.

Since the resumption of production at International Nickel, deliveries of Inco nickel have increased at a rate exceeding initial expectations. During December, they were about 50 per cent of pre-strike levels; in January, they will be between 70 and 75 per cent. In April, they are expected to reach about 100 per cent. Production is expected to continue to rise thereafter.

### Consumption by Countries

In 1969, primary nickel consumption in most countries was affected by lack of supply. Consumption of primary nickel in the United States decreased. According to the

Hank Sydor (left), the J. J. Robbins representative, and Ron Brown, former Inco diamond drilling superintendent and now area superintendent of Crean Hill and Totten mines, are shown with the beautifully machined model of a raise-boring machine presented to the Company. All working parts are operable by hand.



International Nickel's long-standing policy of extensive co-operation with manufacturing firms in the development and improvement of new mining equipment was saluted by the J. J. Robbins company in the presentation at Copper Cliff of a working model of a raise-boring machine. Part of the revolution in mechanized underground mining at Inco, the raise-borer is capable of drilling circular openings up to seven feet in diameter for ventilation raises, ore passes, and service ways.

The inscribed plate on the model states: "Presented to the International Nickel Company for an outstanding contribution to the underground mining industry through co-operatively pioneering raise-boring machines with equipment manufacturers. Inco's educational exchange with other properties has encouraged wide application of this art, the effects of which have been most prominently demonstrated by Inco themselves in a highly productive program of utilization and diverse application."

preliminary figures, the U.S. will have used some 310 million pounds in 1969, compared to 340 million pounds in 1968. Consumption in the United Kingdom and Continental Europe is estimated at about 310 million pounds, compared to 1968's total of 320 million pounds. In Canada, consumption increased from 25 million pounds in 1968 to 28 million pounds in 1969. In Japan, whose industry was largely unaffected by the strikes, 1969 consumption will be on the order of 150 million pounds, about a 20 million-pound increase over 1968.

### Primary Nickel Price Increase

To sustain large capital expansion programs and to compensate for the large increase in costs of all kinds, International Nickel in late 1969 increased the price of various primary nickel products some 25 cents. Other producers also increased their prices for primary nickel products. The new prices are more in line with the realities of the world market price for nickel. It has been estimated that over one-third of all nickel consumed in the first quarter of 1969 in the free world was purchased at prices materially above the previous published price of \$1.03 per pound for electrolytic nickel. Nickel purchased on the merchant market during the strikes brought as much as \$6 to \$7 per pound, and peak prices for nickel-containing scrap were also

noted as users resorted to extreme measures to help meet their requirements.

The producer price increase will enable the mining of lower grade ores and encourage the exploration for and development of deposits that would not be economically practical under the old price.

### Huge Expansion Planned

Throughout the industry, 1969 was a year of expansion as nickel producers continued their programs to develop new facilities and enlarge existing ones to close the gap between supply and demand. On the basis of announced expansion programs, which established and potential producers are endeavoring to achieve, maximum production capability of the free world nickel industry at the end of 1971 could be 1.1 billion pounds; at the end of 1972, 1.2 billion pounds, and by 1975, 1.6 billion pounds. The following summarizes some of the more significant programs:

Inco will have spent \$1.1 billion between 1966 and 1972 to modernize its facilities and expand its annual production capacity in Canada from 450 million pounds to some 600 million pounds in 1972. Of the total cost, \$600 million will be spent in the period 1970-1972.

Falconbridge Nickel Mines Limited reports that its production is expected to rise from 71 million pounds in 1968 to 110 million

pounds by 1971. In addition, Falconbridge has announced a ferronickel project in the Dominican Republic that is expected to begin production in 1972 and reach its planned annual capacity of 60 million pounds by 1973.

Outside of Canada, the greatest expansion activity is in New Caledonia, where several companies have announced they are conducting studies leading toward the establishment of nickel-producing operations.

### New Caledonia Increases

Societe Le Nickel has announced it will increase its annual production, based on New Caledonian ores, from some 100 million pounds in 1968 to about 130 million pounds by 1971.

The Kaiser-Le Nickel facility on New Caledonia is scheduled to be completed in 1971, for the production of some 30 million pounds of nickel per year.

Japanese producers, who process nickel ores principally from New Caledonia, are expected to increase their production from 124 million pounds in 1968 to 185 million pounds by 1971.

A large gain in nickel production, aside from the increase in Inco's Canadian capacity, is expected to come from Cofimac, a French company jointly owned by French interests and International Nickel. Cofimac is currently engaged in a feasibility study with the objective of producing some 100 million pounds of nickel from New Caledonian ores in 1974.

Societe Miniere et Metallurgique  
(Continued on Page 15)

## Chairman Announces Executive Changes

The following executive changes were announced at the year's end by Henry S. Wingate, chairman and chief officer of the Company:

Louis S. Renzoni, vice-president, process research, has become vice-president, special technical projects, Inco, Canada, by action of the executive committee of the board of directors effective December 31.

Mr. Renzoni, whose office will be located in New York, will provide guidance and counsel to the senior executive management with respect to a wide range of technical matters. He will be involved in the further development of both existing and new plant facilities worldwide. He will report to A. P. Gagnebin, president.

Dr. William Steven, vice-president, process technology and product development, has become vice-president, process research and technology, Inco, Canada, by action of the executive committee. He will continue to be located in Toronto.

Dr. C. E. O'Neill has been appointed assistant vice-president, process research, Inco, Canada, by action of the executive committee of the Company.

Dr. O'Neill, whose office will be located in Toronto, will report to Dr. W. Steven, vice-president, process research and technology.

# INCO FAMILY ALBUM



One hundred acres of mixed farm land and a herd of 19 Herefords keep Rudy Szigeti, a bridge-man at the nickel refinery in Port Colborne, and his wife Esther pretty busy. Rudy came from Hungary and has been an Incoite since 1954. The only time Mrs. Szigeti was ever on a farm is when her husband bought one — and she loves the life. Their children are Katherine, 11, Margaret, 9, Joe, 6, and Ron, 2. Rudy built the picnic table with lumber from his own bush.



It was in 1948 that Bert McRae left his home town of Baddeck on picturesque Cape Breton Island to join Inco at Garson mine, where he is a sandfill man. A pleasantly wooded half acre surrounds his home in New Sudbury. With him in this picture are Heather, 20, Melanie and Ferne, 8, Madeline (Mrs. Lucien Chaput), Keith, 16, and his wife Doris. Bert often provides musical entertainment for his family when he fiddles some of the old Down-East tunes.



A pipeman at Stobie mine since 1959, Raymond Mayotte started with the Company in 1950 at Copper Cliff, then moved to Frood. He and his wife Jeannine were both born in Field, Ontario, where together with their attractive family they still spend holidays and summer week-ends at their camp on Clear Lake. The youngsters are Lise, 9, Michel, 13, Pierre, 10, Ronald, 7, and Alain, 8.



Bill Koivu and his wife Aura have made their home in Lively since 1956. With Inco since 1947, Bill transferred from the mechanical to the safety department in 1967, is a first-aid man at Creighton mine. Their family are Brenda, 13, and Brian, 16, both musical. An outdoorsman, Bill lists golf, gardening and skiing as his favorite recreations.



A paymaster at Thompson, Jack Bryson enjoys community activities; he is a past president of the Kinsmen, and now treasurer of the Community Club. He also goes in for curling, fishing and golf. He and his wife Merle moved in 1960 with their two sons, Richard, 18, and Rodney, 15, and were joined three years later by daughter Susan, now 6.



Mother is outnumbered five to one in the family of Copper Cliff mason Gilbert Perrin. She doesn't seem to mind, but the boys wish they had a sister to do the dishes. Gilbert has been an Inco man since 1951. The boys are Claude, 7, Andre, 4, Denis, 12, and Michel, 10. They live in Hammer.



## —:APPOINTMENTS:—

### ONTARIO DIVISION

J. A. Pigott, general manager, announced the following appointments:

**Dr. M. D. Sopko** as general superintendent process technology;  
**H. S. Judges**, manager, staff personnel;  
**J. R. Beaver**, assistant to the division comptroller.

G. O. Machum, assistant general manager (processing), announced the following appointments:

**F. C. Svenson**, assistant chief engineer (construction), Copper Cliff;  
**I. W. Laing**, superintendent process technology (process control), Sudbury district exclusive of copper refinery;  
**J. R. Rawling**, superintendent process technology, copper refinery.

G. R. Green, assistant general manager (mining), announced the following appointments:

**R. J. Ludgate**, superintendent of drilling;  
**F. Kelly**, underground superintendent, Creighton mine;  
**R. H. Pettit**, mine engineer, Levack mine;

**J. J. Wylie**, mine engineer, Creighton No. 5 mine;

**A. R. McLennan**, mine engineer, Garson mine;

**H. J. Soltendiek**, assistant mine engineer, Copper Cliff South mine;

**D. G. Valentine**, assistant mine engineer, Kirkwood mine.

D. A. Fraser, assistant general manager (processing), announced the appointment of:

**Graham Byers**, co-ordinator employee training.

R. O. Regimbal, superintendent of mills, announced the appointment of:

**R. Shore**, assistant superintendent, Creighton mill.

W. V. Barker, manager, nickel refinery, Port Colborne, announced the appointments of:

**L. R. Schooley**, assistant superintendent, nickel anode furnace department;

**R. A. Harrington**, assistant mechanical superintendent.

### MANITOBA DIVISION

J. McCreedy, general manager Manitoba division, announced the appointment of:

**R. A. Carlyle**, superintendent, process technology.

### DR. M. D. SOPKO

Born in Montreal, Michael Sopko received his doctorate in metallurgical engineering from McGill University in 1964, and came directly to the International Nickel research department at Copper Cliff.

He was appointed superintendent of research in 1968, and continued in charge when research received its new identity as the process technology department.

In his new position he will be functionally responsible for all process technology in the Ontario

division. He will report directly to the assistant general manager (processing) and functionally will report to the manager of process technology at Toronto.

A summer camp at Lake Penage, and skiing and curling, are his recreations. He is keenly interested in technical society activities.

### H. S. JUDGES

Born in Toronto, Hugh Judges received his degree in mining engineering from the University of Toronto in 1959 and then joined International Nickel in the efficiency department at Frood.

He went to Levack as ventilation engineer, and then in 1961 was transferred to the industrial relations department at Copper Cliff as an industrial engineer.

He was appointed an assistant manager, industrial relations, in 1968.

He was married at Toronto in 1957 to Marilyn Sargent, and has one son and one daughter.

### J. R. BEAVER

Born in Sudbury, Dick Beaver received his chartered accountant's degree in 1964 from the Canadian Institute of Chartered Accountants through Queen's University.

After public practice at Pembroke and Port Erie he joined International Nickel in the accounting department at Copper Cliff. His new appointment was made by W. A. McCadden, comptroller of the Company.

He was married in 1960 at Copper Cliff to Gail Hashey, and has three sons. Curling, bowling and golf are his recreations. He is a leader in a large non-denominational youth organization at Copper Cliff.

### F. C. SVENSON

A native of Sydney, Australia, Fred Svenson graduated from Sydney Technical College in 1951 with a degree in civil engineering.

He was associated with the heavy engineering group of Australian Consolidated Industries, and was responsible for its construction projects in the Australia Pacific Islands and New Zealand.

Coming to Canada in 1966 he was a member of a Sudbury firm of consulting engineers engaged on Inco construction projects, and joined the Company in late 1968 in the general engineering department.

His wife is the former Patricia Russell. He has three children by a previous marriage.

Golf, fishing and curling are his spare-time favorites.

