

CLOSED

BY ON 6/8/
FOR RECORDS
RETIREMENT PROGRAM

CLOSED

S
87
3
1A

ENCL.

Vol.
10

587-3-1A

File Rocher

Deputy

MINISTER

79TH

Meeting

A.C.N.D.

21ST July 1970

CONFIDENTIAL

ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

The 79th meeting of the Committee to be held on Friday, July 31st, 1970 at 2:15 p.m. in the Conference Room of the Department of Indian Affairs and Northern Development, 14th floor, south wing, Centennial Tower, 400 Laurier Ave.W.

FILE NO. 587-3-1A
CORR. No.
REFER. TO

AGENDA

- I. Progress report (Task force on organization of Conference of circum arctic countries for pollution control and navigational standards).

Papers:-

Memorandum to Cabinet, dated 24th July 1970
Telegram No. 403 - 12 May 1970
Telegram No. 2000 - 10 July 1970
Text of Response by U.S. to U.N. Sec. Gen. 29 Jan. 1970
Telegram No. 1999 - 10 July 1970
Telegram No. 1980 - 9 July 1970
Telegram No. 1792 - 10 Jun. 1970
Telegram No. 2021 - 14 July 1970
Telegram No. 1361 - 10 June 1970

- Mr. L.H. Legault

- II. Tabling of regulations under Arctic Waters Pollution Prevention Act.

Papers:-

Memorandum to Chairman, A.C.N.D. dated 28 July 1970
Regulations respecting the Prevention of pollution in Arctic Waters.

- Mr. J.K. Naysmith

- III. Tabling of Working paper on Canadian Draft Treaty on Navigational Safety and Pollution Control in Arctic Waters.

Ext
IAND
dot
- work to go

... 2

- 2 -

IV. Ditchley Conference - May 1971
(Secretary's memorandum ND-489
distributed 28 July 1970)

V. Other Business.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
July 30, 1970.

THIS DOCUMENT IS THE PROPERTY OF THE GOVERNMENT OF CANADA

CONFIDENTIAL

July 24, 1970

MEMORANDUM FOR CABINET

Proposed International Conference on Safety of Navigation and
Prevention and Control of Pollution in Arctic Waters

A. PURPOSE OF THE MEMORANDUM

1. The purpose of this Memorandum is to inform Cabinet of recent developments relating to the possibility of convening an international conference on safety of navigation and the prevention and control of pollution in Arctic waters, and to request guidance on certain questions of principle concerning the proposed conference, namely:

- (a) the desirability of Canada attempting to organize the conference in the light of recent developments;
- (b) the position that Canada should take if the USSR should decline to participate in the conference;
- (c) the position that Canada should take if the US position should remain radically different from and basically opposed to the Canadian position regarding the conference and the results it might achieve;
- (d) the timing, sponsorship, terms of reference and nature of the conference, should it appear to be in the Canadian interest to hold it.

B. BACKGROUND

2. Annex A to this Memorandum provides comprehensive background information on developments related to the conference. In summary, the key development has been that the USA has agreed that the conference should exclude jurisdictional and resource questions and that it should be limited to elaborating internationally agreed standards of navigation safety and pollution control in Arctic waters. From a preliminary US draft treaty, however, it appears that the general US approach to the substance of the conference still remains far removed from the Canadian approach which seeks to obtain recognition of the special rights and responsibilities of the Arctic coastal states. From bilateral consultations with the USSR, it also appears that the Soviets share the Canadian position on the rights of Arctic coastal states but have strong reservations regarding the proposed conference. Major uncertainties thus remain to be resolved concerning the US and Soviet positions, which are crucial to the success of the conference from the Canadian point of view.

C. POLITICAL AND LEGAL CONSIDERATIONS RE CONFERENCE PROPOSAL

Advantages of Conference Proposal

3. Canada has been committed from the outset to a multilateral approach which would complement its Arctic waters pollution legislation and would contribute to Canada's reputation as a member of the international community. Such an approach offers certain advantages from the Canadian point of view. It would be in the Canadian interest for other countries to accept that Canada has the right to lay down minimum standards for navigation safety and pollution control in the Arctic waters adjacent to its coasts, and to agree to comply with such standards; such a result could perhaps be achieved gradually by tacit acquiescence over a period of years, but the public opposition of the

USA, for instance, makes this gradual approach very difficult. The conference proposal also has the advantage of providing a possible means of ending the bilateral confrontation between Canada and the USA in respect of the Arctic waters legislation, and shifting the issue to the multilateral plane where the Canadian position could be more rapidly accepted. In the circumstances it is desirable to explore to the fullest the possibility of securing a form of international agreement which would leave it open to the USA and other countries to consider that they had delegated to Canada and other circum-Arctic states authority to regulate navigation safety and pollution control in Arctic waters, while at the same time leaving it open for Canada and the USSR, for example, to consider that they had obtained international recognition of the special rights and responsibilities of the Arctic coastal states. Such an approach is consistent both with Canada's traditional position within the international community and the realities of Canada's relations with the USA (both of which are factors which do not apply to the USSR).

Risks of Conference Proposal

4. Certain risks and hazards as well as advantages are inherent in the conference proposal. For this reason it has been made clear from the beginning that Canada would only agree to participate in the conference on the basis of firm assurances that the conference would exclude jurisdictional and resource questions and would not prejudice or challenge Canada's Arctic waters pollution legislation. Even in the light of the agreement achieved with the USA on acceptable terms of reference for the conference, however, certain risks remain. There is the risk that it will ultimately prove impossible to convene a conference on terms satisfactory to Canada (with regard, for example, to conference participation and the substance of the treaty arrangements to be concluded at the conference). There is the further risk that if a conference is in fact convened it may still prove impossible to secure agreement on the kind of international standards and arrangements which would be acceptable to Canada. There is also the risk that the conference could lead to a collision between participants on precisely those jurisdictional issues and conflicting concepts of freedom of the seas which the conference is intended to avoid; in such event the result again would be failure of the conference, but its failure in these circumstances might be of greater consequence. Finally, there is the risk that Canada's attempts to organize the conference could give rise to the impression that Canada did not have the right, or was uncertain that it had the right, to proceed unilaterally as it had done with the Arctic waters pollution legislation. The risk in this case is perhaps more of a political than a legal nature, and it can be offset by the kind of action Canada has been taking, including in particular the proclamation of the legislation and the regulations thereunder. In the event of failure to succeed in organizing a conference or in the event of failure of the conference itself, Canada would incur some embarrassment, but on the other hand Canada would in either case have established its good faith with regard to the international community and could then revert to its unilateral position on navigation safety and pollution control in Arctic waters.

D. QUESTIONS FOR CONSIDERATION

Desirability of Continuing Attempt to Organize Conference

5. In light of the developments noted above, it is necessary to consider whether it is desirable for Canada to continue to attempt to organize an international conference on navigation safety and pollution control in Arctic waters. In considering this question, the positions of the USA and the USSR are, of course, of crucial importance. The US position, as reflected in the US preliminary draft treaty, appears far removed from the Canadian concept of an international agreement which would delegate authority to the Arctic coastal states. Since Canada has not yet been provided with the final version of the US draft treaty, however, it is difficult to judge whether and how far the USA will be willing to move towards the Canadian point of view. Similarly, there is so far no clear indication as to whether the USSR may ultimately be willing to participate in and perhaps cosponsor the proposed conference, although indications to date give little reason for optimism on this point.

CONFIDENTIAL

- 3 -

Position if USSR Declines to Participate

6. Canada has already made it plain to the USA that it would have to take "a good hard look" at the whole conference proposal in the event that the USSR should decline to participate. While the USA also appears to attach importance to Soviet participation, the absence of the USSR from the conference would not, of course, have the same implications for the USA as for Canada, and indeed the USA might accuse Canada of bad faith if it should decline to participate in a conference without the USSR. Nevertheless, without the USSR Canada's position at the conference would be much weaker and more isolated in both political and legal terms. In these circumstances, it would undoubtedly be much less likely that Canada could secure the sort of international agreement that it desires, and the absence of the USSR might also make it more difficult for Canada to resist any attempt to raise issues which are outside the limited terms of reference agreed to with the USA. On balance, it appears as things now stand, on the basis of the present US position, that it may become advisable for Canada to decline to participate in the conference if the USSR decides against participation. While Cabinet may wish to make a decision in principle on this question at the present time, such a decision might be subject to review in the light of future developments, particularly regarding possible further movement by the USA towards the Canadian position.

