

THE JOINT ARCTIC WEATHER STATIONS: SCIENCE AND SOVEREIGNTY IN THE HIGH ARCTIC, 1946-1972

by Daniel Heidt and P. Whitney Lackenbauer

ISBN 978-1-77385-258-4

THIS BOOK IS AN OPEN ACCESS E-BOOK. It is an electronic version of a book that can be purchased in physical form through any bookseller or on-line retailer, or from our distributors. Please support this open access publication by requesting that your university purchase a print copy of this book, or by purchasing a copy yourself. If you have any questions, please contact us at ucpress@ucalgary.ca

Cover Art: The artwork on the cover of this book is not open access and falls under traditional copyright provisions; it cannot be reproduced in any way without written permission of the artists and their agents. The cover can be displayed as a complete cover image for the purposes of publicizing this work, but the artwork cannot be extracted from the context of the cover of this specific work without breaching the artist's copyright.

COPYRIGHT NOTICE: This open-access work is published under a Creative Commons licence. This means that you are free to copy, distribute, display or perform the work as long as you clearly attribute the work to its authors and publisher, that you do not use this work for any commercial gain in any form, and that you in no way alter, transform, or build on the work outside of its use in normal academic scholarship without our express permission. If you want to reuse or distribute the work, you must inform its new audience of the licence terms of this work. For more information, see details of the Creative Commons licence at: <http://creativecommons.org/licenses/by-nc-nd/4.0/>

UNDER THE CREATIVE COMMONS LICENCE YOU MAY:

- read and store this document free of charge;
- distribute it for personal use free of charge;
- print sections of the work for personal use;
- read or perform parts of the work in a context where no financial transactions take place.

UNDER THE CREATIVE COMMONS LICENCE YOU MAY NOT:

- gain financially from the work in any way;
- sell the work or seek monies in relation to the distribution of the work;
- use the work in any commercial activity of any kind;
- profit a third party indirectly via use or distribution of the work;
- distribute in or through a commercial body (with the exception of academic usage within educational institutions such as schools and universities);
- reproduce, distribute, or store the cover image outside of its function as a cover of this work;
- alter or build on the work outside of normal academic scholarship.



Acknowledgement: We acknowledge the wording around open access used by Australian publisher, **re.press**, and thank them for giving us permission to adapt their wording to our policy <http://www.re-press.org>

Canadianization: Getting Out of Joint?

The joint Arctic weather stations have done much to make clear to the world Canadian sovereignty in the Arctic. The United States has recognized completely Canadian sovereignty over the territory by agreeing to all Canadian stipulations in operating those stations. Canadian hunting laws are obeyed, Canadian postage stamps are sold at the remotest stations, Canadian archaeological regulations are respected and carefully carried out by United States citizens.

Andrew Thomson (1959)¹

From the onset, the Canadian government had hoped and planned to assume full responsibility for the resupply and operation of the Joint Arctic Weather Stations in due course. When Minister of Reconstruction and Supply C.D. Howe announced the program in Parliament on 4 March 1947, he explained that American personnel would be “invaluable until sufficient technically qualified Canadian-trained personnel are available.”² As the early chapters showed, some public servants were keen to see this “Canadianization” happen immediately. When officials in Ottawa and Washington drafted the exchange of notes intended to govern the joint endeavour, Commissioner of the Northwest Territories Hugh Keenleyside expressed displeasure with Canada’s decision to contribute only half of each station’s personnel. “I am sure,” he declared in a note to Canadian ambassador Lester Pearson in Washington,

that our Government would not accept such a prospect with enthusiasm and would be likely to take a very dark view of any suggestion that the responsible Canadian authorities could not train a sufficient number of qualified technicians in less than five years. So far as this Department is concerned, we believe that it is quite possible to train the necessary Canadian personnel, and in a much shorter time than would seem to be envisaged in the draft note.... We also consider that such action should be taken.³

The Department of Transport — responsible for recruiting and training Canadian personnel to serve at the stations — disagreed with Keenleyside's assessment. "Canadianizing" the High Arctic stations with entirely Canadian staff was unrealistic in the foreseeable future. After all, the department had already committed to Canadianizing eight American-operated stations in the northeastern Arctic, and the US provided significant funds, supplies, building materials, sophisticated meteorological equipment, and transportation capabilities to enable JAWS operations. Sustaining the US Weather Bureau's "interest and ... ability to obtain appropriations would be greater if American personnel were at these stations."⁴ After all, Congress would not let American personnel suffer shortages or undue hardships while working in the Canadian High Arctic. Accordingly, DoT refused to commit to a timetable for Canada to assume full responsibility, and George McIlraith, Howe's parliamentary assistant, affirmed a few months later in June 1947 that the USWB would continue to supply half of JAWS personnel "until sufficiently trained Canadian staff are available."⁵

Both Canada and the United States questioned the extent and form of American involvement in the JAWS program intermittently over the next twenty-five years of joint operations. Was Canadianization necessary or practical? Some Canadians fretted over whether a heavy reliance on American personnel, equipment, and transportation resources compromised Canada's *de facto* (if not *de jure*) Arctic sovereignty. On the other hand, could Canada safely assume ongoing US support for a joint program? While the superpower had extensive resources at its disposal, it had to balance JAWS requirements with global commitments. Canadian

officials grappled with these questions, answering them differently depending upon their departmental affiliations, perceptions of vulnerabilities and capabilities, and shifting political contexts. Senior Canadian Meteorological Service and USWB officials stalwartly defended the joint program, touting it as a model of bilateral understanding and cooperation. Their message prevailed, effectively countering threat narratives in internal Canadian government circles — but it could never fully reverse the American-challenge-to-Canada’s-Arctic-sovereignty narrative in political, academic, and public discourse.

In retrospect, the conventional, dominant narrative that emphasizes the ongoing American threat to Canada’s Arctic sovereignty seems misplaced with respect to the JAWS story. While “sovereignty” animated the debate over Canadianization, the practical application of the concept saw Canada gradually assume responsibility for resupplying the stations in forms and at a pace that its growing capacity allowed. In the early years, “the United States carried out this task practically alone, with only token Canadian participation,” historian Gordon Smith observed. “As time went on, however, Canada took over an increasing share of the load, and eventually it became almost as completely a Canadian show as it had originally been American.”⁶ While day-to-day JAWS functions continued to play out through well-established joint engagement and shared responsibility at the station level, Canadian officials increasingly directed the larger operational theatre — a scenario welcomed by their American counterparts. When the full Canadianization of the stations occurred in the early 1970s, it was not at Canada’s behest but as a consequence of American parsimony and a recognition that, by this point, Canada could certainly manage and afford to run the stations on its own.

Conceptualizing Canadianization: Breaking the Ice

In the late 1940s, with the US bearing full practical responsibility for JAWS construction and resupply operations, Canadian politicians tended to link the civilian weather station project to the broader suite of expanding continental defence projects proposed and pursued by its superpower neighbour. Accordingly, fears of American security agendas overwhelming or undermining Canadian Arctic sovereignty featured prominently in most high-level discussions in Ottawa about the weather station program.⁷



FIGURE 9-1. "If Uncle Sam pays most of the bills, is it tactful to take the credit?" *Maclean's*, 1 March 1950.

