TWO YEARS BELOW THE HORN: OPERATION TABARIN, FIELD SCIENCE, AND ANTARCTIC SOVEREIGNTY, 1944–1946. By ANDREW TAYLOR. Edited by DANIEL HEIDT and P. WHITNEY LACKENBAUER. Winnipeg: University of Manitoba Press, 2017. ISBN 978-0-88755-791-0. xl + 456 p., maps, b&w illus., notes, bib., index. Softbound. Cdn$34.95. Also available as a PDF file and epub.

This is a remarkable book about a Canadian who led an Antarctic expedition (the secret Operation Tabarin) during World War II. His manuscript was completed in the 1940s but not published until the editors of this volume found and published it. While I have long known that there was a Canadian on the first expedition to overwinter in Antarctica, in 1899, and that Canadians have been actively involved in south polar exploration and science since then, I had never heard of a Canadian leading an expedition, nor had I seen personal reports of Antarctica in wartime.

Andrew Taylor was an engineer surveyor from Manitoba who was posted to Britain early in World War II as a captain in the Canadian Army. He was invited to become a member of Operation Tabarin, a two-year expedition to Antarctica designed to strengthen Britain's claims there during and after the war. He spent 1944 and 1945, the last years of the war, on the Antarctic Peninsula. The team was assembled by the British government, and they sailed as civilians, with their equipment, in a large troop ship to Port Stanley, Falkland Islands, the capital of British Antarctica.

They were taken south in small vessels, aiming for Hope Bay in a part of the peninsula that had been occupied by Nordenskjöld's Swedish expedition of 1901–04. They could not reach their target destination and so spent their first winter at Port Lockroy on Goudier Island. The bases they built at these sites became prototypes for the network of bases that became the foundation of British involvement in Antarctica after the war.

During their first winter, they began geological, botanical and other collections while transmitting weather data daily to Port Stanley. The weather data were valuable for wartime shipping in the South Atlantic and were part of their science program. They surveyed and mapped their region, an activity in which Taylor, a professional surveyor, was very valuable. As Port Lockroy was on an island surrounded by sea that did not completely freeze, winter traveling was restricted (although one man-hauling trip was for 25 days) but provided excellent preparation for their second winter. In the spring, they continued the surveys in small boats.

During this winter, the original leader of the expedition became sick, and Taylor was appointed in his place.

Their relief vessel proved to be a Newfoundland (then a colony) sealer, complete with Newfoundland dogs that proceeded to eat lots of penguins. They sailed to Hope Bay, their original destination, where they built a base, which is now a heritage site. The dogs continued to slaughter penguins. Taylor writes about these and other activities with little of the "heroic" tone of similar ventures. The expedition's second year in the Antarctic was very productive.

March of 1945 was spent building the base. They were now a seasoned, competent bunch, with Taylor very much their leader. As winter (their travel season) approached, they practiced dog sledding and ice fishing and added sea ice conditions to their regular weather reports.

Having completed their base, the party spent July 1945 preparing for the winter sled expeditions. As there was no overall plan for science (although this was in theory a key part of their mandate), they set about designing science projects around their base and for their sled journeys with remarkable resourcefulness. In addition to the routine meteorological work, they measured ice thickness and tide levels (they built a tide gauge), initiated glacier movement measurements, and began collections of geological, botanical, and biological specimens for their new region. Above all, they initiated survey programs for their journeys and around the base, which included repositioning the base many kilometres from where it was supposed to be. They fixed sleds and made harness for the dogs. Participation in these activities seems to have been a remarkably cooperative exercise of very competent men. In the chapter devoted to this period, there is no mention of the fact that July 1945 saw the end of World War II of which they were a part.

They undertook major winter dog sled treks around the region, taking particular interest in sites and phenomena noted by their Swedish predecessors. They collected and surveyed as they went, accumulating heavy loads of samples. They were disappointed to find the old Swedish base in poor condition but took tools, samples of ancient food and booze (some of which they consumed), and candles for their own use as supplies were running low. They covered hundreds of kilometres on treks that extended into the end of winter when they were becoming anxious about being away from base when the relief ship might arrive.

They went to great lengths to carefully package and catalogue all specimens, creating duplicate copies of reports and lists in case of accidental loss. At base, they did their best to prepare the way for their successors. Although this was the last year of the war, there is little mention of it except to note the surrender of the German army. When their relief was delayed, they tended to attribute it to the secrecy surrounding their expedition.

Then, quite suddenly, they were relieved and taken to Port Stanley whence, after some time, they traveled to England in the cruiser *Ajax*, which picked up prisoners of war from various ports en route. On the way home, they learned that their Operation Tabarin had been transformed into the Falkland Islands Dependency Survey, the administrative basis for British activities in Antarctica for decades after the war.