Position if USA Attitude Remains Radically Different from Canadian

7. The question also arises as to the course of action Canada should take if the US position on the substance of the conference (as it will be revealed in the final draft treaty to be submitted to Canada and in any discussions of that draft or a Canadian counter-draft) should remain radically different from and basically opposed to the Canadian position. In these circumstances the possibilities of a successful conference (from the Canadian point of view) would be very slight. In deciding whether to participate in a conference with the USA in opposition to Canada (or without the participation of the USSR) the risk to be weighed would appear to be the likely failure of the conference as against Canada's inability to succeed in a multilateral approach at this time. An important factor to be considered is the possibility of the USA attempting to organize a conference without Canada and/or the USSR. (This possibility has in fact been raised by US officials in private discussions with Canadian representatives. Despite the fact that a considerable number of states have indicated, in response to the original US proposal, that they would not participate in a conference at which Canada was not in attendance, a renewed independent attempt by the USA might be presented and viewed in a different light as a result of developments since the original US proposal. US officials have also referred in private discussions to the possibility that the US Defence Department might insist on retaliating against Canada in the field of bilateral defence production arrangements, or might sail a nuclear submarine through the waters of the Arctic archipelago without informing or seeking the consent of Canada.) If Canada were to decline to participate in the conference, a public confrontation with the USA would appear to be virtually inevitable even if the USA did not attempt to convene the conference without Canada. While having regard to the adverse consequences of such a confrontation, it must be borne in mind that a similar confrontation with similar consequences would also undoubtedly occur if the US position at the conference were to be in serious conflict with that of Canada. On balance, in light of these considerations, it may be necessary for Canada to decide against participation if the US position proves inflexibly opposed to Canada's, and Cabinet may wish to make a tentative decision on this contingency.

Questions for Consideration if a Conference Is Held

8. In the event that it should be considered in the Canadian interest to hold the proposed conference, after clarification of the present uncertainties, guidance would be required from Cabinet on the following matters:

...

000582

CONFIDENTIAL

- 1 -

- (i) Timing - The proposal to convene the conference this autumn (from October 13 to 30) seems unrealistic in light of the various developments outlined above. The question of timing is a crucial one since a conference held a year from now rather than sometime in the next few months would provide a greater opportunity for preparation by all the states concerned and could also allow Canada to continue preparing the way for acceptance of its position through diplomatic means and through education of the public of other countries. Such a delay, however, might be strongly resisted by the USA.
- (ii) Terms of Reference - As agreed with the USA, these would be limited to the elaboration of internationally agreed standards of navigation safety and pollution control in Arctic waters which could be made applicable, by agreement, both within and beyond national jurisdiction. These terms of reference appear to provide the only framework for a multilateral approach which would be consistent with Canada's Arctic waters pollution legislation.
- (iii) Nature of the Conference - As agreed with the USA, the conference would be at the level of experts (technical, scientific and legal) but political representation would also be required since the conference would attempt to reach agreement on a treaty. Assuming confirmation of this understanding, guidance would ultimately be required as to the nature and level of Canada's political representation at the conference.
- (iv) Site and Sponsorship - The proposal agreed to by the USA is that Canada would be the sole host of the conference, which would be held at Ottawa, with the USA, USSR and a Nordic country acting as cosponsors (if the USSR and a Nordic country so agree).
- (v) Budget - Consideration must be given to the financial implications of Canada acting as host to the proposed conference, and the obligations to be assigned to various departments in this connection. An interdepartmental task force has already begun working on the organizational and administrative preparations for the conference under the aegis of the Advisory Committee on Northern Development. In light of the numerous uncertainties surrounding the conference at the present time, however, it is not yet possible to provide a firm estimate of the financial implications of the conference and a separate report on this matter will be submitted to Ministers at a later date.

E. RECOMMENDATIONS

9. Since the situation remains in a state of flux, final decisions might appropriately be postponed until greater clarification is obtained and a further submission can be made to Cabinet. In the interval, however, it is recommended that the following course of action be adopted:

- (i) Canada would not, for the time being at least, abandon its efforts to organize a conference in keeping with the Canadian approach; at the same time, however, Canada's position would be one of non-commitment to a conference until the situation is clarified and the likelihood of a successful conference (from the Canadian point of view) can be determined with greater certainty than at present. Generally, Canada would seek to bring matters to a head as quickly as possible and further instructions would be sought from Cabinet at such time as this was accomplished.

... 5

CONFIDENTIAL

- 5 -

- (ii) Canada would make clear to the other countries concerned that a number of basic issues remain to be settled concerning the proposed conference.
- (iii) Canada would similarly make clear to the other countries concerned that it had not agreed to any treaty drafted by the USA.
- (iv) Canada would continue to hold such bilateral consultations with the USA and USSR as may seem appropriate in light of the results of the recent USA-USSR discussions when these are known. If it were considered advisable, Canada might also submit to the USA a draft Canadian treaty when a text has been cleared through interdepartmental consultations (including the Advisory Committee on Northern Development).
- (v) Canada would propose to the USA, when appropriate, that the conference be postponed (possibly for one year).
- (vi) With regard to the terms of reference, nature, site and sponsorship of the conference (if it is held), it is recommended that these be confirmed as set out in items (ii), (iii) and (iv) of paragraph 9 above, having regard to the financial implications of Canada acting as host to the conference.

Secretary of State for External Affairs

BACKGROUND

Original US Conference Initiative

Immediately following the introduction of the Arctic waters pollution legislation the USA simultaneously protested the Canadian action and proposed to Canada and to 17 other countries (Denmark, Norway, Sweden, Finland, Iceland, the USSR, Britain, France, Belgium, the Netherlands, Greece, Italy, Spain, West Germany, Japan, Liberia and Panama) the convening of "a multilateral conference designed to establish an international regime for Arctic areas beyond national jurisdiction", to be held at Washington in June 1970. This proposal was made without prior consultation with Canada concerning the terms of reference of the conference, or the invitees, sponsorship, site or timing. The terms of the US proposal were ambiguous and did not make clear which Arctic environment or environments (land, sea or seabed) should be discussed at an international conference and submitted to an international regime.

Canadian Response

2. The Canadian response to the US conference proposal was directed towards securing appropriate clarifications and assurances from the USA concerning its intentions, and towards ensuring that the other countries approached by the USA were aware of Canada's serious reservations with regard to the ambiguities of the US proposal. Canada made clear to the USA and the other countries concerned that it was not prepared to participate in a conference involving any suggestion of an international regime covering Canada's Arctic lands and continental shelf, or any attempt to discuss or deal with Canada's territorial limits and national jurisdiction, Canada's Arctic resources, or any other matters falling wholly within Canadian domestic jurisdiction. At the same time Canada affirmed that it remained ready and willing to participate in multilateral discussions on matters properly of an international character with regard to navigation safety and pollution control in Arctic waters, as had been indicated by the Prime Minister in the House of Commons on October 24, 1969. Canada also made clear that it would not be willing to attend a "stacked" conference in which the majority of the participants had been selected for their hostility to the Canadian Arctic waters legislation.

3. This response from Canada (and the consequent unwillingness of other countries to participate in the conference) succeeded in obtaining from the USA confirmation that the proposed conference should be limited to matters "appropriately of international concern" and that it would exclude jurisdictional and resource questions. The USA accepted that the proposed conference should be limited solely to the two questions of navigation safety and pollution control in Arctic waters, and on this basis it was agreed that Canada and the USA would hold informal discussions concerning the proposed conference.

Points of Agreement and Disagreement Between Canada and the USA

4. Two rounds of informal discussions have been held between Canada and the USA regarding the proposed conference (on May 20 and June 16 respectively). Following inter-departmental consultations in the Advisory Committee on Northern Development, and with the approval of the Prime Minister, Canadian officials made a number of counter-proposals to the USA concerning the conference site, timing, nature, host, sponsorship and participation. The following points of agreement and disagreement have emerged as between the Canadian and US positions:

(a) Points of Agreement

- (i) Terms of reference of the conference - It has been agreed that the conference terms of reference would exclude jurisdictional and resource questions and be limited to pollution control and navigation safety standards only, with the basic approach being that the standards elaborated would be applicable, by agreement, to Arctic waters both within and beyond national jurisdiction.

- (ii) Environment to be included - The international standards to be elaborated at the proposed conference would be applicable only to Arctic waters (both liquid and frozen) and would not be applicable to the seabed underlying those waters.
- (iii) Nature of the conference - The conference would be at the experts' level (technical, scientific and legal) but political representation would also be required since the conference would attempt to reach agreement on a treaty. A second phase of the conference could be held if necessary but it has been agreed that a single conference would be preferable if possible.
- (iv) Timing of the conference - October 13 for approximately two weeks (since re-opened).
- (v) Site of the conference - Ottawa.
- (vi) Host and co-sponsors - Canada would be the sole host of the conference while the USA would be a co-sponsor together with the USSR (if that country would agree) and a Scandinavian country (yet to be selected or approached).
- (vii) Importance of USSR participation - Both Canada and the USA would have bilateral talks with the USSR to persuade the Soviet Government to co-sponsor the conference.
- (viii) Pre-conference consultations - Further consultations might be required not only between Canada and the USA but also with other potential participants regarding various aspects of the regulations to be promulgated by Canada under the Arctic waters legislation, the agenda of the conference and related questions, and advance treaty drafting.
- (ix) Conference agenda - Preliminary agreement has been reached on a tentative agenda for the conference (copy attached as Annex B).
- ...
- (x) Timetable - It was agreed that the tentative agenda of the conference would be communicated to the USSR in June (and to the proposed Nordic co-sponsor when selected), with the request that these countries join Canada and the USA in cosponsoring the proposed conference. If the desired cosponsorship was obtained, Canada would, as soon as possible thereafter, deliver invitations as conference host to all potential participants. Immediately thereafter the USA (and presumably the USSR and the Nordic cosponsor) would follow up the Canadian invitation.
- (b) Points of Disagreement
- (i) Nature of regime - Canada has expressed its preference for a treaty regime which would fix specific and comprehensive standards for navigation safety and pollution control in Arctic waters, leaving the application of these standards to be carried out by the Arctic coastal states. The USA, on the other hand, prefers a general framework treaty with considerable delegation of regulatory and enforcement powers of international machinery. Canada has resisted this suggestion and has indicated that it would be willing to have only administrative or advisory powers given to any such machinery.
- (ii) Flexibility in application of treaty - While it has been agreed that pollution control and navigation safety standards would vary for different seasons and for different Arctic areas, no clear agreement has been reached on the extent to which the necessary flexibility would be achieved by delegating powers to international machinery or by having different regulations for different areas.