Capability gaps limited Canada's options, particularly the inadequate Arctic icebreaking capacity that precluded Canadian vessels from contributing to sealifts. Without physical evidence of its participation in transporting materials to the weather stations, could Canada claim credibly that this was a "joint" project and that the US was not running the show?⁸ Capacity was "the key to the Arctic," an RCAF report on the 1948 sealift insisted. "Whatever the cost, the Canadian government must control this key to our Arctic Islands."⁹

In this context, Secretary to the Cabinet Arnold Heeney argued in the fall of 1948 that it was time to consider a "government policy of Canadianization" in the Arctic similar to that successfully implemented in the Northwest during the latter stages of the Second World War.¹⁰ Within months, the St-Laurent government adopted an official policy dedicated to discerning measures that would "keep the Canadian Arctic Canadian."¹¹ The central component of this strategy focused on greater Canadian involvement in resupplying JAWS, so the first priority was

procuring vessels.¹² Although the RCN and DoT began to construct new icebreakers in 1949, steel shortages and design changes hampered progress.¹³ This delay frustrated the US Navy which, far from seeking to cling to full operational control, eagerly anticipated Canadian capacity to relieve it of the JAWS sealift burden. That March, the USN requested that *N.B. McLean* carry supplies to the proposed Alert site on Ellesmere Island because its icebreakers faced competing priorities and required repairs. Despite the cries for “Canadianization” in official circles, DoT could not comply, prioritizing important icebreaker tasks to facilitate shipping in Hudson Bay as well as the St. Lawrence and Saguenay Rivers over a High Arctic mission.¹⁴

The archival record clearly indicates that there was no insidious plot by the US Navy to monopolize the JAWS sealift and build a rival claim to sovereignty over the High Arctic islands. US officials emphasized that the joint weather station program was in their “national interest” and should be expanded “to obtain even greater coverage throughout the Arctic.” Nevertheless, budgetary limitations, the lack of personnel and ships for Arctic work, as well as competing naval operations “of a higher priority” in the north Pacific strained American resources. Canada had to do more to help, the US Chief of Naval Operations told Reichelderfer in September 1949. “It appears that it would be advantageous to both the United States and Canada for Canada to assume complete responsibility for the present weather stations, particularly with regard to transportation activities, at the earliest practicable date, in order that available United States effort and funds be utilized for the establishment of additional weather stations in other critical areas.” Although the US Navy recognized that Canada did not have the capacity to contribute immediately to resupply efforts and thus agreed to provide American ships for the 1950 and 1951 operations, it refused to commit to efforts beyond that time.¹⁵

Each country’s contribution of half of each weather station’s staff was not the same as sharing an equitable burden overall. Reichelderfer emphasized that the USWB welcomed increased Canadian contributions to the joint stations, and he looked forward to Canadian and American “parity” in all aspects of JAWS activity. The Bureau chief also expected that Canada would assume full responsibility for the stations “at some future date,” but he cautioned that disproportionately high Canadian contributions might

erode Congressional support for American contributions to the joint program in the meantime. Accordingly, Reichelderfer urged his colleagues in Washington to continue contributing at least half of the program's budget and transport requirements, at least half of its resupply tonnage, and half of the station personnel until Canada could take over the entire program. He also recommended that the US military adopt a similar position regarding its involvement.¹⁶ In short, the archival record contains no indication of senior American officials intending to use the JAWS resupply missions to reinforce or expand their country's Arctic naval presence or capabilities in Canada's High Arctic.

For its part, the United States Air Force (USAF) had provided the airlift essential to build the network, and its role in aerial resupply dominated the early years of the program. Until 1949, the RCAF's four-engine transport fleet consisted primarily of Second World War-era aircraft, including converted Lancaster bombers. The following year, the RCAF's acquisition of several squadrons of Canadair North Stars allowed Canada to augment its participation in the JAWS airlift.¹⁷ The RCAF had established a small station at Resolute in 1949 to coordinate High Arctic operations, and it contributed one North Star to the 1950 spring airlift (thus allowing the USAF to deploy one fewer C-54 to the mission).¹⁸ Air Transport Command personnel posted to the fledgling military station shared similar experiences to their civilian comrades at the weather station, countering feelings of desolation, loneliness, and depression (particularly during the long, dark winter) by embracing "a regular Station routine." They also devoted their evenings to "playing cards, darts, table hockey," or reading, and trying "to preserve a healthy and cheerful attitude"¹⁹ — and interacted with their JAWS neighbours regularly. With its High Arctic hub in place, the RCAF contributed two North Star aircraft to support the 1951 spring airlift²⁰ and officially "assumed responsibility" for aerial resupply operations — but continued to "invite" USAF contributions and, in practice, remained heavily reliant on US support.²¹ The next year, the RCAF resupplied Mould Bay and Isachsen out of Resolute, while the USAF continued to fly aircraft to Alert and Eureka out of Thule. What had begun as a US-dominated resupply effort had transitioned to a truer joint partnership.

Ottawa's aspirations to "Canadianize" maritime resupply operations took longer to realize. In January 1952, the Canadian Secretary of State for



FIGURE 9-2. Canadian C-119's and North Stars at Resolute during the mid-1950s. The RCAF's acquisition of these aircraft types gave it the capacity to gradually Canadianize the JAWS airlift. Jim Jung Collection.

External Affairs was “pleased to extend an invitation to the United States to participate in the annual sea supply mission in the summer of 1952 and to enter Canadian waters and ports for that purpose.”²² In reality, neither of Canada’s new icebreakers was ready and the US had no choice except to spearhead the operation. “This rather typical and misleading sentence must have induced wry smiles on the faces of American officials,” Smith noted. “The plain truth was that, up to that time at least and apart from the presence of a few Canadian observers and scientists, American ‘participation’ had amounted to practically everything that was done, and without it there would have been no sea supply voyages.” The Canadian “invitation” revealed an “anxiety to preserve at least the outward appearance, or illusion, of Canadian leadership in these activities taking place on Canadian territory and to some extent in Canadian waters.”²³ Ottawa readied for a more significant contribution the following year when DoT planned the shakedown cruise of its new icebreaker, CGS *D’Iberville*,²⁴ and hoped to assume responsibility for the sea resupply of Resolute and Eureka, “thereby carrying the flag into the interior of the Archipelago” and relegating US operations to “the fringe” station at Alert.²⁵

The Stations, the DEW Line, and the ‘Delicate Balance of Manpower in the Northern Arctic’

Plans to gradually Canadianize JAWS resupply operations did not allay lingering sovereignty concerns in Ottawa, particularly as continental defence plans drew heightened attention to and interest in the Canadian Arctic in the early 1950s. The Soviets had the atomic bomb, the Korean War raged, and superpower tensions exacerbated popular anxieties about the security of North Americans. In late December 1952, R.A.J. Phillips, who held responsibility for the Arctic sovereignty “file” at the Privy Council Office, prepared a note on ten “unfortunate incidents” (all rather minor) involving the US in the Canadian Arctic in the previous three years, as well as a list of potential developments that could affect sovereignty policy. One related to possible US radar stations for the defence of Thule,

in the vicinity of the Joint Arctic Weather Stations at Alert, Eureka and/or Resolute. Resolute, with about 35 Canadians, has the largest Canadian community in the Arctic Archipelago. Alert and Eureka have seven Canadians between them. Each U.S. radar station would probably have about 200 US servicemen.... There is at least the possibility that the U.S. will ask to put a U.S. main radar station with between 100 and 200 men at Resolute.

Phillips, who had briefly visited the JAWS sites during an Arctic tour earlier that year, noted that “until now the main activity in that area has been the weather station program. We have maintained our tenuous position by providing half the staff.... Any new U.S. activity is bound to change the delicate balance of manpower in the northern Arctic.” During the Second World War, Canada had gone to great lengths to “preserve” its sovereignty in remote areas “where Canadians are out-numbered.” Although “the U.S. administration has been eminently reasonable during the past six years that we have been working together in the Arctic,” thus removing any worries about formal challenges, “*de facto* U.S. sovereignty” issues could embarrass the Canadian government. Phillips offered eleven proposals to

reduce the risk, the first of which was to completely take over the maintenance and operation of the joint weather stations.²⁶

These “potential” US radar stations in the High Arctic were never built, but the push to Canadianize JAWS reached new heights in the early 1950s. The Soviet Union — now possessing atomic weapons and a growing strategic bomber force — invited increasingly ambitious American proposals to deploy advanced detection systems in the Arctic and use the vast northern approaches to the continental heartland to afford a higher degree of “defence in depth.”²⁷ In late 1952, St-Laurent’s cabinet learned that the Americans would eventually want at least forty radar stations across the Arctic, which would require hundreds, if not thousands, of American personnel to construct and operate.²⁸ Canada had neither the resources nor the experience to mount its own polar watch independent of the US at such high latitudes, and joint participation in strategic air defence systems ensured a modicum of defence against unwanted American “help.”²⁹ Under Operation Counterchange (later renamed Operation Corrode), Canada permitted the United States to install an experimental radar station along the Western Canadian Arctic coastline in 1953, which served as a prototype for a line of sixty-three radar stations that ultimately formed the Distant Early Warning (DEW) Line.

