

Book Review

The Joint Arctic Weather Stations: Science and Sovereignty in the High Arctic, 1946-1972. By Daniel Heidt and P. Whitney Lackenbauer. University of Calgary Press, 2022. 600 pp.

Reviewed by Glenn Icton

During the onset of the Cold War, the Canadian and American governments engaged in a joint effort to establish weather stations in the High Arctic. These developments occurred concurrently with increased American presence in the Canadian Arctic due to other military endeavours. With some exceptions, northern Canadian historiography examining this era has consequently been characterized by a focus on the American presence in the Arctic and associated sovereignty concerns on the part of the Canadian government. In *The Joint Arctic Weather Stations*, historians Daniel Heidt and P. Whitney Lackenbauer substantially broaden this scope of inquiry. While providing a nuanced analysis of sovereignty issues related to the establishment of Joint Arctic Weather Stations (JAWS)—and, in the process, challenging many previously-held assumptions—Heidt and Lackenbauer also provide numerous insights into the civilian components surrounding the establishment of the weather stations and the logistical challenges faced by planners and station personnel as they attempted to construct and maintain these stations in such harsh environments. This broad focus allows the authors to provide significant historiographical contributions not only to diplomatic history, but also to scientific and environmental history.

The book is divided into nine chapters. The first four chapters are chronologically organized. Chapter 1 focuses on the lead-up to negotiations regarding the establishment of JAWS, setting the context of early meteorological and scientific research in the Canadian North as well as Canadian sovereignty concerns in the decades preceding the Cold War. Chapter 2 discusses the negotiations that ensued between Canada and the United States to allay the former's sovereignty concerns and pave the way for JAWS. The following two chapters discuss the logistics of establishing the first weather stations in the High Arctic and expanding the network of stations.

The following five chapters are organized thematically, addressing various components surrounding the logistics and challenges of maintaining the weather stations. Chapter 5 examines the staffing of the weather stations while the following chapter explores how station personnel participated in scientific networks and contributed to the development of scientific knowledge. In doing so, chapter 6 highlights the distinction between the year-round JAWS personnel and visiting scientists, and the role of the former as meteorological technicians (or “met techs”) in collecting data for scientists. While environmental and seasonal influences on weather station operations are evident in each chapter, chapter 7 brings these considerations to the forefront. These considerations include addressing how seasonality affected resupplying the stations as well as how the environment influenced other life-sustaining elements, such as procuring water. As the weather stations were jointly staffed by Canadian and American personnel and offered few opportunities for respite from fellow staff members, chapter 8 examines the interrelationships between staff in the High Arctic. Finally, chapter 9 focuses on the debates surrounding the “Canadianization” of JAWS.

A central historiographical contribution made by Heidt and Lackenbauer is challenging conventional understandings of JAWS as a threat to Canadian Arctic sovereignty. The authors present very detailed research and analysis demonstrating the American government’s intentions to respect Canadian sovereignty. Concomitant to questions of sovereignty and security, Heidt and Lackenbauer also emphasize the important civilian role that the weather stations played. While acknowledging the fact that JAWS was useful militarily, the authors effectively demonstrate how the network of weather stations would facilitate more accurate weather forecasting which, in turn, served a multitude of civilian functions. Finally, the book effectively demonstrates that without American investment and expertise, these weather stations would likely have never been constructed.

While *The Joint Arctic Weather Stations* is in direct conversation with the multitudes of works examining Canadian Arctic sovereignty, the broad focus of this book allows it to make various other significant historiographical contributions. By providing an environmental lens, this book provides an important perspective when considering the interplay between plans developed in southern regions and Arctic realities. The fine details that are provided by Heidt and Lackenbauer demonstrate how the harsh Arctic environments as well as the unique geographies of each weather station’s locale meant that plans needed to be fine-tuned on site. As the authors note: “Realities on the ground and in the waters of the archipelago would force decision-makers to reshape their plans and even their conceptual mapping of where, when, and how human activities could be accomplished” (116). As Heidt and Lackenbauer point out, these challenges were further exacerbated

by logistical issues. For example, at the station on Resolute Bay, fresh fruit arrived prior to the construction of heated warehouses. As a result, most of the fruit was destroyed by frost.

Heidt and Lackenbauer also provide detailed descriptions of the interpersonal relationships that unfolded at the weather stations. A variety of factors affected these interpersonal relationships including nationality, whether individuals were military or civilian personnel, and whether individuals were well-suited to work in the Arctic. Each of these factors were further compounded by the isolation of the weather stations. The authors effectively demonstrated how each of these factors intersected to create unique social dynamics at the weather stations. Elaborating upon this, Heidt and Lackenbauer also examine the relationships between JAWS staff and scientists, highlighting the importance of empathy and camaraderie in facilitating a more congenial relationship between the two groups and facilitating the effective collecting and communicating of scientific data.

Government and military organizations figure prominently in this book. These types of organizations have a penchant for using acronyms. Consequently, Heidt and Lackenbauer have provided a four-page list of acronyms at the start of the book. This list is a very useful resource for readers who might otherwise find the frequent use of acronyms alienating and difficult to follow. The use of maps is also very useful to help situate readers to the locales discussed in the book. Finally, the book is well illustrated with photographs and other images.

While some readers might be overwhelmed by the level of detail provided in *The Joint Arctic Weather Stations*, it is through this detail that Heidt and Lackenbauer take their analysis beyond high-level bureaucratic understandings of JAWS and provide valuable insights into the actual operations of the weather stations. As stated in the book's introduction, "we [Heidt and Lackenbauer] quickly realized that a fixation on senior decision-making overlooks significant dynamics in the actual *operation* of the JAWS program, in addition to what experiences in the field tell us about high-level assumptions and concerns over time" (10). These details provide a comprehensive understanding of the operations and how senior decision-making often did not reflect the realities on the ground. The insights provided in this book would be of interest to scholars studying Arctic sovereignty, environmental history, and the history of science. Additionally, the book is written in accessible language and general northern history enthusiasts would likely find themselves drawn in by the many unique details surrounding the establishment and operation of JAWS. Overall, *The Joint Arctic Weather Stations* provides multiple significant historiographical contributions to understanding the Canadian High Arctic during the Cold War era.

Glenn Icton is a sessional instructor at University of New Brunswick Saint John.