

BOOK REVIEW

Review of *The great ocean of truth,* by Peter Wadhams (2009). Ely, Cambridgeshire: Melrose Press. 378 pp. ISBN 978-1-907040-30-6.

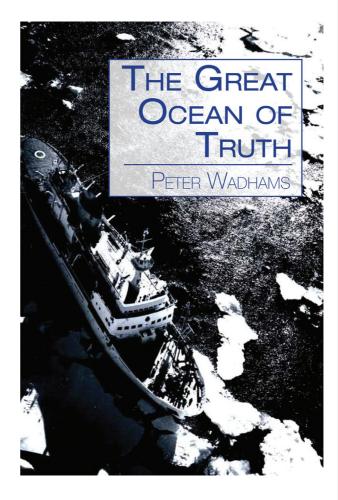
Hudson-70 was an epic voyage by the Canadian research oceanographic ship CSS *Hudson* from 19 November 1969 to 16 October 1970. This major expedition was similar in scope to the *Eltanin* Southern Ocean cruises and the earlier *Discovery* and *Meteor* expeditions. It was, however, the first to focus on, and successfully complete, a circumnavigation of the Americas. The vessel carried out multidisciplinary scientific observations in the North and South Atlantic, Antarctic, Pacific and Arctic oceans and at that time was only the sixth ship to traverse the Northwest Passage in the Canadian Archipelago. It encountered polar sea ice and icebergs at the distal extremes of its voyage.

A diverse suite of marine sciences observations including geology, geophysics and biology (marine and avian) as well as physical and chemical oceanography was obtained. The results have been published in numerous peer-reviewed professional journals and technical reports. A partial list of highlights include: dissolved oxygen and silicate distribution in the Atlantic and Pacific including the Antarctic Convergence zone, oceanographic characteristics of the Chilean fjords, distribution of seabirds in the Drake Passage, *Planktonic foraminifera*—water mass relationships in equatorial and North Pacific waters, and the oceanic nature of Baffin Bay.

Peter Wadhams, who chronicles the Hudson's voyage in his book, The great ocean of truth, was the most junior scientific assistant on board—he was, in fact, a lowly student-and in this capacity he stood watches and participated in all activities. His academic status dictated that he worked the longest hours at the least desirable times, i.e., the mid-watch (also known as the graveyard watch), and was always called upon to perform outdoor activities during the coldest and roughest seas. One of the major strengths of the book is his detailed descriptions of the instruments and how they worked and what they measured. One of his prime duties was hanging the Nansen-Knudsen bottles that consist of water sampling bottles and thermometers that are triggered by a messenger weight at selected depths. This ingenious but cumbersome device has since been replaced by the

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modern conductivity, temperature, and depth recorder that performs these measurements on a continual basis. Magnetometers and gravity meters are described in detail from both theoretical and practical points of view so that the novice may understand why one would wish to record these data. In recounting the *Hudson's* stay in the Chilean fjords, the author delves into internal waves, which were first studied by Fridtjof Nansen, and he explains how they can counter the forward motion of a ship's propeller.

Peter is a keen observer of nature, its processes, and the foibles of man and he is an excellent writer. Peter either has a prodigious memory or keeps a most complete diary. The answer is most likely both, as shown in his detailed and vivid descriptions of Canadian embassies, hotels, points of interest, government institutes and the officials and other local inhabitants with whom he interacted. In describing the photo ops arranged for visiting dignitaries, when the scientists were pushed aside so that a

prestigious visitor could pretend to be busy recording data, Peter writes with refreshing frankness and is not afraid of giving offence. An example of the fascinating material contained in The great ocean of truth is the author's social commentary on the situation of the indigenous people of Tierra del Fuego, including a brief history of the three main tribes and their disastrous history with Europeans. A Chilean schoolteacher whom Peter met aired the opinion that the Indians are very lazy; they never lift a finger to help themselves. Once they have left school they sit in their huts, living on government handouts. The author tried to point out that this is understandable when a people have had their land and, hence, the meaning of their lives, taken away from them, but this did not appear to make any impact on the teacher.

The author conveys the thrill of discovery on a scientific cruise and also the joy of port calls at places that many of us will never get a chance to visit such as Buenos Aires and the Inca city of Machu Picchu, which Peter reached by dint of great determination and various modes of transportation from Valparaíso. I greatly enjoyed *The great ocean of truth* as it brought back memories of my early seagoing days. I highly recommend this book to seagoing scientists and the general public, who can obtain a vivid taste of the seagoing life. I hope that Peter considers penning an autobiography so his remarkable career will be documented with the same level of candidness and fascinating detail as in *The great ocean of truth*.