US air defence studies left no doubt that the elaborate detection systems needed to warn of a transpolar Soviet bomber attack would require the construction of Arctic installations on an unprecedented scale.³⁰ The sheer magnitude of the mega-project made it intimidating and unique, but the JAWS experience — however modest by comparison — informed many aspects of DEW Line planning, from logistics to equipment to essential supports for personnel working at isolated posts. Malcolm Hubbard, the Assistant Director of Project Lincoln at MIT, noted that a tour of the five Joint Arctic Weather Stations by the Lincoln Summer Study Group served as a “major factor” in indicating the feasibility of a DEW Line in the far north. “Without the evidence of safe and satisfactory operation of stations on an economic budget by a small staff,” Hubbard told Reichelderfer, “we would have been forced to delay our tests for a much longer interval.” Hubbard also acknowledged Canadian sensitivities about Arctic projects — another analog between the JAWS and DEW Line programs.³¹

FIGURE 9-3.
The American and Canadian
flags flying
aside radar and
communications
equipment at the
CAM-MAIN
DEW Line radar
site, Cambridge
Bay, early 1960s.
Canadian Forces
Photographic Unit
photo, PCN-1656.



Building the DEW Line would bring thousands of American personnel into the Arctic, resurrecting primordial Canadian worries about sovereignty. Secretary of State Lester Pearson adopted similar messaging as he had with respect to the High Arctic weather station proposal in 1946, insisting that Canada should assume full responsibility for building and operating the DEW Line — with no consideration to the exorbitant costs and personnel demands. This was completely unrealistic, but typical of Pearson's narrow nationalist proclivities when it came to Arctic development.³² Other senior politicians, more attentive to material realities, declared their eagerness to Canadianize "as many activities in the Canadian north as possible."³³ During Advisory Committee on Northern Development (ACND) meetings, the minister of Northern Affairs and National Resources, the commissioner of the RCMP, and representatives

from the Departments of Finance and External Affairs argued that the JAWS stations were located in the most “sensitive” areas for the maintenance of Canada’s sovereignty in the Arctic. As long as Americans constituted half of the staff, the stations were not achieving the kind of independent and effective occupation that some Canadian officials believed was necessary.³⁴ Canada did not have the resources to match the coming wave of American military activity in the Arctic, but it could achieve the impression of effective occupation if it assumed full responsibility for all civil programs before the DEW Line was completed.³⁵ Given that the JAWS program represented the largest single project on the archipelago, the ACND asked DoT to document the potential costs of taking over the weather stations.³⁶

The ensuing report explained how JAWS provided critical meteorological information to Canada, the US, and Europe for civil and military forecasting. It could not be allowed to falter. Recruitment of adequate personnel had proven “a serious problem,” and DoT would need to recruit an additional twenty-three employees (mainly met techs) to replace the American personnel if Canada wanted to assume full operational responsibility. This increased demand would be especially hard to satisfy, however, because the department had already committed to constructing and operating additional weather stations in other parts of the Canadian Arctic to improve NATO forecasting capabilities. Any delay in securing adequate staff for the High Arctic stations “would tend to reduce the observing program and this would carry with it serious penalties in loss of information.” Moreover, the JAWS installations still relied heavily on American equipment and supplies, and Canadianizing resupply would be a “slow process” requiring even more employees. Finally, Canada’s annual financial outlay for the project (\$200,000) would more than treble to at least \$675,000. The report did not end with a clear recommendation, but its tone strongly cautioned against rejecting American participation.³⁷

Considering this lopsided treatment of the issue, ACND Secretary Graham Rowley generated his own report making the case for Canadianization. While he readily acknowledged DoT’s reservations, the opening paragraph questioned whether Canadian sovereignty in the Arctic was secure. “Although the senior Canadian is in command of the station,” Rowley suggested, “the executive officer exercises complete

authority over the use of all technical equipment (which is United States property), and hence Canadian control is in practice incomplete.” Sole Canadian operation, and thus sole occupation of the sites, would allay “doubts [that] have been expressed as to the validity of our title in the archipelago.” Furthermore, could Canada count on the US remaining a reliable partner? If the Americans ever withdrew from the JAWS program on short notice, Canada’s northern development and ability to meet NATO meteorological requirements might be jeopardized. Ultimately, Rowley insisted that Canada needed to “build a growing corps of men, both civilian and service, who know the Arctic” if it aspired to “maintain and develop its position in the north.” In his assessment, barriers to Canadianization were difficult but not insurmountable. JAWS recruitment problems might be resolved by Canadianizing the stations over a period of up to eighteen months, and Inuit could be trained to “take over a part of the work.” Furthermore, if funding was a concern, did USWB financial contributions to Danish-operated weather stations in Greenland mean that the US might be willing to continue to pay for part of a Canadian-run program that yielded essential meteorological information?³⁸

ACND members considered both reports at the interdepartmental body’s thirteenth meeting on 23 November 1953, revealing persistent divisions within the Canadian civil service on the imperative for — or attractiveness of — Canadianization. Andrew Thomson, as controller of the Meteorological Service, communicated the USWB’s promise not to withdraw from the JAWS program “without giving adequate prior notice to Canada.” He also countered assertions that jointly-run stations jeopardized Canada’s sovereignty over the High Arctic, explaining 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.” General Andrew McNaughton, the chairman of the Canadian section of the Permanent Joint Board on Defence (PJBD), similarly emphasized that Canadian control at the stations fully met sovereignty requirements. The program benefitted from American contributions, leading him to urge that Canadianization “be left in abeyance.”³⁹

In other circles, the pressure for Canadianization intensified. RCMP Commissioner L.H. Nicholson suggested that the cost of Canada taking over the joint program was “relatively small by present-day standards” and

that any equipment and recruitment problems could be overcome. The Department of Mines and Technical Surveys also argued that the stations should be operated by “Canada alone.” Continental defence imperatives loomed large over the entire exchange, and the chairman of the meeting, R.A.J. Phillips, highlighted that Canada “could not match the United States military operations in the north man for man and dollar for dollar.” To offset this asymmetry, he reiterated that Canada must assume responsibility for all “civilian operations in the north” as soon as possible.⁴⁰ The JAWS program, as the largest civilian endeavour in the High Arctic, was the obvious starting point.

All sides recognized that Canada’s limited resources precluded an immediate takeover, and successful Canadianization would come down to “a matter of timing.” The ACND drafted a memorandum to cabinet “recommending that Canada take over the complete operation of the joint weather stations as soon as time and resources permit,”⁴¹ which stressed effective occupation as well as a tradeoff between rising civil and defence costs. The joint stations stretched “some 800 miles North of Resolute and in all that distance the only substantial civil operation is carried out at least equally by the United States.” Canada could not afford to cover half the costs of Arctic defences against Soviet bombers, so it would have to compensate by taking greater responsibility for civilian projects. Accordingly, the memorandum recommended that the government approve, “in principle,” the Canadianization of JAWS “as soon as feasible,” and that “all necessary measures be taken” towards this end. It ended by proposing a Canadianization timetable that envisaged DoT assuming full responsibility for Mould Bay in September 1955, two other stations in 1956, and the final two the following year.⁴²

The end of the JAWS program’s first five-year term in late 1953 had also prompted discussions in Washington about a possible American pullout in the face of new budgetary restrictions. The USWB “reluctantly” considered balancing its books by withdrawing from three of the five Joint Arctic Weather Stations. Reichelderfer, however, sought supplementary support for the program “as a military requirement” from the Department of Defense — by now a typical tactic that he used to try to secure funding for civilian programs with essential applications for national defence. In a meeting between USWB, USAF, and State Department officials, the

weather bureau chief cast aside his previous insistence that the JAWS program be differentiated from contemporary military projects, now offering a revisionist narrative that the joint program initially had been cast as a “civilian operation” for “political reasons.” The PJBD had taken considerable interest in the JAWS program, he pointed out, and State Department officials lauded how “Canada had cooperated fully” with American requests and cautioned that an American withdrawal would harm US-Canada relations. They joined the chorus for continued joint operations, arguing that “the weather stations were much more vital for defence purposes now than when they were originally established in 1947.”⁴³

Far from seizing an opportunity to expand the American military’s influence in Canada’s High Arctic on the pretext of national or continental security, the USAF avoided making any new commitments to JAWS. Air Force representatives pointed out that Public Law 296 clearly authorized the USWB to construct and operate the joint stations as a “civilian program.” While the stations had “value to the military,” the network “had not been considered heretofore as a strictly military requirement.” They agreed begrudgingly to further study of the stations’ contributions to defence requirements,⁴⁴ but did not buy into Reichelderfer’s reimagining of JAWS to access Cold War military funding to support his weather programs.⁴⁵ Otherwise stated, the civilian program would not be repackaged under “military cover.”