- (iii) Area of application of treaty - It has been generally accepted that the definition of the Arctic waters to which the treaty would apply could be approached as a technical question but no agreement has been reached on such a definition.
- (iv) Conference participants - The USA has not accepted the concept of two classes of participants as proposed by Canada (with shipping states having only observer status) but is willing to confine the conference to the circum-Arctic states plus a small number of shipping states. The USA has proposed that the shipping states which would have full participant status should be Japan, Britain and the Netherlands. This question remains unsettled but Canada has indicated that its views on the number and selection of participants would depend largely on the position already adopted by the countries concerned with regard to the Arctic waters legislation.
- (v) Conference decision-making procedures - It has been agreed that the conference should operate on the basis of the "consensus" procedure used in the United Nations. Canada, however, interprets this term as meaning unanimity (and thus the right of veto), whereas the USA seems to interpret the term as meaning the widest possible measure of agreement. Canada has stressed that on matters involving its essential national interest, the unanimity rule would have to prevail.
- (vi) Enforcement powers - No agreement has been reached on this question although it is understood on both sides that the Arctic coastal states would play a special role in the enforcement of internationally agreed standards of navigation safety and pollution control in areas adjacent to their coasts.

Soviet Position

5. The Soviet Government has informed the USA (in a Note dated June 11) that it does not agree that anti-pollution measures for Arctic waters could only be implemented on the basis of multilateral agreement, and has expressed the view that the Canadian Arctic pollution measures were not unusual and did not justify the convocation of an international conference. Talks with Soviet officials have been held through the USSR Embassy in Ottawa and the Canadian Embassy in Moscow. In light of the measure of agreement reached between Canada and the USA on June 16, these talks were followed up by the Legislative Assistant to the Prime Minister and the Head of the Legal Division of External Affairs who visited Moscow on June 24 and 25 to hold consultations with the Soviet authorities concerning the Canadian Arctic waters legislation and the modified Arctic conference proposal. It was made clear to the USSR that while Canada could not participate in the kind of conference originally proposed by the USA, the type of conference which was contemplated by Canada was a new and different initiative which presented a different range of issues. The conference proposal now under discussion with the USA involved different terms of reference, different participants, a different site, a different host, different timing, and generally different basic thinking underlying the proposal. The Canadian representatives also outlined the points on which Canada and the USA had been able to achieve agreement and those on which agreement had not yet been reached and which remained unsettled.

6. As a result of these consultations with the USSR, the Soviet position on the proposed conference appeared to move from extreme scepticism and almost outright opposition to a willingness to consider the possibility of participating in such a conference. The Soviets, however, remained extremely cautious and would require further convincing, and it is by no means clear that they can be so persuaded. The agreed conclusions which emerged from the consultations with the USSR were as follows:

- (i) Canada and the USSR have a common approach to the concept of the preferential rights of coastal states in the Arctic and hope that this concept will receive general recognition.

- (ii) Various Arctic regions differ from one another in geographical, climatic and other terms and there can be no single general regime for all these regions.
- (iii) In the view of the USSR it is not possible to guarantee that an international conference would limit itself only to purely technical questions of navigation safety and pollution control in Arctic waters.
- (iv) The expediency of convening a conference depends mainly on whether other states will support the concept of preferential rights for Arctic states or at least will not undermine these rights. Soviet experts doubt that such a result could be reached at a conference, while Canadian experts also see certain difficulties in this approach but treat the problem with more optimism.
- (v) Both sides agreed that their views could be more exactly defined upon the basis of a concrete text of a draft treaty (since prepared by Canada but not yet shown to the USSR).

Positions of Other States

7. In general the other countries originally approached by the USA concerning an Arctic conference have adopted a cautious attitude and displayed reluctance to be used in any "ganging up" effort against Canada. While almost every country has expressed sympathy with the purposes of the Canadian legislation, only the USSR and Sweden have refrained from questioning its legality on grounds of its unilateral nature. (While the initial Norwegian position was very sympathetic, Norway's final position is not yet known.) Most of these countries have agreed that the proposed conference should deal only with navigation safety and pollution control in Arctic waters. Finland's position has been basically sympathetic but has reflected a desire not to be caught in any possible conflict between Canada and the USA. Denmark's position has tended to be negative but not entirely so. Among the other countries concerned, both Britain and Japan have objected to the Arctic waters legislation but Britain has indicated to the USA that it would only attend an Arctic conference if Canada were willing to take part, whereas Japan has not expressed its views on this question. Belgium and the Netherlands have taken highly negative positions. Greece has expressed its preference that no conference be held at all or that one be held far in the future. France has expressed concern over the prejudicial effect of the unilateral action taken by Canada. Italy has been careful not to become involved in what it regards as a problem between Canada and the USA. Spain believes that the questions raised by the Canadian legislation should be dealt with by a full-fledged UN conference.

Progress on Canadian Regulations

8. At the time of introducing the Arctic waters pollution legislation the Government announced its intention of consulting with other interested states before promulgating regulations under this statute. It has also been agreed in the bilateral consultations with the USA that draft Canadian regulations (which would form the basis for the Canadian position regarding the international standards to be agreed upon at the proposed conference) would be discussed with technical experts in other countries at the earliest possible date in advance of the conference. The drafting of the Canadian regulations has proceeded as a matter of urgency and comprehensive regulations are nearing completion concerning: the establishment of shipping safety control zones; the design, construction, equipment and manning standards for vessels operating in Arctic waters; the disposal of wastes in Arctic waters; the limitation of liability for pollution damages; and the provision of evidence of financial responsibility. These regulations are to be submitted for preliminary consideration by the Advisory Committee on Northern Development during the week of July 27, after which expert level consultations will be initiated with a selected group of other countries.

US Draft Treaty

9. During the continental shelf boundary discussions held with the USA in Washington on July 9, Canadian officials were given an opportunity, on a personal basis, to read (but not to take away) a draft treaty prepared by the USA for consideration and possible adoption at the proposed Arctic conference. Subsequently, on July 15 a copy of the US draft treaty was officially transmitted to the Canadian Embassy in Washington. On July 20, however, the State Department requested that Canada defer examination of this text since it was only a "working" draft and had been given to the Embassy in error. The State Department explained that it hoped to provide Canada with the "real" draft treaty by July 24; the basic concepts of that draft would be the same as those contained in the working draft provided to Canada in error with the exception that certain provisions which Canada would find difficult to accept would be deleted. In the circumstances, a final evaluation of the US position on the substance of the proposed conference must await receipt of the new US draft treaty. Nevertheless, it is significant that the conceptual approach of the US working draft is as follows:

- (i) The treaty would apply not only to pollution arising from shipping in the Arctic waters but also to pollution arising from exploration and exploitation of the seabed underlying those waters (contrary to the understanding reached with the USA).
- (ii) The whole of the Arctic waters lying north of the 60th parallel would be divided for the purposes of the treaty into three zones, with Zone A comprising the area north of Alaska, Canada and Greenland; Zone B comprising the area north of the Scandinavian countries; and Zone C comprising the area north of the USSR.
- (iii) A Zonal Advisory Panel would be established for each of these areas consisting of the countries adjacent to the area concerned (i.e. Canada, the USA and Denmark in one Panel, and the USSR alone in another Panel); the Zonal Advisory Panels would be given broad regulatory powers on pollution matters, with all decisions to be reached by unanimity and virtually all decisions to be subject to confirmation by a proposed Arctic Commission.
- (iv) The treaty would establish an Arctic Commission, the membership of which would include contracting parties having territory in the Arctic or whose nationals or vessels normally navigate, fish or conduct substantial commercial activities in the Arctic; thus the Commission's membership would be open-ended, with the clear possibility of shipping states outnumbering Arctic states.
- (v) The powers of the Commission would include the promulgation, amendment and enforcement of Arctic navigation and pollution regulations in accordance with the treaty; the decisions of the Commission would be binding and would be reached by a two-thirds majority of the Commission members present and voting.
- (vi) References to the Commission in the working draft are almost invariably followed by the phrase "or its designee", leaving open the possibility that Canada, for example, could be the designee of the Commission for the purpose of making and enforcing regulations for the Canadian area.
- (vii) Each contracting party would be competent to proceed against its own nationals in its own courts for violations of the treaty prohibitions; members of the Zonal Advisory Panels would have the power of arresting nationals or vessels of other Contracting Parties, but such arrests and subsequent action would be undertaken only in accordance with undefined special arrangements to be concluded between the Arctic Commission and the members of the Zonal Advisory Panels.

