

## The Canol Project in Canadian-American Relations

Richard J. Diubaldo

Volume 12, Number 1, 1977

Fredericton 1977

URI: <https://id.erudit.org/iderudit/030827ar>

DOI: <https://doi.org/10.7202/030827ar>

[See table of contents](#)

### Publisher(s)

The Canadian Historical Association/La Société historique du Canada

### ISSN

0068-8878 (print)

1712-9109 (digital)

[Explore this journal](#)

### Cite this article

Diubaldo, R. J. (1977). The Canol Project in Canadian-American Relations. *Historical Papers / Communications historiques*, 12(1), 178-195. <https://doi.org/10.7202/030827ar>

### Article abstract

L'article retrace les principaux événements et les motivations qui ont conduit à la construction d'un pipeline reliant Whitehorse et les puits Norman Wells. Des considérations militaires défendues par les États-Unis expliquent que l'on ait choisi pour le projet Canol, un chemin parallèle à la grande route de l'Alaska reliant une série de pistes d'atterrissage d'Edmonton à Whitehorse. Lorsque le Canada fut mis au courant par le Haut-Commissaire britannique au Canada des intentions semi-voilées de l'armée américaine de construire Canol en prévision de l'après-guerre, on posa immédiatement des gestes pour affirmer la souveraineté canadienne dans l'Ouest. C'est finalement un comité d'enquête spécial américain sur le programme de défense qui força les directeurs du projet à réouvrir les négociations. Le Canada maintint des positions fermes et ne concéda aux États-Unis que le droit d'acheter des réserves de pétrole spécifiques. Le projet fut finalement liquidé à la fin de la guerre à la satisfaction des intérêts canadiens.

**R.J. DIUBALDO**

*Précis*

L'article retrace les principaux événements et les motivations qui ont conduit à la construction d'un pipeline reliant Whitehorse et les puits Norman Wells. Des considérations militaires défendues par les Etats-Unis expliquent que l'on ait choisi pour le projet Canol, un chemin parallèle à la grande route de l'Alaska reliant une série de pistes d'atterrissage d'Edmonton à Whitehorse. Lorsque le Canada fut mis au courant par le Haut-Commissaire britannique au Canada des intentions semi-voilées de l'armée américaine de construire Canol en prévision de l'après-guerre, on posa immédiatement des gestes pour affirmer la souveraineté canadienne dans l'Ouest. C'est finalement un comité d'enquête spécial américain sur le programme de défense qui força les directeurs du projet à réouvrir les négociations. Le Canada maintint des positions fermes et ne concéda aux Etats-Unis que le droit d'acheter des réserves de pétrole spécifiques. Le projet fut finalement liquidé à la fin de la guerre à la satisfaction des intérêts canadiens.

**RICHARD J. DIUBALDO**  
CONCORDIA UNIVERSITY

## *The Canol Project in Canadian-American Relations*

Today, between Norman Wells and Whitehorse, there exists a record of human activity stretching some 577 miles that is all but forgotten in the North's history. Derelict pumping stations, abandoned mess halls, bunkhouses, trucks and heavy machinery, buildings with bins full of automotive parts dot an overgrown road that linked the Mackenzie River to the Yukon's capital city.<sup>1</sup> Gone is the reason for the road, a 4½-inch oil pipeline, the first of its kind in the North. Gone are the thousands of men and machines whose din shattered the tranquility of this peaceful and fragile land. A ghost-like quality surrounds this gigantic American endeavour known as the Canol Project.

Canol, short for "Canada" and "Oil" has been called everything from an "epic" which reinforced the close and harmonious relations between Canada and the United States,<sup>2</sup> to a junkyard of military stupidity.<sup>3</sup> The latter is probably closer to the truth. What has been glossed over, however, is that American aspirations regarding Canol's postwar use, like their designs for the other Northwest Defense Projects, could have undermined Canadian control over the northwest. Canol in many ways was central to Canada's anxieties about her last frontier, and ultimately provided a device to fend off the United States. Yet Canadian efforts have rarely been examined in any detail.

The Northwest Defense Projects were conceived during the bleak days following Pearl Harbour. Between then and the end of April, 1942, United States' losses had continued to mount. The defense of Alaska was seen as precarious, particularly the sea lanes linking it to the United States west coast. There had been some concern for Alaska before the United States entered the war. The tenth recommendation of the Permanent Joint Board on Defence, 14 November 1940, had paved the way for the United States to use a string of airfields, linking Edmonton to Whitehorse, which had been planned earlier by the Canadian Department of Transport. When the airfields became operational in January, 1942, United States' war planes were dispatched to Alaska. After a series of crashes caused by navigational problems and pilot inexperience, it became evident to American authorities that a way must be found to keep their airmen on course. Partly to this end, the United States' military pressed for the construction of the Alaska Highway to link the airfields and provide American pilots with a flight route that could be easily followed. As well, the highway would be an emergency land route to Alaska. In these elaborate and costly at-

tempts to protect the Alaska garrison, the Canol Project was an expensive afterthought which cost the American taxpayer \$134,000,000.

Oil had been found in the Fort Norman area in 1920 by Imperial Oil, but little attention was paid to the field until 1932 when it was used to supply mining operations at Great Bear Lake. In the late 1930s a small refinery and short pipeline (8 miles) were built to provide a source of fuel oil and gasoline for the immediate area and the traffic along with the Mackenzie River.<sup>4</sup> With the outbreak of war, Norman Wells was established as a modest oil field. This fact was first brought to the attention of the United States War Department in January, 1941, by Vilhjalmur Stefansson, the Canadian explorer and an acknowledged Arctic expert in the United States.<sup>5</sup> At hearings to determine a land route to Alaska, Stefansson had proposed Route "D", a highway (more precisely, a waterway) that would run from the end of steel at Fort McMurray, through Great Slave Lake, the Mackenzie River to Norman Wells, then west to Fairbanks, Alaska, via Dawson.<sup>6</sup> Stefansson's plan was rejected in favour of Route "C", a road following the line of airfields. Nevertheless, the possibility of using Norman Wells oil was not lost upon War Department officials.

On 30 April 1942, less than three months after Route "C" had been chosen, an order was given to construct a 4-inch pipeline between Whitehorse and Norman Wells, to build a 3000-barrel-a-day refinery at Whitehorse, and to drill additional wells in the Norman vicinity to increase the field's production.<sup>7</sup> Canol No. 1, as it became known,<sup>8</sup> was to be operational by October 1 of that same year,<sup>9</sup> a scant five months from the issuance of the directive. More incredible were the events within the United States War Department which led to the directive.