### I. W. LAING

Four years' experience with an Anglo-American group of companies in the Northern Rhodesian copper belt was part of the professional background of Ian Laing when he came to Inco in 1957 as a research engineer at Copper Cliff. He was technical assistant to the consulting metallurgist at Kitwe, then metallurgist in the leach electrolytic plant at Nchanga.

Born in Edinburgh, Scotland, Ian Laing received his degree in metallurgy from Glasgow University.

Coming to Canada in 1948 he spent three years in plant development and research with Consolidated Mining and Smelting at Trail, B.C. Following his return to this country from Northern Rhodesia in 1955 he was extraction metallurgist for Consolidated Sudbury Basin Mines at Chelmsford for two years.

In 1958, the year after he joined Inco, he became assistant plant metallurgist. In 1964 he was appointed plant metallurgist.

He was married in 1952 at Kitwe to Audrey Bacon of Rossland, British Columbia, and has four children.

### J. R. RAWLING

Holder of a science doctorate in process metallurgical engineering from Massachusetts Institute of Technology, Boston,

which he received in 1960, John Rawling came to Inco's process technology group at Copper Cliff in 1969 from the Noranda research centre at Montreal, where he was head of the chemical engineering department.

A native of London, he graduated first in mining engineering at the University of Birmingham, to which he returned in 1961 to institute a degree course in minerals engineering and extractive metallurgy. He also holds a Master of Applied Science degree from the University of British Columbia.

He was married in Scotland in 1961 to Molly McCallum, who has a degree in medicine and practices part time in Lively. They have three children.

Skiing and camping are the family's favorite recreations.

### R. J. LUDGATE

Following his graduation from Queen's University in mining engineering in 1948, Bob Ludgate joined International Nickel in the Levack mine engineering department, and later transferred to the underground operations.

After three years in the "hot seat" as mines production engineer at Copper Cliff he became a divisional foreman at Garson in 1963. He was safety engineer at Frood-

Stobie, then general foreman at Murray, and returned to Levack as underground superintendent in May, 1967.

His marriage to Joan Daubney, a registered nurse, took place at Ottawa in 1949. They have three children.

Curling, golf, and the family camp at Rait Lake are his recreations.

### F. KELLY

North Bay was the birthplace of Frank Kelly, who graduated from the University of Toronto in 1951 in mining engineering following four years' service overseas in the Canadian air force.

Following experience in the mines standards and mine efficiency departments he went to Levack in 1956 as ventilation engineer, then became an underground shift boss. Transferred to Creighton in 1964 he became a general foreman at No. 3 shaft the following year. He saw service at No. 5 shaft and Murray before returning to Creighton No. 3 at the first of this year.

Married at Timmins in 1949 to Rita O'Callaghan, he has three children. The family has a summer camp on Trout Lake, North Bay.

### R. H. PETTIT

During his university vacations Ron Pettit prospected in the North West Territories, and got mining experience at the Quemont, Steep Rock, and Sullivan mines. He graduated in mining engineering at Queen's University in 1957. He is a native of Kitchener, Ontario.

Joining International Nickel in 1957 he worked in the Stobie and Garson engineering departments before transferring to Levack, where he became assistant mine engineer in 1968.

Joanne Holmes became his wife at London, Ontario, in 1957. They have three children.

He is involved in community work as chairman of the "Y" extension committee at Levack, and also enjoys skiing, badminton and golf.

### J. J. WYLIE

Jack Wylie was born at Burwash, just down Highway 69 from Sudbury, where his father was the CPR station agent.

Following war service in the RCAF as a navigator, he attended Queen's University and later took extension courses at the University of Sudbury.

He started with International Nickel in 1946 on a research department project at Coniston smelter, then worked in the metallurgical department at Copper Cliff. Trans-



H. S. Judges



J. R. Beaver



F. C. Svenson



M. D. Sopko



I. W. Laing



J. R. Rawling



R. J. Ludgate



F. Kelly



R. H. Pettit



J. J. Wylie

ferring to the mine engineering department in 1948, he later became assistant mine engineer at Garson.

His marriage to Kathleen McDonald took place at Sudbury in 1948, and they have four children. He is an enthusiastic golfer, curler, and hunter.

#### A. G. McLENNAN

A. G. "Gus" McLennan came to International Nickel in 1941 after four years on the staff of the



A. G. McLennan

Wright-Hargreaves mine at Kirkland Lake. He was with the mine engineering department at Frood until 1948,

then moved over to Garson where a year ago he became assistant mine engineer.

Born in Toronto, he studied mining engineering at McGill University, Montreal, for three years.

His marriage to Helen Barclay took place at Toronto in 1933. They have two children and four grandchildren.

The family's favorite recreation spot is a farm purchased 10 years ago in the Blue Mountain country south of Collingwood.

#### H. J. SOLTENDIEK

Since joining International Nickel as an engineer at Murray mine in June, 1960, Herman Soltendiek has worked at Frood and on the development of the Copper Cliff North mine. He was engaged at Copper Cliff on investigative projects in connection with the application of data processing to mining operations.



H. J. Soltendiek

Born in New York City, he moved with his family to Germany at an early age. Coming to Canada in 1952, he attended Loyola College in Montreal and then in 1960 graduated from McGill University with a mining engineering degree.

His marriage to Norma Medina took place in Montreal in 1961, and they have four children. His hobby is stamp collecting.

#### D. G. VALENTINE

For a year prior to coming to International Nickel in July 1969, Douglas Valentine was an instructor at Cambrian College, Sudbury. A graduate of Queen's University in 1954 with a B.Sc. degree in mining engineering, he had spent three years as manager of a gold mine at Val d'Or, Quebec, and three years as superintendent and chief engineer of the Vauze mines at Noranda. Before coming to Sudbury he was employed at the Milliken mine, Elliot Lake.



D. G. Valentine

He has been engaged in development engineering for the Copper Cliff South mine.

Vivian Barker became his wife at Lachute, P.Q., in 1955. He has two children. His recreations are curling, skiing and golf.

#### G. F. BYERS

Son of Charlie Byers, a veteran Inco smelterman who retired in 1963 after 32 years' service, Graham Byers was born in North Bay but has lived most of his life in Copper Cliff.



G. F. Byers

Following war service in the Canadian air force he graduated from an honors science course at the University of Toronto, then came to Inco in the smelter efficiency department at Copper Cliff. He was relieving general foreman at Coniston, returning to Copper Cliff in 1967 as safety supervisor of the reduction section.

Bette Maddock became his wife at Copper Cliff in 1950. They have two children.

He has been a member of the board of directors of Sudbury Memorial Hospital since 1959. Skiing and sailing on the Great Lakes are his favorite recreations.

#### R. SHORE

Born in Kimberley, British Columbia, where Consolidated Mining and Smelting has one of its major operations, Ralph Shore got his initiation in the milling game during three years' experience in the big home-town plant. He then attended the University of British Columbia, graduating in metallurgy in 1959.



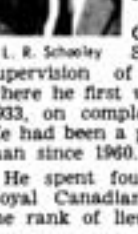
R. Shore

On graduation he joined International Nickel at the Copper Cliff mill, where he became a general foreman in 1967 and assistant to the superintendent in 1969. Included in this experience was 16 months with the safety department.

Norma Porter of Sudbury became his wife in 1960. He has two children. He built the first summer camp on Carlyle Lake, near Killarney, but now has about 40 neighbors there.

#### L. R. SCHOOLEY

A second-generation Incolte whose father, the late Harry Schooley, was one of the original employees of the nickel refinery at Port Colborne and retired in 1946 with 30 years' service, Lloyd Schooley is now being seconded in the family's Inco service by his own son, Wayne, a foreman.



L. R. Schooley

Born in Port Colborne, Lloyd Schooley returns to supervision of the department where he first worked for Inco in 1933, on completing high school. He had been a plant general foreman since 1960.

He spent four years with the Royal Canadian Navy, attaining the rank of lieutenant.

He was married to Mary Gravelle at Port Colborne in 1933, and has two sons and a daughter.

A power cruiser docked at the Port Colborne Yacht Club is his chief recreation.

### Argosy Ball Was Annual Ladies' Night Feature



Honoring a "Voyage of Exploration" that has spanned the centuries between the early ventures of sailing ships and man's conquest of the moon, the modern day explorers of the exploration department's Foot & Hanging-wall Society aptly named their annual ladies' night the Argosy Ball.

In the picture, aboard the Viking ship designed and built by Garry Michalak for the occasion, are

shown some of the 83 couples who attended the ball: Valda and Chip Duncan, Pat and Dick Agar, Dick and Jean Bruser, and Giselle and Garry Michalak; down along the waterline are Doug and Nonie Taylor, Brenda Lennie and Barry Carnovale (who won the spot dance prize), and Bunny and Carl Gourley. Organizers of the fun-filled evening included chairman Larry Arsenault, Doug Taylor, Garry Michalak and Dick Bruser.

#### R. A. HARRINGTON

Born in London, England, Roy Harrington graduated in mechanical engineering from South-West Technical College in 1955, and following two years of air force service came to Canada to join International Nickel at Port Colborne.



R. A. Harrington

Married at Toronto in 1962 to Emlyn Murphy, he has one child. Gardening and landscaping are his hobbies.

#### R. A. CARLYLE

After attending high school and Carleton College at Ottawa, Robert

A. Carlyle enrolled at Queen's University, Kingston, where he graduated in 1959 with a B.Sc. degree in metallurgical engineering.

He was employed by Noranda Mines, Limited, and Aluminum Company of Canada, before joining International Nickel in 1962 as a research engineer at Port Colborne.

He was transferred to the Manitoba division in 1967 as plant metallurgist.

His marriage to Sally Elsenbauer, a graduate nurse, took place at her home town of Bridgewater, Nova Scotia, in 1962. He has two sons.

### Bill Semchuk Wins \$1,000 Suggestion Plan Award

"I can't think of a better way to start the New Year," was the way that a very happy Bill Semchuk expressed his feelings when he received his Inco Employees Suggestion Plan award of \$1,000 from J. B. McConnell, manager of reduction plants.

A Copper Cliff smelter converter department blaster who joined the Company in 1951, Bill is also involved in the operation of the department's safety training school.

His windfall was the result of an idea involving the building of concrete retaining walls beneath the converters to facilitate easier scrap cleanup.

A single man who has netted



\$380 on two previous suggestion plan awards, Bill has no immediate plans for the use of his prize money.

Following the presentation, Bill is seen here receiving congratulations from J. B. Fieck, superintendent of smelters, and Elliott Lawson, converter department superintendent.





**IRMA BERNAUER**

Seen at her machine in the purchasing department, Flexo-writer operator Irma Bernauer's flying fingers have been working for Inco since 1967. A native of Germany, she left her home town of Augsburg in Bavaria and came to Canada in 1956. Irma and her husband Armin have a family of two boys, and enjoy nothing better than cruising the local lakes in their 14-foot runabout.

## PEOPLE YOU MAY MEET ON A *Thompson Walkabout*



**RON CROSSLEY**

It was in 1961 that Ron Crossley left Montreal for Thompson, where he joined the Company in 1965. A geological research technician, Ron is seen polishing an ore sample prior to microscopic examination. He and his wife Alberta are proud parents of a baby son. Hobbies are hunting and curling.



**STEVE GALL**

On the job in the smelter, furnace operator Steve Gall is operating the budding machine on the No. 2 electric furnace to plug a matte taphole. A native of Hungary, Steve came to Canada in 1957, settled in Snow Lake, and came to Inco in 1961. He and his wife Anne live on Eider Bay. Steve's favorite sports are bowling and soccer.



**LAWRENCE CHABOYER**

A man who worked on the construction of the Thompson smelter, and then stayed on as an Inco employee, Lawrence Chaboyer is a counterman in the warehouse. Born in Cumberland House, Saskatchewan, Lawrence was living in Prince Albert before he moved to Thompson.