Canadian Draft Treaty

10. State Department officials have been informed (on a private and unofficial basis since the US draft treaty had not officially been seen by Canada) that the US draft was so far removed from the Canadian approach to the problem that it would not provide a useful basis for discussion, and that for this reason Canada was working on a draft treaty of its own. The Department of External Affairs has since completed the first draft of a treaty reflecting the Canadian position and the kind of international arrangements which would be compatible with the Arctic waters pollution legislation. The draft at present is in the form of a working paper which will in due course be processed through the Advisory Committee on Northern Development. The basic approach of this draft is to establish an international legal umbrella under which the Arctic coastal states could establish their own systems of navigation safety and pollution control in the Arctic waters adjacent to their coasts, while leaving it open to other states to consider that they had agreed to a delegation of authority to the Arctic coastal states. (A summary of the provisions of the Canadian draft is given in Annex C).

USA - USSR Consultations

11. In light of the similarity of the Canadian and Soviet positions and the fact that the USSR has acquiesced in the Arctic waters pollution legislation while the USA is strongly opposed to it, the Canadian position as between USA and the USSR is one of considerable delicacy. To avoid possible accusations of bad faith against Canada by either of the major powers, Canada has been anxious for the two countries to enter into direct bilateral consultations concerning the proposed conference and the question of Soviet participation and cosponsorship. Such consultations were held in Moscow on July 20, prior to which Canada advised the USA that if it showed any draft treaty to the USSR it should avoid giving any impression that the draft was in any way the result of Canada-USA discussions. While the results of these consultations between the USA and USSR are not yet known to Canada, it is hoped that they may provide some clearer indication as to the USSR's willingness to participate in the proposed conference.

ANNEX B

TENTATIVE AGENDA OF PROPOSED ARCTIC CONFERENCE AS AGREED
BETWEEN CANADA AND USA IN INFORMAL DISCUSSIONS

1. Area of Application
2. Scope of Regime: Preventative Measures
 - (a) Consideration of objectives, criteria and standards
 - (b) Regional and seasonal variations
3. Vessel Construction and operating standards
4. Navigational Aids
5. Navigation Channels
6. Financial Responsibility: Insurance and Guarantees
7. Clean-up and Ecological Restoration
8. Contingency Plans and Emergency Action
9. Liability
10. Appropriate Regulatory Authority and Enforcement, Including Possible International Machinery
11. Legal Consequences of Non-Compliance
12. Cost Sharing by Parties of Treaty Activities
13. Final Clauses

(Square brackets in items 3 and 10 are additions suggested by the USA subsequent to the informal agreement with Canada.)

ANNEX C

SUMMARY OF CANADIAN DRAFT TREATY WORKING PAPER

(Not yet cleared through Advisory Committee on
Northern Development)

- (i) The draft defines pollution in the same terms used in the Arctic Waters Pollution Prevention Act; the Canadian proposal, however, is for a treaty which would apply only to pollution from shipping and not to pollution arising from exploration or exploitation of the seabed.
- (ii) The proposed treaty would be without prejudice to jurisdictional or sovereignty claims, the recognition or non-recognition of such claims, and the powers of any contracting party to take measures within its jurisdiction in respect of any matter to which the treaty relates.
- (iii) For the purposes of the treaty the whole of the Arctic waters north of the 60th parallel would be divided into separate zones, with each circum-Arctic state having its own zone.
- (iv) Within the limits of its zone each circum-Arctic state would prescribe regulations on the basis of agreed standards, conditions, procedures and other provisions to be established by the treaty. (These agreed standards would be based on the regulations to be promulgated by Canada under the Arctic Waters Pollution Prevention Act, with such modifications as would be required to make the Canadian regulations generally applicable. Provision would be made for the circum-Arctic states to vary these standards within certain defined limits in order to take into account seasonal, climatic and regional variations.)
- (v) Each contracting party would prohibit ships registered under its laws or flying its flag from discharging any pollutant in any zone established under the treaty or from navigating in any such zone, except in compliance with the regulations prescribed by the circum-Arctic state concerned.
- (vi) The contracting parties would delegate to each circum-Arctic state the power to enforce within its zone the regulations prescribed by the circum-Arctic state concerned. With regard to warships and government-owned ships on non-commercial service, however, the power of enforcement would not be governed by the treaty, as it is considered that states would not be prepared to delegate their powers in respect of such vessels.
- (vii) The treaty would establish an Intergovernmental Consultative Organization for Arctic Navigation whose membership would consist of the circum-Arctic states and three other members elected by the circum-Arctic states from other contracting parties whose nationals or ships normally navigate, fish or conduct other substantial commercial activity in Arctic waters.
- (viii) The powers of the proposed Organization would be consultative and advisory. In particular, the Organization would be empowered to approve or disapprove proposals for the revision or amendment of the agreed navigation safety and pollution control standards established by the treaty, provided that all such revisions or amendments were concurred in by each circum-Arctic state concerned. The circum-Arctic states would be entitled to revise or amend regulations prescribed by them even when such revisions or amendments were objected to by other contracting parties;
in the event of an objection by another contracting party, however, the revision or amendment introduced by the circum-Arctic state concerned would not be binding on the objecting state and the respective rights of that state and the circum-Arctic state in question, with regard to such revision or amendment, would be limited to such rights as exist independently of the treaty.

EXTERNAL AFFAIRS



AFFAIRES EXTÉRIEURES

MAY 25 1970

TO: *File*
FROM: ACRD

ATTN: *Mr. R.C. Smith*

TO
A Le Sous-secrétaire d'Etat aux Affaires extérieures,
Ottawa

SECURITY CONFIDENTIAL
Sécurité

FROM
De Le Haut Commissariat du Canada à Malte, Rome

DATE le 12 mai 1970

REFERENCE
Référence Vos télégrammes FLE 559 et FLE 577
des 21 et 28 avril 1970

NUMBER
Numéro

403

SUBJECT
Sujet Législation canadienne portant sur l'Arctique,
la mer territoriale et les zones de pêche

FILE	DOSSIER
OTTAWA 85-5-5-CDA-5	
MISSION 25-5-4; 20-1-2-MALTE	

ENCLOSURES
Annexes

DISTRIBUTION

Mission per-
manente du
Canada près
l'Organisation
des Nations-
Unies, N.Y.

En conformité avec le paragraphe 3 du premier télégramme en référence, nous avons profité de la visite du nouveau Haut-Commissaire à Malte, Monsieur Rogers, pour informer, le 4 mai dernier, le Ministère des Affaires étrangères de Malte des projets de loi canadiens sur les sujets précités. Nous avons eu une conversation de près d'une heure avec l'agent en charge des relations entre Malte et le Canada, Monsieur Edmund Grech. Nous lui avons remis une copie des projets de loi C-202 et C-203, une copie du discours prononcé en Chambre par notre Ministre sur la pollution des eaux de l'Arctique, le 16 avril dernier, (votre télégramme FPR 88 du 16 avril), une copie des "Background Notes on the Arctic Waters Pollution Prevention Bill and the Territorial Sea and Fishing Zones Bill" du 8 avril et un résumé de la Note canadienne du 16 avril déposée par notre Ministre en Chambre le 17 avril (votre télégramme FPR 90 du 17 avril). Finalement nous avons fait parvenir à Monsieur Grech les commentaires contenus dans votre télégramme FLE 577 du 28 avril.

2. Monsieur Grech a écouté avec sympathie l'exposé des raisons qui ont présidé à l'élaboration de ces deux projets de loi. Sur la question de la prévention de la pollution des eaux de l'Arctique, il s'est montré d'autant plus compréhensif qu'il y a quelques mois, Malte a dû faire face à une situation analogue à celle qui s'est produite au large des côtes de la Nouvelle-Ecosse. Tout comme au large d'Halifax, un pétrolier étranger s'est en effet échoué sur les côtes maltaises près de Marsaxlokk provoquant là aussi un problème sérieux pour les riverains.

3. Quant à la question de la mer territoriale, bien que Malte ne réclame pour le moment qu'une mer territoriale de trois milles, il n'exclut pas la possibilité que, dans un avenir prochain, cette position soit modifiée surtout si l'on considère qu'un très grand nombre de pays a déjà pris cette initiative.