Brehan Somervell, Commanding General Army Service Forces, had made the decision to build Canol on the recommendation of Colonel James Graham, Dean of Engineering at the University of Kentucky. Graham's proposal had been based on a one-day conference held a day before the directive was issued, 29 April 1942. Among those present had been Brigadier General A.H. Carter, Fiscal Director, Army Service Funds, General Walter B. Pryon, a forty year veteran of Gulf Oil and member of the Army-Navy Petroleum Board, General St. Clair Street, Commanding General, Second Air Force, and representatives of Standard Oil of New Jersey and its Canadian subsidiary Imperial Oil. Both Somervell and Graham regarded Canol as a military necessity with little commercial prospects. "We needed the oil," said Somervell later, "and we made the decision . . . Everything seemed to point so conclusively to the desirability of having oil on that line (i.e.: the Alaska Highway) that it looked as if this was an admirable thing to do."<sup>10</sup> But Somervell knew virtually nothing about oil<sup>11</sup> and depended on Graham, his old friend and railroad expert from World War I days. Graham had listened "to everyone I could get a hold of" and once he had made his recommendation he "didn't give a continental whether it was torn up and thrown in the wastebasket."<sup>12</sup> In fact, Graham never bothered to read the result-

ant directive.<sup>13</sup> His job was done. The 29 April conference was the only meeting held even though Graham had had over two months to obtain expert opinion.

Those in attendance could not or were not asked to provide authoritative judgements. General Pyron, the oil expert, was merely asked whether there was a possibility of obtaining 3000 barrels per day from Norman Wells; he was not queried about technical problems.<sup>14</sup> General Carter, who had no idea of how much gasoline a 3000 barrel-a-day refinery would produce, or how much men and material would be required, based his favourable view on "how oil has been developed out in my own State, Texas."<sup>15</sup> Any knowledge that Carter held of the terrain between Whitehorse and Norman Wells came from "talks" with individuals who had gone up there on hunting trips.<sup>16</sup> Major General Street had also been present but, like Carter, he had no advance notice as to what the conference was about.<sup>17</sup> He, too, had not been asked to pass judgement on the scheme's feasibility, but whether it would be a good thing to have petroleum products supplied locally. Such an obvious question did not need a General to answer it. ". . . I wasn't called in to pass upon the cost, the engineering difficulties, the shipping difficulties, or anything like that," commented Street.<sup>18</sup> Nevertheless, Graham would later assert that Street had remarked such a supply of oil "would be a god-send . . . I admire him very much . . . He probably influenced me more than anybody else toward making this recommendation."<sup>19</sup> The only "expert" opinion came from officials of Imperial Oil who told the meeting that they foresaw "very great difficulties, both as to the feasibility and as to the expedition in the places proposed."<sup>20</sup> No other position could be taken because Imperial Oil did not have enough knowledge about the Norman field or the territory between the Wells and Whitehorse to make a positive statement.<sup>21</sup> Yet the project was approved.

Had Graham used the two months given him to study the problem, the results of the one day conference might have been substantially different. He would have learned almost immediately, for instance, that Norman oil contained a high degree of paraffin which tended to precipitate out at low temperature. This could clog the pipeline.<sup>22</sup> As well, the cost per barrel would be enormous. Even if the project had cost \$38,000,000 as originally estimated, it meant that the line would cost \$7,600 per barrel capacity as opposed to \$824 per barrel capacity of the United States' pipeline in Iraq. The Iraq line was twice as long and had a daily capacity twenty-eight times greater.<sup>23</sup> It would be easier and cheaper to hazard Japanese submarines and send oil to Alaska along the west coast via the Inland Passage. This was the view of many others, for instance General T.M. Robins, Deputy Chief of Engineers, U.S. Army. For some reason Robins, an engineer, had not been asked to attend the 29 April meeting. A day after the meeting, Robins commented that "ten times the volume of deliveries contemplated by the pipeline could be made by barges already available . . . and at one-tenth the cost and effort . . ."<sup>24</sup> But orders were orders. The War Department's justification for Canol was based on their view that the west coast sea lanes could not be protected by the navy. Yet at no stage had anyone bothered to ask the Navy's opinion.<sup>25</sup> Somervell felt it was none of their business.<sup>26</sup>

Obviously, the War Department's homework had not been done, but the project went ahead with a flurry of activity. A hesitant Imperial Oil was contracted to extend and develop the Norman field; a skeptical Standard Oil of California was brought in to supervise the pipeline operations;<sup>27</sup> Bechtel-Price-Callaghan of California was given the task of actual construction. By mid-May, 1942, United States Army Engineers were ready to move with the pipe, rigs and troops; the lead troops were to be at Fort McMurray by 25 May.<sup>28</sup> Only one irksome problem remained: they had no authority "to cross the line" into Canada.

The Canadian government had been notified of the project on 1 May and had, not surprisingly, raised doubts as to its soundness.<sup>29</sup> The U.S. Army was restless, much like a race horse in the starting gate. Why should the Canadians be hesitant, said Colonel Graham, "after all we were paying for this development."<sup>30</sup> After a series of insistent State Department queries, the War Committee of the Canadian Cabinet gave tacit approval, but did not formalize the arrangements until late June, 1942.<sup>31</sup> The State Department, more attuned to the sensitivities of its northern neighbours than the generals, was never enthusiastic about Canol. General Pyron frankly admitted to Jack Hickerson, the man responsible for the State Department's dealings with Canada, that Canol "would not be practicable . . . as a peace time project or even a good risk for a private company in war time."<sup>32</sup> As well, the State Department had not been impressed by the Army's plans for postwar disposition of Canol; there were no guarantees that the line and refinery would not be dismantled, and no provisions were made for military contingencies after the war. As early as June, 1942, Hickerson felt that the oil reserves in northwest Canada "should be retained as a sort of public trust against the possibility of another war regardless of whether title was in the American Government or Canadian Government." The American Ambassador to Canada, Jay Pierrepont Moffat, could not agree more, but was certain Canada would not bite although the idea was "logical and reasonable".<sup>33</sup>

The War Department rolled on throughout the summer and fall of 1942 impervious to any criticism. Canol numbers 2 - 5 were conceived, as well as plans for additional geological mapping and exploratory drilling in the northwest. No one, it appears, could stop the U.S. Army. For its part, the Canadian government maintained its doubts, but acquiesced to such schemes.<sup>34</sup> To Moffat the project and its auxiliary features were tantamount to throwing good American money after bad. "If we were building up our own country I would not feel so bitterly, but I see slight prospect of return that will do us much good."<sup>35</sup> A frustrated and embarrassed Moffat had written this on 30 September 1942, a day before the line and refinery were supposed to be operational. Nothing of the kind had happened. The complex would not be ready until the spring of 1944.