**DALE REDFERN**

An Incoite since he joined the Company at Thompson in 1967, Dale Redfern works as a carbonate man in the refinery, and is seen here checking the string spacing on a nickel carbonate filter. Dale was born in Moosomin, Saskatchewan, was married to Anne Davies early last year.



**MERRALYN KIDD**

Currently in charge of all the plugs and switches on the busy Thompson plant general office switchboard, Merralyn Kidd is no newcomer to Inco. A native of Manitou, Manitoba, she came to the Company in 1962, operated the teletype machine, then in 1966 moved to the Company's employment office in Winnipeg as receptionist. Her favorite sport is rifle shooting.



**DONNA HAWES**

A young lady who took geology as a filler subject at university and liked it so much that she's currently completing a B.Sc. correspondence course on the subject, Donna Hawes joined the Inco geological department at Thompson early in 1969. She hails from Flin Flon, and her husband George, a geologist at Thompson mine, comes from Swan River. Common hobbies include bowling, fishing and, not surprisingly, rock collecting.



**CARL JENSEN**

At the controls of an eight-ton diesel locomotive on the 1600 level of Thompson mine is motorman Carl Jensen. Born in Turner Valley, Alberta, he grew up in Calgary, and joined the Company at Thompson in 1960. Carl's wife Lynda hails from Swan River, and the couple have a family of three boys. Five years with the Royal Canadian Navy in the Far East preceded Carl's choice of a mining career.

**JACK WILSON**

Jack Wilson has worked in the mill since he joined Inco in 1963. A crusher operator, he is shown in the control room in the new crushing and ore sampling building that was constructed at Thompson to handle the production from Birchtree, Soab, and Pipe mines. A native of Prince Albert, Jack is a keen golfer. He and his wife Eileen have four youngsters.

**GIBB WALL**

Photographed while making adjustments to the pressure trip mechanism for electrode controls on the No. 2 electric furnace in the smelter, Gibb Wall is a 1st class maintenance mechanic. Gibb hails from Chamberlain, Saskatchewan, and joined the Company at Thompson in 1960. He and his wife Dorothy have a family of seven. His hobbies are curling and fishing.



## New \$84 Million Mill Going Up At Copper Cliff

A new, \$80 million ore-crushing and concentrating facility is being constructed a mile north of Copper Cliff to increase Inco's milling capacity, provide maximum recovery of pyrrhotite, upgrade the metal content of smelter feed, and increase overall metal recovery.

The mill is part of a general expansion and modernization program begun by the Company in 1966.

The new Clarabelle mill will replace the obsolete receiving, crushing and grinding equipment at Copper Cliff handling ores from Inco mines in the Sudbury district that do not have their own internal milling facilities. These include the Clarabelle, Copper Cliff North, Garson, Murray and Totten mines, as well as No. 5 shaft of Creighton mine. It will also have the capacity to handle ore from the Kirkwood and Copper Cliff South mines when they come into production. Operations will begin in late 1971.

The project calls for installation of 12 crushers and 10 grinding mills, thawsheds, a tripple, coarse- and fine-ore storage bin, 528 flotation cells, a 250-foot diameter thickener, a high-grade concentrate dryer and other related and supporting equipment.

The new mill will be one of the most modern ore concentrating plants in the world, with highly sophisticated instrumentation and controls. Elaborate systems will be installed for heating, ventilating, and dust and noise abatement. Extensive use will be made of closed circuit television for monitoring critical process points. A process-oriented computer will be employed to perform alarm and limit functions and on-stream analysis. Unloading of ore cars will be done by rotary tipples similar to those used at crusher stations in the underground mines.

## Chairman Gets Preview of Pipe Mine Developments



A plexiglass model built by the planning group in the engineering department gave Inco chairman Henry S. Wingate an excellent overall preview of the projected open pit and surface plant of Pipe No. 2 mine about 20 miles southwest of Thompson. On the left in the picture is mines manager Horace Boucher, and on the right divisional general manager J. McCreedy and executive vice-president Foster Todd. Development of the pit, which will have an ultimate depth of up to 700 feet and a production schedule of 15,000 tons per day, is now in full swing.

lar to those used at crusher stations in the underground mines.

Currently, International Nickel operates four mills in the Sudbury district, at Copper Cliff, Levack, Creighton and Frood-Stobie.

Through its expansion and modernization program, Inco plans to increase its nickel production capability in Canada to over 600 million pounds annually by early 1972.

## The New Law on Drinking and Driving

### WHAT IS THE NEW LAW?

The new law on drinking and driving states that:

IF you are in charge of a motor vehicle while you have more than .08 grams of alcohol per 100 millilitres of blood, you are committing a criminal offence.

### HOW IS THE ALCOHOL MEASURED?

By a breathalyzer — a simple instrument. You breathe into a tube — the device indicates whether or not your bloodstream has an alcohol content of more than Point Zero Eight.

### WHO MAKES THE TEST?

Any peace officer, anywhere in Canada, has the right on reasonable grounds, to require you to take the breathalyzer test if you are in control of a motor vehicle.

### WHAT HAPPENS IF YOU FAIL THE TEST?

If the breathalyzer indicates more than Alcohol Point Zero Eight, you are guilty of a criminal offence and liable on conviction to a fine or imprisonment or both.



Its two-year contract for removing about 13 million cubic yards of muskeg, clay and gravel overburden for the Pipe open pit mine completed, the huge 1,200-ton dredge is now a landlubber, taking a well-earned rest. In the background is the new concrete 275-foot headframe at Pipe No. 2 shaft, where sinking will commence in August. One of the two friction-type hoists in the headframe will be the largest in Canada; skip capacity will be 30 tons.

### SUPPOSE YOU REFUSE TO TAKE THE TEST?

Refusal to take the test is also a criminal offence — and makes you liable to the same penalties as if you had failed the test.

*This law is designed for your safety — and for the protection of everyone on our roads.*

### PENALTIES

If you drive or have the care or control of a motor vehicle while the alcohol content of your blood is over .08 grams per 100 millilitres of blood, you are liable on conviction to: a fine of up to \$1,000 OR imprisonment for up to 6 months OR both.

### WHY THIS NEW LAW?

Traffic accidents killed 5,254 Canadians in 1968. At least 50% of these deaths involved alcohol.

### BE CAUTIOUS

Nobody knows exactly how much an individual can drink before

reaching .08. The quantity may vary from day to day, even from hour to hour. It depends on what you've had to eat, your size, whether you are tired and so many other factors.

A second drink may even be too much. A few drinks can make you feel confident, sure of yourself, certain that you can control a car. Is this really true?

*The law is designed to save lives — perhaps your own.*

### "MAJOR LAND-MARK"

A comment in a letter to the Triangle from T. Patching, professor of mining and metallurgy at the University of Alberta:

"The most recent issue of the Triangle contains a picture of what must be a major land-mark in Canada, the attainment of the final depth (7,137 feet) of No. 9 shaft at Creighton mine."

## A Scoring Bonanza

A bonanza that would make Phil Esposito groan with envy were the 12 scoring points young



Peter Kallio, 15, picked up in a Nickel Belt mid-gest hockey league match. Nine goals and three assists was Peter's big bag as Copper Cliff annihilated Chelmsford 13-1.

A graduate of the Copper Cliff minor hockey league organization, Peter has twin brothers playing junior hockey and another playing peewee.

All this family hockey activity has the boys' father, Arnold Kallio of the Creighton mine maintenance office, logging about 1,500 miles a month during the season. They live in Waters Township.



John Rickaby gave some expert bowling instruction to his young son Andy and (right) Scott Fyall; oblivious to the bedlam about them, Brian Wood and Vic Tremblay played a quiet game of chess; Karen Makela and a couple of her young friends were definitely in a party mood.



## Club's Annual Family Party Enjoyed by Over 400

Off in a corner the little baby pictured on the right slept blissfully through it all, but everybody else was happily involved in the flood of activities that made such a success of the annual Christmas Family Party at the Copper Cliff Club on December 29. Over 400

children and parents attended. Bowling, table tennis, billiards, and card games all got a big play. Jocelyn Akey and Maureen McGuire organized games for the little tots and there was both square and round dancing, with Mark Tugby as caller. A display of ornamental swimming in the

pool by a group of the club's senior class led by Joanne Wulff, Bonnie Buchanan, and Karen Tresize, with Jim Kuzniar as emcee, was greatly enjoyed. And a bountiful lunch was served by Mrs. Eileen Ferguson and other members of the club staff to put the finishing touch on a great party.



### WINS DESIGN AWARD

The addition to Riverside School at Thompson was one of 12 winners of national design awards, out of 183 entries, announced in the Canadian Architect Yearbook 1969.

Simplicity and flexibility of space were basic considerations in the judging. Accommodating 280 children, the Riverside School addition includes teaching space,

resource centre, gymnasium, and staff and administration facilities. One of the judges proclaimed it "a very fine plan, extraordinarily refined to suit the program and technology".

Architects for the addition were the Winnipeg firm of Walsman, Ross, Blankstein, Coop, Gillmor, Hanna, who also designed additions to the Juniper and Westwood Schools at Thompson.

### BEST IN MANITOBA

No. 737 Squadron, Thompson, was awarded the Edward Vopni trophy, presented each year to the most proficient air cadet squadron in Manitoba. It was only the fourth time this coveted distinction had been won outside of Winnipeg since 1956.

Presentation was made at the Canadian Forces Base at Rivers. On hand from Thompson were

Captain D. Henderson, commanding officer of the Thompson squadron, Charlie George and Ross Poulsen, respectively president and treasurer of the squadron's civilian sponsoring committee, and George O'Neill, president of Royal Canadian Legion, Thompson.

Whenever I hear modern music, I endeavor to find out who decomposed it.

## Copper Cliff Wins First Inco International High School Tournament



Mayor Richard Dow presents the Inco trophy to captain Ivan McFarlane of Copper Cliff High School Braves, tournament champions. At left is Cam Desormeau, tournament director, and at right Rolly Wing, Stanley Stadium manager. Picture on the right shows a piece of the torrid action in the final



game between Copper Cliff and Lockerby, with Braves' goalie, "Mouse" Trudeau, and defenceman Mike Heaphy (4) under heavy attack by Lockerby's Don Hanninen (14).

Contested by eight teams, the first Inco international high school hockey tournament at Stanley Stadium, Copper Cliff, on the New Year week-end, wound up a big winner with the host club, Copper Cliff High School Braves, defeating Lockerby in the final match for the new Inco trophy.

Entries came from Sydney Academy, Sydney, Nova Scotia; Bishop Neumann College, Buffalo, N.Y.; Sir Wilfred Laurier High School and Ridgemount High School, Ot-

tawa; Michael Power High School, Toronto, and three local schools, Lockerby Composite and Lo-Ellen Park, Sudbury, and Copper Cliff.

Gross attendance of close to 5,000 indicated the popularity of the tourney. Copper Cliff defeated Lockerby 6-1 in the final match, a much closer battle than the score would indicate. Sydney Academy took home the consolation honors. The most valuable player award went to Pat Digby.

Master-minding the ambitious

and highly successful event was Cam Desormeau, phys-ed teacher at Lockerby Composite, with executive assistance from Rolly Wing, the live-wire manager of Stanley Stadium, and a strong committee.

Referees were Charlie Akey, Bill Hannan, Dennis Hannah, Art Connor, Brian Hill, Jack Hill, Harold Healey, and Gerry Wallace.