4. En terminant cette rencontre avec le représentant du Ministère des Affaires étrangères de Malte, celui-ci a tenu à mettre en relief sa vive appréciation du fait que, quoique non directement intéressé, nous ayons néanmoins eu l'attention de les informer des projets de législation canadienne. Il nous a laissé entendre que son Ministère transmettrait ces informations à leur représentant aux Nations Unies, Monsieur Pardo.

1AND (LACO Hunt)

C O N F I D E N T I A L

FM WSHDC JUL10/73 NO/NO STANDARD

TO EXTER 2203

INFO IT PRMNY DE OTT GENEV DE PARIS

EMAROTT DE OTT

REF OURTEL 1983 JUL9

CDA-USA TALKS CONTINENTAL SHELF BOUNDARIES

REPS OF CDA(BISSONNETTE,BEESLEY,COOPER AND CROSBY)AND USA(STEVENSON, NEUMAN, STANG AND MCKERNAN)MET IN WSHDC AM JUL9 TO DISCUSS BASIS FOR DEMARCATION OF CONTINENTAL SHELF BOUNDARY,SPECIFICALLY GULF OF MAINE AND STRAIT OF JUAN DE FUCA.

2.USA BEGAN WITH REJECTION OF PRINCIPLE OF EQUIDISTANCE LINE AS POINT OF DEMARCATION IN GULF OF MAINE ARGUING INSTEAD IN FAVOUR OF NATURAL CHANNEL.USA POSITION IS BASED ON ARGUMENT THAT GEOLOGICAL FEATURES OF AREA PRODUCE TWO SHELVES AS NATURAL PROLONGATION OF LAND TERRITORIES AND IN SUCH CASES INNATL COURT OF JUSTICE HAS HELD(NORTH SEA CASE)THAT DIV WILL NOT/NOT BE ON BASIS OF EQUIDISTANCE LINE,BUT ON LOCATION OF CHANNEL.USA THEN ARGUED THAT EVEN IF FOR GEOLOGICAL REASONS IT MUST BE ACCEPTED THAT GULF OF MAINE FORMS ONE SHELF,THERE ARE STILL SPECIAL CIRCUMSTANCES WHICH MITIGATED AGAINST ACCEPTANCE OF EQUIDISTANCE LINE AS NATURAL BOUNDARY.THESE SPECIAL FACTORS ARE(1)PREDOMINANT CONCAVITY OF USA COAST WHICH MAKES EQUIDISTANCE INEQUITABLE(2)PRINCIPLE OF PROPOSTIONALITY WOULD DICTATE SOME POINT OTHER THAN EQUIDISTANCE LINE(3)HISTORICALLY USA HAS FISHED THIS AREA ALMOST EXCLUSIVELY

...2

PAGE TWO 2220 CONFD NO/NO STANDARD

UNTIL 1953, AND THIS IS IMPORTANT USA RECREATIONAL AREA.

3. CDN SIDE ARGUED THAT USA WOULD APPEAR TO HAVE ACCEPTED PRINCIPLE OF EQUIDISTANCE IN GULF OF MAINE AT LEAST SINCE 1965 AND AS EVIDENCED REFERRED TO EXCHANGE OF LETS IN MAY AND JUN/65 BETWEEN LT HOFFMAN, ASST DIRECTOR OF USA BUREAU OF LAND MANAGEMENT AND MR DG CROSBY OF CDN DEPT OF EMR. USA ARGUED THAT HOFFMAN HAD NO/NO AUTHORITY IN THIS MATTER AND THAT USA COULD NOT/NOT ACCEPT THIS EXCHANGE OF CORRESPONDENCE AS EVIDENCE OF USA ACCEPTANCE OF EQUIDISTANCE PRINCIPLE. FURTHER EVIDENCE PRODUCED BY CDNS FOR ACCEPTANCE WAS USA ACQUIESCENCE IN ISSUANCE BY CDA OF EXPLORATORY PERMITS SINCE 1965. SUCH PERMITS BY CDN PRACTICE AMOUNT TO LIEN ON EXPLORATION LEASE AND USA WOULD THEREFORE APPEAR TO HAVE ACQUIESCED IN THE CDN ACCEPTANCE OF AUTHORITY FOR AREA IN DOUBT. NO/NO DETAILED ARGUMENTS WERE MADE BY CDA TO REFUTE PRINCIPLE OF PROPORTIONALITY BUT SOME NON-CONCLUSIVE DISCUSSION DID TAKE PLACE ON EXTENT OF CONCAVITY OF USA COAST AND ON SIGNIFICANCE OF USE BY CDN FISHERMEN OF THESE WATERS SINCE 1953.

4. THERE WAS AGREEMENT THAT EQUIDISTANCE LINE SHOULD BE ACCEPTED AS PRINCIPLE OF CONTINENTAL SHELF BOUNDARY IN JUAN DE FUCA STRAIT. NO/NO SPECIAL CIRCUMSTANCES AND NO/NO INEQUITY RESULTS.

5. AT CONCLUSION OF MTG IT WAS AGREED THAT TALKS WOULD RESUME IN AUTUMN (SEP OR OCT) AND THAT BRIEF COMMUNIQUE WOULD BE ISSUED IN WSHDC AND OTT (SEE REFTEL).

W. L. Hunt (HMD)

CONFIDENTIAL

Text of the Response by the United States Government to
the United Nations Secretary-General's Note LE 113 (304)
of 29 January 1970

The Secretary of State of the United States of America presents his compliments to the Secretary-General of the United Nations and has the honor to refer to the Secretary-General's Note LE 113 (304) of 29 January 1970 regarding Resolution 2574A (XXIV) adopted by the General Assembly at its 1833rd Plenary Meeting on 15 December 1969.

The United States Government strongly supports the efforts of the United Nations to provide for the codification and progressive development of international law. These efforts of the United Nations with respect to the International Law of the Sea provide an excellent example of its accomplishments regarding a subject of great importance to all nations. The work of the United Nations in this field began over twenty years ago, and resulted in the 1958 and 1960 United Nations conferences on the Law of the Sea. The 1958 conference completed the four United Nations Conventions on the Law of the Sea which contain basic rules regarding the rights and duties of states in the use of the seas. It would appear to be unnecessary and unwise to repeat the work which the United Nations has already completed and which is reflected in these conventions.

The United States Government is pleased to note that the United Nations has continued its work in this field in recent years. In particular, the General Assembly has established a Committee on the Peaceful Uses of the Seabed and the Ocean Floor beyond the limits of national jurisdiction, which is charged with considering the problems posed by the development of seabeds technology.

There are certain outstanding issues regarding the Law of the Sea which were either unresolved by the 1958 and 1960 United Nations conferences or have matured since that time, that should be addressed and resolved by new treaties. Specifically, these include the basic questions of the breadth of the territorial sea and the regime for the exploration and exploitation of the natural resources of the seabeds beyond the limits of national jurisdiction.

CONFIDENTIAL

CONFIDENTIAL

2

A resolution of the territorial sea issue in itself directly raises questions of concern to many states regarding other applicable rules of law, particularly questions regarding international straits and coastal fisheries beyond the territorial sea. Similarly, the establishment of an international regime and international machinery for the exploitation of seabed resources beyond the limits of national jurisdiction requires agreement on a clear, precise and internationally accepted definition of the areas involved. A precise seaward limit of the continental shelf was not established by the 1958 United Nations conference.

In connection with the foregoing issues, it must be borne in mind that the international community has become increasingly aware of the need to protect the environment. The United States Government firmly supports the efforts of the United Nations and its specialized agencies to deal with this pressing problem on an international basis. It is convinced that the protection of the environment, and particularly the prevention of pollution, must occupy a major role in the further development of the International Law of the Sea.

The United States Government believes that the outstanding issues regarding the Law of the Sea could appropriately be addressed and resolved at a future Law of the Sea conference or conferences. In this connection, it should be noted that the considerations and questions bearing upon the breadth of the territorial sea are in many respects different from those bearing upon a seabeds regime and boundary. All of the outstanding issues are important and require appropriate concentration of effort and attention. The United States Government believes that the procedures for the resolution of these issues should be structured so as to assure that each issue receives appropriate attention in a manner which will facilitate its examination and enhance the opportunity for agreement.

There are doubtlessly a variety of means available for assuring an orderly and successful resolution of these issues. While the United States Government is most interested in learning the views of the other members of the United Nations on this matter, it wishes to point out to the Secretary-General the procedure it has considered during informal discussions with other states, based on

CONFIDENTIAL

CONFIDENTIAL

3

the concept that the issues be addressed in manageable packages. The questions of the breadth of the territorial sea, international straits, and coastal fisheries were carefully and thoroughly reviewed at the earlier United Nations conferences. The resolution of these directly inter-related questions has been discussed informally by many members of the United Nations recently. The General Assembly might accordingly decide that these issues should be addressed and resolved as soon as practicable. The establishment of a regime for the exploitation of seabed resources beyond the limits of national jurisdiction involves certain new and challenging legal and institutional problems. The General Assembly might accordingly instruct the Committee on the Peaceful Uses of the Seabed and the Ocean Floor simultaneously to accelerate the preparation of such a regime, which along with the question of the boundary for the seabeds beyond the limits of national jurisdiction, might also be addressed and agreed upon as soon as practicable. The problem of protecting the ocean environment arises in the context of many issues, and should be carefully examined in connection with each issue. At the same time, the United Nations and its specialized agencies might proceed with their work in this field, certain aspects of which could more appropriately be dealt with separately from the more general problems of the Law of the Sea.

