

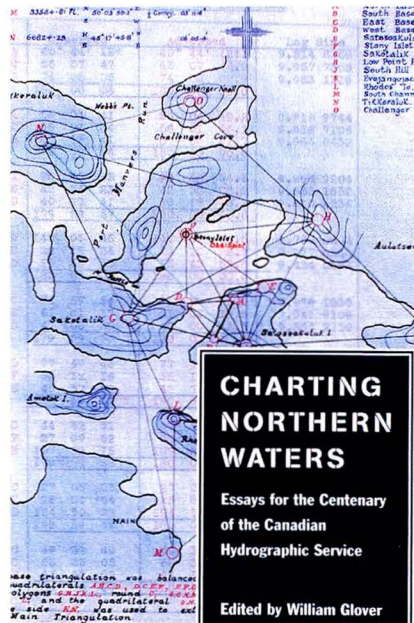
Charting Northern Waters

Essays for the Centenary of the Canadian Hydrographic Service

Edited by William Glover, published by McGill-Queen's University Press, 2004

This excellent volume of essays is best described by the sub-title as the essays cover most of the waters of Canada and not just northern waters. The essays were prepared as a significant part of the 2004 centenary celebration of the Canadian Hydrographic Service (CHS). In the introduction, William Glover makes it clear that the volume is not intended to be a history of CHS, but instead is a series of essays by a group of eminent hydrographic historians on hydrographic events from the 17th century to the present.

In the first essay, James Pritchard provides a summary of the efforts of the French to carry out surveys, teach hydrography and navigation and to publish the information during the period from the middle of the 17th century until the siege of Quebec in 1759. While there were a number of prominent French hydrographers who laboured in New France, the one who likely made the greatest contribution was Jean Deshayes who was appointed Royal Hydrographer in 1685 and only stayed in New France for one year. One of his accomplishments was on 11 December, 1685, when he observed a lunar eclipse and later established a meridian through Quebec to within seconds of arc, meeting the colony's needs in terms of a longitudinal measurement for land surveying as well as for his superb chart of the St. Lawrence River.



In the second essay, Andrew David discusses Alejandro Malaspina's survey operations and in particular his hydrography on the British Columbia coast during the period, 1791-1792. For this voyage of discovery, Malaspina was painstaking in seeking the latest survey instruments to equip the two corvettes appropriately named *Discovery* and *Daring*, and obtained many instruments such as sextants and chronometers from London. During this voyage many astronomical observations were made as well as gravity measurements to determine the true figure of the earth. His voyages are noteworthy from the point of view of his

meticulous methods and for the large amount of survey information he gathered.

In the third essay, Andrew Cook discusses the Royal Navy's charting of the British Columbia coast during the 19th century and provides a detailed listing of the significant number of charts of the British Columbia coast published from 1848 until 1911.

An essay by Richard Gimblett is especially interesting in terms of the history of CHS as it describes the efforts of the then Minister of Marine and Fisheries, the Honourable Raymond Préfontaine, to establish a hydrographic service as a logical progression towards the establishment of a Canadian naval militia. His efforts were considerably aided when, on 24 November, 1902, shortly after departing Quebec City for England, the *SS Sicilian* struck an object in the middle of the channel in the same place as the *SS Lake Huron* sustained considerable damage some years earlier. The Canadian government promised immediately to sweep the channel the next season. This became the third instance when a marine accident prompted an investment in hydrography, the first being in 1883 after the loss of the steamer *Asia* in Georgian Bay in 1882 and the second after the liner *Parthia* encountered a shoal in Burrard Inlet in 1890.

Christopher Andreae discusses the other government departments who were and in some instances still are involved in hydrographic work. In this essay, he outlines the interdepartmental jurisdictional issues and the overlap concerns between engineering related hydrography and hydrography specifically for navigation.

In a very personal essay, Steve Ritchie discusses the last British Admiralty survey on the Labrador coast to provide an inside route that would allow vessels to visit the coastal settlements four or five weeks earlier each year. The survey of the waters of this colony was carried out in the period 1932-1934 and Admiral Ritchie was an officer on the survey vessel *Challenger*. He discusses in detail the

survey equipment used, the laborious process of triangulation, conditions aboard ship and ashore, and the use of dog teams as a means of travel. He also discusses the grounding of the vessel on Challenger Rock.

Vladimir Sobolev discusses hydrographic operations in Russia's northern oceans during the period 1900-1940. This essay is a welcome addition to the limited English language charting information available on the Northern Sea Route and the writer presents the material in considerable detail.

In a very enlightening essay, Michael Hadley presents an interesting account of German hydrography and reconnaissance missions in Canadian waters on both the west and east coasts during the first half of the 20th century. These voyages were for military reasons and included some physical oceanography and military operations in addition to charting.

In the second last essay, David Gray describes the technical advances in the CHS since 1945. While it would take many pages to provide detail on all the advances, the essay does provide enough material to make the inquisitive reader search the bibliography.

In the final essay, Gary Weir through the diary of William Metcalf reminds the reader of the difficulties in operating in the ocean environment and the difficulties that are not just caused by the environment but by the bureaucratic struggles.

This volume of essays will be of interest to hydrographers, mariners and nautical historians, and also to anyone else with an interest in nautical history. It should also be of interest to educational institutes as it contains many excellent examples of the history of hydrography and the changes in instrumentation and methods over a long period of time. The publication is well prepared with extensive end notes and a very good bibliography.

Reviewed by Stephen B. MacPhee, Canadian Hydrographic Service, Ret'd.