Canadian Arctic Sovereignty and Security: Historical Perspectives

Edited by P. Whitney Lackenbauer
Cover: The Mobile Striking Force, an air portable and airborne brigade group designed as a quick reaction force for northern operations, was an inexpensive solution to the question of how Canada could deal with an enemy lodgement in the Arctic. During training exercises, army personnel from southern Canada learned how to survive and operate in the north. In this image, taken during Exercise Bulldog II in 1954, Inuk Ranger TooToo from Churchill, Manitoba relays information to army personnel in a Penguin. DND photo PC-7066.
Calgary Papers
in Military and Strategic Studies

Canadian Arctic Sovereignty and Security
Historical Perspectives

Edited by P. Whitney Lackenbauer

Contents

Introduction
P. WHITNEY LACKENBAUER .................................................................1

Gateway to Invasion or the Curse of Geography?
The Canadian Arctic and the Question of Security, 1939-1999
BERND HORN ......................................................................................23

“The Army of Occupation”: Americans in the
Canadian Northwest during World War II
KEN COATES AND BILL MORRISON ......................................................55

1946: The Year Canada Chose Its Path in the Arctic
PETER KIKKERT ..................................................................................69

“Advertising for Prestige”: Publicity in Canada-US
Arctic Defence Cooperation, 1946-48
DAVID J. BERCUSON .........................................................................111

Arctic Focus: The Royal Canadian Navy in Arctic
Waters, 1946-1949
ELIZABETH B. ELLIOT-MEISEL ..............................................................121

Clenched in the JAWS of America? Canadian Sovereignty
and the Joint Arctic Weather Stations, 1946-1972
DANIEL HEIDT ..................................................................................145

A Practicable Project: Canada, the United States,
and the Construction of the DEW Line
ALEXANDER HERD ............................................................................171
The Military and Nation Building in the Arctic, 1945-1964
K.C. EYRE ........................................................................................................ 201

Claiming the Frozen Seas: The Evolution of Canadian Policy in Arctic Waters
ADAM LAJEUNESSE .................................................................................. 233

The Manhattan Incident Forty Years On: Re-assessing the Canadian Response
MATTHEW WILLIS ................................................................................... 259

Building on “Shifting Sands”: The Canadian Armed Forces, Sovereignty, and the Arctic, 1968-1972
P. WHITNEY LACKENBAUER AND PETER KIKKERT ..................................... 283

Polar Vision or Tunnel Vision: The Making of Canadian Arctic Waters Policy
ROB HUEBERT ......................................................................................... 309

Canada’s Northern Defenders: Aboriginal Peoples in the Canadian Rangers, 1947-2005
P. WHITNEY LACKENBAUER ...................................................................... 345

Climate Change and Canadian Sovereignty in the Northwest Passage
ROB HUEBERT .......................................................................................... 383

Pathetic Fallacy: That Canada’s Arctic Sovereignty is on Thinning Ice
FRANKLYN GRIFFITHS ........................................................................... 401

Conclusions: “Use It or Lose It,” History, and the Fourth Surge
P. WHITNEY LACKENBAUER ...................................................................... 423

Further Reading ....................................................................................... 437
Clenched in the JAWS of America? Canadian Sovereignty and the Joint Arctic Weather Stations, 1946-1972

Daniel Heidt

Sovereignty is a complex subject but can be roughly separated into two forms. De jure sovereignty is the degree to which other states accept a country’s claim to a geographic area. It is the diplomatic or “official” territorial claim. If there is no competing claim for territory then Canada is, at least ostensibly, sovereign. De facto sovereignty is how these claims are manifested “on the ground” within a geographic region. The two aspects are complementary. For instance, if one country invades another but is condemned by the international community, the invader may eventually chose to withdraw despite exercising de facto sovereignty. Conversely, insufficient de facto sovereignty can compromise a de jure claim by making a state’s claim seem unjustified.

Given the Arctic’s remoteness and expansiveness, continuous occupation is not required or expected. Routine patrols, the delivery of mail, or the administering of law are all means of asserting control. Many historians argue that Canada’s de facto sovereignty initiatives have been insufficient. Shelagh Grant argues that “‘paper guarantees’ did not always translate into practice” as Americans violated Canadian laws or diplomatic agreements. Accordingly, she concludes that the result was “a compromise: optimum security with minimal, but perceived unavoidable loss of sovereignty.” More moderately, Adam Lajeunesse argues that the United States was “exceedingly careful and tactful with issues of sovereignty,” but that:

rather than seeking the effective control which would have allowed Canada to assert a firm policy, the government focused its efforts on using the American need for continental defence to secure implicit recognition from the U.S. while trying to minimize the perception of American control and involvement in the Arctic.

Thus, Canada tried to “minimize the public perceptions of American control and involvement in the Arctic” while exaggerating its own to the press.
Unlike Grant, Lajeunesse does not describe American violations of Canadian sovereignty, but instead insists that the dominance of the United States in joint Arctic programs, by definition, compromised Canada’s ability to control events “on the ground.” Moreover “securing actual control over the Arctic was never its [Ottawa’s] primary concern” as Canada continued to rely on mere de jure sovereignty to maintain its claims. Although Canada’s limited investment in de facto sovereignty was not a problem at the time, “the Canadian reliance on the U.S. military throughout the 1940s and 1950s in the Arctic left the country incapable of asserting any official claim” to combat subsequent explicit challenges to Arctic sovereignty such as the 1969 sailing of the SS Manhattan through the Northwest passage.

Revisionist scholars describe Canadian and American past Arctic cooperation more favourably. Joseph Jockel argues that mutual respect dominated the Canadian-American defence relationship and that American officials did not “spend endless hours plotting to rob Canada of its sovereignty.” Focusing more on the Canadian side of events, David Bercuson contends that: “Canada established the policies and procedures by which it safeguarded its interests and protected its sovereignty while still satisfying the defense needs of its superpower partner... Canada’s claim to the far north emerged stronger than ever.” P. Whitney Lackenbauer agrees: Canada secured “both sovereignty and security” during and immediately following the Second World War. These revisionists use examples spanning the Second World War and early Cold War to make their arguments, and turn to macro-level material such as memoirs, cabinet conclusions, or minutes of the Advisory Committee on Northern Development (ACND). Precedent setting projects during Second World War included the Alaska Highway or the Canadian Oil Road (CANOL); early Cold War examples included the Basic Canada-United States Defence Plan, Long Range Air Navigation (LORAN) systems, American Arctic training over-flights, and Joint Arctic Weather Stations (JAWS). While these examples and sources are legitimate, they rarely provide an “on the ground” account. As such, their arguments concerning de facto sovereignty (the chief critique of Grant and Lajeunesse) remain somewhat abstract. Focused studies of particular joint programs, such as JAWS, facilitate understanding what happened “on the ground” by narrowing the scope of research and demonstrate that the Canada-United States Arctic relationship was healthy and mutually beneficial.