The United States Government wishes to emphasize its view that timely agreement on these substantive issues should be the central objective of the procedures adopted, and believes that all suggestions which will enhance the possibility for timely agreement should be given the most careful consideration.

CONFIDENTIAL

ORIGINAL NOT CLEAR

1 AND (Laco Hunt)

C O N F I D E N T I A L

FM WSHDC JUL12/70 CDN EYES ONLY NO/NO STANDARD
TO EXTER 1999

INFO TT MOSCO DE OTT

REF YOURTEL FLE946 JUL7

PROPOSED ARCTIC CONFERENCE

I SPOKE TO STEVENSON AND NEUMAN ALONG LINES REFTEL WED, JUL3.

STEVENSON WAS GRATEFUL FOR OPPORTUNITY TO LEARN OUTCOME OF
DISCUSSION WITH USSR. HE HAD NO/NO SUBSTANTIVE COMMENT AND INFORMED
US HE HAD NOT/NOT YET SPOKEN TO SKYRNOV IN NY BUT HOPES TO GO TO
MOSCO SOON TO TALK TO OFFICIALS THERE

CADIEUX

ORIGINAL NOT CLEAR

1 AND (LACO Hunt)

C O N F I D E N T I A L

FM WSHDC JUL12/78 CDN EYES ONLY NO/NO STANDARD
TO EXTER 1999

INFO TT MOSCO DE OTT

REF YOURTEL FLE946 JUL7

PROPOSED ARCTIC CONFERENCE

I SPOKE TO STEVENSON AND NEUMAN ALONG LINES REFTEL WED, JUL8.

STEVENSON WAS GRATEFUL FOR OPPORTUNITY TO LEARN OUTCOME OF
DISCUSSION WITH USSR. HE HAD NO/NO SUBSTANTIVE COMMENT AND INFORMED
US HE HAD NOT/NOT YET SPOKEN TO SKYRNOV IN NY BUT HOPES TO GO TO
MOSCO SOON TO TALK TO OFFICIALS THERE

CADIEUX

1AND (L.A.C.A. Hunt)

U N C L A S S I F I E D

FM WSHDC JUL9/70 NO/NO STANDARD

TO EXTER 1980 PRIORITY

INFO EMAROTT

CDA-USA TALKS CONTINENTAL SHELF BOUNDARIES

AT CONCLUSION OF DISCUSSIONS WITH USA ON CONTINENTAL SHELF BOUNDARIES
THUR JUL9 IT WAS AGREED THAT COMMUNIQUE WOULD BE ISSUED TO PRESS, IN
WSHDC AND OTT AM FRI JUL10. ARRANGE FOR RELEASE OF COMMUNIQUE. FOLLOWING
IS TEXT: QUOTE REPS OF THE GOVTS OF THE USA AND CDA MET TODAY IN WSHDC
TO DISCUSS THE DELIMITATION OF USA-CDA CONTINENTAL SHELF BOUNDARIES.
FURTHER TALKS WILL TAKE PLACE IN THE FALL.

2. QUOTE THE USA DEL WAS LED BY MR JOHN R STEVENSON, LEGAL ADVISER AND
INCLUDED AMBASSADOR DONALD L MCKERNAN, SPECIAL ASST TO THE SECTY OF
STATE FOR FISHERIES AND WILDLIFE, MR ROBT H NEUMAN, ASST LEGAL ADVISER
FOR POLITICAL-MILITARY AND OCEAN AFFAIRS, AND MR DAVID P STANG, ASST TO
THE UNDER SECTY OF THE INTERIOR. THE CDN DEL WAS LED BY ASST UNDER
SECTY OF STATE FOR EXTER PA BISSENETTE, AND INCLUDED MR JA BEESLEY,
HEAD EXTER LEGAL DIV, DR DONALD G CROSBY, CHIEF RESOURCES ADMIN BRANCH,
DEPT OF EMAR AND MR CJ COOPER, CDN HYDROGRAPHIC SERVICE, DEPT OF
EMAR. UNQUOTE.

3. IT WAS AGREED THAT IF QUESTIONS WERE ASKED INTERLOCUTORY COULD BE
INFORMED THAT TALKS RELATED IN THE FIRST INSTANCE TO THE GULF OF
MAINE AND THE STRAIT OF JUAN DE FUCA BOUNDARIES.

action

AND (K...)

C O N F I D E N T I E L

DE PARIS JUN10/70

A EXTER 1792 PRIORITE

INFO LDN TT WSHDC PRMNY TOKYO DE OTT LAHAYE MOSCO DELCANOTAN DE LDN

SAC BRU BONN OSLO STKHM COPEN ROME ATHNS DE OTT

REF NOS TELS 1413 DU MAI14 ET 1744 DU JUN8

LEGISLATIONS SUR LARCTIQUE:LA MER TERRITORIALE ET LES ZONES DE
PECHE

JEANNEL,DIRECTEUR ADJOINT DES SERVICES JURIDIQUES, AU QUAI, NOUS
REMETTAIT HIER AIDE-MEMOIRE A CE SUJET DONT NOUS VOUS TRANSMETTONS
TEXTE DANS TEL DISTINCT.

2.COMME VOUS LE CONSTATEREZ LE GOUVT FRANCAIS SE MONTRE ASSEZ
SYMPATHIQUE QUANT AU FOND A LA CAUSE CDNNE ET EN CIT RECONNAIT...
LA LEGITIMITE FINCIT.IL DEPLORE CEPENDANT, AU MOINS INDIRECTEMENT,
LA METHODE UNILATERALE QUE NOUS AVONS CHOISIE AFIN DE PROTEGER NOS
INTERETS.LES PROPOS QUE NOUS A TENUS JEANNEL NOUS ONT DAILLEURS
CONFIRMES DANS CETTE IMPRESSION.SELON LUI,LES PROBLEMES SPECIAUX
ET REELS QUE POSE LA PROTECTION DE LARCTIQUE TOUT AUTANT QUE LES
PROBLEMES DE PECHE SONT DES QUESTIONS SUSCEPTIBLES DE SOLUTIONS
MULTILATERALES.CELA DIT,LES FRANCAIS ONT DEJA ACCEPTE LA PROPOSITION
DUNE CONFERENCE SUR LARCTIQUE FAITE PAR LADMIN AMERICAINE.EN CE
QUI A TRAIT AUX ZONES DE PEHCE LE TEXTE DE LAIDE-MEMOIRE-DE MEME
QUE CE QUE NOUS EN A DIT JEANNEL-PARAIT SOIGNEUSEMENT CALCULE PAR
LES FRANCAIS POUR ECARTER DES POURPARLERS AVEC LE CDA SUR LES
DROITS DE PEHCE QUE DETIENNENT LES PECHEURS FRANCAIS EN VERTU A LA
FOIS DE TRAITES ET DUNE LONGUE COUTUME.CETTE TACTIQUE EST DE BONNE

PAGE DEUX 1792 CONFD

GUERRE ET IL EST EVIDENT QUE SI NOUS DEVIONS UN JOUR PROPOSER DES
POURPARLERS A LA FRANCE A CE SUJET CETTE DERNIERE SOUTIENDRAIT AU
DEPART QUE LES DROITS DE PECHE QUELLE POSSEDE DANS NOS EAUX LUI
SONT DEFINITIVEMENT ACQUIS EN FAIT ET EN DROIT ET NE SONT PAS
NEGOCIABLES QUANT A L'ESSENTIEL.

1 AND (Lac's Hunt)

C O N F I D E N T I A L

FM WSHDC JUL14/70 NO/NO STANDARD

TO EXTER 2021 IMMED

REF YOURTEL PDM193 JUL13

PROPOSED ARCTIC CONFERENCE

WE SAW STEVENSON TUE, JUL14 AND SPOKE TO HIM ALONG LINES REFTTEL. STEVENSON EXPRESSED DISAPPOINTMENT THAT CDA-USA TALKS ON DRAFT TREATY WOULD NOT/NOT TAKE PLACE JUL15. USA WANTED TO HAVE REACTIONS FROM CDA BEFORE TALKING TO USSR BUT UNDERSTOOD CDN DESIRE TO STUDY DRAFT TEXT BEFORE CONFERRING. TEXT HAS STILL NOT/NOT BEEN AGREED TO BY ALL INTERESTED USA AGENCIES AND WE GOT IMPRESSION STEVENSON COULD NOT/NOT BE AS DISAPPOINTED AS HE WOULD HAVE LIKED SINCE IT IS DOUBTFUL THERE WOULD HAVE BEEN AGREED TEXT FOR JUL15.