The following dismal paragraph is really the end of Taylor's manuscript, which remained unpublished until

the editors of this volume, Heidt and Lackenbauer, most creatively, used it and other Taylor records to create the present volume and draw attention to an extraordinary gap in Canada's polar history. At the end of his manuscript, Taylor wrote (p. 395):

> It is probably true to say that no government-sponsored expedition to the Antarctic ever set forth from its country of origin so unostentatiously as Operation Tabarin had in 1943 because our entire mission was shrouded in secrecy. The quietness of our return, however, exceeded that of our departure. A knot of people stood alongshore on that dreary afternoon, but they had come to see friends and relatives from the *Ajax*'s crew. Half an hour after the cruiser docked, a handful of government officials arrived, including J.M. Wordie of the Scott Polar Research Institute. We struggled to procure money for our party at that particular time of the English week, but the *Ajax*'s paymaster, Commander Bennett, obliged us by cashing a personal cheque of mine. With these funds in hand, I doled out sufficient money for each man to last through a rather lean weekend. The lack of prearranged reservations made locating hotel rooms difficult, and three of our group spent their first night back in England, stretched out with their luggage in one of London's derelict air raid shelters. I was fortunate in deciding to remain on board the deserted *Ajax* for one night.

They had been forgotten!

The editors conclude their volume with an account of Andrew Taylor's career until his death in 1993. His manuscript was not picked up in North America or Britain. He and his colleagues received no real recognition for their pioneering work, which laid the foundations for a British presence in Antarctica after the war when the United States, the Soviet Union, and South American nations became very active there. He received a grudging Polar Medal from Britain many years after the expedition. His promotion in the Canadian Army was slow. He continued to work in cold weather science and engineering and received recognition for this work in Canada (e.g., the Order of Canada, a Northern Science Award, and an honorary degree from his alma mater, the University of Manitoba). The citations for these well-earned honors stressed his Arctic, not his Antarctic work.

Canadian colour in the book includes Andrew Taylor's comment that their first Antarctic winter was warmer than Winnipeg and that he led his dog team on snowshoes. There is remarkably little comment on the war, but Taylor does suggest that a good meal of seal meat was better than the food he had received in wartime London.

This book will be enjoyed by anyone with Antarctic interests, especially those interested in the origins of the Antarctic Treaty. It is clearly written with little of the heroic overtones of similar works. It covers daily life and scientific work in great detail, clearly and effectively. Had this manuscript been published when it was written, young Canadians, knowing that one of their own led a very special Antarctic expedition, would have a different view of Canada's involvement in the great southern continent. The editors are to be commended for a fine piece of work.

Hon. Peter Adams
Professor Emeritus
Trent University
Peterborough, Ontario K9L 0G2, Canada
peter.adams@cogeco.ca

LINES IN THE ICE: EXPLORING THE ROOF OF THE WORLD. By PHILIP HATFIELD. Montreal and Kingston: McGill-Queen's University Press, 2016. Published in the United Kingdom by the British Library. ISBN 978-0-7735-4820-6. 255 p., colour illus., select bib., index. Hardbound. Cdn$44.95.

This wonderfully illustrated book draws most of its pictures and maps from the collections of the British Library. As the author, Philip Hatfield, points out, the large amount of Arctic-related material held by an institution that has never had any particular focus on the Far North demonstrates the allure of this region for Europeans. Hatfield's book offers no overarching thesis; instead, he merely observes that although the Arctic's beauty has often inspired visitors to produce creative works marked by "awe and humility," those who engage with the region must do more to respect the land and its indigenous inhabitants (p. 247). The section on global warming near the end is suitably sobering, but overall the book is more effective at evoking wonder than at increasing the reader's awareness of past and present shortcomings among the producers of Arctic images.

Lines in the Ice is made up of short chapters, most of them only a page in length, on topics arranged in chronological order from the Middle Ages to the present. For every page of text, there is a page or more of beautifully reproduced images. Although British, American, and Canadian stories predominate, there are several extremely interesting sections on Dutch, Scandinavian, and Russian expeditions. Some Antarctic topics have also been included, and while the material in these chapters is important in itself, it does appear somewhat out of place here, especially considering the subtitle "Exploring the Roof of the World."

The volume, therefore, has elements of the coffee table book, but it is well suited to inform at the same time as it entertains. Hatfield has read extensively in the published primary and secondary literature, although he does not appear to have ventured into the archives to any extent. His commentary provides a well-balanced and gracefully written synthesis of recent scholarship. General readers will learn much from Hatfield, but students and scholars concerned with accurate detail should look elsewhere for information. There are few major mistakes—no small