The popular media in Canada continued to link the weather stations and continental defence, however, often with the goal of resurrecting sovereignty concerns. By the mid-1950s, Canadian officials were increasingly open to journalists joining resupply missions and visiting the stations in hopes that their stories would end any speculation about threatening American activities in Canada’s Arctic.⁴⁶ Predictably, official briefings to reporters emphasized Canadian contributions and most reporting reflected this cooperative message.⁴⁷ Some journalists, however, continued to depict JAWS as an example of Canada’s subservience to Washington and resisted Ottawa’s attempt to control the messaging.⁴⁸ For example, a Northern-themed issue of *Maclean’s* magazine in November 1954 contained a feature article by editor Ralph Allen that accused the St-Laurent government of “timidity, parsimony, indifference and sloth” in its Northern policies, holding up JAWS as a prime example of Ottawa’s failure

to prove that Arctic activities “really [were] our show again.”⁴⁹ Rather than doubling down on its attempts to vet stories for fear of public embarrassment, however, officials decided to ease restrictions on journalists. “There are no security problems,” Phillips insisted in November 1954:

We are anxious to encourage more journalists to visit the north and to provide more publicity on Arctic activities. The present arrangements for clearance and copy can easily become vexatious to the journalists and work to the detriment of the full and good publicity of the Meteorological Service. I should, therefore, like to propose that the requirement for international clearing of stories about the joint Arctic weather stations be discontinued.

Journalists would no longer require the special permission of the USWB and DoT to visit the stations, and so long as the writers did not discuss the RCAF base at Resolute, articles would no longer be vetted in both capitals.⁵⁰ This decision to “liberalise” publicity procedures⁵¹ reflected a growing Canadian confidence in the benefits of their joint endeavour with the Americans.

Thus, proposals to have Canada assume full responsibility for the High Arctic stations fizzled once again in the mid-1950s despite ongoing cabinet concerns about “effective occupation,” ardent appeals from the interdepartmental ACND, and media pressure to fully “Canadianize” JAWS. Instead, the stable bilateral working relationship continued, with officials from both countries renewing the arrangement on an annual/periodic basis without penning a more formal agreement.⁵² 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.⁵³

Instead of unnecessarily complicating or undermining this pragmatic arrangement, St-Laurent's cabinet members — now much better versed on the issues after years of deliberations — focused on Canada assuming, "as soon as practicable," full responsibility for both air and sea supply operations.⁵⁴ Although the US continued to support all five of the Joint Arctic Weather Stations, American military logistical support to the program decreased apace as Canada took on an expanding share of the resupply.

Having bolstered its Arctic shipping capacity by 1954, Canada could play a more direct role in maritime efforts. The year before, operations had followed the "usual pattern" of US ships replenishing the joint stations while Canadian ships supplied other Arctic posts.⁵⁵ In June 1954, a DoT press release highlighted that a Canadian convoy comprised of *D'Iberville*, *C.D. Howe*, *N.B. McLean*, two chartered vessels, and extensive landing vehicles, including an LCM landing craft, had resupplied all of the JAWS stations except Alert during Operation Nors'1.⁵⁶ Although Ottawa trumpeted the supply operation as a major achievement,⁵⁷ Howard Wessbecher, an American at Resolute, was unimpressed. "When the US came up," he reminisced, "we [had] major ships — two, three major freighters with landing craft" to supply and sustain the stations. "When the Canadians came up, they had one little ... ice breaker with a little tiny life boat" carrying a minimal amount of supplies. "We used to kid up there and say ... the Canadians provided the joint and we, the US, provided the effort and the supplies."⁵⁸ While the Canadian convoy may have exercised less ice-breaking might than previous US missions, Wessbecher's cynicism was increasingly misplaced. The ability to complete the practical job of resupply represented the real test, not the size of the vessels.

The RCAF also assumed responsibility for JAWS aerial resupply operations at a gradual but steady pace in the 1950s. By 1954, Canadian aircraft transported goods and equipment to Resolute, Mould Bay, and Isachsen,⁵⁹ while the USAF continued to do the same at Alert and Eureka (in whole or in part) until 1961.⁶⁰ "The spring and fall re-supply of the arctic bases ... has been handed over to squadrons equipped with C-119 freight-carriers,"



FIGURE 9-4. Canada's *D'Iberville* and landing craft resupplying Eureka (circa 1957). Lowell Demond Collection.

Flight Lieutenant J.D. Harvey described in the RCAF journal *The Roundel* in 1955. "Two [Air Transport Command] squadrons, No. 435 at Edmonton and No. 436 at Lachine, now join forces on the job. In the spring and fall of 1955 similar operations airlifted more than a million and a quarter pounds of all types of cargo" from Resolute.⁶¹ The American Air Force Base at Thule provided additional support for the resupply of Alert, which was subsequently dubbed Operation Boxtop after the RCAF began to "Canadianize" it in 1956.⁶² The new pattern of the RCAF leading and conducting aerial resupply "was generally followed thereafter with certain variations according to need," Smith observed. "The U.S.A.F. continued to participate in the airlift as needed and according to circumstances, but little innovation turned out to be necessary as the years went by, and arrangements and procedure for the resupply tended to become rather standardized and routine."⁶³

The High Arctic Relocations of Inuit: A Form of Canadianization?

In the early 1950s, the Canadian government began to awaken from its long period of “fit of absence of mind” (as Prime Minister Louis St-Laurent characterized it) about its North, propelled by Cold War military considerations and popular concerns about the fate of its Inuit citizens. The neglectful mentality that had led Ottawa to leave responsibilities for welfare and education to the Hudson’s Bay Company and missionaries⁶⁴ was no longer acceptable. The postwar introduction of family allowances, the increasing reliance of Inuit on imported technologies, and the crash of the fox fur market had changed Indigenous northerners’ relationships with the state. Government officials, increasingly aware of the encroachment of the modern world into the region, scrambled to address what they perceived as problems: the shortage of local food sources, a health crisis (which led to the evacuation of a large portion of the Inuit population to southern sanatoria to be treated for tuberculosis), and a failing traditional subsistence economy.⁶⁵

One government solution to the “Eskimo Problem,” as it was called at the time, was to relocate Inuit from places where game was dwindling to more abundant hunting grounds. In 1950, for example, the Arctic Division considered (and then rejected for budgetary reasons) the creation of an Inuit settlement near the Eureka weather station on Ellesmere Island. Instead, it authorized wildlife studies in the area, anticipating that “it will be necessary in the very near future to move a number of the Eskimos from their presently poor productive hunting grounds to more favourable locations.” Although the head of the division saw no reason to “stress any immediate requirement for Eskimos” to be relocated and noted that “in any mass movement of Eskimos we shall use more accessible areas first,” he noted that “if these Arctic weather stations prove to be a continuing project we may find it advisable to place one or two Eskimo families at certain stations.” Knowing more about local terrestrial and marine wildlife would help to make this determination.⁶⁶

Regular hunting trips by Greenlandic Inuit (Inughuit) to Ellesmere Island not only suggested that the High Arctic islands might be habitable, they also raised questions in Ottawa about sovereignty and “effective occupation.”⁶⁷ Although the Danish government had formally recognized



FIGURE 9-5. Inuit community at Resolute in March 1956. Gar Lunney National Film Board of Canada LAC, PA-191422.