2. STEVENSON RE-EMPHASIZED THAT THERE HAD BEEN AGREEMENT IN OTT TO MEET JUL15. WE DID NOT/NOT REPLY. HE ASKED WHEN CDA WAS PLANNING ON COMING AND WE TOLD HIM THAT WOULD DEPEND ON WHEN A DRAFT WOULD BE AVAILABLE FOR US TO STUDY. HE AGAIN AGREED TO HAND US A TEXT AS SOON AS THERE WAS ONE.

3. STEVENSON SAID THAT TIME WAS RUNNING SHORT AND HOPED IN PARTICULAR THAT VACATION PLANS WOULD NOT/NOT MAKE CONSULTATIONS IN NEXT FEW WEEKS MORE DIFFICULT. WE REPLIED THAT WE ALSO HOPED SO. WE SAID HOWEVER THAT AS DRAFT TEXT IS NOT/NOT YET AVAILABLE AND UNLESS IT REFLECTED VIEWS CDA HAD EXPRESSED ON JUN16 OUR STUDY OF TREATY WOULD CERTAINLY TAKE SOME TIME; IT SEEMED WE ADDED THAT PERIOD BETWEEN NOW AND OCT IS INDEED SHORT.

1AMP (Lero
4 int.)

C O N F I D E N T I A L

FM CANDELNATO JUN10/70 CDN EYES ONLY

TO TT EXTER 1361 DE LDN

REF OURTEL 1360 JUN10

CDN LEGISLATION RE ARCTIC POLLUTION-CCMS OIL SPILLS MTG JUN8-9
DURING COURSE OF SUBJ MTG DANISH REP, OLE VAGN OLSEN, DESCRIBED
ON LIST OF PARTICIPANTS AS BEING FROM QUOTE LABORATOIRE
OCEANOGRAPHIQUE UNQUOTE ATTEMPTED TO INVOLVE STUART OF DOT
IN DISCUSSION OF ARCTIC LEGISLATION. ALTHOUGH STUART DECLINED TO BE
DRAWN OLSEN SHOWED HIM CHART OF GREENLAND AROUND WHICH 100
MILE ZONE (NATURE UNSPECIFIED) HAD BEEN MARKED BY A DANISH
DRAUGHTSMAN. WHETHER THIS WAS OF ANY SIGNIFICANCE OR SHOULD
BE FOLLOWED UP IS DIFFICULT FOR US TO EVALUATE BUT WE THOUGHT
YOU SHOULD HAVE INFO.

2. IF YOU WISH TO CONTACT STUART HE WILL BE BACK IN OTT JUN11
AND CAN BE REACHED AT 29743.

Department of
Indian Affairs and
Northern Development



Ministère des
Affaires indiennes et
du Nord canadien

The Chairman,
Advisory Committee on Northern Development

Ottawa 4, July 28, 1970.

our file/notre dossier R-1403-2-1
your file/votre dossier

Proposed Regulations Pursuant to the
Act to Prevent Pollution to the Arctic Water

As chairman of the Working Group on Arctic Seas Pollution Prevention Regulations, I take pleasure in forwarding with this memorandum, a draft of the proposed regulations. The actual drafting of the regulations was accomplished by dividing the working group into sub-committees, each dealing with a particular subject part of the regulations. The make-up, by Departments, of the Working Group and the sub-committees is listed as Appendix C.

The Regulations are divided into five parts.

Part I cites regulations respecting the deposit of waste in Arctic waters from shore-based works and undertakings under authority of Sections 4 and 10 of the Act.

Part II contains regulations respecting the deposit of waste from ships into Arctic waters and is also pursuant to Section 4 of the Act.

Part III deals with regulations respecting the determination of limits of liability for pollution arising from shore-based works and undertakings, from works in areas subjacent to Arctic waters and from works, other than ships, in Arctic waters.

Part IV sets out regulations respecting the determination of the limits of pollution liability that can be imposed on ship owners and cargo owners operating in Arctic waters, pursuant to Section 9 of the Act.

Part V contains regulations pertaining to the prevention of pollution of Arctic waters by ships, in accordance with the authority set out in Section 12 of the Act.

Also attached as Appendix A is a proposed Order-in-Council respecting the establishment of shipping safety control zones as required by Section 11 of the Act. This Order is an essential part of the regulations contained in Part V.

Of the various parts of the proposed regulations, those contained in Parts III and IV are the most controversial and contentious. International marine and non-marine pollution liability insurance currently available in the commercial market is far too limited in scope and extent to adequately cover the degree of liability imposed by these Regulations. The committee of the working group dealing with Parts III and IV of the regulations held discussions with representatives of the Canadian Transport Commission, the Insurance Bureau of Canada, the Canadian Board of Marine Underwriters and with Lloyd's underwriters

in London. Some of the salient points respecting commercial pollution liability insurance resulting from these discussions are as follows:

In the opinion of the insurance underwriters, recent large scale pollution events, such as the Torrey Canyon, and the Santa Barbara incidents, have resulted in a tendency for governments to pass legislation assessing absolute and unlimited liability for damages, including the cost of clean-up, to the owner of the polluting works, whether they be ships, off-shore rigs, mines, resource storage facilities, etc. It seems to the underwriters that underlying these legislative initiatives is the notion that such liability requirements are entirely manageable from the operators point of view because, in reality, the commercial insurance industry is ready and willing to provide liability coverage for all types and scale of pollution events.

In actual fact, the serious pollution incidents referred to above have resulted in just the opposite attitudes developing in the insurance market. There is evidence of increasing reluctance among insurance underwriters to write pollution liability coverage and this attitude is reflected by industry requirements for strict limits to liability coverage for any one event, the limitation of liability coverage to actual property damage and the actual financial losses resulting from such damage, the exclusion of liability for seepage and pollution damages from off-shore or land based non-marine coverage (see Appendix B), the limitation of liability coverage to "fortuitous accidents" or "acts of God", and so on.

In summary, the opinion of marine and non-marine underwriters is that current legislation respecting absolute and unlimited liability for pollution damages and clean-up costs is unrealistic in terms of insurance available on the commercial market and if such legislation is to be workable, alternative measures for pollution liability coverage will have to be developed by the governments concerned, by the marine and non-marine operators through mutual funds or by a combination of efforts by both.

Specifically the following data on commercial pollution liability insurance are pertinent to the regulations under discussion:

Marine Insurance - pollution liability insurance to ship owners is available, on an automatic or absolute liability basis in an aggregate amount of \$100 per ton to a maximum limit of \$14.4 million. In the case of shipping in Arctic waters, no "book" exists on risks involved and existing rates are prohibitive. Lloyd's underwriters accepted liability coverage on the Manhattan but the rates quoted were such that the operating company declined and self insured. No pollution liability insurance is available on the commercial market for cargo owners.

Non-Marine Insurance no pollution liability insurance is available from Lloyd's underwriters to the oil and gas industry for off-shore drilling and production operations (see clause 2 of Appendix B).

With respect to land based oil and gas operation, liability insurance is available through Lloyd's underwriters covering seepage and pollution cost attributable only to "fortuitous accidents" or "acts of God." (see clause 1 of Appendix B).

Land based operations, other than those involving the oil and gas industry are also presently covered for pollution liability only in the case of unforeseeable accident and are limited to the cost of damages to tangible property and the financial losses resulting from the damage (see clause 3, Appendix B).

It is readily apparent by comparing the above information on the availability of pollution liability insurance on the commercial market with the requirements in this respect set out in the proposed regulations that there is a large area of liability for pollution damage and cost of clean-up imposed on northern operators by this Act that is uninsurable on the commercial market. Because of the financial risks to the developer, shipper or cargo owner of operating in the Arctic on a non-insured or self insured basis, this wide gap between the legislative requirements and the availability of insurance coverage could impose prohibitive constraints on northern development. For this reason, an urgent and comprehensive study should be undertaken to determine ways and means, through government action, mutual funds or other alternatives, of meeting and overcoming this problem. ✓

With the forwarding of the proposed Arctic Seas Pollution Prevention Regulations to the A.C.N.D., most of the work of this "Working Group" has been concluded. However, the Act, to be operative, requires that a number of Orders-in-Council be issued. Section 11 provides authority for the Governor in Council to designate areas of the Canadian Arctic as safety control zones and a draft of such an order has been prepared because it is a necessary prerequisite to the regulations contained in Part V.

Section 14 of the Act provides authority for the Governor in Council to appoint Pollution Control Officers. It is the opinion of the Working Group that this responsibility should be exercised on the recommendation of the Ministers responsible for administering the various Parts of the regulation. Section 26 of the Act provides authority for the Governor in Council to delegate responsibility to a Minister or Ministers for administering the regulations. It is the recommendation of the working group that Parts I, III and IV be administered by the Minister of Indian Affairs and Northern Development and that Parts II and V be made the responsibility of the Minister of Transport. ✓

Summary of Recommendations

1. That A.C.N.D. commission a special working group to look into the problems associated with creating special pollution liability protection to close the gap which exists between limits of protection provided by commercial insurance and the limits of liability imposed by the Arctic Seas Pollution Prevention Regulations; and to make recommendations on the ways in which this problem can best be overcome.
2. The the Governor in Council delegate powers and authority to administer Parts I, III, and IV of the Arctic Seas Pollution Prevention Regulations to the Minister of Indian Affairs and Northern Development and Parts II and V to the Minister of Transport.