The JAWS program was born in a climate of serious American interest in the Canadian north. Rather than bowing to American pressure, Canadian officials remained conscious of Canadian interests ensured, both during the
negotiations and throughout the program’s tenure, that the United States respected Canadian sovereignty. Given the respect Canadian sovereignty received as well as Canadian personnel limitations, Ottawa’s slowness to “Canadianize” the JAWS program was understandable. Ottawa remained wary of the press’ tendency to sensationalize the American presence, but gradually developed confidence in the JAWS program’s publicity potential. In the end, despite Canada’s financial and operational limitations, its de jure and de facto sovereignty were strengthened by the JAWS program.


Beginnings

During the Second World War, the United States and Canada both established military weather stations across Canadian territory. These included American-operated stations in the Canadian Arctic such as Padloping Island off the coast of Baffin Island. In 1944 American Colonel C.J. Hubbard of the US Army (and associated with the Department of Meteorology at the
Massachusetts Institute of Technology) pushed Ottawa to agree to the establishment of permanent bases in the high north to monitor arctic weather.\textsuperscript{11} Little resulted, however, as Ottawa wished to limit American encroachment.\textsuperscript{12}

At war’s end Canada purchased all of the American bases on its soil so that it could regain its solitary claim of ownership in its Arctic.\textsuperscript{13} By 1946, however, the Americans again desired heightened continental defence collaboration. Ottawa was flooded with a host of specific American defence and civil projects, including LOng Range Air Navigation (LORAN) systems, American Arctic training over-flights, and what would become JAWS. The respective outcomes of these negotiations have been detailed elsewhere, but two general Canadian problems came to light. First, its Arctic islands were not yet fully explored and in some regions Canada’s claim relied on the sector principle.\textsuperscript{14} This principle was not widely accepted in international law and, at least theoretically, American personnel could have discovered new islands and claimed them as American territory.\textsuperscript{15} These fears were partially allayed on 16 January 1947 when both Canada and the United States agreed to Permanent Joint Board on Defence (PJBD) Recommendation 36, promising to “safeguard the sovereignty and protect the interests of the country in whose territory joint exercise [were] undertaken.”\textsuperscript{16} Canada’s sector principle claims were not recognized, but these projects would not be used to challenge Canada’s \textit{de jure} sovereignty. Indeed, McNaughton and subsequent scholars argue that Canada’s \textit{de jure} sovereignty was strengthened by America’s “implicit recognition.”\textsuperscript{17}

Undaunted by Canada’s unwillingness to grant further access, Hubbard continued to press for weather stations in the high Arctic. He convinced Senator Owen Brewster of Maine to propose a bill requesting funds for the United States Weather Bureau to construct, operate, and maintain weather-reporting stations “in cooperation with... the meteorological services of foreign countries.”\textsuperscript{18} Thus the project would be under civilian auspices. Critical writers have dismissed the civilian framework for JAWS as fraudulent. Grant decries Canada’s general preference for a “civilian cover” regarding American Arctic projects. Lajeunesse similarly describes JAWS as a “military project” in which the United States “played its part” by using a civilian guise.\textsuperscript{19} Admittedly, Canada preferred American civilians to military personnel. At times, both the American and Canadian military resupplied JAWS and the military obviously desired arctic weather information for Arctic flights. American Senator Brewster recognized the military importance of meteorology but also described the “farming, construction, transportation, merchandising, and many other activities” that would benefit from accur-
ate weather forecasting. Thus the American Senate bill explicitly assigned responsibility for the stations to the United States Weather Bureau without any Canadian input.

After the Senate passed this legislation on 12 February 1946, the United States began to stockpile building supplies and post recruitment ads for meteorologists. Although Ottawa kept “an eye” on these developments, American officials did not consult their Canadian counterparts. Only in May 1946 did Americans arrive in Ottawa to discuss constructing stations in Canada’s Arctic islands. Hubbard emphasized the need for such stations as well as the urgency given the limited Arctic shipping season. If Canada approved, the American transport mission “would start Monday.”

Shocked by this pressure, as well as number of other American arctic requests, the Canadians took their time to consider the American proposal. At the forefront of Ottawa’s considerations was Canada’s Arctic sovereignty. If approved, the new American stations would be the only occupants in the region and possibly compromise Canada’s sovereign claims. After months of debate, the Cabinet declined the American request, at least for the time being, to better situate the proposed weather program within the larger scope of continental defence. The Americans were “considerably upset and are faced with the problem of what to do with the stores and equipment which had been loaded at Boston in the hope that a favourable reply would be forthcoming from the Canadian government.” The United States’ presumptiveness, however, did not lead it to ignore Canada’s decision, nor force Canada to reconsider. Instead they continued to allay Canadian concerns, explaining both informally and formally (via Recommendation 36) that the United States “had no intention of questioning Canadian sovereignty.”

Eventually, negotiations approved the construction of nine weather stations under a “joint” framework. Canada would provide the Officer-in-Charge (OIC), pay for the supplies and incomes of its half of the base personnel, as well as maintain ownership of all land and structures. The United States would construct the buildings, a Weather Bureau official would serve as Executive Officer at each station, supply the other half of the personnel and most of the site construction personnel, and provide both the sealift and airlift required to build and resupply the stations. As time passed, Ottawa was free to “Canadianize” any of the American responsibilities. At the outset, however, the United States dominated the program in terms of both personnel and expenditures.

Astoundingly, this informal agreement was never formalized by a more elaborate exchange of notes. Drafts were discussed and exchanged, but de-
lays continued for a variety of administrative reasons – including the “over-worked” U.S. section at the Canadian Department of External Affairs. With a sense of irony, Escott Reid (Deputy Under-Secretary for External Affairs) noted that his departmental officials were delayed because “no small part of their time has, incidentally, been devoted to keeping various phases of the Arctic weather station programme moving smoothly.” Discussions continued into 1949 and the desire for a formal agreement slowly evaporated as the program’s smooth running made such action seem unnecessary. Each year the previous precedents were renewed and the unusually informal, but successful, bilateral relationship continued.