Canada's ownership of the island in 1922 and had instructed Inughuit to observe Canadian laws,⁶⁸ the latter continued to cross over Smith Sound to hunt muskox. The Royal Canadian Mounted Police maintained a post at Craig Harbour on southeast Ellesmere from 1922–40 and another at Bache Peninsula on the east coast of the island from 1926–33⁶⁹ to assert official jurisdiction, but both were closed owing to resupply difficulties. With no perceived Danish threat to Canadian sovereignty to justify their reopening, the police had no permanent presence on the island until 1951 when it reopened the Craig Harbour post. The Canadian government let Inughuit continue with polar bear hunting, given that many of the men leading the hunting parties had previously worked for the RCMP at their

posts, and Eureka was situated along one of their main travel routes.⁷⁰ When Jim Migre, an American mechanic at Eureka, first alerted his peers to the two approaching dog teams in October 1952, the hyperbolic station diarist wrote that his peers, “thinking him bushed, reach[ed] for [a] straightjacket.” He was not suffering from High Arctic delusions: two men and one woman from Etah, Greenland, had been sent ahead by another dozen of their group of Inughuit who were camped on the Bache Peninsula. According to the station records, the Inughuit intended to make camp at nearby Lake Hazen in the spring. The trio stayed at the station for three days, during which time the “Eskimo girl prove[d] to be quite an adept housekeeper,” according to US Weather Bureau chief Glenn Dyer, who happened to be at the station during the fall airlift.⁷¹ The station gave the Inughuit family “a few surplus komatiks of food” when it departed.⁷²

Shelagh Grant suggests that this incident at Eureka was a strong catalyst for the Canadian federal government’s decision to embark on the High Arctic relocation program. Although the Department of External Affairs asked the Danish government to prevent crossings from Greenland without Canadian approval,⁷³ Greenlanders continued to visit parts of Ellesmere Island for seasonal hunting trips and even became familiar with the local RCMP constables. The sovereignty concern dissipated, however, when the Danish government promised to curtail any “illegal permanent migration” of Inughuit to the island.⁷⁴ At any rate, the 1952 encounter at Eureka in the JAWS context is particularly intriguing given its uniqueness: no other oral histories or archival records share stories of similar meetings. Aside from the occasional Canadian Inuit who passed through stations as aircraft personnel or as guides for the RCMP or scientists, JAWS personnel at Mould Bay, Isachsen, Eureka, and Alert never encountered Inuit.⁷⁵ Apart from a 1961 story of the Eureka station helping arrange the air rescue of a pregnant Inuk woman from Alexandra Fiord to Thule (where a medical doctor saved both her and the baby),⁷⁶ the Canadian archival records offered no insights into Indigenous peoples around these satellite stations. Furthermore, even though a few Inughuit had met JAWS personnel at Eureka, the site was never selected for a Canadian Inuit settlement, indicating that officials considered such a move to be unnecessary from a sovereignty standpoint.

Instead, the federal government's decision to send seven families (thirty-two people) from Port Harrison (Inukjuak) in northern Quebec to Craig Harbour and Resolute the following year has become the most notorious of these government-directed moves.⁷⁷ By the early 1950s, Canadians had access to reports that hundreds of Inuit were starving in the Keewatin Barrens and Ungava. This news sparked a popular and political reaction.⁷⁸ Canadians would not tolerate having their government stand back and allow northern citizens to starve to death. Was the solution to make people in desperate situations, where local resources could no longer sustain traditional livelihoods, dependents of the state, or to create opportunities to move them to other areas where they might enjoy a better quality of life? Officials faced this dilemma when confronted with reports of a growing Inuit population facing starvation along the eastern coast of Hudson Bay.⁷⁹

The details of the High Arctic relocations have been discussed elsewhere, although varied interpretations yield no consensus on government motivations.⁸⁰ Were the relocated Inuit “pawns of history” moved by officials for state sovereignty reasons or for “social reformist ideologies,” historian Alan Marcus asks, or “did they become victims of a humanitarian effort gone wrong”?⁸¹ Was the primary motive sovereignty (with Inuit serving as “human flagpoles”) or welfare and economic concerns?⁸² Aware that the conditions in the High Arctic were different than in northern Quebec, planners recruited three Inuit families from Pond Inlet on northern Baffin Island to help Inukjuammiut adjust to life in the High Arctic. The archival record suggests that the government's primary intent for the relocations was to relieve the pressures on game resources in northern Quebec and provide Inuit with a means to continue their hunting and trapping lifestyle. The plan was also, in part, “an experiment to determine how well Eskimos from southern areas could adapt themselves to conditions in the High Arctic.”⁸³ The physical remains of the Indigenous (Thule) dwellings near the Resolute weather station confirmed that, historically, the ancestors of Inuit had lived in the area, and optimistic reports speculated on the availability of sufficient marine life to sustain a small Inuit community.⁸⁴

The federal government's 2010 apology for the High Arctic relocations and unfulfilled promises associated therewith has officially embedded



FIGURE 9-6. Inuit woman and three children in winter clothes, Resolute Bay, NWT, March 1956. Gar Lunney National Film Board of Canada. LAC, K-3963.

this history as one of government failure.⁸⁵ At the time, however, federal advisory bodies such as the ACND and the Committee on Eskimo Affairs consistently looked to the relocations with optimism, seeing them as humanitarian “experiments” to improve Inuit welfare. The archival record does not support allegations that officials used Inuit as “human flagpoles” for sovereignty, and certainly does not sustain the misconception that this was the primary purpose behind them.⁸⁶ Indeed, rather than seeking an Inuit presence to bolster the Canadian presence at Resolute, the RCAF worried that Indigenous residents would become dependent

on the airbase.⁸⁷ Whereas Inuit relocated to Craig Harbour on Ellesmere Island were set up fifty kilometres away from the RCMP post to discourage loitering and “handouts,” the Qausuitturmiut (Resolute Inuit) settled just five kilometres from the RCAF station. Despite this close geographic proximity, the RCMP deliberately sought to segregate Inuit and *qallunaat* and limit interaction between base personnel and Inuit whenever possible, fearing that regular contact could lead to disease, social dislocations, and moral corruption. An RCAF Station Standing Order placed the Inuit village out of bounds “to all personnel except on business.”⁸⁸

Inuit oral histories recount how the relocatees found their first few years challenging in their new High Arctic settlements. The stories of plenty that convinced them to relocate were not easily reconciled with the poor variety of game and other foods in the High Arctic, where people faced extreme environmental conditions, colder temperatures, lack of wood, and (most significantly) three months of complete darkness.⁸⁹ At the time, however, the appraisals offered by local RCMP (who monitored and reported on the day-to-day activities of Inuit) and other government officials were more favourable and optimistic. While defence reports in the months after the first Inuit relocation worried that Qausuitturmiut had already become “more or less” wards of the RCAF detachment,⁹⁰ RCMP constables suggested that the relocated families were “living their native way of life, had little or no contact with the base, and were so happy in their new surroundings that they were already talking of having some of their relatives from Port Harrison” join them.⁹¹ Inuit men interacted with *qallunaat* on occasional hunting trips organized and chaperoned by the RCMP,⁹² who worked diligently to supervise any contact.

The issue of creating a diversified economic base for Northern Indigenous peoples represented a complicated challenge for the new Department of Northern Affairs and National Resources (DNANR). “Some new means of broadening the Eskimo income need not affect the traditional way of life significantly, and may indeed, capitalize on the skills of that life,” Minister Jean Lesage explained. There was no desire to impose a single model to which all Inuit should conform. In other cases, such as Inuit employment at weather stations, airfields, and radar posts, the nature of the work imposed “a complete break with traditional ways and entail[ed] sharp changes both in social organization and in standards

of living.” Denying Inuit the ability to participate in these projects would be “foolish,” Lesage asserted.⁹³ Guided by this logic, DNANR officials were interested in encouraging some Qausuitturmiut to take advantage of wage employment opportunities at the RCAF and weather stations, believing that casual employment would “not interfere greatly with the natives['] present way of life and will enable them to add to their income during seasons when they have little else to do.”⁹⁴ Subsequently, Qausuitturmiut worked seasonally as stevedores during resupply shipments, leaving them “sufficient time off for hunting throughout the year.”⁹⁵

The growing cluster of government buildings and the nearby Inuit village also drew national media attention to Resolute Bay as the country’s burgeoning High Arctic hub. Canadian reporter Ritchie Calder described the location as the “metropolis” of the Queen Elizabeth Islands when he visited the area in the mid-1950s. “Resolute was a smudge of exotic orange-paint on a snow-white canvas,” he recounted. The wrecks of seven aircraft surrounded the outpost, their “carcasses, ‘cannibalised’ of all working parts and fuselages left as store-rooms,” serving as grim “reminders of the hazards of servicing remote outposts of this kind.” The journalist noted that there were actually “three separate Resolutes — the Air-Force base and the weather-station adjoining it; the ionospheric station about 2½ miles away; and the Eskimo encampment, well out of the way and ‘out-of-bounds’ for civil and military personnel, except by dispensation of the Royal Canadian Mounted Police.”⁹⁶