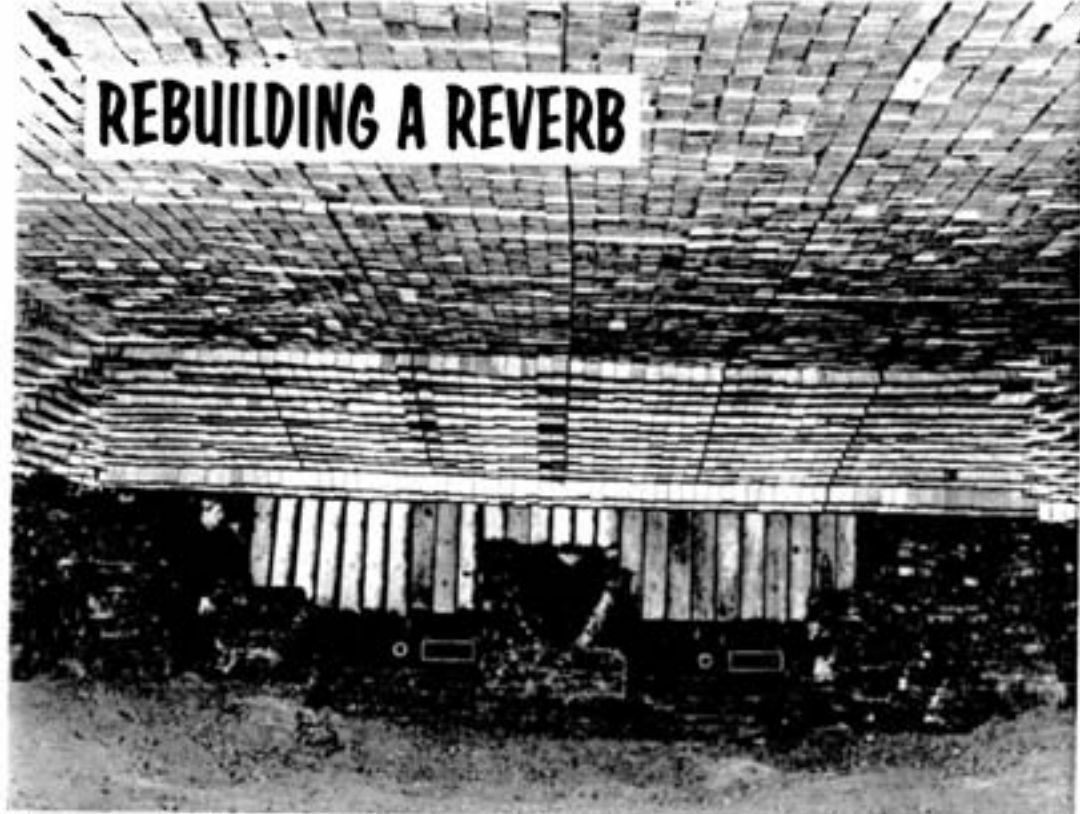
The visiting players were all billeted in private homes. An ice dance was held in their honor on the Friday night.

The Town of Copper Cliff entertained all the teams and coaches at a chicken and spaghetti banquet at the Italian Hall, at which Don Fraser, Inco assistant general manager (administration) extended the Company's greetings and good wishes. Guest speaker was Jack Porter, Laurentian University coach. Mayor Richard Dow was master of ceremonies.

Individual trophies were presented to the winning team, and participation trophies to all the other players.



# REBUILDING A REVERB



This picture, taken inside one of the seven reverberatory furnaces at the Copper Cliff smelter following a major overhaul and prior to reheating, shows the firing wall and part of the suspended roof, 100 feet long. At lower centre is the water-cooled return-slag launder. The four rectangular nozzles, two on each side of the launder, feed combustion air and pulverized coal into the furnace, and the two circular nozzles are the water-cooled oxygen lances. A natural gas burner is installed over each of the coal nozzles. When the furnace is operating, the refractory-filled "cans" hanging over the slag chute and burners can be replaced quickly and efficiently should a "hot repair" be required. At the left is mason Clark Gratton.

## 1,100 Tons of Refractory Brick Replaced in Major Furnace Overhaul

Imagine an oven — a big brick oven with inside measurements of 100 feet long by 25 feet wide and eight feet high. Stretch the imagination a little further, raise the temperature to 2,900°F, and you

have a mental picture of one of the seven reverberatory furnaces which are the heart of the reduction process at the Copper Cliff smelter.

Like any other piece of operat-

ing equipment, the furnaces need a regular overhaul, and averaged every two to three years each is shut down for major repair involving demolition and replacement of most of the refractory brick, amounting to some 1,100 tons.

Thanks to efficient design, careful planning, and round-the-clock action the overhaul, from fire-off to fire-on, takes about two weeks. In that time 55,000 chrome magnesite bricks 13 x 6 x 3 inches are laid to form the furnace walls, and 15,500 metal-clad bricks 12 or 15 inches long are hung to form the suspended roof.

The suspended roof with its sloping shoulders is constructed with "cans," so called because each 35- and 45-pound unit is comprised of two bricks enclosed in a casing of 22-gauge steel, equipped with a hanger. The cans are suspended from pipes attached to the furnace roof beams. In the event of a burn-through in a section of the roof when the furnace is in operation, as many cans as necessary can be speedily replaced from walkways above to make the repair.

Cans containing plastic refractory are used to form the closure between the side walls and the roof shoulders. Fifty of these king-size units, each weighing 600 pounds and measuring 42 x 18 x 8 inches, are used on each side of the furnace. At the firing end of the furnace these special cans also form the wall over the burners and the launder through which slag is returned from the converters. Here again they greatly simplify the job of making a repair in the wall while the furnace is in operation.

There is a fair amount of heat remaining in the furnace bed during an overhaul, and maintenance foreman Andy Moxam and his masons are well used to having warm feet and moist brows during the construction period.

After the last can is hung and the roof has been sprayed with a thin sealing grout, the furnace is ready for fire. The reheating process to bring the unit up to operating temperature is done carefully over a period of four or five days to dry out the mortar, minimize thermal shock to the refractory, and allow expansion stresses to equalize. Corrugated paper spacers, placed vertically in carefully calculated locations between bricks during construction, allow for the expansion which otherwise would result in a growth of more than a foot in the length of the furnace.

So, completely rejuvenated, the furnace gets back to its daily job of smelting 1,500 tons of roasted nickel concentrates plus sand flux, during which it gulps over 200 tons of coal — or its equivalent when mixed with natural gas — and inhales about 40 million cubic feet of oxygen-enriched air.



### Varying Hanger Lengths Form Shoulders

The suspended roof of the reverb furnace is shouldered over the firing wall and along the full length of the furnace on both sides. This view of the partially completed overhaul shows how the slope of the shoulders is formed by varying lengths of steel rod hangers from which the cans of brick are suspended. On the right can be seen two of the 44 six-inch Fahrlloy-tipped feed pipes through which calcine from the roasters is discharged into the furnace. The mason shown here on the rebuilding job, with a pair of the 15 inch 45-pound cans of bricks enclosed in steel casings, is Angelo Facchin.



### Suspending Cans

Taken from above the reverb furnace during an overhaul, this picture shows the steel beam supports and hangers from which the suspended roof is hung. Seen positioning some of the 15,500 "canned" bricks that form the roof are masons Adam Finnigan and Cy Young. After installation, the roof is sprayed with a light mortar mix to form a tightly sealed unit and prevent free air infiltration.



## Faces of





## Christmas at Inco





# Faces of Christmas at Inco

(Continued from Page 11)



## Santa Welcomed By Thousands of Inco Youngsters

### COPPER CLIFF

At the largest Christmas party in the Sudbury area, with 3,300 youngsters and more than 1,000 parents in attendance at the one time, the Copper Cliff Athletic Association hosted children of employees working at the smelter, iron ore plant, and Copper Cliff police department.

Gathered in the Sudbury Arena, the partygoers were treated to an hour and a half live show ably emceed by Norm McGilvary which included carols by Espanola's talented young songbird Maria Kozachanko, with piano accompaniment by her sister Karen, the hilarious antics of skating clown Alan McPherson, songs by Lorena Trusk and guitarist Bill Kokesh, and the twirling of Marg Kennedy's blazing batons.

The show climaxed with Santa Claus Jack Latreille, who abandoned his sleigh and trusty team for the ice-making machine on which he circled the rink to greet and shake hands with his many excited admirers.

Each departing youngster was presented with a Christmas stocking filled with candy and novelties.

CCAA president Jim Kuznair, party chairman John Taylor, and committee members Roy Maud and Ken Fyall are to be congratulated for organizing a highly successful affair; they were grateful for the willing assistance of many helpers from the plant, pay office, and safety and personnel departments.

### PORT COLBORNE

Over 850 public and pre-school children of Port Colborne nickel refinery employees packed the Inco Recreation Hall Saturday morning, December 20. Their singing of Christmas carols, led by Larry Roach and accompanied by Reg. Steeves on piano, was a joy to hear and a reminder of what Christmas really was.

Their bright, shining eyes beamed with fascination as sighs and gasps of wonderment pierced the absolute silence that prevailed during the performance by Hugo the Magician.

And then pandemonium broke loose at the first, faint, distant sounds of sleigh bells heralding Santa's approach. Jolly Saint Nick's delegate, Wes Pierce, and helpers Bob Duke, Andy Svends, Lovell Puttick, Ed Mitchell, Doug Lampman, Jack Burd, Gord Needham, Bob Caldwell, Jack Rodgers, John Bernard, Don Horne, Zoltan Bendas, Art Bellinger, Roy McIntyre, Elmer Somers, Chuck Ott and Jim Walter appeared a little weary after the last child was shown out of the hall, clutching a big bag of candy. They knew and were pleased that this edition of the Children's Christmas Party was another success.

### WILLISVILLE

A hot turkey dinner was served at the Willisville Community Hall for the 60 children and 40 adults who got together at the Christmas

party sponsored by the Willisville Recreation Committee for Lawson Quarry families, as well as the Crean Hill families now living there.

Chairman Gordon Matheson and a group of Willisville ladies made the arrangements for the affair, and Lloyd Spry and Donnie MacDonald provided the tree under which Santa Gerry Brownlee held court and distributed gifts to the children.

### LEVACK

There was real snow on the tall, gaily lit tree that welcomed the small fry and their parents to the Levack Athletic Association Christmas tree party.

Standing on the lawn in front of the Levack Employees Club, the stately spruce greeted the arrival of some 2,700 excited young Santa seekers and many parents who attended the afternoon and evening sessions.

Movie cartoons were shown, roof-raising sing-songs were led by Rita Zubac at the piano, and gifts and candy were distributed.

Red-suited Sam Williams was on hand to accept requests, confessions, and promises. His many helpers included chief organizer Harvey Nadeau, Levack AA president Rollie Nadeau, Johnny Bryant, Ron Matte, Ken Taylor, Oliver Rossi, Gerry Dinell, Ron Corelli, Ron Storey, Eli Maki and Ron Smith.

Some 60 surplus gifts and many bags of candy were donated to the Valley School for Retarded Children.

### LIVELY

The wailing siren of the town fire truck announced the arrival of Santa Claus in Lively, and brought kiddies running to the windows as the jolly gent (iron ore plant personnel officer Pat Scott) toured the town in a minor blizzard.

Delivered to the Lively High School with his Ho! Ho! Ho! a little subdued by the chilling experience his whiskers glittering with snow, Our Hero was propped beneath the tree provided by town foreman Bill Fortin and his crew, and was thawing nicely by the time the first of a steady stream of 750 little visitors appeared to receive their gifts and candy.

Members of the Lively Athletic Association, which staged the smoothly organized party, were on hand to assist Santa, including president Alan Este, vice-president Jack Cooper, secretary John Paterson, treasurer Mason Logan, along with Gary Poy, Colette Este, John Taylor, Harold Haas and chief Christmas tree decorator Eric Penton.

### COPPER REFINERY

A kiddie-count at the party for children of copper refinery employees revealed that a minor population explosion has taken place during the 12 months since last Christmas.

