

*Sackville* was caught in a vicious storm near Bermuda. When the 160 km/h winds finally died down enough for an inspection, no damage could be found.

*Sackville* now carries six scientists and a crew of 34. Wood panelling and comfortable cabins have replaced the cramped mess-decks where more than 60 men hung their hammocks. The wardroom, much roomier now than some 30 years ago, is decorated with oil paintings.

Gone too are the red and white stripes from *Sackville's* funnel which once marked it as a member of the Barber Pole Group — the Third Canadian Escort Group of the mid Ocean Force.

#### Everyone put to work

Research ships are not the only CFAV vessels to carry out highly specialized tasks. The ocean-going tug *St. Charles* tows targets off the coast of Nova Scotia for land-based gunners and off Puerto Rico for shipboard gunners during winter exercises. A "deperming" barge makes several trips each year to Bedford Basin at the head of Halifax Harbour to rid naval ships of their magnetic fields. Each ship is wrapped with many metres of rubber-covered copper cables, then given a 1,200-volt charge.

On the shore side, the CFAV organization oversees the cleanup of dockyard oil



*Sackville* on convoy patrol during the Second World War.

spills. Though the incidence of spills has dropped sharply since Captain Brick began a campaign of investigations and lectures on the subject, about 500 metres of oil containment booms and gallons of solvent are kept on hand in case of accident.

The CFAV day is a busy one, filled with a variety of tasks that would swamp

a lesser organization. When the tugs and other harbour vessels make their way from the cambers in the morning, and when the research vessels head out to sea, the Canadian Forces' largest fleet is at work.

*(The foregoing article, by Lieutenant Wendy Tighe, has been reprinted from Sentinel, Vol. 14, No. 4.)*

## Satellite technology attracts international market

A Vancouver-based electronic engineering firm is quickly gaining buyers from overseas for its satellite technology. Canadian Press reports that MacDonald, Dettwiler and Associates (MDA) will supply a \$2-million Canadian Landsat station to the Swedish Space Corporation and have recently signed a \$4.5-million contract with the Australian Government for a more complex version of the same model.

Landsat, a ground station that produces images of 160-square kilometre sections of the earth from the satellite signals it receives, is claimed to be more efficient than aerial photography in mapping natural resources. Dave Sloan, the scientist responsible for MDA's original involvement with Landsat, explains: "If the same were done with aerial photography, it would require a mosaic of many photos and this 'mosaicing' sometimes hides exactly what the scientists are looking for."

#### Several applications

The scientists are looking for several things: oil companies use Landsat to explore oil and gas deposits; the forest industry appraises woodland resources; farmers examine the health of their crops; and transport companies check the extent of Arctic ice.

Although larger multinational aerospace firms previously developed the Landsat technology, only MDA has specialized in building the system, says Sloan. "We're the only company that's been consistently in the business."

MDA has contributed at least component parts to most of the six stations now operating throughout the world and to the five under construction. In Canada, two Landsat stations are in use: the first, built entirely by MDA, is at Shoe Cove, Newfoundland; the other is at Prince Albert, Saskatchewan.

## Metric invades the North

The metric system is being given equivalents in the Eskimo language for the Inuit. Twenty-five translators and interpreters from as far west as Cambridge Bay, Northwest Territories and as far east as Labrador, met in Ottawa recently for the Inuktitut five-day Language Word Development Conference.

Inuktitut, which can be written both in roman orthography or syllabics, is an independent family of languages. It incorporates many units of meaning in one word by the use of affixes, suffixes or infixes. Consequently, the metric system, which uses prefixes, requires adaptation on the part of linguists when forming new words.

The interpreters at the conference reached consensus on how base units should sound and how they should be written both in orthography and in syllabics and agreed to use the international metric symbols.