It is difficult to disentangle interactions between weather station personnel and Inuit from those with the RCAF station. No Qausuitturmiut oral histories that we have heard or read refer directly to the weather station. Instead, memories often focus on relationships with the RCMP or experiences with RCAF personnel. Community members and academic commentators typically highlight negative dynamics such as abuse at the hands of police, Inuit accessing the garbage dump for food and building materials,⁹⁷ and problems with alcohol from the base (at least until Inuit were disallowed from buying liquor there in 1961).⁹⁸ The archival record offers little evidence of official Canadian intentions to coercively acculturate Qausuitturmiut into Western life, however, and federal civil servants expressed a desire to accommodate the many Inuit who wanted to maintain traditional lifestyles (although their creativity in finding ways

to support Inuit who wished to do so was wanting).⁹⁹ DNANR records suggest that, through a combination of modest wages earned from casual work, hunting, and trapping, Qausuitturmiut built a relatively stable local economy.¹⁰⁰ Indeed, the federal Eskimo Affairs Committee, an interdepartmental body that convened from 1952–62 to discuss Inuit policy, saw Resolute’s mixed economy as a model to emulate and suggested sending a “few more families from Port Harrison to Resolute Bay to meet a developing demand for causal labour” in 1955.¹⁰¹ Accordingly, the second phase of the High Arctic relocations sent another thirty-four people from northern Quebec to the community that year.¹⁰²

More generally, government assessments in the 1950s and early 1960s held up Resolute as a model of a successful Inuit relocation program. Administrator of the Arctic C.M. Bolger recommended in 1960 that the Craig Harbour/Grise Fiord experiment on Ellesmere Island should not be replicated; instead, he urged that “any new colonies ... should be [created] in the vicinity of established weather stations [at Eureka, Mould Bay, and Isachsen] ... as satellites of the Resolute Bay community.”¹⁰³ Thus, senior officials considered the successful JAWS construct — with Resolute as the hub supporting the more isolated satellite stations — as a potential model for future Inuit settlement in the High Arctic. Would this, in turn, bolster Canadian sovereignty? Although the archival record offers no indication that Inuit factored into Canadian officials’ sovereignty calculations in the early 1950s (which only appeared to consider non-Indigenous Canadians as evidence of “effective occupation”), by the following decade some civil servants began to recognize that “Canada’s first Arctic citizens” represented a basis for state sovereignty. In 1960, Northern Affairs officer Alex Stevenson emphasized employment prospects:

Some years ago, the D.O.T. gave tentative approval to considering employment of Eskimos at weather stations all over the Arctic, provided of course they had certain qualifications. No further action has been taken in this regard. No doubt the employment of Eskimos, particularly in the High Arctic, within the range of their capabilities would be a distinct advantage to D.O.T. and render a service to weather stations,

and again the matter of sovereignty would be another aspect of such employment.

One important factor to always keep in mind is that the Eskimos at Resolute Bay and Grise Fiord are an invaluable human resource in the northern economic development taking place on Cornwallis Island and the adjacent islands, and that other groups at several other points in this vast region might develop a similar importance. Then again, as already mentioned, the occupation of these northern islands by Canada's first Arctic citizens only enhances our claims to sovereignty of these regions.¹⁰⁴

Proposed plans to train and hire Inuit as non-seasonal weather station personnel were never implemented, however, and Canadian officials stuck with their established relationship with the US for another decade. Furthermore, the federal government officially ended Inuit relocations early in the 1960s, recognizing that scarce game resources in the High Arctic could not sustain a larger population, so no new Inuit "colonies" were established. Nonetheless, the Inuit community at Resolute grew modestly.¹⁰⁵ Housing, education, and social services encouraged closer alignment with southern Canadian political and societal expectations, and a local RCMP officer boasted that progress had revealed to Qausuitturmiut "the benefits and security which employment provided compared to the hardships encountered in their old way of life."¹⁰⁶ Such optimism was offset by problems of settlement living (including alcoholism, social deviancy, and externally-imposed governance) that challenged the developing community.¹⁰⁷

The 2013 Qikiqtani Truth Commission report on Resolute Bay suggests that "with the relocations, the RCAF base was no longer isolated" and "the installation played a major part in the history of the community."¹⁰⁸ Oral histories from weather station personnel and the JAWS archival record in Canada and the United States, however, paint a different picture. Although the government footprint at Resolute played a fundamental role in the shaping of the Inuit community there, it is remarkable how little the Inuit community factored into the culture of the weather station as documented in archives, letters, photograph collections, and

oral histories. While the Inuit community at Resolute was geographically close to the weather station, it was remote socially. Inuit are conspicuously absent from discussions of station isolation, and it seems that JAWS personnel generally heeded RCMP warnings against visiting the nearby Qausuitturmiut community. Oral histories recall how JAWS employees even had to go through the Mounties if they wanted to procure any soapstone souvenirs from local carvers.¹⁰⁹ Government officials in Ottawa continued to periodically circulate ideas amongst themselves about the benefits of training and hiring Inuit to operate the weather stations, but these never materialized. Apart from interactions during the annual sealift and seasonal gatherings, JAWS personnel and Qausuitturmiut appeared to inhabit separate worlds.¹¹⁰

Last Call for Canadianization

Canadian and American personnel at the stations continued to co-habit the same worlds, however, and senior officials mirrored the spirit of cooperation that governed station life in the late 1950s. The USWB worked diligently with its Canadian counterparts to avoid potential misunderstandings, with men like Glenn Dyer who recognized Ottawa's sensitivity about any potential indication that the Americans were losing interest in the joint program. The Canadian government considered the annual bilateral meeting, which it hosted to devise operational plans, to be a prestigious affair, with senior government officials (including Prime Minister Louis St-Laurent and two cabinet ministers) addressing the planning conference on separate occasions. Andrew Thomson regularly participated in the discussions, and official dinners and cocktails always accompanied the planning event. When senior USWB officials (including Reichelderfer) noted that JAWS planning had become routine and might be undertaken by lower-ranking officials (or even cancelled in favour of written exchanges), Dyer refused. He explained to the USWB chief that any suggestion of scrapping the conference or sending junior officials would lead the Canadians to surmise that "the Weather Bureau is not as enthusiastic or as interested in the Arctic activity as Canada would wish them to be." If Ottawa believed that an annual conference was necessary, Dyer insisted that the Americans had to be respectful and continue sending similarly high-ranking representatives.¹¹¹ Though a small gesture, the continuation

of the planning conferences affirmed a strong American commitment to the joint program. Furthermore, far from being an overbearing partner, the Americans went out of their way to satisfy and accommodate their Canadian partners.

By 1959, JAWS operations had fallen into a comfortable routine marked by predictable, binational cooperation. This allowed senior officials in Ottawa to focus diplomatic energies on larger developments that were dramatically changing the Canadian Arctic, particularly the DEW Line and Inuit communities forming around the radar stations.¹¹² The Canadian government dedicated its main Canadianization efforts to high-profile defence and resource development projects, with the RCAF assuming operational control of the DEW Line that year. Conservative Prime Minister John Diefenbaker, first elected in 1957 and re-elected with a resounding majority the following year, articulated a bold “Northern Vision” that generated national interest in northern development. While St-Laurent’s Liberal government had laid much of the groundwork for the “Arctic revolution” that followed,¹¹³ Canada’s North now had a champion at the helm of a Conservative government that promised to finally unlock the region’s economic potential. Although Diefenbaker’s accomplishments failed to match his rhetoric, his Northern Vision brought a new energy and fresh focus.¹¹⁴ The transition in government also invited his cabinet ministers to reconsider established paths charted by civil servants under the previous Liberal regime.¹¹⁵

Advocates for fully Canadianizing the Joint Arctic Weather Stations relied on the same political arguments that had led Canada to assume operational control of the DEW Line stations on Canadian territory. Northern Affairs Minister Alvin Hamilton, who was keen to expand Canada’s civil presence in the Arctic, wrote to his Transport counterpart in January 1959 to applaud the RCAF’s new responsibility for DEW Line operations while lamenting Canada’s limited “effective occupation and control” in the Arctic. Consequently, he insisted that Canada had to “assume complete control of all civil government responsibilities,” resurrecting old ideas that had been floated under the previous Liberal government and abandoned for pragmatic reasons.¹¹⁶ Hamilton amplified this alarmist tone in subsequent correspondence. The Americans had cooperated thus far, but he alleged that this had come “at the expense of our effective sovereignty.”

