operated by the Coast Guard. Civilian contractors provide such truck and stevedore services as are needed. The amount of cargo handled each year in the supply operations amounts to about 100,000 tons.

Supply convoys in the Western Arctic operate from Tuktoyaktuk at the mouth of the Mackenzie River, down which freight is brought from the south by barge. A Coast Guard icebreaker, based at Victoria, British Columbia, makes the long trip round Alaska to Tuktoyaktuk, and from there provides escort to the supply vessels. These operate eastward, between the mainland and Victoria and King William Islands, as far as Spence Bay and Shepherd Bay at the southwestern end of Boothia Peninsula.

Assistance to In winter, the Canadian Coast Guard icebreakers play a vital part Gulf shipping in the ever-increasing shipping operations in the Gulf of St. Lawrence. The movement of the icebreakers is directed by an iceoperations officer, who maintains contact with commercial vessels, provides routing instructions for them and directs such icebreaker assistance as they may need.

Information on ice conditions is provided by the Ministry's Canadian Atmospheric Environment Service. Where possible, merchant shipping is organized into convoys for passage under escort by icebreakers through areas where difficult ice conditions prevail.

Throughout the season, cargoes move regularly in and out of ports on the north shore of the Gulf, such as Sept-Îles, Port Cartier and Baie Comeau, as well as from the paper-producing ports of Corner Brook and Botwood, Newfoundland, and Dalhousie, New Brunswick. New ports and new industries are contributing to the flow of winter trade each year.

The winter traffic is of particular importance to the north shore, for it means that industrial life does not have to come to a halt because of the freeze-up, as was the case in the earlier years.

Aid to marine science In the Arctic, and to a growing extent in the Gulf of St. Lawrence and other home waters, advantage is taken by scientists, such as oceanographers and hydrographers from other government agencies, of the opportunity to further their knowledge of those waters that can be penetrated only by icebreakers.

In the course of High Arctic operations of the past several summers, the ships carried scientific research parties into many parts of the Far North, in some cases into waters hitherto uncharted. Among