No one, it seems, had bothered with the logistics of reaching, and operating in, an unexplored and uncompromising wilderness with its underdeveloped transportation system. Canol created a virtual traffic jam of men and material in

the northwest.<sup>36</sup> Muskeg and ill-defined mountain ranges, mosquitoes and black flies, as well as the pitiful planning, all conspired in the delays and losses. By September, 1942, the U.S. Army's zeal to get the job done began to provoke the ire of the Canadian government. Without informing either Ottawa, or for that matter American authorities, Army engineers began a road and a series of unauthorized aerodromes. Hugh Keenleyside, a member of External Affairs and member of the Canadian section of the Permanent Joint Board on Defence, protested these violations of sovereignty, telling Moffat that "it was very important that we should be informed first, as soon as the United States authorities began to discuss any new projects *in the field*. They can think as much as they like in Washington, but the minute the matter becomes a subject of conversation among American officers in Canada it is bound to become known to the Canadians in the area . . ." <sup>37</sup> To Canada's Oil Controller, G.R. Cottrelle, the situation had become unmanageable:

I am finding it increasingly embarrassing to have matters referred to me covering the activities of our friends in the south in Canada, and about which I am in complete ignorance. Just recently an executive of one of our oil companies happened to be in Washington and he was asked by United States Army authorities whether his company would be prepared to drill 200 wells in a certain area in Canada. His reply was to the effect that had the area they had in mind been thoroughly seismographed, and whether geologists of O.P.C. (Office of Petroleum Co-ordinator) had been consulted. The answer he received was that no one had been consulted, and that they, the Army, were prepared to go ahead on their own.<sup>38</sup>

Yet from the start the Canadian government not only had little to say in the planning and execution of Canol, but appeared oblivious to the long-range problems such activities could create. The war abroad absorbed more attention than the goings-on in the northwest, and the government preoccupation was not to exercise control in the area but merely to be informed in advance of the United States' intentions. After all, it was American money and it certainly helped the Canadian balance of payments. This attitude continued well into 1943. Canada seemed satisfied as long as proper channels had been followed. The complacency was soon to end.

The jolt came not from within, but from the British High Commissioner to Canada, Malcolm MacDonald. On 31 March 1943, the High Commissioner, who had just returned from a tour of the northwest, informed the Cabinet War Committee of his analysis of American activity. It had become "quite evident" he reported "that these vast undertakings were being planned and carried out with a view to the postwar situation."<sup>39</sup> MacDonald elaborated on these remarks in a secret and personal memo to King on 6 April 1943 pointing out that Canada was in a precarious position. MacDonald forcefully made the point that the culprit was the United States Army whose enthusiasm was beyond the control of even Washington:

. . . (I)t is surely unfortunate that Canadian authorities have little real say as

## HISTORICAL PAPERS 1977 COMMUNICATIONS HISTORIQUES

to, for example, the exact placing of (the) airfields and the exact route of (the) roads on Canadian soil. The Americans decide these things according to what they consider American interests. They pay no particular heed to this or that Canadian national or local interest. This aspect of the matter assumes even greater importance when one realizes fully the considerations which the American Army, and the other American interests working with them, have in mind in all their efforts in the North-West. Responsible American officers will tell you frankly in confidence that in addition to building works to be of value in this war, they are designing those works also to be of particular value for (a) commercial aviation and transport after the war and (b) waging war against the Russians in the next world crisis.

. . . With the same considerations in view the Americans are pushing ahead with . . . the building of oil pipe-lines . . . The Americans are very alive to this and the possibility that further prospecting may reveal an oil field of considerable importance in the Mackenzie valley. American oil interests are watching the situation closely, and if developments look good they will seek to gain control there . . . (C)ertainly many influential American individuals who have had a hand in these developments in the North-west have no serious thought that the interests they represent shall withdraw. American money, energy and labour have been spent on an immense scale whilst the Canadians have comparatively little to do with some of the most important undertakings. One can imagine some of these people stirring up quite an unpleasant agitation in Congress circles to force the hands of the (U.S.) Administration.

. . . (T)he political effects in western Canada of these developments may be significant . . . The American Army calls itself 'the Army of Occupation'. Much of this annoys the Canadian citizens of the territory, yet they cannot help realising that it is largely the Americans who *are* now opening up their country . . . The inhabitants of these regions are beginning to say that it seems that the Americans are more awake to the importance of the Canadian North-West than are the Canadian authorities. This state of affairs tends to play into the hands of those Western Canadians who are inclined to assert that the West receives little sympathy and help from Eastern Canada, and that its destiny lies in incorporation with the United States of America.<sup>40</sup>

MacDonald's main recommendation to create a special Commissioner was undertaken almost immediately. On 19 May 1943, the government appointed Major General W.W. Foster to strengthen the Canadian presence in the north-west and to watch over American activities, making sure that no situation be "allowed to develop as a result of which full Canadian control of the area be in any way prejudiced or endangered."<sup>41</sup> Foster began the task of ensuring that U.S. military authorities did not overstep, or go beyond, the formal agreements between the United States and Canada. As watchdog, it was his responsibility to ensure that no American projects were initiated without prior approval. As well, efforts were made to give the appearance of a Canadian presence. A.D.P. Heeney's trip in later September, 1943, resulted in the display of more Canadian Red Ensigns! "The U.S. people lost no opportunity of flying their own flag, although they have been courteous enough about using the Union Jack (they have



been flying the Union Jack at Whitehorse for some time — upside down!) When the Americans fly a flag they fly a good big one.”<sup>42</sup> Relations were relatively smooth as the U.S. military recognized Foster’s position and used that official channel for clearing most of their requests. In reality, the presence of Foster and Canada’s stepped-up publicity campaign to tell the Canadian and American public of its input into the Northwest Defense Projects were merely holding actions. The major question of resolving the American presence remained. True, the formal exchange of notes and the recommendations of the P.J.B.D. theoretically protected Canada’s postwar position and “if existing agreements are maintained and executed all Canadian interests will be adequately protected.”<sup>43</sup>

Yet there were strong feelings that American pressure would increase to change these various arrangements.<sup>44</sup> Foster noted, during the visit of U.S. Senators to the northwest, that in their questions about the future of the region, “the line was not drawn between Canadian and U.S. territory . . . it is noticeable that many of the well-informed U.S. visitors are greatly interested in the potential oil, coal and base metal resources of the Northwest.”<sup>45</sup> Speaking to the Canadian Club of Ottawa in September 1943, Ray Atherton, the new American Ambassador to Canada, described eloquently the intimate relationship between the two countries and the glowing future of the North American continent. The Northwest Defense Projects, especially the Alaska Highway, had reinforced the “common traditions, common cultures, and a common physical environment.” Alaska and the northwest were being opened up and “the best thing for the United States and Alaska is also the best thing for Canada; if we fall short of the best thing for ourselves, you will automatically fall short of the best thing for Canada, and vice versa.”<sup>46</sup> Such bold remarks about the “true maxim of ‘share and share alike’ ” and a “great Continental idea”<sup>47</sup> were not lost upon Canadian officials. There seemed little opportunity to deflect American sentiments.

