Hi-tech phone rings in the 80s

After 35 years of service, the standard rotary telephone that has served as the basic phone for millions of Canadians is being retired to make way for a streamlined "high-tech" set from Northern Telecom Ltd.



Alan Hazel, marketing manager of Northern Telecom Canada, demonstrates the new Harmony telephone that is replacing the older rotary dial telephone (background) for basic residential service. The Harmony is a pushbutton, touchtone telephone that features modern design and uses electronic technology.

Via teleconference facilities linking Geneva, Switzerland, Toronto and Ottawa, Minister of State (International Trade) Gerald Regan participated in a launching ceremony by Northern Telecom Canada of the new product, the Series 8000 Harmony electronic telephone.

The lightweight, compact phone will go into mass production in early 1984 and be available for lease to subscribers in areas with touchtone service.

The first model of the Series 8000, the *Harmony*, will be the standard set for the home and features a low-profile design, larger keys and an adjustable tone alerter that sounds like a warble rather than a ring.

The phone weighs 400 grams, compared to about 1 700 for standard dial phones, and has a recessed handle for easy portability. It can be mounted on a wall or used on a desk or table. The handset has been designed to accommodate hearing aids.

Developed in conjunction with Bell-Northern Research of Nepean, Ontario,

the *Harmony* has 156 components compared with the 235 parts in the old rotary telephone. Three custom silicon chips designed by BNR and Northern Telecom Electronics are used to replace parts found in older phones for the dial, network and ringer.

The Series 8000 will be manufactured in Northern Telecom's London, Ontario plant.

Describing the new set as the "telephone for the 1980s", Alan Walter, Bell vice-president of marketing said the company estimates more than 200 000 Harmony telephone sets will be needed to satisfy initial customer demand.

Ice island aids Arctic research

Canadian scientists who braved bonechilling temperatures to camp out in the Arctic last spring are eager to do it again — this time on a permanent floating ice station, according to *The Citizen*.

George Hobson, head of the federal government's Polar Continental Shelf Project, would like to see a research station set up on a small ice island as early as next summer.

"We've got four volunteers already," he told a gathering of the Canadian Science Writers' Association.

The Arctic abode Mr. Hobson envisages would have a core group of three



The CESAR expedition, which took place in March 1983, explored Arctic ridges such as this. The proposed ice island venture would put a team in the high Arctic year-round.

or four mechanics and technical staff housed in prefabricated structures on the ice near Ellesmere Island.

As many as 30 scientists would visit for periods ranging from three to six months. The project could cost up to \$1 million to start and about \$500 000 annually to maintain. The scheme still needs funding approval from the Department of Energy, Mines and Resources.

As many as 60 scientists took part in Project CESAR (Canadian Expedition to Study the Alpha Ridge) in March 1983. (See *Canada Weekly*, Vol. 11, No. 9, March 2, 1983.) The researchers, studying everything from oceanography to bathymetry — the measuring of depths — camped on a drifting ice floor. Data from the \$1.7-million venture is still being analysed.

Unlike the CESAR expedition, the ice island venture would put a team in the high Arctic year-round. Arctic researchers placed a telemeter and buoy on an ice island in August to watch its movement. The island measures about five by eight kilometres.

Mr. Hobson said a permanent base is needed because of the growing importance of Arctic research.

In 1970, he said, 36 research parties visited the North. Last year, in contrast, more than 181 science expeditions operated in the Canadian Arctic.

CESAR produced some startling finds in terms of ancient Arctic life, and more new discoveries are expected from the volumes of information collected.

Hans Weber, senior scientist on that expedition, said one three-metre sample of the seafloor contained sediment up to 500 000 years old. Micro-organisms found in the sample were several million years old, he said.

Click! An instant slide film

Polaroid Canada Inc., the company that brought instant snapshots to thousands of Canadian homes, is now bringing 35-millimetre camera buffs into the picture with instant slide film.

The Polaroid Autoprocess 35-millimetre system, which was unveiled recently, lets photographers put colour and black-and-white film in a small developer unit and receive slides in about three minutes.

The processor unit will sell for about \$130, while the slide mounter will cost about \$23.