Initially, start-up materials were flown to Eureka Sound on Ellesmere Island in April 1947 and assembled. By mid-July a trio of ships consisting of the icebreakers USS *Edisto* and USS *Whitewood*, in addition to the freighter USS *Wyandot*, departed from Boston. After stops in Greenland to resupply bases there, they ventured west into Canadian waters. Eureka was supplied without major incident but the ice surrounding the planned station at Winter Harbour on Melville Island proved impenetrable. After four attempts, Resolute on Cornwallis Island was selected as an alternative location and became the main site from which all other subsequent JAWS stations were resupplied. In 1948 two more stations were established at Isachsen on Ellef Ringnes Island and Mould Bay on Prince Patrick Island. During the voyage, the two American icebreakers ventured to Cape Sheridan and dropped supplies for a future weather station. The ships then turned further north and set a new record for the most extreme northern latitude reached by ship. The Americans also dominated airlift missions; the RCAF did not even participate in a limited capacity until 1950. Due to the limitations of the American Weather Bureau’s budget and the utility of the existing locations, no further JAWS stations were constructed.

Despite Ottawa’s concerns about Canadian sovereignty, Canada only slowly assumed a more active role in the JAWS program for two important reasons. First, it lacked the personnel to operate the stations which typically had a crew of eight that included weather observers, radiosonde operators, general maintenance personnel, and a cook. Canada suffered from a shortage of meteorologists and radio operators willing to go to the Arctic. Lajeunesse doubts that the shortage was real, and quotes a meeting where some participants argued that: “if we [Canada] scrapped the bottom of the barrel and secured the co-operation of the Meteorological Service and the Army, Navy and Air Force, we could surely get enough technicians to take care of the matter.” That this suggestion was not adopted is hardly
surprising. Throughout the remainder of the 1940s Ottawa continued to emphasize that Canadians would replace Americans at the stations “as soon as possible,” but the joint personnel arrangements continued. A host of other weather stations in Canada, as well as Canadian ships in the Atlantic and Pacific Oceans, also required similarly trained personnel. Moreover, due to metrological requirements, Canada permitted the United States to reopen a few of the former American Second World War weather stations, such as Padloping Island. Canadian officials worried that these stations posed a much greater hazard to Canadian sovereignty due to the lack of Canadian accompaniment. The American presence was to be temporary, and Canadian officials prioritized stations such as Fort Chimo and Padloping Island for Canadianization as soon as Department of Transport (DOT) personnel became available. Padloping was scheduled to be among the last stations taken over in 1949-1950. Unfortunately, “the manpower requirements for these north-eastern stations would not leave any surplus to replace U.S. personnel at the two Arctic weather stations.” The Canadian military also suffered from similar shortages and it was not until 1953 that the Royal Canadian Navy (RCN) finally stepped in (instead of DOT) and took over the Padloping station – three years later than planned. Ottawa justifiably focused on bases that lacked any Canadian personnel rather than the JAWS installations, where the Americans were not sole occupiers.

Cost was the second deterrent to Canadianizing the JAWS program. During the Second World War, the Advisory Committee on Post-Hostilities Problems concluded “that in joint planning with the United States, Canada should accept full responsibility for all such defence measures within Canadian territory.” This policy was not followed. Lajeunesse argues that Ottawa’s “claims that the construction of these weather stations was beyond Canada’s capability appear more like an exercise in parsimony than an accurate assessment of Canada’s capabilities.” Indeed each station only cost $200,000 to construct and the program’s operating costs (excluding resupply) were estimated to be approximately $465,000. Unfortunately Lajeunesse misrepresents the way Canadian officials conceived cost policy by insisting that Canadian officials were unwilling to pay these paltry sums. Ottawa coupled personnel and costs when conceptualizing Canadianization of the program. Because Ottawa was far more concerned about American personnel in the Canadian Arctic, Canadianization of costs was delayed. Documents discussing personnel rarely mention these expenses, and when they were mentioned, they were considered affordable. It seems that the option of Canada paying American personnel was dismissed because it would not have
strengthened Canadian *de facto* sovereignty. Furthermore, the Americans requested that their participation remain significant. It was a “joint” program after all, and American meteorological equipment was particularly important. Thus, while incremental Canadianization was within Canada’s rights, the Americans did not welcome it and excessive haste to achieve it could have led to technical difficulties.44

Moreover, Ottawa was concurrently negotiating other Arctic projects with the United States and it was clear that the list would continue to grow. A financial precedent regarding Canadian contributions was required; but as Bercuson explains:

> Canada was reluctant to explore the idea of a specific cost-sharing formula based, for example, on a ratio of national incomes or populations because of the inflexibilities that would have introduced. One memorandum prepared for King suggested it was best to share costs on a project-by-project basis with Canada supplying sites, buildings, administration, and housekeeping, and some or all of the operating personnel. The United States could supply technical equipment, personnel, and the bulk of the transport services.45

With some permutation, this became the precedent for subsequent joint Arctic projects. Sometimes Canadian participation in joint projects would be “token,” but Washington recognized the symbolic importance. Although Ottawa was not concerned about the minimal sums of the JAWS program, it was concerned about the wider precedent it could set. Canadianizing a project over time created a very different precedent than insisting on heavy Canadian participation at the outset. Bercuson insists that this policy successfully guarded Canada’s sovereignty, but he only provides a very minimal “on the ground” account of the programs discussed.46 Did Canada’s limited investment of personnel and money compromise its sovereignty? Although there were some initial problems, the United States respected both Canadian *de jure* and *de facto* sovereignty. In fact, Canadian *de facto* sovereignty was strengthened rather than weakened.

