

Health centre research funded

An Ottawa health service has been given \$1.3 million by the United States Kellogg Foundation to research the health habits of area residents.

The new program called "Health-styles" will examine ways of helping adults stop smoking, cut down drinking and over-eating, eliminate stress and control other harmful habits. It is intended to make people examine how all their habits can combine to affect their health and to teach them to deal with them as one problem, rather than trying to curb only the bad habits.

Working with the University of Ottawa's community medicine department, the centre will ask some 600 adults to answer questionnaires and attend workshops designed to assess how their daily behaviour affects their diet, smoking and stress levels.

First satellite in SARSAT/COSPAS project launched

The launching of a satellite by the Soviet Union in June marked a milestone for Canada, the United States and the Soviet Union in their co-operative COSPAS/SARSAT project.

The *COSPAS 1*, is the first satellite within the framework of the joint project, which is intended to use satellites to detect and locate aircraft and ships in distress.

The first SARSAT-equipped satellite developed by the United States, Canada and France is expected to be launched in February 1983 completing the two-satellite network planned for the tests.

A 12- to 18-month test of the SARSAT satellite network has recently begun to evaluate its effectiveness in locating downed aircraft and vessels in distress. In addition to the four nations participating in the project, Norway and Britain will also take part in the evaluation.

Canadian participation in the international COSPAS/SARSAT project began in 1979 with the Canadian budget for the program being \$14.2 million over five years. The Department of National Defence is the major Canadian government contributor and manager of the project. The Department of Communications, the other major Canadian contributor, has technical responsibility for the system design and implementation. The Ministry

of State for Science and Technology and the Department of Fisheries and Oceans are also contributing to the project.

Faster detection possible

The experimental SARSAT system will make use of signals from existing aircraft emergency locator transmitters (ELTs) and emergency position-indicating radio beacons (EPIRBs) used in marine vessels. The satellite relays these distress signals to a ground station known as a local user terminal (LUT) where the origin of the distress call is calculated to within about 30 kilometres. The ground station then relays this information to a mission control centre (MCC) which alerts the nearest Canadian Forces rescue co-ordination centre for action by military search and rescue aircraft or Canadian Coast Guard and Department of Fisheries and Oceans ships.

The first SARSAT-equipped US civilian weather satellite will carry Canadian beacon signal repeaters and a special French signal processor. The Canadian repeaters are designed and built by SPAR Aerospace, Montreal.

Local user terminals have been designed and built by Canadian Astronautics Limited, Ottawa. Canada has purchased one of these terminals, the US four and France the major elements of one. The Canadian mission control centre was developed by SED Systems Incorporated, Saskatoon.

British Columbia rocks yield ancient Indian lore

For centuries migrating salmon were the main staple of the Indians of the British Columbia coast. If, for whatever reason, the salmon run to the traditional spawning grounds was late or disrupted, the Indians would call upon their gods to restore the fish supply.

The Nootka Shaman Indians would carve fish in the rocks of the coastline and pray that the salmon would be drawn by these pictures when the rock was submerged in the rising tide. Rain divinities were sculpted in the rock by the Tlingit Indians, who knew that the fish would not come in until the water level had been raised by a heavy rain.

Abundant in British Columbia

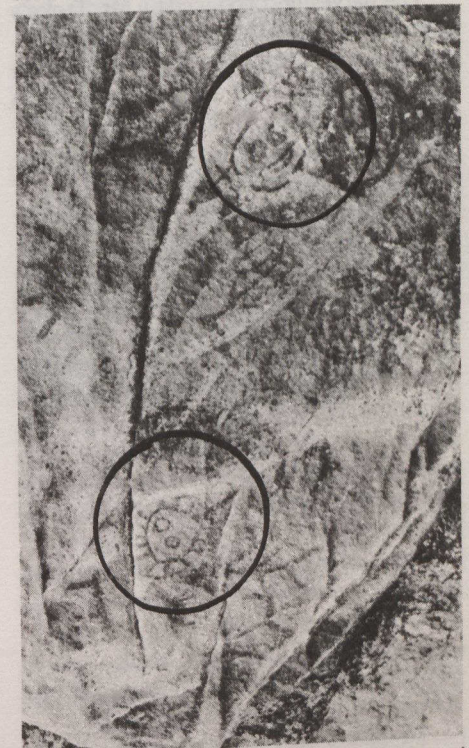
These rock sculptures, known as petroglyphs, are found throughout the world, but few countries have as outstanding

a collection as that which is found along the northwest coast of the Pacific.

Hundreds of human figures, fish, whales, gods and geometric designs were carved in the porous rock for a number of reasons.

Some sculptures relate local history, wars, shipwrecks and deaths; others mark sources of fresh water or good fishing spots. In many places there are family emblems marking hereditary property rights, hunting and fishing territories and changes of names.

Most of the petroglyph sites are difficult to find, with the possible exception of Petroglyph Park, located one kilometre south of Nanaimo, through which the Nanaimo River runs out to sea.



Circled areas indicate petroglyphs found in rocks in the Nanaimo region.

The park contains some 20 sculptures representing human figures, fish, birds and sea creatures having the head and tail of a wolf and the dorsal fin of a fish.

The petroglyphs of British Columbia are found between the tidal lines along the shore, and sometimes along the shores of lakes and rivers.

Archaeologists are unable to determine the age of these petroglyphs using radiocarbon, because the rocks do not contain any carbon. However, experts believe that they probably date back as far as the first human settlements in British Columbia, a span of some 12 000 years. Petroglyphs have been protected by British Columbia law since 1960.