Ottawa had to bar the Americans from carrying out any function of government in the region, and the weather stations were “by far the most important government activity in this area.” To an outsider like Hamilton, the project’s relaxed routine seemed dangerous. He did not understand the collaborative relationship that allowed the JAWS program to run so smoothly and was unfamiliar with the formal and informal agreements that guided the program and the OICs’ effective control of each station. Instead, he saw dangers everywhere. “I have not the slightest doubt myself but that in the eyes, say, of the Soviet Union the joint stations are evidences of the United States’ occupation and that as such the present relationship acts contrary to the policy the government has decided on,” the minister suggested. “I think the arrangement could at some time be a source of embarrassment and I do not see any reason why this risk should be run.”¹¹⁷ Since Canada had always said it would assume full responsibility for the stations at the earliest opportunity, he assumed that “the United States would welcome any move on our part to take over what is so obviously a Canadian responsibility.”¹¹⁸

Transport Minister George Hees, relying heavily on Thomson for advice, rebuffed these contentions and furnished a positive narrative of how the JAWS relationship had evolved fortuitously for Canada. Although the US had played a “predominant” role when the stations were first established, Canada had gradually assumed more responsibilities and diluted the proportionality of the US contributions. Furthermore, continuing to leverage American resources in the High Arctic had allowed Canada to independently establish and operate several additional weather stations in the Arctic Archipelago.¹¹⁹ As a “highly integrated joint operation,” JAWS served as a source of “pride” that both countries’ weather services cited regularly. The US was proud of the relationship, “not because they believe they have any permanent rights in these stations but merely because ... the nature of the cooperation” was so unique and longstanding. If Canada “forced” the USWB to withdraw its personnel, it would upset this dynamic and deprive Canada of access to other American programs “which we could never hope to undertake ourselves because of manpower and financial limitation[s].” Furthermore, JAWS benefitted directly from USWB financial and personnel contributions. At a time when DoT sought additional federal funding to take over several Northern Canadian airstrips

FIGURE 9-7.
Monte Poindexter
outside Mould
Bay's customs and
immigration booth,
1956. Jim Jung
Collection.



operated by the United States, Hees argued that Canadianizing the JAWS program would squander limited resources for no apparent benefit, because the American presence at these stations posed “no threat to our Canadian sovereignty.”¹²⁰

Canadian Transport officials with the most intimate knowledge of the program insisted on the value of continued American involvement and the negative implications of a Canadian takeover. “The joint participation of these Joint Arctic Weather Stations, far from being a threat to Canadian sovereignty, on the contrary strengthens Canadian sovereignty, inasmuch as the United States recognizes Canadian laws and are meticulous to observe the regulations governing the Northwest Territories,” Thomson argued. “In effect, therefore, the presence of American staffs working

along with Canadian staffs serves to strengthen and establish very firmly Canadian sovereignty.”¹²¹ Canada managed most of the resupply by this point and benefitted from priority access to specialized US equipment for upper air observations.¹²² Canada would accrue no benefit from ending what had become a strong symbol of bilateral cooperation. Hees took his department’s advice and insisted that if Hamilton was worried about Canada’s sovereignty, the country should spend more on airstrip operations, communications, ice reconnaissance, and marine patrols — all of which would have a “much more important bearing on aspects of Canadian sovereignty” than “Canadianizing” the JAWS program.¹²³

DoT’s continued denial of an American sovereignty threat, along with its insistence that Canada benefitted materially from the JAWS partnership, helped to ward off further discussions about “Canadianization” for the next eight years. The countries had institutionalized their continental air defence relationship in the North American Air Defence Command (NORAD), the DEW Line had settled into another example of strong bilateral cooperation and respect, and Arctic security and sovereignty slipped to the political backburner.¹²⁴ In this context, even Canadian civil servants eased into a more casual attitude regarding JAWS diplomacy. External Affairs sent fewer representatives to the annual planning meetings because the proceedings had become “largely a matter of administration,”¹²⁵ and these meetings were shortened after the USWB asked for a tighter agenda that only included truly joint issues.¹²⁶ The DoT and RCAF coordinated and planned resupply activities in advance, and the bilateral meetings typically confirmed previous paths of cooperation rather than creating new ones.¹²⁷ Whereas participants in the ACND had discussed JAWS issues at length during the early 1950s, the weather stations were no longer reported upon in the 1960s (apart from expansion plans to accommodate the PCSP and other scientists, as well as support to commercial oil and gas exploration activities).¹²⁸ The JAWS program had settled into amicable routine, run by administrators in both Canada and the United States who enjoyed a longstanding trust relationship and practical approach to collaboration. By international standards, it was an exemplary case of bilateral cooperation. Dyer, writing to American physicist Dr. Dan McLachlan in 1963, expressed his frustration with Argentinians who, in his opinion, “tended to over-control [operational problems] and to be

much too formal, which tended to strangle the flow of needful management-type information.” In the same letter, he described the JAWS program as a “happier strain,” where there was “complete cooperation and very happy working conditions everywhere.”¹²⁹

On 17 February 1967, the American and Canadian delegates to the annual planning conference celebrated the JAWS program’s twentieth anniversary. They offered a moment of silence in tribute to Charles Hubbard and recalled the work of his equally enthusiastic Canadian counterpart, Andrew Thomson, in laying the program’s foundation. They hailed the JAWS program’s contributions to the world’s meteorological and scientific accomplishments and lamented the lack of media attention dedicated to these achievements. Dyer concluded the celebratory remarks by expressing his government’s desire that the two countries continue their close collaboration for years to come, reassuring his Canadian counterparts that the USWB remained “keenly interested in this most valuable source of data on Arctic meteorology.” Furthermore, “this programme had served a unique purpose in that it had demonstrated, most effectively, the results that might be achieved by friendly cooperation in a field of mutual interest.” Dyer extolled how the smooth functioning of the JAWS program “might well serve as a classic example for the inspiration of other agencies having a need to engage in cooperative activities of this kind.”¹³⁰

The End of a Bilateral Partnership

Ironically, this meeting in early 1967 marked the beginning of the end for American involvement in the Joint Arctic Weather Stations. The Canadians announced their intention for the RCAF to turn over responsibility for the aerial resupply of the stations to charter flights by Canadian commercial carriers the following year. This meant that the air force would no longer move equipment and goods from Montreal to Resolute “gratis” in support of the joint civilian program. The expectation that the US would shoulder a portion of this financial burden, in addition to new fuel costs at Resolute, would have increased the US Environmental Science Services Administration’s (ESSA) portion of the JAWS program’s costs by approximately \$40,000. When the ESSA budget suffered a “very serious cut” that year it had to make hard decisions about its global commitments, and the agency recommended that Canada either absorb the additional

costs or consider closing Isachsen so that both countries could support the remaining four joint stations.¹³¹

From its inception, the JAWS program had been susceptible to budget limitations and pressures. These factors now sealed the partnership's fate. Ottawa stepped in to cover the additional airlift expenses, but ESSA's resource problems worsened. In November 1969, the Americans hinted to the Canadians that they might have to end their involvement in the JAWS program. Glenn Dyer explained to D.C. Archibald of the Canadian Meteorological Service that President Richard Nixon had directed US agencies to reduce their assistance to "outside agencies." Although the US had not made a final decision about its further involvement in JAWS, Dyer noted that Archibald's offer to increase Canadian personnel contributions would help ESSA to "meet the Presidential directive."¹³² It was not enough, however, to save American involvement in the program.