With their total up from 700 to 800, the youngsters made an early evening invasion of the Inco Club in Sudbury, and were individually greeted by those two long-time experts at the gift and candy-giving game, refinery pensioners Santa Jack Latreille and his helper George Purchner.

Parents were treated to coffee and doughnuts, and enjoyed a movie cartoon show set up and run

## First 1970 Baby Won Two Contests

"It was a pretty fast ride," admitted Gerry Vachon, father of Sudbury's first 1970 baby, quietly describing the hectic 14 minutes and 18 miles he drove between his home near Chelmsford to St. Joseph's Hospital in Sudbury on New Year's Eve.

He delivered his wife to the nurses there at 12:05 a.m., and their 10th child, chubby little eight-pound seven-ounce son Rejean Christophe, was born with a lusty yell at 1:53 a.m. The attending physician was Dr. Edgar Leclair of Chelmsford.

Wise far beyond his age, young Rejean timed his debut to win not only the Sudbury Star Stork Derby, but also the Chelmsford Baby Derby event, both laden with prizes, a feat that gladdened the hearts of his parents and his five young brothers and four sisters, who range in age from Carmen, 17, to Robert, 5.

An Incolite since 1948, Gerry is a Cottrell operator at Copper Cliff smelter. He and his family live on 70 acres in Balfour Township, four miles north of Chelmsford, where together with the duties involved in raising a family of nine, his wife Louise also finds time to operate the Vachon confectionery store which is part of



Double derby winner Rejean with his proud parents, Gerry and Louise Vachon.

the home that Gerry has been building for the last four years.

One of a family of six, Gerry is the son of 80-year-old Company pensioner Fred Vachon, who retired from the Copper Cliff reverber building in 1959 after 15 years of service. Two of Gerry's brothers, Joe and Pete, both work as roaster department conveyor operators at Copper Cliff.

A member of a pioneer Chelmsford family, Louise Vachon is accustomed to the hustle and bustle of a large brood after growing up as the oldest of a family of 15.

Gerry and Louise are agreed, five boys and five girls make a well-balanced family, "and 10 is a good round number."

They have no plans for a repeat performance.

by club steward Vern Tupling and his assistant Val O'Neill.

Athletic Association president Bob Sandberg and secretary Bud Eies were ably aided in organizing and running the very successful get-together by such refinery stalwarts as Wayne Wilson, Bill Brown, Bill McBain, Howard Caldwell, Jim Bryson, Jim Tosto, and many others too numerous to mention.

### CONISTON

Grease-painted clowns — no less than seven of them — were turned loose at the Coniston Athletic Association party at the Club Allegri.

Arriving at the Club after a hectic tour of the town on seven snowmobiles, the funny men lost no time in raising mayhem to the delight of the 400 assembled youngsters.

Hector Bibeau's good-natured submission of a raw egg and whipped cream scalp treatment topped the performance. Concealed by the crazy circus clothes were Ray Bidel, Gino Gobbo, George Evershed, Harley Gagnon, Rick Howatt, Clarence Fox, and Charlie Veno.

Master of ceremonies Ugo Comacchio led some wildly enthusiastic sing-songs, and the ear-ringing volume reached a peak in the rendition of Jingle Bells, encouraging sack-carrying Santa Tibby Caverson to saunter forth for a gift and candy giving session.

Roy Snitch, Reg MacNeil and Tom Crowley headed up the committee in charge, and were ably assisted by a loyal band of helpers.

### MURRAY MINE

The honor of being the most-

visited Christmas tree in the Sudbury area must surely have gone to the elegantly dressed spruce that stood in the auditorium of the Inco Employees Club in Sudbury.

Having three different Old Nicks hold court beneath its branches at succeeding Christmas parties didn't cause it to turn a needle, and it stood proudly until the last of its more than 5,000 young visitors came under its spell.

Some 800 of those youngsters were there to attend the Murray Mine Athletic Association party, which also hosted the children of employees at the Copper Cliff North mine and the two Clarabelle open pits.

The presiding Santa for that occasion was tireless and smoothly bilingual Maurice Lavole, who appeared to be getting just as much fun out of the occasion as his many young admirers.

The numerous helpers who distributed gaily wrapped gifts included Ed Udeschini, Bill Lang, Doug Dinnes, Stan Dobson, Pat Storie, Walter and Anni Sokolowski, Pete Ladyk, and many other willing hands.

Association president Clarence Weist and secretary-treasurer Tony Basso engineered the enjoyable party, during which Ingrid Dobson and Emma Byrnes were busy behind the kitchen counter serving tasty refreshments to a host of parents.

### FROOD-STORIE

Countless gallons of coffee and tea, and no less than 48 square feet of iced cake, went to fortify

(Continued on Page 14)





IN THE SAFETY DEPARTMENT

## Yuletide Spirit Prevails

The Yuletide spirit took over in the general offices at Copper Cliff as usual on the break-off of business on the day before Christmas, and informal receptions were quickly arranged in several of the departments, at which coffee and cakes were served. Staff members moved from one group to another, happily exchanging greetings and good wishes. Three of these pleasant gatherings are shown in the accompanying photographs.

A jolly Santa, in the person of Copper Cliff pensioner Alf Mash, got a tumultuous reception when he appeared in the accounts payable section, and he was soon in demand by other groups. His visit was arranged by his daughter, Mrs. Edna Walberg.

Among the visitors to the mines department coffee party were new pensioners Harry Smith, ex-Clarabelle, Earl Mumford, ex-Creighton, and Archie Massey, ex-Creighton, who were given a warm reception.

As is their thoughtful annual custom, members of the data processing department each brought gifts, toys or cash toward hampers which were made up for delivery on Christmas Eve to two needy families in the Sudbury district.



MINES DEPARTMENT HAD SEVERAL GUESTS



SANTA VISITS ACCOUNTS PAYABLE

## Santa Welcomed By Thousands

(Continued from Page 13)

the parents who accompanied the more than 4,000 youngsters who enjoyed the Frood-Stobie Mine Athletic Association Christmas tree celebration.

The five-hour party, held at the Inco Employees Club in Sudbury, included the distribution of gifts, candy and fruit to the kiddies, who also enjoyed a showing of colored movie cartoons.

Santa's able deputy for the occasion was Dave Gilbert, who calmly withstood the siege, and patiently turned a kindly ear to all who wished to be heard.

The large committee, which made a commendable success of the mammoth undertaking, was chaired by industrious Eldred Dickie, and included his wife Grace and her staff of ladies who organized the buying of the gifts. Also on hand were pensioners Bob Brown and Bob Christie, and mine personnel Ron St. George, Norm Whissell, Garry Chioquen, Ken Marion, Wes Johnston, Andy Rayne, Bob Dickie, and many more whose help was greatly appreciated.

### CREIGHTON MINE

A wide range of entertainment was lined up for the 450 children who filled the auditorium of the Employees Club for the Creighton Mine Athletic Association Christmas tree party.

Forty members of the St. Michael's Church all-boy choir, under the leadership of their director Ermenio Cozzarini, sang a happy selection of Christmas songs. The musical group of Martin Maloney, Barry Holmes, Miles McKay and Michael Glebe sang to the accompaniment of their guitars and drums, and were followed by a movie show featuring the slapstick comedy of the Three Stooges and color cartoons.

A group of eight local high school students volunteered their services to bag the candy, fruit and nuts distributed to the youngsters as they left the building after a visit with jovial Ed Cayen, who had replaced his regular suit of policeman blue for one of scarlet with white trimmings.

On hand to give away the goodies and keep the party moving along at a brisk pace were Association chairman Bruce King, party committee chairman Munro Smith, Bill Dumencu, and Saul Sherbanuk. The professional touch at the movie projector was provided by Don Shannon.

### GARSON

A most enjoyable time was had by all at the Garson Mine Athletic Association party, when the Employees Club was home base for some 900 Santa seekers on the afternoon of the Saturday before Christmas.

Resplendent in his white whiskers and tasseled cap, Glynn Clarke was the man of the hour as he greeted the excited horde who were treated to potato chips, a candy cane, a four-feature movie show, and then departed for home clutching a gaily wrapped gift.

Association president Tom Scanlon and party chairman Milt Jowsey arranged the details for the happy event, and George Quilty came through with the party tree which received a very artistic trimming from Bruno Castellani.

Santa's many helpers included Harvey Bangle, Sam Pataran, Ray Joly, Ollie Matson, Merl Currie, Harold Strutt, Almo Maki, Floyd Laking, and projector operator Ron Watt.

At the beauty parlor the girls were kidding Doris.

Hazel: I certainly can't see what you see in Jim. He doesn't dance, he doesn't swim, he doesn't go in for sports. What's he interested in, anyhow?

Doris: Me.

## 85 Enjoyed Annual Christmas Dinner at Caswell



At the second annual Christmas party of the development section, process technology department, 85 sat down to dinner at the Caswell Motor Inn and afterwards danced away the balance of a most enjoyable evening to the melodious music of the Stardusters. Seated around one of the tables were: Art Kenzie, Jim and Betty Hewetson, Pug and Reta Hickey, and Janet and Lawrence Muchizuki. Brian Lyons and his committee arranged the party. John and Elizabeth Patterson, and Connie and Rose Schitka, were the lucky winners of some extra Christmas cheer in the door prize draw.



## Two Christmases in the Life of Clarence Spencer



Back in 1955 the Triangle had a picture of Clarence Spencer of the Creighton mill, keeping a lonely vigil on Christmas Eve as he patrolled the pipe lines between Creighton and Copper Cliff. But Christmas morning 1969 was a different story — he had lots of company when general manager J. A. Pigott, assistant general manager (mining) G. R. Green, and chief surgeon Dr. B. F. Hazlewood led the group making the traditional rounds at Copper Cliff Hospital to extend greetings to the patients. Making a fast recovery from a hernia operation, Clarence was quite able to sit up and take a dram of cheer in honor of the occasion. From the left in the above picture are: Gordon Chapman, orderly, Dr. J. H. L. Jones, Ann Gower, RN, Beverley Card, RNA, Rochanne Mistry, RN, C. E. Varney, medical department assistant, Mr. Green, Mr. Spencer, Mr. Pigott, Dr. Hazlewood, Eileen Tobin, superintendent of nurses, Linda Dunn, RN, Dr. J. W. Sturtridge, Dr. Paul Martin.

## HIGHWAY SAFETY

Every fleet, every individual driver, has some sort of safety program, but the effective program is one that places emphasis on, and trains for, safety not periodically but every day of the year.

Safe practices may be developed in many ways. Your personal habits are a key. The tendency to anger at over-aggressive drivers is a number one hazard and should be avoided at all costs. Teaching the driver to be more tolerant of the inconsiderate practices of other drivers will help. Courtesy is always a good practice. It works wonders in keeping the driver out of trouble. Training with constant daily reminders on driving courtesy helps keep one aware of its safety powers.

### VISUAL ALERTNESS

In addition to improving the driver's mental attitude, daily training can improve his physical powers for safe driving as well. The ability to see what one is looking at or alertness is important to driving safety. Check yourself on the principles of better seeing every time you drive. They will soon become second nature in your driving. Here are five seeing jobs that every driver should fulfill:

1. Keep your vision high in steering. Look for problems in front of the car ahead of you.
2. Get the big picture. Don't get trapped into watching what's immediately ahead of you. Observe what's happening in oncoming traffic at the sides and behind.
3. Keep your eyes moving. Don't become hypnotized by the road ahead.
4. Make sure others see you. Don't assume that a pedestrian crossing the street or a driver pulling out from a curb will see you coming.
5. Leave yourself an out —

ample space to stop or swerve.

