

Major Two-Phase Quebec Hydro Project Opens

MONTREAL (CP) — A major two-phase development of Quebec province's vast hydro-electric power potential has begun feeding electricity to Quebec and Montreal.

Three 150,000-horsepower generators at the first Bersimis project hummed into action recently. Five more—making total output 1,200,000 horsepower—are scheduled to be spinning within 18 months. Work is under way on the second development 20 miles down stream.

Bersimis I must be regarded as a tremendous even in a country which abounds with such achievements. Plant, transmission line and controlling microwave system will cost about \$225,000,000, the Quebec hydro-electric commission says. By contrast, the tab for the 2,700-mile Mid-Canada radar line has been set at \$170,000,000-plus.

NOTABLE FEATURES

Some project features: A 300-square-mile reservoir, a mountain-heart, power-house cavern big enough to hold an ocean liner, two dams up to 900 feet thick at their bases, a 7½-mile, intermountain tunnel three storeys high.

Bersimis I is located 400 air miles northwest of Montreal on the rugged north shore of the St. Lawrence River. Labrieville is the settlement.

Regulation of the turbulent Bersimis river was the problem. Lake

Case accordingly was sealed at its lower end by two dams of crushed stone and clay. Dams at the upper end prevent backflow. The lake was raised another 155 feet. The tunnel from dam to power house, 3½ feet in diameter, runs 7½ miles and falls 875 feet to the power house.

The power-house cavern is 565 feet long, 65 feet wide and 80 feet high. A surge tank, designed to prevent sudden changes in water pressure harming the turbines, runs up 578 feet from the tunnel to the mountain top.

1,717 TOWERS

There are 1,717 steel transmission towers carrying cable from Montreal to Labrieville, via Quebec. Fifteen microwave towers from 100 to 350 feet high have been built, providing Quebec Hydro's Montreal headquarters with remote control over the majority of its outposts and operations.

The 5,200 persons employed on Bersimis I — about 120 will be needed to keep it running — attracted a little city of bunkhouses, bank, theatre, recreation centre, churches, hospital, stores, school and other commercial enterprises. Some of it already has been transported to the site of Bersimis 2.

The rest is permanent. The only Quebec Hydro power house and system outside its microwave control is the northwestern one at the head of the Ottawa River in Abitibi.

Bersimis I is just one Quebec

Hydro current project. A second extension of facilities at nearby Beauharnois will boost output there to 2,150,000 horsepower. Quebec Hydro's total capacity now is something above 2,900,000 horsepower out of the province's capacity of 8,000,000. By 1961, provincial capacity is scheduled to be about 12,000,000—leaving a potential of 22,000,000 still to harness.

Girl Guide Column

TRINITY BROWNIES

The Brownies of Trinity Pack held an Enrolment and their Christmas closing recently. A number of parents and visitors were present. Mrs. W.J. Rodd enrolled the following Brownies: Judith Carr, Sandra Morrison, Kathryn MacKinnon, Nancy MacKinnon, Patricia Bruce, Patsy Mills, Jean Stewart, Karen Johnston, Betty Lou Dickey. Refreshments were then served, and a good time was had playing games.

TRINITY GUIDE CO.

Trinity Guide Company were hostesses to 35 children from Mount Herbert Orphanage. Mrs. W.J. Rodd was present, and a grand time was had as you will see by the following programme. The party began with "Get Acquainted games", then the children from the Orphanage put on the following programme: recitation, "A Welcome, Debby Genge; Motion Song, a Christmas Lullaby for little girls; recitation, Don't sleep on the floor—Ernest Larter; Duet, Rudolph the Red Nosed Reindeer—Gail Webster, Roberta Chisholm; recitation, A Christmas Wish—Carl Good dialogue—Anna's Secret; song—Jingle Bells, Five Little Boys; recitation: telephoning Santa—Roberta Chisholm Quartette—Jolly Old St. Nicholas; Ernest, Robert, Graham, Raymond—solo—Away in a Manger—Debbie Genge.

