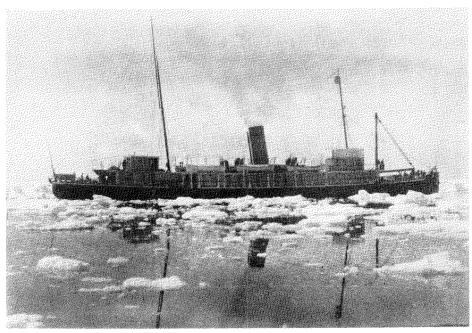


The Earl Grey off Port Nelson, Hudson Bay.



The Minto in Hudson Bay.

Commentary

EARLY CANADIAN ICEBREAKERS

R. J. Fraser*

In the years before 1914 I travelled on, or otherwise was acquainted with the icebreaking ships that were employed on the Hudson Bay Route. At Port Nelson, on board the hydrographic schooner Chrissie Thomey, the first vessel specially commissioned for northern charting, we attempted — with little success — to entertain the Governor General Lord Grey in 1910 when he and his party were impatiently waiting to join the icebreaker named after him, as she was lying in the offing hidden by mist.

CONSTRUCTION of the Hudson Bay Route, which was intended to provide short rail transport to seaboard for the wheat of the Canadian prairies, was begun in 1910 during the tenure of office of Earl Grey, Canada's ninth Governor General. It entailed the construction of a railway line, development of a new seaport, and the charting of the ice-encumbered waters of Hudson Bay and Hudson Strait. Lord Grey was deeply interested in Empire development and set out to gain personal knowledge of the projected route. Accompanied by a notable entourage, in a flotilla of canoes manned by Indians, he journeyed in 1910 for eleven days from Lake Winnipeg to York Factory on Hudson Bay, where he made a brief tour of the shore flats and the site of the proposed terminal harbour, Port Nelson. From there he returned by sea, on an icebreaker with a sumptuously appointed vice-regal suite, to Quebec City.

In the same year Canadian icebreakers had been sent for the first time into northern waters to assist in exploring and charting the new route where arctic ice conditions prevailed, and from then on they worked for several seasons more or less successfully — certainly often precariously. The outbreak of the First World War brought these activities to a halt, and when they were resumed in the postwar years the vessels that had pioneered the work had either become war casualties or been honourably retired from service.

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The first to go north in 1910 was the *Stanley*, built in 1888 at Govan, Scotland; the icebreaker Minto, eleven years younger and the product of a Dundee shipyard, carried on until the war brought these northern activities to an end. The two ships had in turn as ice pilot a veteran of arctic navigation, Captain Sam Bartlett of Brigus, Newfoundland, an uncle of "Bob" Bartlett of Peary fame. Both ships had been designed to carry passengers and freight on the Prince Edward Island ferry run and had only limited icebreaking capability. They were at times defeated by even the relatively light ice encountered in Northumberland Strait; in Hudson Strait the massive fields of arctic ice, often deck high and dotted with miniature icebergs, were many times more formidable. In one encounter with heavy floes coming down from Foxe Basin the Minto came off second best. Despite all this these two ships did Trojan and successful work in the early exploitation of the route. The Stanley was sold in 1935 and broken up for scrap; the exact fate of the Minto is not known, for she was one of several vessels sold to Russia in 1915 for escort work in the White Sea, and it has been assumed that she was wrecked on the coast of Norway.

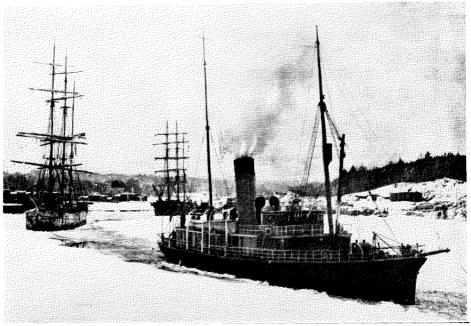


Photo: Dept. of Transport

The Stanley in Bridgewater Harbour, N.S.

In 1904 a more powerful icebreaker was built at Glasgow, named *Montcalm*, which displaced 3270 tons and had an engine of 3225 horsepower. She was the workhorse of the fleet for the next 38 years, engaged in icebreaking and other coastal duties in the St. Lawrence River and the Gulf of St. Lawrence. In the end she too was transferred to Russia in 1942 and,

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though she is believed to have become a casualty of the "Murmansk run", her ultimate fate seems to be unrecorded. The first Canadian-built icebreaker, J. D. Hazen, was launched in May 1916 from Vickers' Montreal yards and was an immense improvement in size, power, and capability, and was almost immediately sold to the hard-pressed Russians. They renamed her *Mikula Selyaninovich*. When the Allies (including Canadian forces) evacuated Arkhangel'sk the French took away the *Mikula* as war booty. Three years later the Canadian government repossessed the ship—at a price—and from then on until 1937 the former J. D. Hazen assisted in keeping the St. Lawrence channel open above Quebec; she was finally sold and broken up for scrap.



The hydrographic schooner Chrissie Thomey (left) off Port Nelson, Hudson Bay.