**Resupply**

Although violations did occur during the decreasingly American annual sealift operations for the Joint Arctic Weather Stations, the severity and number of infringements declined after 1948 and remained black marks on otherwise
respectful and successful operations. Moreover the infringements that did occur resulted from the apathy of some American personnel and were not normative statements of the American government as critics such as Grant have contended. Ottawa remained understandably eager to Canadianize the operations, and did so once it possessed the necessary transportation vehicles. The interim, however, was also used to demonstrate continued de facto sovereignty. Infringements were brought to the attention of Canadian officials, action taken, and American compliance secured. Moreover, such initiatives were exceptional; American personnel generally respected Canadian wishes. Thus, even while the United States dominated the sealift, Canada continued to exercise de facto sovereignty. American personnel and equipment dominated the initial resupply missions. The RCAF possessed transport aircraft, but they were tasked elsewhere and did not have enough aircraft and crews to do everything.\textsuperscript{47} Similar naval deficiencies resulted in American dominance of the annual sealift. Although the American government was more than willing to work with Canadian vessels, Canada declined since its few Arctic-capable ships, such as the CCGS \textit{N.B. MacLean}, were already committed in Hudson Bay and the St. Lawrence.\textsuperscript{48} Both the Canadian Departments of National Defence and Transport were constructing new, modern icebreakers based on the American “Wind” class to resupply northern outposts including the JAWS sites, but the construction program was still in its early stages. An RCN vessel was scheduled for completion in 1950, but steel shortages and design changes delayed its deployment until 1954. Canada offered the \textit{N.B. MacLean} as a backup for the American icebreakers in case of an emergency, but fortunately it was never required.\textsuperscript{49} Accordingly, Canadian representation on the early resupply sealifts was limited to Canadian observers on American ships and aircraft.

Initially, Ottawa was wary about JAWS publicity. During the negotiation phase, the \textit{Financial Post} published a series of condemnatory articles arguing that Washington had issued Ottawa “a virtual ultimatum” to increase its commitment to continental defence.\textsuperscript{50} A subsequent article commented that the United States was “anxious and eager to get at the work of establishing a proper North American weather service, irrespective of who claimed sovereignty over the ice-bound wastes where they wanted to operate.”\textsuperscript{51} This was precisely the sort of publicity that Ottawa wanted to avoid. The PJBD recommended that:

\begin{quote}
Public information in regard to military projects, tests or exercises, jointly conducted or conducted by one country in the other
\end{quote}
country, or in the territory leased by it, should be the primary responsibility of the country whose territory is utilized. All public statements on these subjects shall be made only after mutual agreement between the appropriate authorities of the two countries.\(^52\)

Because joint projects remained essential to future continental cooperation, Ottawa tried to downplay the military aspects of the JAWS program – an argument that both Lajeunesse and Grant consider to be a guise. When introducing it to the House of Commons Prime Minister King described the program as “primarily a civilian one to which contributions are made by the armed forces.”\(^53\) Indeed, aside from the resupply mission, JAWS was civilian run; and it was the United States, not Canada, that selected a civilian framework. As such, it would not facilitate an American military invasion of Canada’s north. Nonetheless, many Canadians continued to worry, as the Visiting Forces debate of 4-6 June 1946 demonstrated.\(^54\) Given these emotional arguments, the Canadian government worried, rightly, that important northern joint projects could be jeopardized by negative public opinion. Press releases would be carefully drafted and interviews were not to venture beyond released content.\(^55\)

These plans were frustrated before the sealift (dubbed Task Force 80) even departed. At an American Meteorological Society dinner Colonel Hubbard spoke about the JAWS program, and while he did utilize the existing press releases he also ventured well beyond their content discussing the resupply roles of Resolute and even envisioned an “indefinite” number of future subordinate stations. Normally the venue was free of newsmen, but on that evening a journalist from the \textit{Washington Star} was present and published a summary that was then used by Canadian papers. Hubbard and the US State Department apologized, but Ottawa bureaucrats were unimpressed.\(^56\)

This mishap was merely the beginning. After resupplying Thule, Greenland, the \textit{Edisto} and \textit{Eastwind} ventured north into Cape Sheridan where Colonel Hubbard noticed some cairns. On August 4, after unloading supplies at what would later become the Alert site, Hubbard flew to the cairns and discovered that they held a liquor bottle containing documents. After the bottle was returned to the \textit{Eastwind}, Commander T. Fife (the senior Canadian observer) was called was to the bridge, handed the bottle, and asked to open it. The bottle contained brief notes from the American Peary expedition of 1905-1906 documenting when the expedition arrived in the region. The bottle also contained copies of notes from the British Neary
expedition of 1875-1876, briefly describing latitudes explored and scurvy among the crew.\textsuperscript{57}

The documents posed no threat to Canadian sovereignty, but a squabble ensued regarding their custody. The Canadian observers argued that the find was subject to the Archaeological Sites Ordinance (which, because Hubbard lacked a permit granted by the Northwest Territories Commission, would require the Canadian officials to seize the documents), while the Americans argued they had done nothing wrong and were merely reclaiming documents from an American expedition (and therefore desired that the documents be retained by the US Navy). After considerable disagreement Fife allowed the Americans to retain the documents. In his assessment, “it would be neither polite nor politic to make any such demands at the moment. A demand of that nature would very likely result in us being left out of any further discovery which might be made.”\textsuperscript{58} He left it to his superiors to decide whether corrective action was necessary.

After another stop at Eurkea Sound, the \textit{Eastwind} and \textit{Edisto} headed home. The \textit{Wyandot} returned to Boston via Godhaven, Greenland, but the two icebreakers returned via Fury and Hecla Strait. This was the first time the strait had been navigated and many chart errors were corrected. The Americans had not asked Canada’s permission to sail this route. Angry Ottawa bureaucrats cited documents stating that the United States would “consult” Canada prior to any significant route changes. Washington countered arguing that the planned routes had only be described as “probable,” that the American commander retained “operational” prerogative based on sea conditions, and that Chouinard (the senior Canadian observer on the \textit{Edisto}) had approved of the route change.\textsuperscript{59} Since the \textit{Wyandot} returned via the proposed route, Canadian officials later concluded that:

\begin{quote}

it is plain from the information already available that the change was made not for operational reasons but because Captain Dufek wished to do so and because he had forgotten the instruction which said he was not to change his route without permission.\textsuperscript{60}

\end{quote}

Thus, a host of problems including the embarrassment of American ships setting a record at Cape Sheridan, the questionable discovery of the Peary documents, and the illegal passage through the Fury and Hecla Strait awaited frustrated federal bureaucrats.

Ottawa knew that the dramatic events of the sealift could not be kept secret. While Canadian officials were concerned about Canadian sover-
CLENCHED IN THE JAWS OF AMERICA?

eignty, they did not worry that the United States would use the voyage to make claims in the Canadian Archipelago and were far more worried about “some possible embarrassment for the Canadian Government, vis-à-vis the Canadian public, in issuing a statement indicating that the U.S. Navy has accomplished these feats on Canadian territory.” An initial draft press release mentioned the Edisto and Eastwind’s trip to Cape Sheridan, but was described as revisiting a region discovered by Neary rather than as record setting. Similarly, the voyage of the two icebreakers through the Fury and Hecla Strait was not described as a “first.”