After this the Guides put on the following programme: Skit Ellen Matheson, Sylvia Taylor; Monologue—Barbara MacDonald; Skit, Joyce Wigginton; recitation—Bevly Mills; Carol singing by all.

There were gifts under the Christmas tree for everyone, and a delicious lunch was served.

ZION GUIDES

The Guides of the Zion company were at home to the Zion Brownies recently, the occasion

Canadians Earned More, Spent More During Past Year

OTTAWA (CP) — Canadians earned more and spent more in 1956 and a lot of their spendings were turned into a rise of modern conveniences for Canadian homes.

More of these homes were equipped with television sets, telephones, cleaning equipment, automobiles and oil-burning furnaces. A bureau of statistics report based on a sample survey of Canada's 3,974,000 households showed that 54 per cent were equipped with television, compared with 39 per cent in 1955. Radios showed virtually no change at 96 per cent, but households equipped with telephones rose to 74 per cent from 70.

Homes with automobiles increased to 58 from 56; those with furnaces to 57 from 54. The percentage using oil as a heating fuel rose to 46 from 43. Those using coal declined to 26 from 29; wood to 18 from 20.

being their Christmas closing. Everybody had a fine time; films were shown, Christmas Carols were sung around the Christmas tree and gifts were exchanged. The Ladies of Zion L. A. served a delicious lunch.

PARKDALE BROWNIES

Mrs. Cyrus Pickard, District commissioner visited the Parkdale Brownies, recently and enrolled the following girls: Sharon MacKay, Marjorie Lou MacLinnan, Roberta MacLean, Marsha Proud, Londa Gaudet, Elaine MacKay, Hazel Hogan and Linda MacDonald; Mrs. Pickard also presented Margaret MacDonald and Dorothy MacEwen with Golden Hands.

This is an extremely busy Pack at present under Mrs. Kimble MacKay acting Brown Owl and Mrs. Lester Johnston acting Tawney Owl.

CENTRAL ROYALTY GUIDES

Mrs. Walter Smith visited the 1st Central Royalty Guide Co. and enrolled the following girls who were exceptionally well prepared by their Captain Miss Marion Langille and Mrs. Arthur Farquharson, Lieutenant; Margaret Dalton, Enid Livingston, Gail Cameron, Mardi MacDonald and Kells.

The following Guides received their second class: Elaine Kenney, Virginia Doiron, Zita Doiron, Betty Johnston, Margaret MacMillan, Phyllis Stewart, Joyce Hamby, Arlene Gallant.

Hostess Badges were presented to Elaine Kenney, Virginia Down, Zita Doiron, Betty Matthews, Arlene Roper, Sheila Johnston, Margaret MacMillan, Phyllis Stewart, Joyce Hamby and Arlene Gallant.

(Continued from Page 3)

to Approved and R.O.P. flocks, but the disease is also known to have occurred in broiler chickens and commercial flocks.

SYMPTOMS
Bronchitis is essentially manifested by slight difficulty in breathing, coughing, sneezing or sneezing. Feed consumption will drop slightly. In young chicks, growth will be retarded and there will be quite a few culls.

If the infection is not contracted until the birds are in production, the consequences are more serious. Apart from respiratory trouble, there will be quite a noticeable drop in egg production. This will not be as rapid as in Newcastle disease but it will be more permanent. Usually, production will not return to much over 50 per cent.

The history of some outbreaks in adult birds suggests that the infection may be introduced by the addition of cockerels. Cockerels should, if at all possible, be raised on the same premises as pullets with which they will be mated. If chickens contract infectious bronchitis any time from 3 weeks of age up to one month before coming into production, the effect will not be serious, as by the time such birds come into production, they will have recovered the attack and will be immune.

In some flocks tested during the survey and in which it was evident that they had had bronchitis at some time, the owners report that no signs of the disease had been noticed and that egg production had been normal. This could be so, as in young birds, especially when on range, the attack of bronchitis may be mild and pass unnoticed unless the flock was frequently observed carefully when roosting at night.

IMMUNITY

Chicks from hens which have had bronchitis will have some immunity when hatched. This is referred to as parental immunity. Such immunity, however, wears off in the course of a week or two and the chicks will then be susceptible.