Strange as it may seem, the chance came from an unexpected quarter — the Americans themselves. Through October and November of 1943, the Canol Project and its creators were subjected to unrelenting questioning by Senator Harry S. Truman’s Special Committee Investigating the National Defense Program. Exposed were the messy details of how the project had been started, how the Army had turned a blind eye to its critics, and how American money had been squandered. The War Department was left standing virtually naked before its inquisitors.

From the Committee’s point of view, the one heartening result came with the disclosure that the oil field was now considered substantial because of additional drilling and exploration — according to U.S. Army calculations at least. Somervell now agreed that the project initially was “cockeyed”, but things had turned around in its favour.<sup>48</sup> Army estimates of a 2,000,000 barrel field had now jumped to 100,000,000 barrels and that geological exploration indicated “that other fields which we have discovered since in this general location will also bring in tremendous amounts of oil.”<sup>49</sup> According to Somervell, who ap-

pears to have inflated the figures to salvage some credibility for the War Department, it was the "biggest oil field that has been uncovered in the last 15 years . . . (o)n the North American Continent."<sup>50</sup> If he were considering the project in December, 1943, he claimed, he would have ordered a 20,000 barrel refinery and a 10-inch pipeline.<sup>51</sup> but the formal agreements and methods of disposal between the two countries left the United States with no postwar rights in a now seemingly promising oil pool. Congressman Leon H. Gavin (Pennsylvania) reflected the frustration of Truman's committee on this matter:

Why didn't we have some good horse trader handling this contract for us who would try to make a deal that would be beneficial to our own people who have to foot the bill? I feel we are all fighting the war together, and I am of the opinion that we all ought to assume our proportionate share, particularly as this is a Canadian oil development and at the termination of the war Canada will take it over, and we have just carried on a gigantic W.P.A. project for the benefit of the Canadian people, opening up the Canadian wilderness, and Uncle Sam isn't getting anything out of it.<sup>52</sup>

Gavin's remarks were not lost upon the Truman Committee. The Committee concluded in January, 1944, that the War Department should be censured for its unintelligent consideration of the feasibility of its project and the alternatives. Nevertheless "(i)f the project is to be completed, every effort should be made to obtain at once a revision of these contracts (with Imperial Oil and the Canadian Government) which will provide proper postwar rights and safeguard the interests of the United States."<sup>53</sup> In anticipation of this censure the wheels for such re-negotiation had been set in motion in late November, 1943.

To Canada, this development was cause for some alarm. Assistant Under-Secretary of State for External Affairs, Hugh Keenleyside, pointed out to a special meeting of departmental and political representatives, on 30 November 1943, that "this case is probably the first of a number of United States efforts to re-negotiate wartime agreements with Canada, using as an excuse the development of public opinion in the United States."<sup>54</sup> Nevertheless, the revelations of the Truman Committee and the War Department's empty logic in defense of Canol now provided Canadian authorities with the lever for which they had been searching. Three days later, on 3 December, the Canadian government decided literally to "buy" the Americans out of the potentially valuable Northwest Staging Route and related facilities constructed at U.S. Expense<sup>55</sup> — a strategy they had been toying with since the spring of 1943.<sup>56</sup> Canol had convinced the Canadian government that the wisest course now was to begin purchasing those "items which serve us best."<sup>57</sup> As a diplomatic ploy, it might work to Canada's advantage "to have our bid in on the airfields before having to take a strong negative line on any formal United States proposal regarding Canol."<sup>58</sup> Any changes to the Canol agreements would open the floodgates for the establishment of postwar rights along the Alaska Highway and along the chain of airfields established in eastern Canada. If this happened "Canada will . . . be committed to the consequences of future United States' Policy."<sup>59</sup> The question that

could not be answered at the time, of course, was to what extent could Canada continue its close military relationship with the United States in the postwar world and still preserve some freedom of action. A wrong move on Canol might upset the balance.

Negotiations between the two countries stretched from December, 1943, to the spring of the following year. From the outset, the Canadian position remained firm, giving the United States little latitude for further concessions. On 30 November 1943 the Canadians had held a preparatory meeting to discuss and decide on their strategy in the forthcoming talks.<sup>60</sup> The United States' argument of obtaining a return on their investment could not be taken seriously. The project "was conceived as a defence project and . . . it should not be considered as a commercial investment." The use of the financial argument by U.S. authorities would be foolish even for home consumption given the devastating publicity of the Truman Committee revelations. "As a commercial venture, the Canol Project is indefensible." If anything, it would be viewed as a white elephant, giving little benefit to Canada.<sup>61</sup> The furthest that Canada would go would be to undertake, on her own, the creation of a strategic reserve for continental defense purposes only.<sup>62</sup> This would be "purely an economic transaction and, as such, is not comparable to a concession which would grant to a foreign country the right of transit for armed forces and military equipment . . . (and) would not necessarily imply closer military collaboration with the United States."<sup>63</sup> By the end of January 1944, through skilful negotiation, and determined argument, the Canadians were able to lead their American counterparts to the idea of a strategic reserve.<sup>64</sup> The initial Canadian position had remained firm. The Americans encountered a toughness that they had not anticipated.<sup>65</sup>

The next stage would be to extinguish all vestiges of U.S. control of oil resources in the northwest. By February, 1944, two problems remained: Imperial Oil's contract with the U.S. Army, which gave Imperial Oil an almost monopolistic hold on oil development in the northwest; and the size of the strategic reserve. It was hinted that the Canadian government might be willing to assume responsibility for continuing the oil development in cooperation with Imperial Oil. Hickerson and General Robins, both part of the U.S. negotiating team, thought the idea would meet with a favourable response from the United States Government. Anxious by now to withdraw completely from the picture and being woefully behind schedule, the U.S. Army saw no difficulty as long as a new agreement between itself and Imperial Oil could be reached ensuring continued development. Any new contractual arrangement, however, would require Canadian approval. Imperial Oil, though, would not entertain continued development unless new Canadian royalty schedules were introduced to make the project attractive.<sup>66</sup>