These may seem like obvious rules, but it can be surprising how many times a conscious check can catch the driver being sloppy about his practice. Every driver thinks he sees correctly in traffic. When he makes errors in seeing, he is never aware of the fact at the moment. So he is apt to blame his near-misses or accidents on bad luck or the errors of other people.

Even with good seeing habits, we can get into trouble if our mental habits are disturbed. For we look with our eyes, but we see with our mind. Unless both our normal seeing habits and mental discipline are maintained, we cannot avoid errors. Every driver has a "hurry habit" to some extent and wants to find a way around anything that delays him in traffic. This fact alone explains many driving errors resulting in accidents.

### DAILY ROUTINE

Everyday training and consciousness of safety practices in mental attitudes and seeing habits will let you "read" the traffic picture in one fast glance and make the correct decision with rapid accuracy. No matter how insignificant mental attitude and seeing habits may seem, be sure to include these two classifications of personal training in your safety campaign.

Most important, do it daily. Safety is a full-time job. You can't think about it or emphasize it today and then forget it for six months. Keep reminders in view. Read safety bulletins whenever possible. Practice good seeing habits while driving and, most important, maintain a tolerant mental attitude for fellow drivers.

## Huge Expansion Seen

(Continued from Page 3)

de Penarroya S.A. of France, in partnership with Amax, announced preliminary agreement, if approval is obtained from the French Government, for a new project in New Caledonia that could add another 100 million pounds of nickel to the world supply by 1975.

Also, Patino Mining Corporation, in partnership with Societe Le Nickel, has announced their intention, subject to French Government approval, to undertake a project on New Caledonia to produce some 80 million pounds of nickel and ferronickel in 1976.

### Activity in Australia

In Australia, Western Mining Corporation Limited has announced that its program to triple production to 60 million pounds annually is ahead of schedule, and will be completed in 1970. In the Philippines, Marinduque Mining and Industrial Corporation has announced it will bring into commercial production in 1972 a new plant to produce 75 million pounds of nickel annually. In Africa, principally in Rhodesia and Botswana, published plans call for nickel production on the order of 40 million pounds annually by 1972.

Assuming that all of these expansion projects materialize as planned, they could add about 800 million pounds of nickel annually to the free world's supply by the end of 1978, giving a total of over 1.7 billion pounds annually.

The figures do not include Inco's Guatemalan project. As soon as final arrangements are concluded with the Guatemalan Government, Inco will immediately start construction of mining and processing facilities in Guatemala that will produce at least 60 million pounds of nickel annually by the mid-1970's.

In addition to the above announced projects, there is much potential for new nickel production in the Southwest Pacific

area. In Western Australia, intensive exploration and development studies are being carried out by International Nickel and other companies, and Inco is conducting extensive exploration activities on the Indonesian island of Sulawesi.

Inco continues drilling on copper-nickel mining leases it holds in Minnesota in the United States.

### Nickel Consumption by Application

Consumption of primary nickel by field of application in 1969 followed the traditional pattern with one exception: high-nickel alloys and nickel plating exchanged places, and now rank second and third, with 18 and 14 per cent respectively. High-nickel alloys and stainless steel were the only two fields of application to show an increase in nickel consumption over the previous year.

The reversal of positions between nickel plating and high-nickel alloys, which resulted this year, sooner than expected, was due in part to the nickel shortage and the use of U.S. defense set-aside nickel for jet aircraft and other nickel-base applications. However, the continuing growth of high-nickel alloys for non-military applications is the underlying long-range factor. More airliners of larger capacity and the increasing use of the gas turbine engine as a source of power are expected to result in the high-nickel alloy category representing an ever-growing percentage of nickel consumption, according to Inco market development specialists.

The increase in consumption of nickel for stainless steel in 1969, which again topped the list at 39%, is due to a high output of stainless steel in the United States during the first half of the year, and expanded production by Europe and Japan.

The rich may not live longer, but it certainly seems like it to their poor relations.

# Retired on Inco Pension

## EARL GILCHRIST

Known equally well as mine engineer at Levack, the position he held for 26 of his nearly 35 Inco years, and as the efficient mayor of that busy community 1945 and 1964, Earl Gilchrist has retired on early service pension.

Born and educated in Toronto, where he graduated from the University of Toronto as a mining engineer in 1931, Earl joined the Company in 1935 at Frood, was appointed mine engineer at Levack in 1942, became area engineer in 1954, and moved to Copper Cliff as mines planning engineer in charge of water supply and control in 1968.

During his time at Levack, Earl saw close to 33 million tons of good nickel-copper ore hoisted to surface, and engineered the workings as they dropped from the 1400 level to the present 3600 level.

At Toronto in 1936 Earl was married to Marjorie Weeks, and they have a family of two, a son and a daughter.

Slowed down by a heart attack in 1964, Earl is looking forward to a retirement that will allow him to fish the cool clear northern Canadian waters in the summers, and seek the sunny south for winter relaxation.

## PAUL ZAMISKAS

A skiptender for the last 15 of the 33 years he has been with Inco at Creighton mine, Paul Zamiskas has retired on special early service pension.

Paul left his post office job in Kolackov, Czechoslovakia, for Can-

ada in 1930, spent six years working at various jobs across his adopted country, and came to the



Mr. and Mrs. Zamiskas

Company in 1936. There was no name change for Louise Zamiskas when she married Paul in Sudbury in 1939. "She came from my village," explained Paul. "There are lots of Zamiskas there." Their family of two have presented them with four grandchildren.

## ED DESABRAIS

A timberman for 30 of his nearly 39 years with Inco at Frood mine, Ed Desabrais has joined the ranks of Company disability pensioners.



Mr. and Mrs. Desabrais

He was born in Worthington, and mining has been his life since he started on a diamond drilling rig at Shiningtree at age 15. He came to Frood in 1930.

A Whitefish girl, Blanche St. Louis became Ed's bride in 1931, and one of their family of two, Art, is a welder at Copper Cliff.

Visiting five grandchildren in Sudbury and Ottawa, and relatives in northern Quebec, will be highlights of what it is hoped will be many years of pleasant relaxation for Ed and his wife.

## W. G. PILLING

"Garry" Pilling came to Port Colborne and the nickel refinery from Souris, Manitoba in May of 1937. He and Mrs. Pilling, the former Margaret Evelyn Rose,



Mr. and Mrs. Pilling

were married in Souris in 1928, where they farmed for 9 years prior to coming east.

Mr. Pilling was appointed a plant security officer in 1941 and remained with the security force until his recent early retirement.

Future plans are indefinite for the Pillings. Garry is an ardent hunter, and has been going back each year to shoot ducks, geese and grouse in Manitoba. He is also interested in woodworking and has a well-equipped shop in his basement.

## JACK BRADY

An Incolite since he joined the Company at the Copper Cliff smelter in 1940, a maintenance electrician at the Iron Ore Plant since it went into operation in 1955, Jack Brady has retired on service pension after 29 years of electrical construction.



Jack Brady

A native of Marmora, near Peterborough, Jack married Helen Lynch at Copper Cliff in 1940. Their family of two still represent them at Inco. Son Jim is a technologist with Creighton mine's engineering department, and daughter Maureen is the wife of Frood shift boss Bruce Fraser. One granddaughter completes the family.

They plan to move to Southern Ontario.

## KEN LOYST

Having returned to his home town of Arden, Ontario, Ken Loyst is enjoying the leisure days of retirement after working for Inco for 27 years. A disability pensioner, Ken's time with the Company was spent in the converter building at Copper Cliff where he punched tuyeres and operated the aisle cranes before becoming a skimmer, the job he held at retirement.

Hazel Throop became Ken's wife in 1938. Their family of four sons live in Sudbury, Toronto and Germany.

## ALF PHILIPPE

Alf Philippe helped to build the Frood No. 3 shaft headframe in 1928 and came back to join the Company there in 1936. He became a shaft inspector leader in 1949.



Mr. and Mrs. Philippe

Born in Nouvelle, on Quebec's Baie des Chaleurs, Alf married Stella Henry in Montreal in 1936. Of their family of four, two are with Inco at Stobie mine — Vic is a welder and Paul a garage mechanic. They have six grandchildren.

With 33 Inco years behind him, Alf proudly boasts that he can't remember being sick during his working life.

## RALPH GRANT

Well known around the Copper Cliff changehouses and at the research laboratory, where he has operated as a maintenance me-



Mr. and Mrs. Grant

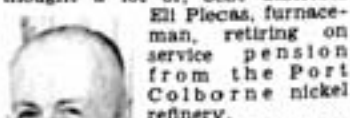
chanic for the last seven years, Ralph Grant has retired on disability pension after 22 years with Inco.

Ralph joined the Company for the first time at Frood in 1934, left in 1939, saw army service in England and France, returned to Inco at Copper Cliff in 1945.

A Sudbury native, Ralph married a St. Charles girl, Ruth Burnham, in 1946, and the couple have been blessed with a family of three. He plans to spend summers at his Grassy Lake camp near River Valley, and will tinker with things mechanical for winter occupation.

## ELI PLEKAS

A man who thought a lot of Inco, and a man whom Inco thought a lot of, best describes Eli Plekas, furnace-



Eli Plekas

man, retiring on service pension from the Port Colborne nickel refinery. Eli was born in 1905 in Divoselo, Gospich, Yugoslavia, and came to Canada in 1926. He did railroad work in Noranda, helped build the Peace Bridge at the international boundary at Port Erie-Buffalo, and worked on the Welland Canal prior to his first association with Inco in 1928.

The goldfields of northern Quebec caught Eli's fancy for nine years but he returned to the nickel

## Earl Gilchrist Honored by Mining Colleagues



A handsome table lamp with a base of polished Levack mine ore was a retirement gift to retiring Earl Gilchrist, who was mine engineer at Levack for 26 years, from his colleagues in the mines department. In this group at the presentation are: back row, Art Silver, Ted Goddard, Ralph Buntin (Coleman); front, Walter Dydyk, chief mines engineer Bob Hall, Raymond Baucelin (Crean Hill), Al Ryter (Levack), Earl Gilchrist, Jack O'Shaughnessy, and assistant general manager (mining) Gar Green.



## Rousing Send-Off Given Popular Bob Brown



At the big retirement dinner in his honor, Bob Brown is shown (centre) with assistant general manager (mining) G. R. Green, general manager J. A. Pigott, Crean Hill shift boss Ilmar Manninen and assistant superintendent Keith Henderson. Behind them is one of the gifts presented to Bob, a painting of the Crean Hill plant by salvage man Jake Shigwadjo. In foreground is the mounted beaver he received.

Four of the six members of the graduating class in mining engineering at Nova Scotia Technical College in 1936 joined International Nickel at Copper Cliff. With the retirement on early service pension of Bob Brown, only one of the quartet remains, Archie Frame, technical assistant to the general superintendent of process technology.

A big, colorful man of great good humor, Bob Brown is almost as famed in the Sudbury area for his Finnish dialect stories as for his solid competence as a leader in mining.

Born at Palmouth, in Hants County, Nova Scotia, he attended Mount Allison University before going on to Nova Scotia Tech. Starting at the bottom of the ladder as a shoveller at Creighton mine, he was a shift boss a year later, became a divisional foreman in 1942, and a general foreman in 1950. He saw service as a member of top supervision at Murray,

refinery in 1944, having also worked for a time at Copper Cliff. His work experience has been in the leaching, calcining, sintering and anode departments.

Eli enjoys cars and is noted for having the cleanest automobile in town. Many of his friends reside further north in the peninsula and he thinks he will be moving to St. Catharines.

### ARCHIE GRASSAM

A cherished highlight of Archie "Perch" Grassam's 35-year career with Inco was the occasion of the



Mr. and Mrs. Grassam

visit to Frood mine in 1939 of Her Majesty Queen Elizabeth and Prince Philip. Perch was cage-

Creighton, Crean Hill and Stobie mines, eventually winding up his career as area superintendent of Crean Hill and Totten mines.