In early 1970, ESSA decided to completely withdraw from the JAWS program to save \$600,000 (roughly 45% of program costs) annually.¹³³ Archibald and Dyer, both of whom had been involved in the project almost from its start, led discussions at a February meeting that committed to a gradual phase-out at a pace that Canada could maintain, while ensuring the uninterrupted flow of data from all five stations. The American terms of departure were generous and demonstrated the stations' continued value. Except for a D3 tractor, a few outdated electrical generators already slated for replacement, and the GMD-1 radio theodolites, all US equipment would remain at the stations after the Americans withdrew. The GMD-1s would be phased out over five years, with ESSA providing spare parts in the meantime so that Canada would have time to install replacements.¹³⁴

Contextual factors made this decision appear political, resurrecting orthodox assumptions about sovereignty concerns as the primary driver for Canada-US Arctic relations. In 1969–70, the American consortium Humble Oil sent the ice-strengthened tanker SS *Manhattan* through the Northwest Passage to determine if it could be used as a shipping route to transport oil and gas from the Beaufort Sea to the US Eastern seaboard. Although the ship's owners requested Canadian cooperation and assistance, the State Department would not accept Canada's sovereignty over the Passage or ask for permission to transit these waters, claiming

that it constituted an international strait.¹³⁵ International jurist and legal scholar Maxwell Cohen described the national crisis that resulted when Canadians felt “they were on the edge of another American ... [theft] of Canadian resources and rights which had to be dealt with at once by firm governmental action.”¹³⁶ This prompted policy action from Prime Minister Pierre Elliott Trudeau, whose “functional” approach to sovereignty included extending Canada’s territorial sea to twelve nautical miles. He passed the *Arctic Waters Pollution Prevention Act* and committed to increase Canada’s military presence in its Arctic.¹³⁷

When news leaked to the press that the US was withdrawing from JAWS, speculative stories assumed that Ottawa had forced the Americans out of the program as part of Trudeau’s attempt to assert Canada’s Arctic sovereignty more aggressively.¹³⁸ After more than two decades of successful bilateral and binational cooperation, a mistaken media narrative threatened to recast the joint program’s fate as a symbol of divergent national interests in the wake of *Manhattan*. Canadian and American officials alike expressed annoyance when some of their peers drew the wrong conclusions from the coincidental timing of the two Arctic events. Patrick McTaggart-Cowan, who had strongly defended American involvement in JAWS throughout his career, believed that the cooperative program had fallen prey to Canadian “ultra-nationals.”¹³⁹ Such beliefs were completely unfounded, Ottawa’s chronic insecurities about Arctic maritime sovereignty having nothing to do with the American decision to withdraw from the program. A draft briefing to President Richard Nixon in September 1970 confirmed explicitly that the pullout was “at the initiative of the U.S.A.”¹⁴⁰

The US Ambassador to Canada, Joseph W. Scott, offered a detailed justification for the American decision to the assistant secretary of state for European Affairs. The withdrawal was “based entirely upon the need of the U.S. Weather Bureau to trim its budget and reduce operations,” Scott noted. “It has recently been paying 45% of the cost of the program. Its share will be taken over by the Canadians, who will operate the network at the same level in the same way and provide, at no cost, all weather information obtained to the U.S. Weather Bureau” via the international data pool. In case any doubt remained, Scott categorically dismissed “speculative stories” in the Canadian media about Ottawa pushing the

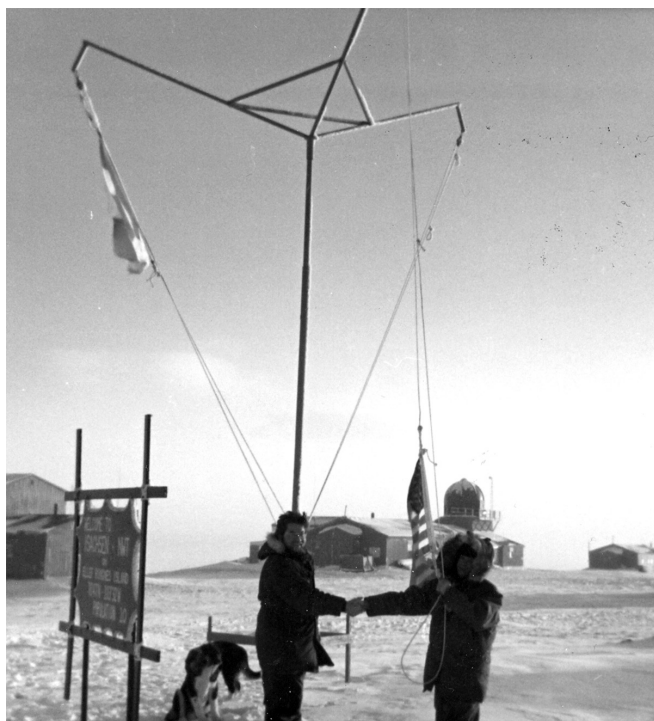


FIGURE 9-8. OIC Brian Brown (left) and ExO Gary Davies (right) lowering the American flag at Isachsen for the last time in 1971. Brian Brown Collection.

United States out of the program. Any suggestion that the American withdrawal reflected a Canadian initiative was patently “untrue,” with the ambassador reiterating unequivocally that the decision had been made in Washington.¹⁴¹

In the ensuing years, both countries worked closely and cooperatively to ensure a smooth transition. Canada augmented its capacity to train upper air technicians and administrative staff, and to secure upper air instruments previously provided by the United States. Fourteen American upper met techs had to be replaced by Canadians: five in 1970 when they pulled out of Alert, four in 1971 when they left Isachsen and Mould Bay, and five in 1972 when the remaining American met techs withdrew from Eureka and Resolute. DoT also recruited extra cooks and equipment operators to fill the gaps left by departing American personnel.¹⁴²

During the transition period, the Meteorological Service of Canada moved from DoT to the newly-created Atmospheric Environment Service

(AES) within the Department of the Environment, which gradually assumed full responsibility for the JAWS network. By 31 October 1970, Canadians had successfully replaced all American personnel at the Alert weather station. The following year, the Canadians held a special luncheon to recognize the twenty-fifth anniversary of the program, and the two countries released a booklet celebrating JAWS as a “shining example of international co-operation for the advancement of science and the welfare of mankind.”¹⁴³ Alongside these laudatory tributes, the American withdrawal continued on schedule. The last US personnel to serve at Mould Bay and Isachsen departed with that year’s fall airlift. The following summer, a plane left Eureka with that station’s last American technician onboard.¹⁴⁴

Although the few remaining American JAWS personnel were not scheduled to depart Resolute until October 1972, an unexpected medical evacuation pulled forward the flag-lowering ceremony to August 27. US representatives Glenn Dyer and C.G. Goodbrand, who had been with the JAWS program since its early stages, flew to Resolute on RCAF aircraft via Trenton, Thule, and Alert. Meanwhile, E.R. Osborne, the Manager of Northern Airports, Central Region (representing DoT), and J.J. Labelle, the Regional Director, AES, took advantage of developing commercial northern transportation routes provided by Air Canada, Pacific Western Airlines, and Nordair to carry them to Resolute. Canadian representatives from the Department of Indian Affairs and Northern Development, the Department of National Health and Welfare, the Department of Public Works, the NWT territorial government, and the local judiciary also made the journey. Given the Arctic environment’s historic tendency to complicate JAWS transportation schedules, it was remarkable that everyone arrived on time. An unexpected problem threatened to foil the ceremony when “souvenir hunters” braved the twenty-four-hour daylight to steal the “Stars and Stripes” from the station’s flagpole on the evening of August 26. Given the imminent American withdrawal, the station did not have its usual stock of replacement standards, but it managed to find and fly the only American flag remaining at the Canadian base.¹⁴⁵

At 6:00 p.m. central standard time, dignitaries from the two countries, along with station personnel and photographers, gathered for a small outdoor ceremony. The weather was “exceptionally fine” with little wind, a bright sun, and temperatures near 40°F (4.4°C). Labelle chaired



FIGURE 9-9. Charlie Goodbrand speaking at the ceremony that ended American participation in the JAWS program, 26 August 1972. Ron McLaren Collection.

the proceedings and Osborne offered welcoming remarks, but the event focused on the American guests. In short speeches, Goodbrand celebrated the JAWS program's long history and Dyer paid tribute to successful Canadian-American cooperation. Local interest was "very high." While visiting dignitaries sat in chairs, station personnel and Qausuitturmiut stood, cameras in hand, as RCMP Constable R. Pollock lowered and then folded the American flag before formally handing it over to Dyer. The entire ceremony lasted a mere seventeen minutes. It was a fitting end: in the High Arctic, personnel at the weather stations had always been short on formalities.¹⁴⁶



FIGURE 9-10. Charlie Goodbrand (left) and a Canadian official looking on as a Canadian Mountie lowers the American flag at Resolute for the last time. 26 August 1972. Ron McLaren Collection.