The new contract between the War Department and Imperial Oil transferred to the company all U.S. facilities, moveable and immovable, machinery, spare parts, etc. to facilitate Imperial's northern oil development.<sup>67</sup> More importantly, through an Order-in-Council of 27 April 1944, the Canadian government pro-

vided Imperial Oil with substantial incentives: reduced royalty payments, and a reduced government share of the field. The United States became merely a buyer of oil, with the right to purchase up to 30,000,000 barrels from the proven field, and an additional 30,000,000 barrels of oil from areas outside the proven field — a possible total of 60,000,000 barrels of reserve oil for the United States. The new contract would come into effect six months after the end of hostilities or the cancellation of the original U.S.-Imperial contract, whichever came first. Finally, so as to ensure that Canadian interests would come first and to leave no question as to who controlled this resource, the Canadian government stipulated that it retained “the right of taking possession temporarily or permanently of all or any part of the areas held under permit or lease.”<sup>68</sup> The latter clause was in response to the possibility of the government’s entering the oil business at some date, and in response to the fear that “the loyalties of Imperial Oil are divided . . . It is dominated by Standard Oil of New Jersey, a company which must necessarily maintain close and friendly relations with the State Department.”<sup>69</sup> Prime Minister King, who had been fearful of possible international squabbles over Canadian resources had argued along similar lines in the Cabinet War Committee.<sup>70</sup> As well, he committed to his diary that

. . . (t)here should always be the opportunity of having the whole business reverted to the government. Broadly (this) decision was to recognize the need for pursuing development of oil in that region, first because of the need of oil for defence purposes, and for the opening up of new resources which might be all important in that region. Equally necessity of going ahead because we had become dependent on the U.S. for oil from California to meet our needs, and that supply is becoming limited and Americans are urging that unless we help to develop our fields, we may be cut off from theirs. Council recognized the importance of keeping these resources in the hands of Canada for the future and of complete freedom from entanglements so as to deal with the world aspects of these problems.

I felt clear in my own mind it was necessary to have private enterprise make a beginning. Equally clear that there should be no parting over any length of time with resources; also that the areas should be kept restricted and that obligation should be placed on any private corporation to see that development was made in the way that would give Canada benefits therefrom, e.g., construction of pipe lines, etc.<sup>71</sup>

It was more sentiment than substance, yet at least in the case of Canol it worked.

The United States had been given a face-saving document and little else except the right to purchase a fixed reserve of oil. True, by the 28th Recommendation of the P.J.B.D. (13 January 1943) the United States could retain possession of Canol and related facilities up to a year after the end of hostilities.<sup>72</sup> But Canada had removed any hint of U.S. control or ownership over the resource in the postwar world. These negotiations served notice that little sympathy would be given to any other U.S. requests for postwar concessions. Ironically, Canol became fully operational on 5 May 1944, a week after the Order-in-Council.

## THE CANOL PROJECT . . .

By the winter of 1944-45, with the changing war situation, the U.S. wished to remove itself from Canol and begin appraisal of the facilities even before hostilities ceased; this meant a modification of the 28th Recommendation.<sup>73</sup> Privately, Canadian government officials welcomed such a request, but officially and legally Canada was under no obligation to continue Canol in the future. Again, by the 28th Recommendation of the P.J.B.D., Canada had first option to purchase the facilities upon appraisal, second option going to private concerns, presumably Imperial Oil. The minutes of the Cabinet War Committee meeting of 7 February 1945 were quite explicit:

(I)t is not in the Canadian interest to take over Canol at any time or accept responsibility for it . . . All evidence indicates that petroleum products from the Canol pipeline and refinery will for an indefinite period cost substantially more than imported products in Northwestern Canada. The current United States proposals do not call for a decision on accepting responsibility for Canol at the present time, but it would be of assistance . . . if Canadian policy on this point were settled.<sup>74</sup>

Appraisal of the facilities would not be considered as recognition for the continuation of Canol development.

It would be difficult for Canada to refuse this request (for appraisal). Existing agreements call for appraisal at the end of the war and these agreements were based on the assumption that operation would continue until the end of the war . . . (a)n insistence by Canada on waiting until the end of the war would involve the United States in the expenditure of money and manpower on maintaining and guarding property in idleness . . . It is probable that general economic conditions in the Northwest will be much the same at the end of the war as during 1945 and that appraisers would reach much the same conclusions. In any event the Canadian Government has no obligation to purchase.<sup>75</sup>

Based upon this internal position, Mackenzie King informed the Americans on 26 February 1945 that he was willing to proceed with the evaluation which would facilitate the American withdrawal before the war's end.<sup>76</sup> Within two weeks, 8 March 1945, the War Department announced that it would discontinue operations at Canol on 30 June.<sup>77</sup> Once the United States had formally announced its position, the Canadian Cabinet War Committee agreed, one week later, that Canada had no intention of exercising its option to buy Canol,<sup>78</sup> whatever the final appraisal.<sup>79</sup> It was only then that Canada informed the Americans of its decision.<sup>80</sup>

Not unnaturally the Americans were upset over this complete abandonment. But the Canadian decision was based on less spectacular estimates of oil reserves. A Canadian study placed the Canol reserve at between 29 and 33 million barrels, not the 100 million barrels and more predicted by the War Department.<sup>81</sup> As one Canadian official put it "They (the United States) say that both the line and the refinery will have a continuing and permanent value . . . and should not, under any

circumstances, be dismantled, although it is reasonable to assume that they will be allowed to stand idle." But such a position could force the government to buy Canol, as Imperial, for example, would not find it commercially worthwhile. If there were no buyers there was a distinct possibility that title to the project would remain in U.S. hands. Neither prospect was politically acceptable to Canada.<sup>82</sup>

From the aspect of defence and postwar military strategy Canol was considered a liability for Canada, should war break out between the U.S. and the Soviet Union. Seen in this light, Canol would be of "relatively minor value for defensive purposes to Canada and to the U.S." and a distinct liability if an enemy were able to capture a fully operational reserve installation. Unless the Canadian government were willing to spend the monies necessary to protect the area, it was implied that Canadian interests might best be served by leaving the limited reserves in the ground and forgetting the Canol complex.<sup>83</sup>

The Canadian position by the summer of 1945 remained unequivocal: Canada would not contemplate the revitalization of Canol. Canol would be allowed to wither. Further modifications to the P.J.B.D.'s 28th Recommendation were arranged and within two and one-half years Canol No. 1. began to disappear.<sup>84</sup> By July 1947, Imperial Oil had struck oil at Leduc, thereby diminishing its tepid interest in Canol still further. It did, however, need the Whitehorse refinery for its new fields in Alberta<sup>85</sup> and purchased the complex for \$1,000,000.<sup>86</sup> By October 1947 the pipe line had been purchased for \$700,000 by two American firms and was in the process of being dismantled.<sup>87</sup> It was left to nature and the passage of time to cover some of the scars.