Ottawa’s efforts to withhold facts about the voyage proved futile. Before the joint press release was approved, the New York Times published a front-page story describing Hubbard’s discovery of the Peary cairn in minute detail. The article also described the Task Force’s voyage through “straits and channels believed never to have been navigated before.” After brief correspondence it became apparent that Hubbard had “a mania for publicity” and conducted the interviews without even consulting American officials. William Snow, Assistant Chief of the Commonwealth Affairs Division at the US State Department, was “as indignant over this flagrant breach” as Canadian officials. Although the US State Department wanted a more detailed release than the Canadian draft, it immediately agreed to Canada’s proposed text, seized the Peary documents from the USN, and refused to publish them until it obtained Ottawa’s consent. Unfortunately this initiative failed to calm editorial opinion. The Canadian and American press was now aware of the Peary documents, and demanded their publication. According to Murray Schumach of the New York Times, the State Department desired publication and “the basic cause for delay is the ruffled pride of representatives of Canada.” The Montreal Gazette published an abbreviated version of Schumach’s piece, and ironically criticized the Canadian government for not bending to the United States’ wishes. Had Hubbard not violated bilateral agreements regarding publicity for joint projects, the Canadian government would not have been embarrassed by the utterly innocuous documents. Escott Reid was furious: “It was… primarily the Government’s fear of adverse reaction from the Canadian public that led it to lay down in the directives the general pattern of issuing only one brief release in connection with each major development in Canada – U.S. activities.” Canada received bad press for American misbehaviour, but the texts were released on 30 September with Canadian consent.

Individuals such as Hubbard, who ignored Canadian sovereignty, remained a minority. Canadian sovereignty was generally respected and
the operation achieved its goals. “Considering everything, the Task Force went off well,” an internal DEA memorandum commented. Nevertheless, Ottawa rejected further corrective publicity for Task Force 80, preferring that northern activities be “left as inconspicuous as possible” “for political” (rather than sovereignty) reasons. Even Deputy Minister of Transport Jean Lessard’s benign request to publish a photograph of himself receiving a tin of potatoes left by the Neary expedition in 1875-76 was rejected. Recognizing that “it does seem somewhat ridiculous that there should be any difficulty in releasing such a photograph,” the Under-Secretary for External Affairs still insisted that:

its release might involve us in some embarrassment since, after the recent Washington leakages regarding the Sea Supply Mission which led to widespread interest in the activities of the Mission, we not only took the U.S. authorities to task for the leakages but informed them that, in accordance with the decisions reached at an interdepartmental meeting at which your Department was represented, the authorities here wanted the Mission to drop into obscurity.

The Under-Secretary speculated that if Ottawa continued to publicize Task Force 80, American Departments involved in the sealift might have legitimately done the same. Canadian diplomats in Washington vocally denounced the American-made situation but their foremost concern remained editorial perceptions.

Planners for the 1949 sealift acknowledged the mistakes of the previous year. When proposing their route for 1949, the Americans mentioned the possibility of again passing-through the Fury and Hecla Strait. Canada asked that: “the greatest care… be taken to ensure that information regarding the expedition will only be released in accordance with the terms of the Canadian and U.S. directives.”

Mechanisms for joint approval of photographs for the press were also developed. Sure enough, the publicity for the 1949 and 1950 sealifts was favourable and coordinated. There would be no more rude surprises, the Americans fully disclosed and coordinated their plans with their approving Canadian counterparts.

Most importantly, Canadian observers received proper training. In 1948 Canada selected its observers well in advance, but these individuals only received the appropriate security clearance a few days before the ships departed. Due to the short time remaining, “no attempt to brief even the leaders
of the two Canadian parties in their responsibilities, let alone the remaining members of the Canadian party or the Americans” was possible. Canadian observers were thus ill prepared to correct similarly ignorant American behaviour. For instance, Chouinard would have likely objected to their passage through the Fury and Hecla Strait had he received this education. The 1949 sealift observers received three full days of instruction.\textsuperscript{80}

Subsequent sealift missions involved more stops but created far fewer difficulties. During 1949, Colonel Hubbard discovered a couple of wooden mallet heads in the vicinity of Radstock Bay. Hubbard later showed the artifacts to J.W. Burton, the senior Canadian observer for that year:

and explained that he intended taking them home as souvenirs. I [Burton] explained to Mr. Hubbard that according to the Archaeological Sites Ordinance it was not permissible for anyone to disturb Eskimo ruins or sites of historical importance or to pick up and carry away objects connected with such sites, unless he was a holder of an Archaeologists and Ethnologist permit.

Although Hubbard denied knowledge of this ordinance, he likely recalled the troubles of 1948, and insisted that: “it was not his intention to contravene any Canadian Law, Ordinance or Regulation” and “without any further remarks” he gave the mallet heads to Burton.\textsuperscript{81} In his letter recounting the event, Burton advised that the pieces be forwarded to Hubbard since he doubted their archaeological value and was pleased that “Canadian Sovereignty has been recognized by an Official of the United States Government.”\textsuperscript{82} The government of the Northwest Territories agreed, and Hubbard received his mallet heads a few months later.\textsuperscript{83} The mistakes of the past were not repeated. Moreover, this event was the sole exception to an otherwise smooth operation. Continuing seaborne resupply operations in the early 1950s were similarly uneventful.

Thereafter, Canada began to take over the resupply missions for the JAWS program. The RCAF flew the occasional mission in 1950. By 1951 it resupplied Mould Bay and Isachsen from Resolute and was responsible for the operation of USAF and its own aircraft during the spring and fall airlift resupply missions. In 1952 and 1953 Canadian ships independently transported some supplies to Resolute.\textsuperscript{84} By 1954, Ottawa’s press release emphasized that: “for the first time in Canada’s history, a convoy of Canadian vessels” supplied all JAWS locations with the exception of Alert. Dubbed “Operation Nors I,” the new Canadian icebreaker CGS \textit{d’Iberville} and the older CGS \textit{N.B. MacLean}
were joined by the CGS *C.D Howe* and the chartered vessels SS *Gander Bay* (freighter) and MV *Maruba*. The press barely noted this Canadianized initiative. By 1955, with the exception of limited USAF participation, the resupply of JAWS stations was fully Canadianized. Canada’s increased participation was facilitated by its new icebreakers as well as new C-119 Boxcar aircraft. This pattern continued until the 1960s when Ottawa gradually commercialized the airlift. Naturally, the annual resupply mission did not produce further challenges for Canadian de facto sovereignty.