His marriage to Bernice Dunn of Bonfield, Ontario, took place in 1943. One of their two daughters, Judith, holds a degree in medicine and is on the staff of Montreal General Hospital; the other, Mary, is attending business college in Nova Scotia.

Mr. and Mrs. Brown have modernized his old parental home by the ocean in Nova Scotia and have taken up residence there. Occupying a position of honor is a beautifully mounted beaver, one of the gifts presented to Bob at his retirement party as a souvenir of his continuing war with that wily and industrious rodent in maintaining water control in the Crean Hill area. Bob won the upper hand, but the mounted beaver nonchalantly holds a stick of his blasting powder between its teeth.

tender when the Royal party visited the 1,000-foot level of the mine.

A star in earlier years with the Frood soccer team, Perch later served for several seasons as referee-in-chief of the Sudbury & District Football Association, an expert and highly respected official.

A native of Falkirk, Scotland, Perch came to Canada in 1928, and joined Inco at Frood in 1934. Now on special early service pension, he worked as skip and cage-tender at 3 shaft for the last 10 years.

Hanna Munro and "Perch" exchanged marriage vows in 1934. One of their family of three, Margaret, is the wife of Creighton maintenance electrician Jack Kosmerly. Three grandchildren complete the family.

### ALEX SIGOUIN

Now a service pensioner, Alex Sigouin rolled up his 36 Inco years at Creighton mine, where for the last 10 he worked as a construction leader.

Born in New Glasgow, Quebec, he came to Sudbury as a prospector in 1926, and joined Inco in 1933. He was married to Isabel

Goudreault in 1930, and they had a family of six including Maurice, a Frood rigger, and Alice, the wife of Copper Cliff welder Don Campbell. Mrs. Sigouin died in 1962.

His marriage to Mrs. Cecile Brousseau took place in 1966, adding



Mr. and Mrs. Sigouin

six more to his family. Daughter Idola is the wife of Levack pipe-man Jean Paul Brousseau, Oveline is married to Levack powderman Jean Frappier, and Diane is married to Wyman MacKinnon who works at the Coniston smelter. Grandchildren already on the scene total 16.

### LOUIS MARTINE

"I was born in Sudbury but came to Port Colborne with my parents as an infant," said Louis Martine, a disability pensioner of the leaching and calcining department at Port Colborne refinery, with 34 years' service.

He and his neighborhood sweetheart, Carmela Fraracci, were married on May 15, 1937. They



Mr. and Mrs. Martine

have three daughters and four grandchildren.

Louis is an ardent fan and supporter of local ball and hockey teams. He is also reputed to be a vigorous armchair coach of the NHL Boston Bruins.

The Martines presently have in mind an extended European tour this coming summer.

### KOSTI ETTALA

For the last 17 of his 29 years with Inco, Kosti Ettala worked as an ore pass tender at Murray mine.

Now a service pensioner, Kosti came to Canada from Finland in 1927, made his first connection with the Company in 1936 as a carpenter at the Port Colborne refinery, and started at Creighton in 1942, the year after

his marriage to Aili Laaxo. They (Continued on Page 18)

## Maintenance Planner Bill Bell Farewelled



Displaying the gold pocket watch that was presented to him together with two pieces of luggage, retiring Crean Hill maintenance planner Bill Bell is seen seated between Mel Young, Ontario division manager of mines, and general superintendent of maintenance Al Cameron. On the right is Crean Hill and Totten mines area superintendent Bob Brown, since retired, and standing behind him superintendent Bill Tilton of Lawson Quarry, where Bill Bell worked prior to his move to Crean Hill in 1966.

Chief maintenance planner at Crean Hill mine for the last three years, Bill Bell's retirement on early service pension ends a 23-year Inco career that started in Ormiston, Saskatchewan, in 1937 as a shift boss with the Horseshoe Lake Mining Company, which produced sodium sulphate for the Copper Cliff smelter.

Born in Yellow Grass, Saskatchewan, Bill moved to the mechanical department at Frood open pit in 1942. He became mechanical foreman at Levack in 1943, master mechanic there in 1949, and had the same job at Lawson Quarry in 1958 and Crean Hill in 1966.

A man with a great knack for quickly resolving tricky mechanical problems, Bill attributed this skill to his youth on the farm where "there were no mechanics for miles, and we had to keep the equipment running the best way we could figure for ourselves."

Bill was married to Anne Lemke at Weyburn, Saskatchewan, in 1936. Their family consists of two sons and four grandchildren. In excellent health, and not inclined to sit and twiddle his thumbs, he plans to dust off his stationary engineer's papers and spend part of his well-earned retirement on a light job where there's machines to keep running smoothly.



# Retired on Inco Pension

(Continued from Page 17)

have one daughter who lives in Toronto. Koel will now take on the full-time job of housekeeper and caring for his wife who has been ill for the past few years.

## VAINO MINKKILA

Carbide hat lamps that blew out around blasting time, and wet flints that refused to re-ignite the flame, were things that service pensioner Vaino Minkkila remem-



Mr. and Mrs. Minkkila

bered from the early days of his 39 years with Inco at Frood. He came to Canada from Finland in 1929, and started at the mine's No. 4 shaft the same year.

He and his wife, Lempi Ranta whom he married in 1934, have a family of three. An Inco scholarship winner, daughter Elaine is enrolled in the arts and science course at the University of Toronto. She was also a winner of the Inco scholarship at the Sudbury Musical Festival, emulating her sister Ella, who won this award twice. Two grandchildren, in Georgetown and Toronto, complete the family.

## CHES MCGILVARY

A recent early service pensioner, Ches McGilvary has retired after nearly 29 years with Inco.

A native of Mount Forest, Ches came to the Sudbury area on a fishing trip in 1939, liked what he



Mr. and Mrs. McGilvary

saw, and returned in 1940 to start with the Company at the Frood open pit.

During the years he worked with the instrument departments at Copper Cliff and the iron ore plant, was promoted to electrical foreman in 1962, and made his final move to the copper refinery in 1966.

He and his wife, Rosalie Pad-dick of Copper Cliff when they were married in 1946, have one teenage son.

A well-known team, Ches and his brother Norm were in demand as vaudeville type comics, and entertained at local functions for many years.

Enthusiastic travellers, Ches and his wife will be wintering in Spain, and will be heading for Japan and Expo 70 in the spring.

## CHARLES GIVEN

Forty-one of Charles Given's 43 years of employment at the nickel refinery in Port Colborne were with the sampling depart-



Mr. and Mrs. Given

ments. Now he has retired on service pension.

Charles was born in 1905 at Warton, in the Bruce Peninsula. He grew up there and married Myrtle Hardman in Warton in 1925. He brought his young bride to Port Colborne later that year and joined Inco in 1927.

The Givens have three children, one of whom, Edgar, is a locomotive engineer at the nickel refinery. They have five grandchildren.

A nostalgic possession, a bicycle of considerable antiquity on which Charles has long been a familiar figure riding to and from work, has been honorably retired from active service. Charles has set it up in his garage as an exercise machine, after he bought himself a brand new bike to get around town with.

## CHARLES ROGERS

Upon his retirement at Port Colborne, Charles Rogers gives up his position as an analyst in the general lab., but also the distinc-



Mr. and Mrs. Rogers

tion of being the longest-service employee at the Port Colborne Refinery. Charles's grandfather started with Inco at the Bayonne Works in New York in 1884, launching 84 years of continuous service by the Rogers family with the Company.

Born in New York on November 10, 1904, Charles moved to Port Colborne in 1922 when his father was transferred from the Bayonne Works to the Port Colborne refinery.

Charles and his wife, formerly May Noble of Welland, were married in 1929. They have three children and two grandchildren.

Long service seems to be a tradition with Charles. He has given years of his time in helping and guiding the youth of Port Colborne through his devoted efforts as a Sunday School superintendent and president of the Boy Scout Association. Although he has no definite plans for his retirement, there's little doubt that the community will continue to enjoy the benefits of his good citizenship.

Mr. and Mrs. Smith received best wishes from a host of friends at a retirement dinner at the Italian Hall, Copper Cliff.



## HARRY SMITH

Although it was his outstanding ability as a baseball player that originally brought Harry Smith to International Nickel in 1929, he took to the mining game like a duck to water and over the years assumed increasing responsibility until he became a mine superintendent.

"He was just about the slickest infielder that ever came to the Nickel Belt," say baseball old-timers like Lige Beaver and Bert Flynn. It was the latter who lured him to Copper Cliff from Schumacher, where he was the star of the championship McIntyre team.

Before he took his final vows as a miner he led the Frood team to the Northern Ontario championship.

Starting in the mines engineering department at Copper Cliff, under chief engineer Harold Keast, he moved to the efficiency department at Frood, then in 1935 em-

barked on his underground career as a shift boss there. By the end of 1937 he was a general foreman, touched base as underground superintendent in 1940, and a year later was assistant mine superintendent.

It was in 1950 that he moved over to Murray mine as superintendent, the position he held until 1959 with the exception of a year interval at Frood open pit. He transferred to Clarabelle open pit in 1967 as superintendent.

Scotland, Ontario, in the heart of the baseball country around Brantford, was his birthplace. His marriage to Margaret Greig took place at Sudbury in 1930. Their son John is a general foreman at Creighton.

A generator for his camp at Lake Penage, where he has been a summer resident since 1939, and a statuette of Duke, his faithful canine companion, were among the gifts presented to him at his retirement party.

## FRED CAMPBELL

Welland was Fred Campbell's birthplace in 1907. After completing his schooling, Fred worked at plumbing and heating for over eight years before he began his long association with the nickel refinery in Port Colborne in 1934.



Mr. and Mrs. Campbell

His entire service was in the electrolytic department, working in all areas, including 14 years as cementation before becoming head masticman in 1962, his classification at the time of his special early service retirement.

An accomplished clarinetist and saxophone player, he is a member of the Welland Citizens Band and the 57th LAA Band of Niagara Falls. He first started playing with the Alert Fire Company band of Port Colborne when he was 14 years old.

July 16, 1932, saw Fred and Olivia Winn united in marriage in Port Colborne. They have two children and four grandchildren.

Fred likes hunting and fishing and is a member of the area conservation club. Mr. and Mrs. Campbell both enjoy winter sports

and ice skate regularly on the frozen bay in front of their home.

## DON STICKLES

Well known in Copper Cliff through his activities as town plumber, Don Stickles has retired on special early service pension after a near-record total of 46 years and six months on the Inco payroll.

Born in Folkestone, England, he came to Canada with his family at age three in 1906, grew up in Toronto, and joined the Company



Mr. and Mrs. Stickles

in 1923. During that year he worked as a mason, a crane-man, and a painter before starting his apprenticeship as a plumber.

Don was married to Minnie Atlas in 1930, and of their family of three, Doug, is an electronics specialist at the Frood hangar. Five grandchildren complete the family. In excellent health, the pensioner plans to spend his well deserved retirement years between his Sudbury home and his Long Lake camp, both of which will now be receiving the full-time attentions of a very expert plumber.

## ANDY FLEICH

A converter building blaster for the last 27 of his 36 years at Copper Cliff, Andy Fleich has retired on service pension. A Yugoslavian who came to Canada in 1928, Andy started with Inco at Frood in 1929, broke his service, and returned to the Company at the smelter in 1933. His marriage to Albina Levar took place in 1937, and they have a family of four and two granddaughters. In good health, Andy plans to while away the winter in complete relaxation, and then go to work on his garden in real earnest.