The Canol Project was a fascinating endeavour involving, on the part of those who actually built it, hard work and imagination. In retrospect, the idea of a slim 4½-inch northern pipeline pales into insignificance when contrasted to the giant transmission lines of the north slope of Alaska and those proposed for the Mackenzie Valley today. Yet the Northwest Defense Projects, and Canol in particular, underlined to both Canada and the United States the resource potential and military significance of the Canadian northwest. In dealing with the United States on this issue Canada acquitted herself well, once it had been alerted by a Britisher, Malcolm MacDonald, and once the Truman Committee inquiry had undermined the credibility of the War Department. The inquiry had given the upper hand in negotiations to Canada, and the 1944 talks in connection with Canol were a signal to the United States that its postwar aspirations in the Canadian North would be resisted. Canada's relatively easy "victory of Canol," however, may have fostered certain illusions in Ottawa regarding future dealings with the United States in the Arctic.

By the summer of 1945, Canadian planners had also concluded that some form of northern defence co-ordination with the United States would be necessary.<sup>88</sup> At first glance this seems surprising, given that Canada did not then totally share the Cold War ideology of its neighbour to the south.<sup>89</sup> That would come later. For its part, the United States wished to establish its front line of

defence in Alaska and northern Canada. "To the Americans the defence of the United States is continental defence, which includes us," said General Maurice Pope in 1944, "and nothing . . . will ever drive that idea out of their heads. Should then, the United States go to war with Russia they would look to us to make common cause with them, and . . . they would brook no delay." Norman Robertson agreed with Pope that "what we have to fear is more a lack of confidence in the United States as to our security, rather than enemy action . . . If we do enough to assure the United States we shall have done a good deal more than a cold assessment of the risk would indicate to be necessary."<sup>90</sup> The United States had to be reassured that Canada was doing its part in the defence of the continent. Such sentiment was echoed in a preliminary paper drafted by Ottawa's Post-Hostilities Planning Committee in June 1945: "(i)n the event of a threat against this region, failure on the part of Canada to undertake defence measures in Northwest Canada on a scale considered by the U.S. to be adequate, or to co-operate effectively with the U.S. in its defence, would probably lead to the infringement of Canadian sovereignty by the United States."<sup>91</sup>

This would be particularly true if Canada refused to co-operate with American requests for the establishment of Arctic weather stations in the archipelago; "Canadian sovereignty in all territories in the Canadian sector is unchallenged but not unchallengeable."<sup>92</sup> Joint planning would, it was argued by Canadian officials, be the best course of action and reduce the threat to Canadian sovereignty in the Arctic. By doing so Canada, in a multilateral world, would be able to exercise some control on United States strategy and contribute a modifying influence.<sup>93</sup>

If Canada provides the real estate, the fixed installations and the administration of northern defence projects, leaving to the United States the provision of equipment and supplies, it will give us a voice in the course of events. Otherwise we will be faced with very strong pressure from the United States to allow them to move in and do as they please . . . The decision is essentially a political one, but . . . the Government's wartime policy (which dates from about the beginning of 1944) of accepting financial and other responsibility for United States defence projects in Canada has met with general approval.<sup>94</sup>

In many ways, government policy and action in connection with Canol, and other Northwest Defense Projects, had encouraged the belief that a form of landlord-tenant relationship, with Canada as proprietor, would protect Canadian interests. Such an assumption on the part of Canadian planners was naive to say the least, especially when one reflects on the consequences and repercussions of the intricate and sometimes one-sided relationship that developed in the 1950s with the United States in Canada's northern latitudes.

NOTES

<sup>1</sup> W.O. Kupsch, "The Wells and Canol: A Visit After 25 Years," *Canadian Geographical Journal* 82, No. 4 (April 1971), pp. 138-41.

<sup>2</sup> Richard Finnie, *The Canol Project* (San Francisco, 1945), p. 910. See also, Stanley W. Dzuiban, *Military Relations Between the United States and Canada, 1939-45* (Washington, 1959), p. ix.

<sup>3</sup> Leslie Roberts, *The Mackenzie* (New York, 1949), p. 239.

<sup>4</sup> Oliver B. Hopkins, "The Canol Project," *Canadian Geographical Journal* 27 (November 1943) pp. 238-42.

<sup>5</sup> United States Congress, Senate, 78th Congress, *Special Committee Investigating the National Defense Program*, (hereafter The Truman Committee), Report No. 10, Part 14 (Washington, 1944), pp. 2, 9.

<sup>6</sup> United States, House of Representatives, 79th Congress, 2nd Session, House Report 1705, *The Alaska Highway* (Washington, 1946), p. 7. See also, Vilhjalmur Stefansson, *Discovery* (New York, 1964), pp. 327-29.

<sup>7</sup> Lieutenant General Brehon Somervell to U.S. Army Chief of Engineers, 30 April 1942. Truman Committee, Appendix, p. 9843. Exhibit No. 1096.

<sup>8</sup> Subsequent plans involved the construction of Canol No. 2, a 4-inch pipeline from Skagway in Whitehorse; Canol No. 3, a 2-inch gasoline pipeline between Carcross and Watson Lake; Canol No. 4, a 3-inch gasoline pipeline from Whitehorse to Fairbanks; Canol No. 5, a gasoline pipeline between Fairbanks and Tannana, Alaska (later abandoned); Canol No. 6, a 1000 mile tractor route from the Peace River to Norman Wells was sometimes referred to as this.

<sup>9</sup> Colonel James H. Graham to Somervell, 29 April 1942. Truman Committee, Appendix, pp. 9842-43. Exhibit No. 1095.

<sup>10</sup> Testimony of Brigadier General Somervell, Truman Committee, p. 9661.

<sup>11</sup> William D. Leahy, *I Was There* (New York, 1950), p. 122.

<sup>12</sup> Testimony of Colonel Graham, Truman Committee, p. 9400.

<sup>13</sup> *Ibid.*, p. 9588.

<sup>14</sup> Testimony of Brigadier General Carter, Truman Committee, p. 9511.

<sup>15</sup> *Ibid.*, p. 9442.

<sup>16</sup> *Ibid.*, pp. 9514-15.

<sup>17</sup> Testimony of Major General Street, Truman Committee, pp. 9489; 9582.