It is considered that fairly permanent immunity results from an attack of the disease, or from vaccination.

VACCINATION

Chickens can be vaccinated against bronchitis. However, the vaccine is a live virus vaccine, and the following information should be observed.

(1) If chicks have parental immunity, they can be vaccinated when 2-3 days of age. Parental immunity provides the young chicks with a degree of resistance and reduces the severity of the vaccine reaction in chicks of that age. Judging from the results of the bronchitis survey, it would seem quite likely that a high percentage of chicks are hatched from flocks which have had bronchitis and therefore will have some parental immunity.

(2) If chicks are hatched from



PRESLEY GETS PHYSICAL

MEMPHIS, Tenn.—Elvis Presley, 21, (right), the Rock 'n' Roll idol, opened his shirt a little to-

day so photographers could get a picture of Capt. Leonard B. Glick, examining physician, checking his chest with a stethoscope. Presley took his pre-induction draft physical. (AP Wire Photo)

36 R. C. N. And Reserve Officers Are Promoted

Five new captains and two acting captains were appointed in the navy's New Year promotion list. They are among 36 officers, including 10 in the naval reserve, advanced in rank in the half-yearly promotion.

Heading the list of new captains is Acting Capt. Arthur Francis Peers, OBE, 58, of Queens, B. C., who is in charge of the Naval Research Establishment at Halifax.

Also promoted to captain's rank are: Cmdr. Victor Browne, 38, Ottawa, and Halifax, manning commander on the east coast; Cmdr. Marcel Joseph Jette, 44, Montreal, base superintendent at Sydney, N. S.; Cmdr. Robert Waugh Murdoch, 38, Victoria, commanding officer of the destroyer Stouffville, and Acting Constructor Capt. Sturton Mathew Davis, 37, Montreal and Victoria, who is naval constructor-in-chief at headquarters here.

Promoted to acting captain are: Cmdr. Allan Ross Webster, 53, commanding officer of the Montreal reserve station HMCS Donnacona, and Cmdr. Liston Burns McIlhagga, 38, commanding officer of the Winnipeg reserve station, HMCS Chippewa.

Promoted to Commander, R. C. N. are: J. U. Roberts, I. A. McPhee, P. G. Chance, E. J. Semmens, U. H. Howe, M. H. E. Page, D. R. Saxon, D. W. Knox and A. L. Collier; Commander (E): H. D. Menouge and J. H. Hamilton; Commander (L): J. R. Allen and R. J. Leeger.

Chaplain class IV R. C.: J. P. Farrell; Chaplain class IV, P.: E. A. Peglar; Instructor Cdr.: G. C. E. Gray; Commander (S): D. G. MacKinnon and H. MacGregor; Commander (SB): A. E. M. Moreby, and D. S. K. Blackmore.

Construction Captain: S. M. Davison; Constructor Cdr.: E. W. Kimberley.

RESERVE
Promoted to Commander, R. C. N. (R) are: W. G. Curry, J. H. Curtis and E. G. Gilbride; Commander (E): E. W. Airey and Sgt. Cdr. J. R. Moore.

Acting Sgt. Cdr.: H. D. Hebb; Commander (S): S. A. Takalo, Pt. Arthur; Commander (SB): C. A. Gilbert, Oitawa.

discussions on factors which help or retard the development of rural and urban communities. A special lecture will deal with "The Atlantic Provinces — Framework of Our Communities". Several special adult education projects will be reported on.

The plan is for the presentation of facts on the first day, the study of techniques on the second and the application of techniques on the final day. These conferences are intended to benefit particularly individuals involved in adult education work but are open to all interested persons. The conference two years ago was held at Charlottetown, four years ago at Antigonish and six years ago at Amherst.

First Ships Manoeuvring Way Through Suez Canal

PORT SAID, Egypt (AP) — Thirteen ships of seven nations finally were on their way out of the Suez Canal today — more than two months after the British-French attack on Egypt and Egyptian counter-measures bottled them up in the waterway.