Andy Fleich

## BOB ELLEN

A powderman for the last five of his 35 Inco years, all of which were spent at Frood, Bob Ellen has retired on service pension. A native of Sunderland, England, he came to Canada in 1922, settled in Toronto, and worked as a



Mr. and Mrs. Ellen

plumber until he joined the Company in 1934. His marriage to Audrey Arnold took place in 1931, and they have a family of two. An ardent coin collector, Bob felt right at home recently picking the greenbacks from the branches of a money tree presented to him at a surprise party held by some 35 of his friends and family to mark his retirement.

## COLIN HARROWER

Just old enough to remember the voyage, Colin Harrower was five when he came to Canada from Scotland with his family in 1912, and 15 when he landed his first job in the rockhouse at Garson mine. After breaking his service, he returned to the mine in 1937 and stayed to rack up nearly 33

Company years. Now a special early service pensioner, he worked the last 19 years as a powderman



Mr. and Mrs. Harrower

on the 2400 level. By an unusual coincidence it was Harrower marrying Harrower when Ruby became Colin's wife in 1955. As a well-earned retirement gift to themselves, the couple will be travelling to Bonnie Scotland.

## Winnipeg Man Is New Director of Inco

Peter D. Curry, chairman and director of The Investors Group, has been elected a director of The International Nickel Company of Canada, Limited, it was announced by Henry S. Wingate, chairman.



A resident of Winnipeg, Mr. Curry is chancellor of the University of Manitoba, from which he holds the honorary degree of doctor of laws.

A member of the board of directors of The Banff School of Advanced Business Management, Mr. Curry is also on the board of trustees of the Winnipeg General Hospital and the North American Wildlife Foundation. He is a director of many Canadian corporations and financial institutions.

## THOMPSON QUEEN SCOUTS

In an investiture at Winnipeg, six Thompson boys were presented with Queen Scout awards, Brian Calce and Keith Nesbitt from Thompson 1st Troop and Barry Levesque, David Dimmonds, Ernst Hellrung, and Gordon (Sandy) Clarke.

All but one, Barry Levesque, began their Scouting activities in Thompson, working up through the Cubs, Scouts and Venturers, and reflect great credit on their leaders and the Thompson Scout movement as a whole.

They were guests at a luncheon in the Port Garry Hotel at which the speaker was the lieutenant-governor of Manitoba, Honorable Richard S. Bowles.

## Dates Announced for First Aid Contests

Dates for the annual semi-final and final competitions for Inco first aid teams have been announced by T. M. Crowther of the safety department as follows:

H. J. Mutz trophy for the mining section, Monday, April 6, at 7:00 p.m.; D. Finlayson trophy for surface plants, Thursday, April 9, 7:00 p.m.; R. D. Parker shield for the championship, Thursday, April 23, 7:45 p.m.

For the first time the Finlayson shield contest will be staged at Port Colborne, with the winning

## "Demolition Derby" New Thompson Sport

Behind the wheel of his nearly completed stock car, Thompson Motor Sports Club president Brian Swain, an Inco materials co-ordinator, tests the newly installed dual safety harness, and discusses the installation of a four-corner roll bar, with Club competition chairman Art Hesje, who works in the Company's metallurgical department, and treasurer Laird Irvine of the smelter safety department.



A Demolition Derby? It's what you might call the reverse of the recommended defensive driving — in fact it's downright offensive driving with no holds barred and just one thing in mind — clobber thy neighbor's car before he wrecks thine. The winner of the derby is the only car that leaves the field of combat under its own power.

The drivers are, of course, fully protected with dual safety harness, crash helmet and roll bar, all absolutely mandatory by club rules.

A demolition derby will be part of the 1970 program planned by the Thompson Motor Sports Club, which has recently introduced stock car racing to that northern Manitoba community.

Formed in mid-1968 by 10 auto racing enthusiasts, club membership currently stands at around 50, with founder Brian Swain as president and an executive of vice Wes Stevens, secretary Sharron Stevens, treasurer Laird Irvine, and competition chairman Art Hesje.

Initially a rally club, the group

have held several successful gymkhana events over platted courses around town, have the use of a drag strip for time trials, and in summer use the Thompson Power Toboggan Club's banked track for speed events.

"We're just a sports-minded, fun-loving, safety conscious and responsible group — and not a bunch of hot rodders," stated vice Wes in a recent issue of the Club's newspaper, "Wheels North", a lively monthly put together by editor Wendy Rowley.

"Indeed, a club of this kind provides a community service," commented president Brian with a twinkle in his eye. "We rid the town of the broken-down, going-to-be-fixed-one-day wrecks that would otherwise lie around for years as permanent eyesores." Known in the game as "junks", the tired old cars can usually be acquired for around \$10, and with a little expert tinkering by the members can be coaxed into good enough shape to make stock cars, eventually heading for the dump via a demolition derby.

## Inco Fellowships

Miss Huguette Plante of 1261 Suzor Coté, Quebec City, a post-graduate student at the University of Toronto, has been awarded an International Nickel Fellowship in Canadian-American relations. A co-recipient, also at the University of Toronto, is Nandor Alexander Fred Dreisziger of 13 Lyndhurst Court, Toronto, who received the same award last year.

The fellowships are part of a three-year \$21,600 grant by International Nickel to the university for postgraduate research and study in the field of Canadian-American relations. Each award annually provides a \$3,000 stipend to the recipient plus a \$500 supporting grant to the university for research materials.

Captain George C. Naylor, Director of Canadian Forces School of Music, Esquimalt, B.C., has been awarded the 1969-70 \$3,000 International Nickel Fellowship in educational administration. A former director of the Princess Patricia's Canadian Light Infantry regimental band, Edmonton, he has commenced a Ph.D. program at the University of Alberta.

## IN APPRECIATION

The Master Craftsman of all design,  
Fashioned this wonderful country of mine:  
Piled up the mountains shrouded in snow,  
With roaring cataracts tumbling below:  
Guided the rivers down to the sea,  
Planted the pine and the maple tree;  
Flattened the prairie with His mighty hand,  
Called it Canada, my Native Land.

— Helen Cleland

(Mrs. Cleland is the wife of Ralph Cleland, retired general safety engineer, Copper Cliff.)



## TWO-BILLIONTH POUND

The two billionth pound of copper purchased by Anaconda American Brass Limited from Inco since purchases began in 1930, was presented at Toronto to Donald F. Cornish, Anaconda president (left) by K. H. J. Clarke, assistant vice-president of International Nickel. The metal disc, sawn from a billet, will be suitably engraved and mounted for display.





View of the \$3,500,000 236-dwelling housing project, consisting of townhouses and a high-rise apartment, scheduled for completion in October at Copper Cliff. The private development is being undertaken by a Sudbury company, Copper Cliff Gardens Ltd.

## Large Housing Developments At Copper Cliff and Lively

Major strides to ease the critical housing shortage in the Sudbury district are now being taken by private interests at Copper Cliff and Lively.

Scheduled for completion by October 30 is a \$3,500,000 project at Copper Cliff, in the area cornering on Power Street and Highway 17, where 236 new dwelling units are under construction — 136 townhouses and a 100-unit high-rise apartment building. Some of the townhouses are expected to be ready for occupancy in late March.

Attractively designed, the three- and four-bedroom townhouses will be among the most up-to-date in Canada. Offset in rows, each will have its own front privacy area.

The apartment building will have an exercise room and recreation area.

Rentals will be slightly lower than those prevailing for comparable accommodation in the Sudbury district.

The development is being undertaken by a new Sudbury company named Copper Cliff Gardens Ltd., of which Willard Evoy is president. The land has been made available by International Nickel under a long-term lease. Over 100,000 cubic yards of fill will be required to bring the site about four feet up to grade level, after which it will be fully landscaped. The main road within the development will

be named Dow Drive, in honor of Copper Cliff's mayor. All other streets will be named after flowers. In keeping with the name Copper Cliff Gardens, all services such as power and telephone will be installed underground.

A creek adjoining the property is being straightened by Inco and encased in a covered arch culvert, to be suitably landscaped.

### DEVELOPMENT AT LIVELY

Plans are now in an advanced stage for a private housing development at Lively, on property made available under long-term lease from International Nickel.

Immediate plans are for construction of 36 single and semi-detached dwellings, with another 120 to follow as soon as possible.

Studies are being made on the capacity of the town sewage plant to determine what further housing development will be allowable. The planners are prepared to proceed with as many as 500 new units, including townhouses and a high-rise apartment, on the basis of these studies.

The apartment would be built at the west end of Ninth Avenue on a high knoll adjacent to the playing field, and other dwellings in the undeveloped southwest portion of the Lively area within the municipal boundary.

Permission has been granted by Waters Township to build a new

road across Inco land in the township to provide access to Highway 536. This road will loop through the development and connect with the west end of Third Avenue.

Sudbury Board of Education is undertaking additions and alterations which will more than double

the size of Lively High School, developing it into a fully composite school accommodating 1,100 students as compared with the present 400. It will have 27 more teaching areas, a library resources centre, and a new gymnasium, together with a playing field.

## Christmas Safety Jingles by Poetic Miners



During the month before Christmas there were many wrinkled brows around the yard and throughout the underground levels at Frood-Stobie. Hard-hatted miners could be seen muttering to themselves and scribbling notes at lunch-time.

Shopping lists? Unlikely. Poetry? More than likely, because December is the time for the mine's annual safety slogan contest, and jingle fever was rife among the ranks.

Once again the safety department was swamped with stanzas and odes, and had a hard time selecting the best from a lot of excellent material from bards beating their brains for the \$100.00 in prize money.

Repeating his 1968 performance, Stobie powderman Cliff Bennett copped the \$25.00 top prize, and is seen above receiving congratulations from area superintendent S. J. Sheehan and safety supervisor Jim Hatch. His winning verse appears on the signboard. Also taking bows and the \$15 runner-up money is Frood trackman Andy Rayne (second from right), who turned in this catchy rhyme:

"May the bright lights of Yuletide Continue to shine, On all the safe workers at Frood-Stobie mine."

Third prize of \$10.00 went to Stobie construction leader Leo Cartier for this very wise piece of advice:

"Carols ring out loud and clear, As we come to the end of another year."

Start the new one, do it right, Never let safety out of your sight."

The 10 winners of \$5.00 consolation awards were: Cliff Bennett (he submitted no less than eight verses), Gerry Renkers, Len Webster, Alan Lafleur, Bernie Boyland, Yvon Sauve, Dave Barron, Don Nadorozny, Don Robertson, and Rodrigue Vienneau, who came up with this pithy two-liner:

"Yuletide blessings, Are no dressings."

One day a piano tuner was boasting about his two sons, who were identical twins.

"How do you tell them apart?" asked Mrs. Miller.

"It's easy. All I have to do is pinch them," he replied. "Herbie yelps in high C and Willie is a full tone lower."

## Soo Scholar First to Win New Scholarship

Karl A. Strom of 344 Pine Street, Sault Ste. Marie, was recently awarded a \$6,000 International Nickel university scholarship as first prize for his performance in the First Canadian Mathematical Olympiad.

The Olympiad is sponsored by the Canadian Mathematical Congress in collaboration with the Canadian Society of Actuaries and the Canadian Association of Mathematics Teachers. It is a nation-wide competition at the secondary school level for students who have up to 12 years of schooling. The first national competition in Canada at this level in any field of study, the Olympiad is

designed to test the student's ability rather than the amount of preparation. Entry is restricted to students who have previously competed in the mathematical competitions which are normally held in all ten provinces each spring. The number of entrants allowed from each province is apportioned according to population.

The award is made in four annual instalments of \$1,500. Conditions of tenure require the recipient to register for a full-time degree course at a Canadian university and to obtain satisfactory standing each year the scholarship is in effect. There are no restrictions on field of study.

Mr. Strom is completing Grade 13 at Sir James Dunn Collegiate and Vocational School in Sault Ste. Marie prior to entering university in September, 1970.