<sup>18</sup> *Ibid.*, pp. 9495-96.

<sup>19</sup> Testimony of Colonel Graham, Truman Committee, p. 9388.

<sup>20</sup> R.V. LeSueur, Imperial Oil, to General Carter, 2 May 1942. Truman Committee, Appendix, p. 9857. Exhibit No. 1101.

<sup>21</sup> Testimony of Fred B. Bimel, Imperial Oil, Truman Committee, p. 9454.

<sup>22</sup> Testimony of E.J. Nelson, Civil Engineer, Standard Oil Co. (Edmonton), Truman Committee, pp. 9333-34. Confirmed by a study done by H. LeRoy Whitney, Technical Consultant for U.S. War Production Board, 29 March 1943, Truman Committee, Appendix, p. 9571. Exhibit No. 1137.

<sup>23</sup> United States, National Archives and Records Service, Records of the Department of State, file 842.6363 (hereafter Department of States Papers), A.H. Chapman, Assistant to Director, Office of Petroleum Co-ordinator for National Defense, Department of the Interior, to Max Thornburg (Department of State Petroleum Advisor), 9 June 1942. See also *Ibid.*, Thornburg to J. Hickerson, 9 June 1942.

<sup>24</sup> Testimony of Major General Robins, Truman Committee, p. 9481; see also Memorandum of Conference, 30 April 1942, Truman Committee, Appendix, pp. 9845. Exhibit No. 1097.



<sup>25</sup> Captain John A. Kennedy (Office of the Chief of Naval Operations) to Hugh A. Fulton, (Chief Counsel), 18 December 1943, Truman Committee, Appendix, p. 9911. Exhibit No. 1151. Interestingly, throughout the war civilian oil needs in Washington and Oregon would be regularly supplied. Truman Committee, Report No. 10, Part 14, p. 4. In fact the Texas refinery destined for Whitehorse and auxiliary construction material would be safely moved by water to Skagway, Japanese submarines notwithstanding. Remarks of Senator Homer Ferguson (Michigan), Truman Committee, p. 9416.

<sup>26</sup> Testimony of General Somervell, Truman Committee, p. 9716.

<sup>27</sup> Although Standard Oil of California was brought into Canol No. 1, they suggested early on an alternative scheme which eventually became Canol No. 2, a pipeline from Skagway to Whitehorse. J.L. Hanna to Henry L. Stimson (Secretary of War), 4 June 1942. Truman Committee, Report No. 10, Part 14, Appendix IV, pp. 34-35. This practical alternative had the blessing of Harold Ickes, Petroleum Administrator for War, who was opposed to Canol No. 1. Truman Committee, Report No. 10, Part 14, p. 16. The Army rather than scrapping or postponing Canol No. 1, decided to build Canol No. 2 (as well as No. 3, No. 4 and No. 5) as a support project. Contract between Standard Oil of California and the United States War Department, 1 October 1942, Truman Committee, Appendix, pp. 9719-33. Exhibit No. 1084.

<sup>28</sup> U.S. Department of State Papers, Brigadier General C.L. Sturdevant (U.S. Army Engineers) to J. Hickerson, 15 May 1942.

<sup>29</sup> *Ibid.*, Memorandum by Hickerson, 16 May 1942.

<sup>30</sup> Canada, *Treaty Series*, 1942, Supplement No. 15. "Exchange of Notes (June 27 and 29, 1942) between Canada and the United States of America Constituting an Agreement for the Construction of a pipeline and a refinery in the Yukon Territory."

<sup>31</sup> Department of State Papers, Hickerson Memo, 16 May 1942.

<sup>32</sup> *Ibid.*

<sup>33</sup> Department of State Papers, Memorandum of telephone conversation between Moffat and Hickerson, 12 June 1942.

<sup>34</sup> Canada, *Treaty Series*, 1942 and 1943. Exchange of Notes, 14 and 15 August 1942; 28 December and 13 January 1942; 18 January, 17 February and 13 March 1943.

<sup>35</sup> Departmental State Papers, Moffat to Hickerson, 30 September 1942.

<sup>36</sup> P.S. Barry, "The Prolific Pipeline: Getting Canol Underway," *Dalhousie Review* 56, No. 2 (Summer 1976), pp. 255-61.

<sup>37</sup> Department of External Affairs Records, External Affairs Archives, file 4349-40C, Hugh Keenleyside to Norman Robertson, 6 October 1942.

<sup>38</sup> *Ibid.*, file 4349-40C, Cotrelle to Norman Robertson, 28 September 1942.

<sup>39</sup> Public Archives of Canada (P.A.C.), Records of the Privy Council Office (RG 2, 7C) Cabinet War Committee, 1939-45, Minutes, Vol. 12, 31 March 1943.

<sup>40</sup> P.A.C., William Lyon Mackenzie King Papers, (MG26, J4), Malcolm MacDonald to King, 6 April 1943, fol. C213750-53.

<sup>41</sup> Minutes of the Cabinet War Committee, Document No. 519, Draft Instructions to the Special Commissioner (19 May 1943).

<sup>42</sup> P.A.C., Records of the Special Commissioner for Defense Projects in Northwest Canada RG36/7), Vol. 13, Memorandum by A.D.P. Heeney, 8 October 1943.

<sup>43</sup> External Affairs Records, file 3634-40C, Memorandum by Keenleyside, 11 December 1943, entitled, "Evidence Relating to United States Efforts to Obtain Postwar Advantages from Wartime Expenditures in Canada."

<sup>44</sup> *Ibid.*

<sup>45</sup> External Affairs Records, file 463-BQ-40, Foster to Heeney, 30 August 1943.

<sup>46</sup> King Papers, vol. 240. Address of Ray Atherton, 30 September 1943.