**JAWS Stations**

Like the resupply operations, the initial working relationship at the Joint Arctic Weather Stations was occasionally strained; but on the whole it was much healthier than its resupply counterpart. Again, violations of Canadian sovereignty occurred in the program’s first years of operation, but these were soon resolved in ways that satisfied both Canadian and American officials. Operations at the Joint Arctic Weather Stations demonstrated de facto sovereignty. Moreover, as time passed, this increasingly harmonious environment facilitated a more relaxed and trusting attitude in Ottawa.

In 1947 two tangible questions arose regarding personnel at Joint Arctic Weather Stations: the consumption of alcohol and interaction with wildlife. Purchasing or selling alcohol without a permit in the Northwest Territories was illegal. Neither American nor Canadian JAWS personnel purchased the $1 consumption permits, however, and instead imported alcoholic beverages from home in their luggage. In the American case, this smuggling also violated duty laws. The Department of Mines and Resources was aware of the practice but had “never taken any action to stop it because we [mis] understood that the practice was tacitly approved by” the Department of External Affairs. Apparently “the American officers are rather surprised that they have been allowed to get away with this for so long.” American JAWS personnel were violating Canadian de facto sovereignty, but since the laws were not enforced, and since Canadian JAWS personnel behaved similarly, it was difficult to fault American personnel. The lack of an established system, rather than disregard of Canadian sovereignty, was to blame.

During a joint meeting on 11 March 1948, Colonel Hubbard agreed that the importation of liquor needed to be regularized and requested a solution from the Canadian government. The main problem was delivery logistics to such remote locations. In the end, Canadian OICs purchased permits to sell Canadian alcohol, and all JAWS personnel purchased consumption permits. The problem briefly resurfaced when a still was discovered during
the construction of Alert. It is unclear whether the owner was Canadian or American, but the OIC promptly ended production of illicit brew. This was hardly a deliberate challenge to de facto sovereignty; there are no records of further violations.

There was considerable debate regarding interaction with wildlife during early JAWS operations. For instance, J. G. Wright, Superintendent of the Eastern Arctic and Secretary of the Northwest Territories Council, feared JAWS personnel consumed insufficient meat and therefore pushed for limited caribou hunting – which also helped to relieve boredom. R.A. Gibson, the Deputy Commissioner of the Northwest Territories, believed that hunters would quickly exceed quotas. As Peter Kulchyski, Frank Tester, and John Sandlos have all noted, in the post-war period bureaucrats like Gibson, motivated by modernist scientific discourses, justified imperial policies such as the modernization of native life-ways by strictly limiting the native caribou hunt. By focusing on the resistance of Canada’s native peoples to this modernization discourse, however, these scholars overlook the minority of Arctic government employees who were also subject to the government’s conservation-focused policies. The Joint Arctic Weather Stations were located on a Game Preserve where only natives (who required game for subsistence) or those possessing permits issued by the Northwest Territories Commissioner could hunt. The populations of caribou and other species remained somewhat limited, and Musk-Ox were out of bounds for everyone. Since few permanent residents lived nears the stations, JAWS personnel at Eureka were permitted to kill up to two caribou per year per person if permitted by the Commanding Officer (a Canadian). Unfortunately, confusion abounded and in March 1948 Hubbard asked if hunting caribou was permitted. Summarizing a subsequent meeting, Wright realized that the Canadian government had “never advised the weather station people about this concession.” The Northwest Territories Council ended the confusion the following January when it decided to stop issuing hunting permits because it believed previous estimates of the caribou population were exaggerated and that the species was in serious trouble. From thenceforth, hunting was only permitted in emergency situations with the permission of the Royal Canadian Mounted Police at Resolute Bay. There are no records of further hunting by JAWS personnel.

Interest in Arctic wildlife continued. Of particular note is the Smithsonian Institute’s request to use JAWS personnel to retrieve a pair of Musk-Ox as well as some Polar Bears for the National Zoo. Although this request was first issued to the United States Weather Bureau, it was quickly forwarded to
the Canadian government. Ottawa instructed that the Smithsonian should reissue its request to the Canadian government directly (thereby formally recognizing Canadian sovereignty), and also advised that, due to the hazards involved, JAWS personnel would not be permitted to help. In short, Canada continued to control what happened “on the ground” in the Arctic.

Beyond diplomatic concerns, Canadian and American JAWS personnel developed a strong working relationship. American personnel were particularly compliant during the construction stage. An American recorded that relations between American and Canadian personnel during the construction of Eureka Sound’s station were “good” and all were satisfied with their work. At Resolute inter-national relations were also good, although “there have been minor misunderstandings and some differences of opinion on both sides, but these are to be expected in any normal operation of this kind.” “Stress and overwork, rather than any personal animosity” were blamed for any tension. In 1948 a report on the construction of the Isachsen station described no nationalistic problems and classified morale as “first-class.”

Canadian bureaucrats continued to worry about de facto sovereignty. Some cited potential structural command problems to justify the Canadianization of the Joint Arctic Weather Stations. However, Canadian personnel limitations and continued amicable relations prevented these demands from gaining traction. One memorandum arguing for the full Canadianization of JAWS specifically targeted the power structure between Canadian OIC and the US Weather Bureau Executive Officer. According to the report, the OIC did not exercise overall control of JAWS personnel as Americans could also seek recourse through the Executive Officer to American channels. Although the author admitted that: “this double channel does not appear to have caused serious problems” he insisted that the potential remained. Moreover, the system also over-relied on strong personalities. As an example, the American Executive Officer had slowly taken the initiative of command at the Resolute station due to the OIC’s depression and eventual suicide. A Canadian replacement was flown in, however, and only a year later another observer recorded that “the morale at Resolute was exceptionally high and all the personnel appeared to get along together very well.”

