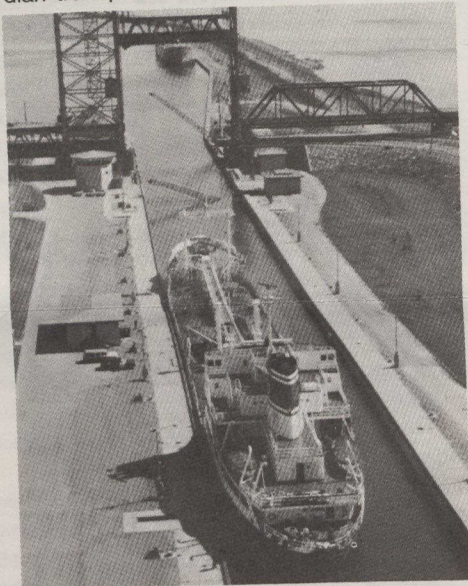


## St. Lawrence Seaway celebrates its quarter century

This year, the twenty-fifth anniversary of the completion of the St. Lawrence Seaway, will be marked by a series of events pointing to the importance of the waterway in the Canadian transportation system.



It was in April 1959 that the first large ocean ships began plying the St. Lawrence Seaway, a deep waterway extending some 3 800 kilometres from the Atlantic Ocean to the head of the Great Lakes.

Construction of the St. Lawrence Seaway called for the mobilization of enormous capital by both sides of the American-Canadian partnership; operating and maintaining it calls for a multi-million dollar annual budget. Nevertheless, the Seaway has amply demonstrated its significance to Canada's economic prosperity. During the 1983 navigation season, an estimated 50 million tonnes of cargo moved through the system.

Grain alone comprises about half the total annual tonnage, with some 30 million tonnes of grain passing through the Seaway each year. The port of Montreal alone annually receives an average of 3.5 million tonnes of grain through the Seaway, making the port a brisk competitor in the export market.

### Work began in 1954

Canada initiated the project in 1951 by passing the St. Lawrence Seaway Authority Act, which authorized construction of navigation facilities on the Canadian side of the river between Montreal and Lake Ontario, as well as on the Welland Canal. It gave the United States government the impetus to follow suit, and construction began in 1954.

Less than five years later the great river route we know today was opened, allowing

222-metre long vessels with an eight-metre draught to reach the Great Lakes.

Seven locks, stepping from Montreal to Lake Ontario, together with eight locks along the Welland Canal, make this great waterway navigable. Four bridges had to be raised for the project, while dredging the Beauharnois Canal alone removed more mud and earth than construction of the Panama and Suez canals combined.

Through the Seaway, which last year carried its billionth tonne of cargo, ships can reach waters that are the highest (183 metres above the sea level in Lake Superior) and furthest from the sea (3 770 kilometres from the Atlantic).

## High-tech security system

Chubb Industries Ltd. has introduced a new home security system which gives its message by the spoken word, thanks to a micro-chip the size of a baby's tooth.

The tiny silicon chip, called a "library chip", has a vocabulary of 200 words. Another silicon chip about the same size chooses the words the security system will broadcast through the intercom system in the house, depending on what has triggered the system.

"In the home security systems we have designed, the response could be 'I have called the police' or 'Get away from that window' or whatever you wish", says A.H. (Sandy) Hislop, manager of marketing at Chubb Alarms, a division of Chubb Industries Ltd. "The response can be a siren or some other loud alarm noise," says Hislop.

The system can also silently contact our control centre from where we call the police, but the intruder is not going to know that he has been detected.

"Most people just want the intruder to leave in a big hurry when he is detected. That way it might only cost you a broken window or door instead of stolen property or even physical harm. Statistics show police only recover about 5 per cent of stolen property."

Last year, Canadians spent about \$130 million on electronic security systems for homes and commercial properties and about 10 per cent of that was for professionally installed systems, usually built into the structure.

Most sales are for the do-it-yourself alarms which can be bought in hardware and auto parts stores and use only a loud noise

to scare off the trespasser. Mr. Hislop expects sales of the more sophisticated alarms installed by companies such as Chubb will triple in volume over the next four years.

The detection devices themselves seem to be right out of a James Bond movie, but one at least is a left-over from the war in Vietnam. Body heat sensors, developed for jungle night fighting, now detect prowlers in the bedroom rather than in the foliage.

Tossing and turning in your sleep on a hot summer night could set off the system watching your bedroom, so you simply tell the security computer to monitor the lower floor or stairs.

The body heat sensors actually detect movement rather than heat. If a burglar enters the house and stands perfectly still all night, he will not be detected. But if he waves his arms, the heat that moves with it will trigger the alarm.

Chubb's basic house security system costs upwards from \$1 200, depending on the size of the house and the sophistication of the surveillance.

## Big bucks for Bunkowsky



Canadian golfer Barb Bunkowsky, 25, of Campbellville, Ontario, celebrates as she is presented with a cheque for \$26 250 for winning the Chrysler Plymouth Charity Classic recently at Clifton, New Jersey in the United States. This was Miss Bunkowsky's first win on the tour.