<sup>47</sup> *Ibid.*

## HISTORICAL PAPERS 1977 COMMUNICATIONS HISTORIQUES

- <sup>48</sup> Testimony of General Somervell, Truman Committee, p. 9680.
- <sup>49</sup> *Ibid.*, p. 9663.
- <sup>50</sup> *Ibid.*
- <sup>51</sup> *Ibid.*, p. 9700.
- <sup>52</sup> Testimony of Representative Leon H. Gavin, Truman Committee, p. 9549.
- <sup>53</sup> Truman Committee, Report No. 10, Part 14, Conclusions, p. 7.
- <sup>54</sup> External Affairs Records, file 463-N-7-40C, Minutes of Meeting held on 30 November 1943 to discuss the Canol Development.
- <sup>55</sup> *Ibid.*, file 3634-40C, A.D.P. Heeneey to Norman Robertson, 14 December 1943.
- <sup>56</sup> Cabinet War Committee, Minutes, vol. 12, 17 March 1943, and 7 April 1943.
- <sup>57</sup> External Affairs Records, file 3634-40C, Heeneey to Clifford Clark (Deputy Minister of Finance), 24 November 1943.
- <sup>58</sup> *Ibid.*, Heeneey to Norman Robertson, 14 December 1943.
- <sup>59</sup> *Ibid.*, file 463-N-7-40C, Memorandum: "Defence Aspects of the Canol Project," n.d. and unsigned, probably 1 December 1943 by Group Captain W.F. Hanna, Director of Plans, Department of National Defence for Air, and Wing Commander P.A. Cumyn, Secretary of the Interdepartmental Panel on Joint Defence Projects.
- <sup>60</sup> Those present at this meeting were: Norman Robertson, Undersecretary of State, External Affairs; A.D.P. Heeneey, Secretary, Cabinet War Committee; Commander C.P. Edwards, Deputy Minister of Transport; R.A. Gibson, Director, Lands, Parks and Forest Branch, Department of Mines and Resources; W.W. Foster, Special Commissioner; C.W. Jackson, Executive Assistant to Deputy Minister of Mines and Resources; J.E. Read, Legal Advisor, External Affairs; Group Captain W.F. Hanna, Director of Plans, Department of National Defence for Air; J.S. Stewart, Department of Mines and Resources; Wing Commander P.A. Cumyn, Secretary, Interdepartmental Panel on Joint Defence Projects; and Hugh Keenleyside.
- <sup>61</sup> Cabinet War Committee, Minutes, vol. 15, 10 March 1944.
- <sup>62</sup> External Affairs Records, file 463-N-7-40C. Minutes of Meeting held on 30 November 1943 to discuss the Canol Development.
- <sup>63</sup> *Ibid.*, Memorandum: "Defence Aspects of the Canol Project," (probably 1 December 1943).
- <sup>64</sup> *Ibid.*, Memorandum on "The intergovernmental discussions on the Canol development . . ." 4 February 1944.
- <sup>65</sup> U.S. Department of State Papers, Hickerson Memo, 2 February 1944.
- <sup>66</sup> External Affairs Records, file 463-N-7-40C, Memorandum on "The intergovernmental discussions on the Canol development . . .," 4 February 1944.
- <sup>67</sup> Dzuiban, p. 333. See also, External Affairs Records, file 463-N-7-40C, King to Atherton, 25 February 1944.
- <sup>68</sup> External Affairs Records, file 463-N-7-40C, copy of PC 2904, 27 April 1944, "Order-in-Council authorizing an agreement with Imperial Oil Limited, re oil development in the Northwest Territories, new regulations to cover further explanatory work, etc."
- <sup>69</sup> *Ibid.*, "Memorandum on the Resumption of Canol Discussions," Minutes, 31 January 1944.
- <sup>70</sup> King Papers, Mackenzie King Diary, 17 February 1944.
- <sup>71</sup> *Ibid.*, 15 March 1944.
- <sup>72</sup> A copy of the 28th Recommendation of the P.J.B.D., 13 January 1943, appears in Dzuiban, pp. 358-59.
- <sup>73</sup> Records of the Special Commissioner, vol. 2, Minutes of a Canada-United States Meeting on Canol, 29 January 1945.
- <sup>74</sup> P.A.C., Cabinet War Committee, Minutes, vol. 17, 7 February 1945.
- <sup>75</sup> *Ibid.*, Document No. 937, "Appraisal of Canol Facilities," 6 February 1945.

## THE CANOL PROJECT . . .

<sup>76</sup> Records of the Special Commissioner, vol. 2, Mackenzie King to the United States Ambassador, 26 February 1945. See also, *ibid.*, vol. 47, Document No. 11-1, Joint Defence Construction Panel, 11th Meeting, 26 February 1945.

<sup>77</sup> Dzuiban, p. 235.

<sup>78</sup> Cabinet War Committee, Minutes, vol. 17, 14 March 1945.

<sup>79</sup> Records of the Special Commissioner, vol. 2, Heeney to Foster, 17 March 1945.

<sup>80</sup> *Ibid.*

<sup>81</sup> External Affairs Records, file 7.C.W.(s), "Study of Canadian Defence Interests in U.S. Defence Projects in Northwest Canada. Notes for the Joint Drafting Group of Post-Hostilities Planning Committee," 1 June 1945. By this time Canol was producing 3,600 to 4,400 barrels of oil per day. *Ibid.*

<sup>82</sup> Records of the Special Commissioner, vol. 44, Charles Camsell to Norman Robertson, 15 June 1945.

<sup>83</sup> External Affairs Records, file 7.C.W.(s), "Study of Canadian Defence Interests . . .," 1 June 1945.

<sup>84</sup> Dzuiban, pp. 331-33.

<sup>85</sup> External Affairs Records, file 463-N-40C, Memo for Mr. Cadieux, 26 July 1947.

<sup>86</sup> Dzuiban, p. 333.

<sup>87</sup> External Affairs Records, file 463-N-40C. Canadian Ambassador to the United States (L.B. Pearson) to the Secretary of State for External Affairs, 17 October 1947.

<sup>88</sup> *Ibid.*, file 7.C.W.(s), "Study of Canadian Defence Interests . . .," 1 June 1945.

<sup>89</sup> See *Ibid.* See also *Ibid.*, Memorandum by R.M. Macdonnel, "Canada-United States Joint Defence Measures in the Northwest," 22 June 1945, and *Ibid.*, file 52-C(s), Memorandum by General Maurice Pope, "Suggested draft of observations on (U.S.) General Henry's statement on (a) Continental Defence Value of Canadian Northwest and (b) Canada-United States Postwar Collaboration, to be made by Canadian Section at Meeting of the (P.J.B.D.) . . . in Montreal, 4 September 1945," 10 August 1945.

<sup>90</sup> King Papers, vol. 318, Quoted in Norman Robertson to King, 19 April 1944.

<sup>91</sup> External Affairs Records, file 7.C.W.(s), "Study of Canadian Defence Interests . . .," 1 June 1945.

<sup>92</sup> *Ibid.*, file 9061-A-40C, Hume Wrong to A.D.P. Heeney, 24 June 1946.

<sup>93</sup> *Ibid.*, file 7.C.W.(s), "Postwar Canadian Defence Interests in United States Defence Projects in Northwest Canada," 6 July 1945.

<sup>94</sup> *Ibid.*, file 9057-40, "R.M." (Macdonnel?), undated memo to Hume Wrong, probably Summer, 1946.