As could be expected there were some personnel problems. One U.S. Executive Officer at Mould Bay was a “constant source of friction,” but he did not complete his term and was relieved of duty. Reports from both the Canadian OIC and the American Executive Officer at Isachsen continually emphasized good working relations. Cooperation between American and
Canadian personnel was occasionally described as “fairly good” but more often as “excellent.” American personnel at Joint Arctic Weather Stations did not compromise Canadian *de jure* or *de facto* sovereignty. Furthermore, American involvement in JAWS improved Canadian meteorological knowledge. Reflecting on the JAWS program in 1955, J.R. Baldwin (Deputy Minister of Transport) wrote:

> With regard to our relations with the Americans at the Joint Weather stations I am pleased to advise that any differences experienced with the United States personnel have been of such minor character that they could be considered as non-existent. We have also enjoyed the full cooperation and understanding of the United States officials in our dealings with them.\(^{106}\)

Historian Peter Kikkert appropriately concludes that: “individual personality, not nationality, created most of the tension at the stations.”\(^{107}\) That these clashes were so rare is testament to the quality of personnel sent by both countries to the Joint Arctic Weather Stations.

Nevertheless, some Canadian departments, such as Mines and Resources, continued to push for a Canadian takeover, emphasizing the relatively small expense and personnel commitment involved. Most departments, however, such as National Defence, Transport, and External Affairs, argued that “effective occupation was demonstrated by the fact that the officers in charge at the stations were also postmasters, justices of the peace, and game wardens.”\(^{108}\) Indeed, Canadian bureaucrats eased into an increasingly casual attitude regarding JAWS diplomacy. J.H. Taylor of External Affairs’ Defence Liaison (I) Division requested that fewer representatives be sent to the annual Canadian-American meetings regarding JAWS since the proceedings had become “largely a matter of administration.”\(^{109}\) Previously the ACND had discussed JAWS issues at length, but by 1956 merely noted the annual joint Canada-United States JAWS meeting.\(^{110}\) By 1961 the joint annual meetings were shortened.\(^{111}\) The JAWS program facilitated amicable and trusting relations among bureaucrats from both countries.

Canadian publicity sensitivities similarly eased with the passing of time. By the 1950s journalists were allowed to join resupply missions. Canadian briefings for newsmen emphasized Canadian contributions and non-sensationalized reporting led Canada to liberalize reporters’ access to these trips.\(^{112}\) Journalists were encouraged by Canadian bureaucrats to visit the stations to end any speculation regarding American activities in the Arctic.\(^{113}\)
Although the sealift was Canadianized by this point, the stations remained a joint effort. Ottawa no longer had anything to hide. It trusted the Americans to respect Canadian sovereignty and reporters to record this cooperation.

Conclusion

The Joint Arctic Weather Station program was an example of a successful partnership. Both countries were interested in developing meteorological knowledge, but Canadian concern for its sovereignty complicated arrangements. Ottawa was rightfully worried about preserving Canadian sovereignty, but resources were limited and Ottawa weighed its options. Canadian officials recognized that de facto sovereignty was not invalidated by dual occupancy. Furthermore, most Americans respected Canadian sovereignty. While Hubbard indicated disdain for Canadian sovereignty when talking with the press, he clearly respected it in terms of hunting and liquor rights. Rather than a systematic attempt to challenge Canadian sovereignty, wilful disregard for Canadian de facto sovereignty tended to be contextual. Sometimes Canadian sovereignty was inconvenient and thus overlooked; at other times simple ignorance was to blame. Ottawa needed to take action to correct innocent or wilful threats to Canadian de facto sovereignty, and by so doing it strengthened both its de jure and de facto sovereignty. Mutual trust increased each time Americans accepted Canadian sovereignty assertions, and yielded a stable working relationship. Writing in 1956, E.F. Gaskell of the Privy Council Office reflected on the program’s successful record:

As a general observation, I would say that the informal arrangements governing these activities constitute a rather unique situation. Here is a major project involving two countries and a very considerable capital investment flourishing after nearly ten years without having been authorized, in the first instance, by a formal Exchange of Notes. However [unconventional] this may be, the informal agreement – for it is largely that – has paid ample dividends in productive activity.114

It required the sovereignty fervour swirling around the voyage of the SS Manhattan 1969 for both sides to contemplate full Canadianization, and all American personnel left the JAWS in 1972. Thereafter, the weather stations at Alert, Eureka, Isachsen, Mould Bay, and Resolute became part of the High Arctic Weather Stations (HAWS) program.115 Contrary to the insistence of Lajeunesse and Grant, Canadian officials sought, and achieved a “firm
policy” that assured “effective control” of Canada’s Arctic while enjoying the advantages of American contributions to the Joint Arctic Weather Station system.

Notes

I wish to thank Wendy Papenburg from Library and Archives Canada for her heroic efforts which ensured that the archival material examined herein was available for my brief visit in December 2008. Pete Kikkert and Whitney Lackenbauer also generously shared primary material.


5 Ibid., 19, 25.

6 Ibid., 84-86.


14 A state uses the sector principle when it claims all territory (and inland waters) within set boundaries. The Canadian sector claim encompasses all land in the Arctic Ocean between the Canada-Greenland Border and the 141st meridian stretching from the southern shores of the Arctic Ocean to the North Pole.

15 American officials recognized this possibility and some low-level officials did consider exploiting the opportunity. However top American officials recognized the importance of Canadian cooperation and thus set aside such notions. Grant, *Sovereignty or Security?*, 185.


17 Lajeunesse, “The True North As Long As It’s Free: The Canadian Policy Deficit 1945-1985,” 25; Cabinet Defence Committee Meeting, 12 August 1947, Library and Archives Canada (herein-
after LAC) RG2 Vol 60 File C-10-9-M Pt 7, 7.


22 Memorandum on Proposed United States Arctic Weather Stations, 25 June 1946, 1. LAC RG25 Vol 3047 File 113. Hubbard did meet informally with the federal government, but after listening to Canadian concerns about a renewed American presence in the Canadian Arctic Hubbard apparently “suggested that some doubt still existed as to the extent of our [Canada’s] sovereignty over some of these Arctic districts north of Canada.” Pearson to Robertson, 6 March, 1945, LAC RG85 Vol 823 File 7140.

23 To Gibson, May 18 1946, LAC RG 85 Vol 823 File 7140, 1-3.


30 Establishment of this station (later named Alert) was delayed until 1950 due to the Berlin airlift.


32 Some documents describe “weather observers” as meteorologists. Though “meteorologists” may have been shorthand for “weather observer” among bureaucrats, the two titles would usually require a different level of training. Further research regarding the training of station personnel will facilitate understanding regarding their subsequent shortage. A Radiosonde operator uses equipment attached to large balloons that, when released into the atmosphere, transmit basic meteorological information such as temperature, pressure, and humidity. “Duties of Radiosonde,” LAC RG25 Vol 3841 File 9061-A-40 Pt 2.