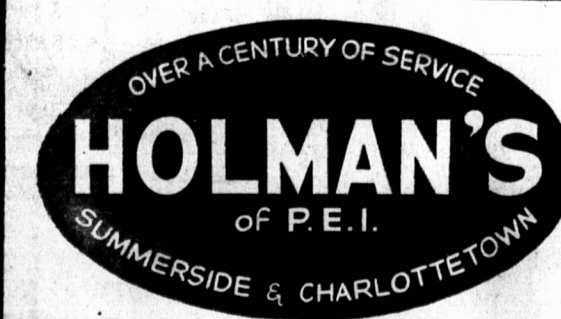
Wrecks still obstructing the canal made their passage north in Port Said a tricky navigating problem. Col. Mahmoud Younes, managing director of the Egyptian Suez Canal Authority, estimated it might take until Thursday to get all 13 out of the canal.

The Egyptians themselves undertook the job of moving the trapped freighters and tankers, and spurning offers from the UN sailing fleet clearing the ships and bridges which Egypt sank in the canal after British and French warplanes began their bombardment Oct. 31.

Because the south portion of the canal is still blocked, the ships must go out through the north. United Nations salvage experts estimate they will have a channel open to 10,000-ton ships the entire length of the 103-mile waterway by early March.

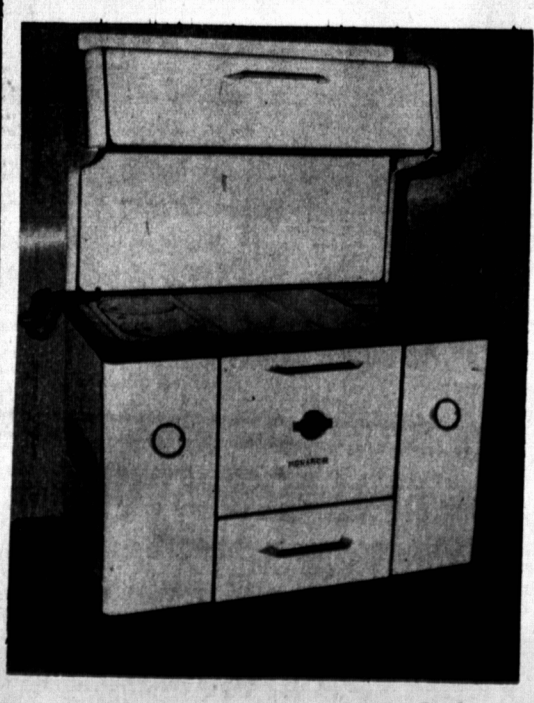
The trip north for the ships involved being tugged around until they were headed that way, the first time vessels have ever changed direction in the canal.

Meanwhile, Cairo Radio quoted Egyptian President Nasser as saying he will not allow British and French ships to pass through the Suez Canal as long as Israel does not withdraw from the Gaza Strip. He also said, according to the radio, that all ships passing through the canal in future will have to pay transit dues directly to the nationalized Egyptian canal authority.



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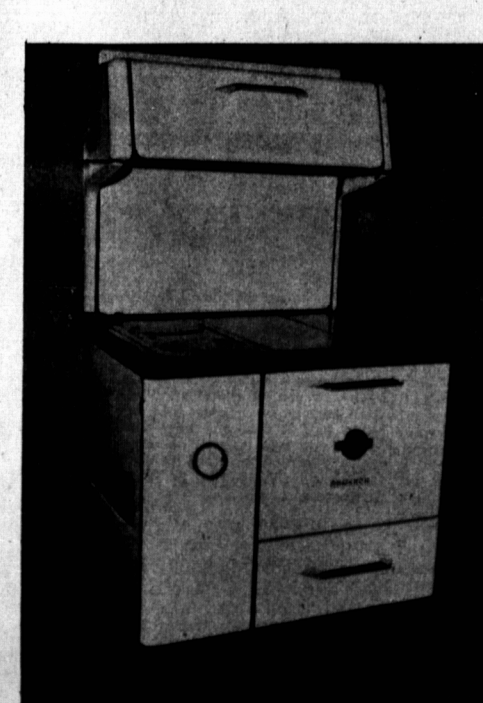
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