engineering facilities in Kingston, Ontario. The new facilities will include chemistry, bacteriology and engineering sections and offices for supporting staff and will be responsible for the evaluation of water samples to determine the extent and distribution of pollution in relation to health.

### JOINT PROJECT

The survey is a joint project of the Department of National Health and Welfare, the Department of Mines and Technical Surveys, the Department of Fisheries and the Ontario Water Resources Commission, under the auspices of the International Joint Commission.

Three ships will be used during the survey: the motor vessel Brandal, a deep-sea fishing vessel specially adapted for research and two smaller ships, Old Squaw and Petrel. All are provided by the Department of Mines and Technical Surveys.

Among the items of equipment that will be used to analyze the numerous water samples is a device known as the auto-analyzer, which makes it possible for laboratory technicians to conduct four different chemical tests of multiple samples at any one time. Two of these instruments are being used in the survey, one installed aboard the Brandal and the other at the Kingston Laboratory.

# PROJECT FOR RETARDED CHILDREN

With the help of a \$34,000-grant from the Centennial Commission, the Canadian Association for Retarded Children is organizing a centennial school athletic programme with events for retarded children. All children attending retarded schools in Canada will be able to participate, including those in preschool classes with children aged four and five years, and nursery classes with six and seven year old children.

## DETAILS OF PROGRAMME

The programme will include: teacher training with workshops and seminars, a manual for the provincial and local CARC centennial athletic programme committee, a manual for organization and planning physical education classes as well as extra curricular programmes, a testing programme for the participants.

#### AWARDS

Each participant will receive a red participation shield, and an award for each performance level he reaches. The awards for performance are based on three levels: bronze, silver, and gold.

The entire programme has been worked out with educational and physical education specialists, particularly those who have had close association with the mentally retarded.

# ARCTIC RESUPPLY BEGINS

Twenty-three ships, including 15 vessels of the Canadian Coast Guard and eight chartered commercial

cargo-carriers, are making their way northward or preparing to depart from Atlantic or St. Lawrence River ports as the Department of Transport's annual Arctic resupply programme gets under way.

The fleet includes seven heavy icebreakers -John A. Macdonald, Labrador, N.B. McLean, d'Iberville, Wolfe and Montcalm - all scheduled for operations in Hudson Bay or the Eastern Arctic.

The first ship to go north was CCGS Camsell, which left Victoria, British Columbia, on June 29 to start the long voyage round Alaska. Because of the usually difficult ice conditions along the north coast of Alaska, the ship's progress is often slow as she makes her way to Tuktoyaktuk, at the mouth of the Mackenzie River, to begin the task of shepherding cargo barges and coastal freighters eastward as far as Spence Bay, Shepherd Bay and Gjoa Haven.

These ports of call, oddly enough, are hundreds of miles farther east than the westernmost ranging of some of the Eastern Arctic ships of the Coast Guard. In some years, heavy icebreakers in the latter group have steamed to the west through Viscount Melville Sound and right into M'Clure Strait, on the edge of the Beaufort Sea. Ice conditions vary from year to year, however, and the extent of any probes, by icebreakers, for purposes of scientific research, must be decided on in the light of observations made after the ships are actually in the high Arctic.

#### ICE SURVEYS

The movement of the ships is aided by the reports of ice conditions and forecasts of ice movement made following regular aerial ice surveys. These are carried out by specially trained observers of the Transport Department's Meteorological Branch, who fly over routes followed by shipping bound from Europe to Churchill in Hudson Bay, and along the paths to be followed by the Department's supply convoys as far north as Eureka and Tanquary Fiord, northernmost inlet in Ellesmere Island, and in the narrow Robson Channel between the tip of Ellesmere Island and Greenland. The reports are made available to all interested shipping either by radio or as ice maps broadcast via radio facsimile.

## CANADIANS TO ROWING MEET

A federal grant of \$11,000 will enable a team of Canadian rowers to compete in the World Rowing Championships to be held in Bled, Yugoslavia in September. The grant, made under the Fitness and Amateur Sport Programme, will cover half the travel and living costs of 16 oarsmen, two coaches and a manager, and includes \$2,000 for the transportation of equipment.

The backbone of the Canadian contingent is the senior "heavy-eights" crew from St. Catharines, Ontario, that captured the recent Canadian title at the Royal Canadian Henley. The St. Catharines crew is backed by a senior "heavy-fours" crew from Burnaby Lake, British Columbia - winners at the

same event.