33 To Gibson, 16 May 1946, LAC RG85 Vol 823 File 7140, 5.


35 For a concise list of Canadian commitments consult: Cabinet Conclusions LAC RG2 Series A-5-a, Volume 2638, Reel T-2365, 28 January 1947, 2-4; For more information on weather ships


42 Ibid.


44 Reichelderfer to Chief, USAF, 17 June 1949, National Archives and Records Administration RG 27 Entry 5, Box 5, File Annual Ottawa Meeting, 1947-1952.


46 Ibid., 162.


53 Canada, *Commons Debates*, 12 February 1947, 347.

54 Ibid, 4-9 June 1947, 3790-3926.

55 “Memorandum on Policy with Respect to Publicity on Canada-United States Defence Arrangements,” 1 April 1948, DHH 2002-17 Box 113 File 4 Pt


65 Ibid.


70 Defence Liaison Division to Acting Head, Defence Liaison Division, “Item No. 3. [Advisory Committee on Northern Development, Agenda for Meeting of November 23] Joint Arctic Weather Stations; Task Force 80; And U.S. North Eastern Air Fields And Weather Stations - Doc. N.D.11,” DCER, No. 942.


73 Ibid.

74 Contrary to Lajeunesse’s assertion, Canada did not file a formal protest with the State Department because “one or two leakages on other matters” by Canadian officials during the same period. Lajeunesse, “The True North As Long As It’s Free: The Canadian Policy Deficit 1945-1985,” 16-17. Defence Liaison Division to Acting Head, Defence Liaison Division, “Item No. 3. [Advisory Committee on Northern Development, Agenda for Meeting of November 23] Joint Arctic Weather Stations; Task Force 80; And U.S. North Eastern Air Fields And Weather Stations - Doc. N.D.11,” DCER, No. 942.


78 See for examples: “Arctic Supplies,” Globe and Mail, 30 June 1949, 17; “Weather Station Only 500 Miles from
CLENCHED IN THE JAWS OF AMERICA?


79 Wright to Gibson, 22 November 1948, LAC RG85 Vol 2083 File 7140-3, 1. The personnel did not receive their orders until four days prior to sailing, Johnson to Deputy Minister of Transport, 6 July 1948, LAC RG85 Vol 2083 File 7140-2; Keenleyside to Gibson, 6 July 1948, LAC RG85 Vol 2083 File 7140-2; Lessard to Chouinard, 7 July 1948, LAC RG85 Vol 828 File 87-2-1 pt 2.


81 Burton to Wright, 30 September 1949, LAC RG85 Vol 2083 File 7140-C, 1.

82 Burton to Wright, 30 September 1949, LAC RG85 Vol 2083 File 7140-C, 2.

83 Gibson to Hubbard, 14 November 1949, LAC RG85 Vol 2083 File 7140-C.


87 C-119s were more suitable than the Canadair North Stars. Advisory Committee on Northern Development, Minutes of the Thirteenth Meeting, 23 November 1953, DHH 73-1223 Box 89 File 1800-1801, 5.


89 Keenleyside to Pearson, 18 June 1948, LAC RG85 File 2083 File 7140-2; Gibson to Thomson, 8 July 1948, LAC RG85 File 2083 File 7140-2, 2.


92 Wright to Gibson, 23 July 1948, LAC RG85 File 2083 File 7140-2.


94 Wright to Gibson, 26 March 1947 and Gibson to Wright, 29 March 1947, LAC RG85 Vol 2084 File 1730.


96 Precis Northwest Territories Council, “Re: Meteorological Stations – Taking of Game for Food purposes,” 1 May 1947, LAC RG85 Vol. 2084 File 1730. Initial documents in the same folder state three per person per year, but this appears to be a typo because subsequent documentation consistently cites two per person per year.

97 Wright to Gibson, 13 March, 1948, LAC RG85 Vol. 2083 File 7140-2, 2.


99 Mann to Reichelderfer, 9 June 1953, and Thomson to Reichelderfer, 14 August 1953, LAC RG12 Vol 2805 File 6754-12 Pt 4. Since JAWS personnel were no longer relevant, the file does not detail whether the Smithsonian
followed up the request by offering to retrieve the mammals with their own personnel.


104 Ibid., 8.

105 Murray, OIC, 3 August, 1955. Murray, OIC, 2 November 1955, Stotts, Executive Officer, 1 November 1956, LAC RG12 Vol 2806 File 6754-1291 Pt 14. Indeed, these reports were sometimes co-authored. See for example: Boynton and Frank, 28 February 1957, LAC RG12 Vol 2806 File 6754-1291 Pt 15.


Calgary Papers

Volume 1 (2007):  Canada in Kandahar
Volume 2 (2007):  Canadian Defence Policy
Volume 1 (2008):  Strategic Studies
Volume 2 (2008):  Military Studies and History
Volume 3 (2008):  Civil Military Coordination: Challenges
                  and Opportunities in Afghanistan

Occasional Papers

                 Canadian Sovereignty from Mackenzie
                 King to Stephen Harper
                 Adam Lajeunesse
Number 2 (2008)  Equipment Procurement in Canada and the
                 Civil Military Relationship: Past and
                 Present
                 Dr. Aaron Plamondon
Number 3 (2009)  Censorship, the Canadian News Media and
                 Afghanistan: A Historical Comparison with
                 Case Studies
                 Dr. Robert Bergen

Forthcoming Occasional Paper

Number 5 (2011)  Inuit Art and the Quest for Canada’s
                 Arctic Sovereignty
                 Dr. Patrick Lennox
ABSTRACT: Climate change is transforming the Arctic. Questions abound about what this will mean for the Canadian Forces, for Canada’s sovereignty position, for northern peoples, and for stability and security in the circumpolar world. Fortunately, Canadians have encountered and debated similar issues in the past. This volume, featuring chapters by established and emerging scholars, offers essential historical analysis on Canadian Arctic security and sovereignty policies and practices since the Second World War. The “lessons learned” lay a solid foundation for future research and historiographical debate in this dynamic field, and should inform Canadian thinking on what is necessary to protect national interests in the twenty-first-century Arctic.