The Russians had some 20 icebreaking, or else ice-strengthened vessels operating in arctic waters during the First World War. Only two were Russian-built, one being the world's largest, the Yermak of 10,000 tons and 10,000 horsepower. She was 5 years old when war broke out. The Russian fleet included former Newfoundland sealing steamers, well-tested in the ice fields off Labrador and in the Gulf of St. Lawrence, and also used for freighting supplies on the Hudson Bay Route. There was first the Beothic, which they renamed Georgiy Fedor, and two other St. John's ships, Bonaventure (Vladimir Rusanov), and Belleventure (Alexandr Sibiryakov), which the Russians classed as "icebreaker freighters". All did not return to America, though at least one, the Belleventure, survived until 1942, when according

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to the Germans she was sunk in the Kara Sea by their pocket battleship Admiral Scheer. The Russians also acquired English and Scotch vessels that had been whaling in the Arctic. Perhaps the most renowned was a Dundee whaler named Eclipse of 430 tons, built in 1867 at Aberdeen, which, after 46 years in the Baffin Bay whale fisheries became in 1914 the Lomonosov (named after Mikhail Lomonosov, a Russian scientist, who was the first to investigate the northern sea route in 1765), working out of Arkhangel'sk. She was a sturdy wooden sailing ship, with an auxiliary steam engine of 69 horsepower, but it is on record that as late as 1932 she was still employed in research work and was based on the Siberian port of Petropavlovsk. Furthermore, though it is not certain that she was still afloat, she was carried on Lloyd's Register of Shipping as late as the year 1961. Her name has now been transferred to a new oceanographic research vessel of 5,900 tons.

The Canadian icebreaker that met the Governor General off the Nelson River in Hudson Bay in 1910 was the C.G.S. Earl Grey, the best-appointed vessel of her kind, with accommodation fitted out for the highest officers of state. The Earl Grey was to outlast all others. Built at Barrow-in-Furness in 1909 for the St. Lawrence winter service, her tonnage (4,600) and power (7,000 HP) were considerably less than those of the Russian Yermak, built the same year, but her speed of 17 knots was 3 knots higher. Her Stanley bow and rakish spars gave her a yacht-like appearance, though this was rather marred by the ill-proportioned huge funnel amidships, characteristic of the coal-burning vessels of her day. Official records listed her as a "steel icebreaking freight and passenger steamer" and operators pronounced her the "first Canadian ice-fighting machine". She maintained a winter ferry service between Charlottetown, P.E.I., and Pictou, N.S., until 1914, when she was sold to the Imperial Russian government for icebreaking duty at Arkhangel'sk. Not unlike the Arctic itself, the Soviets are slow to give up their secrets, and records of the movements and accomplishments of the former Earl Grey are fragmentary. Under successive regimes her name was changed more than once, first to Kanada, then to III International, and finally to Fedor Litke, a name that has become familiar to all interested in scientific work in the Arctic Ocean. The new owners classed her as a "medium-size icebreaker using the cutting method". Unlike those before her, which battered at the ice floes, the *Litke* knifed her way through and she was probably one of the last designed to execute this manoeuvre. The modern icebreaker uses the "rush, rise, and crush" method of attack, ramming the opposing floes and rising on them, thus demolishing them by sheer power and weight. In Russian hands she lived up to high expectations and even established some remarkable records; from Arkhangel'sk to Vladivostok she became the most frequently encountered vessel of her kind. Her reputation was such that, when in 1937 the icebreaker Molotov, with Peter Freuchen on board, fell in with other Russian vessels in the Kara Sea, the Danish explorer assumed that one, fitted with well-appointed laboratories and staffed by former scientific colleagues, must be the Litke, which he described as a "strange vessel, originally built as an icebreaker for Hudson Bay during the First World War". He confused her with the Sadko, the former British Lintrose, torpedoed in the White Sea and raised 17 years later and restored to Russian northern service.

It is evident that in the Siberian Arctic the *Litke* accomplished what may have been impracticable for Russian vessels or others of foreign origin. She furnished the first "icebreaker escort" for merchant ships in *any* northern sea. While on meteorological duty *Litke* spent a whole winter locked in the ice, and in 1934, after having been turned into a floating laboratory, she completed in one season the first traverse from east to west of Russia's "North East Passage", known today as the Northern Sea Route, much travelled, and in some ways comparable to the historic "North West Passage" of the Canadian Arctic, but a thousand miles longer. The next year the feat was repeated, with the added distinction of leading the first convoy of freighters through the same passage, and inaugurating what has since become a regular commercial route.

There are gaps in our knowledge of further accomplishments, though of the few on record, one at least will go down in arctic history. After having been refitted in 1947-8 in a Mersey shipyard the *Litke* continued in exploration and scientific work and in 1955 set up another record when she penetrated into the far reaches of the Arctic Ocean and surpassed the northing made by any other vessel under its own power. Nansen's *Fram* went 300 miles nearer the Pole, but she drifted, locked helplessly in the pack ice. *Litke*, the icebreaker, true to form, *steamed* to within 440 miles of the Pole, reaching a latitude of $83^{\circ}11'$ N. According to the last certain knowledge of the Scott Polar Research Institute, the former proud and distinguished *Earl Grey* was still in service in 1957 in the Russian Arctic, then aged 48 years.