3. That the Governor in Council appoint Pollution Control Officers in accordance with recommendations of the Ministers responsible for administering the Arctic Seas Pollution Prevention Regulations.

J.K. Naysmith.

J.K. Naysmith,
Chairman,
Working Group on Arctic Water
Pollution Prevention Regulations.

APPENDIX A

The information contained in this Document is not to be communicated directly or indirectly to the Press, Industry or the public

PROPOSED ORDER RESPECTING THE
ESTABLISHMENT OF SHIPPING SAFETY CONTROL ZONES

FIRST DRAFT

MARINE REGULATIONS BRANCH
DEPARTMENT OF TRANSPORT
OTTAWA

ARCTIC WATERS POLLUTION PREVENTION ACT

SHIPPING SAFETY CONTROL ZONE ORDER

P.C.

AT: THE GOVERNMENT HOUSE AT OTTAWA

DATE:

PRESENT

HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL

HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL, on the recommendation of the _____, pursuant to Section 11 of the said Act is pleased hereby to make the annexed Proposed Order, respecting the establishment of shipping safety control zones.

ORDER RESPECTING THE ESTABLISHMENT
OF SHIPPING SAFETY CONTROL ZONES

SHORT TITLE

1. This Proposed Order may be cited as the Shipping Safety Control Zone Order.

APPLICATION

2. This Proposed Order applies to all the waters described in Section 3 of the Arctic Waters Pollution Prevention Act and establishes the areas defined in sections 3 to 16 of these Regulations, which are shown on the chart in Schedule A, as Shipping Safety Control Zones.

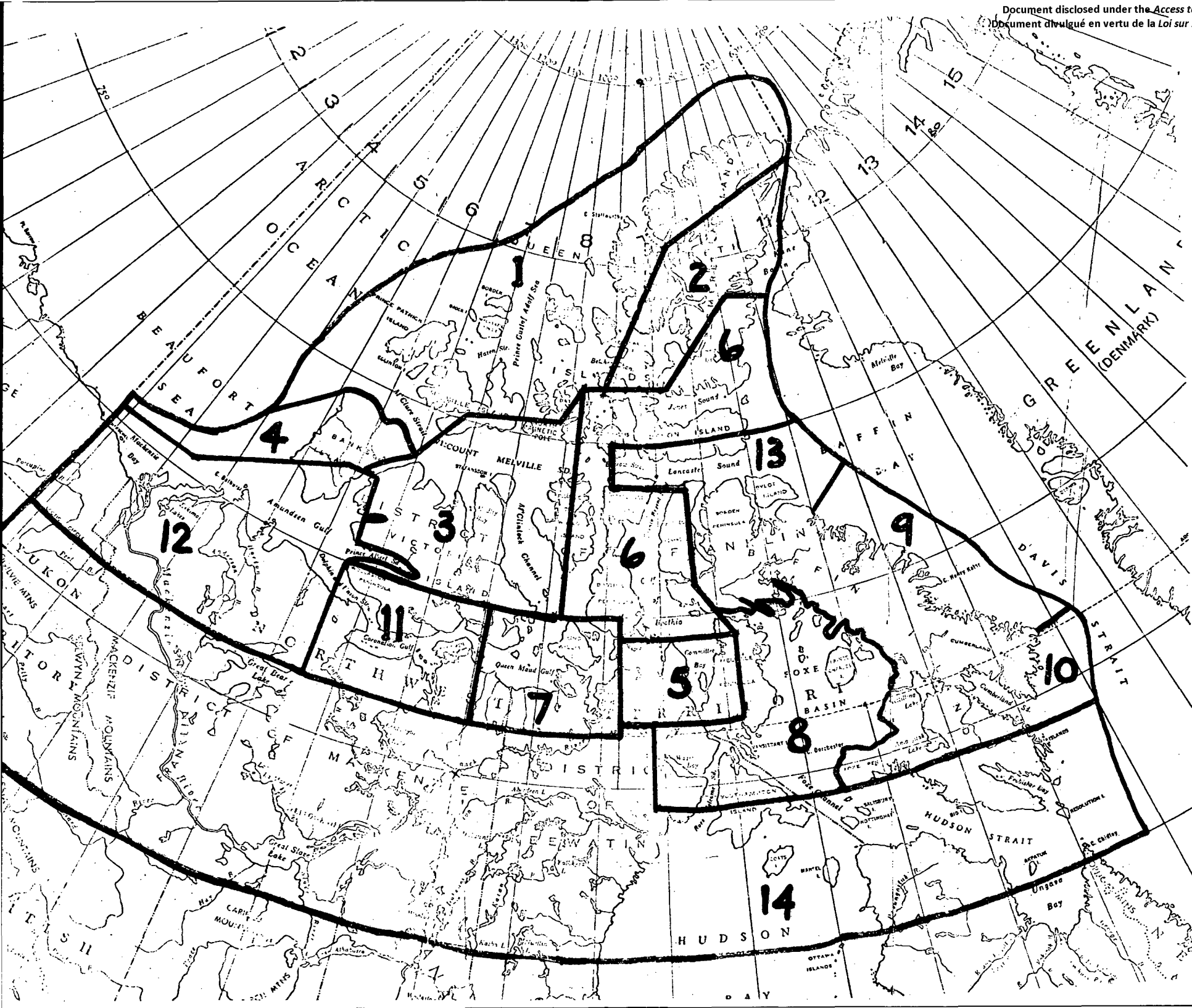
ZONES

3. Zone 1 consists of all waters enclosed within the boundaries from the point at latitude $72^{\circ} 40'$ north, longitude $130^{\circ} 00'$ west, a rhumb line to Cape Prince Alfred, thence following the coast line of northern Banks Island to Russel Point and thence a rhumb line through Cape Hay to the point at latitude $75^{\circ} 15'$ north, longitude $110^{\circ} 50'$ west and thence rhumb line to the point at latitude $75^{\circ} 45'$ north, longitude $100^{\circ} 00'$ west and thence a rhumb line to the point at latitude $75^{\circ} 40'$ north, longitude $97^{\circ} 30'$ west and thence eastward along the parallel of latitude $76^{\circ} 40'$ north to longitude $96^{\circ} 25'$ west and from thence a rhumb line to a point at latitude $80^{\circ} 25'$ north, longitude $88^{\circ} 00'$ west and thence a rhumb line to the point at latitude $82^{\circ} 00'$ north, longitude $61^{\circ} 30'$ west and thence north following the limits of arctic waters and thence a line south west following the limits of arctic waters to the point at latitude $72^{\circ} 40'$ north, longitude $130^{\circ} 00'$ west.
4. Zone 2 consists of all waters enclosed within the boundaries from the point at latitude $76^{\circ} 40'$ north, longitude $97^{\circ} 30'$ west eastward along the parallel of latitude $76^{\circ} 40'$ north to longitude $88^{\circ} 30'$ and thence a rhumb line to the point at latitude $79^{\circ} 15'$ north, longitude $75^{\circ} 30'$ west thence eastward along the parallel of latitude $79^{\circ} 15'$ north to the limits of arctic waters and thence north east following the limits of arctic waters to the point at latitude $82^{\circ} 00'$ N, longitude $61^{\circ} 30'$ west and thence following the eastern limits of Zone 1 to the point at latitude $76^{\circ} 40'$ north, longitude $97^{\circ} 30'$ west.

5. Zone 3 consists of all the waters enclosed within the boundaries from the point at latitude $76^{\circ} 40'$ west, longitude $97^{\circ} 30'$ north south along the line of longitude $97^{\circ} 20'$ to latitude $70^{\circ} 00'$ north and thence west along the parallel of latitude $70^{\circ} 00'$ north to Cape Baning and thence north following the line of longitude $117^{\circ} 20'$ west, but following the shoreline of Prince Albert Sound and Minto Inlet, Victoria Island, east of $117^{\circ} 20'$ west, to latitude $72^{\circ} 46'$ north thence westward along the parallel of latitude $72^{\circ} 46'$ north to Banks Island and thence northward following the shoreline to Banks Island to Russell Point and thence following the limits of Zone 1 to the point at latitude $76^{\circ} 40'$ west, longitude $97^{\circ} 30'$ north.
6. Zone 4 consists of all waters enclosed within the boundaries from the point at latitude $70^{\circ} 15'$ north, longitude $141^{\circ} 00'$ west, eastward along the parallel of latitude $70^{\circ} 15'$ north to latitude $133^{\circ} 00'$ west and thence following a rhumb line through Cape Kellett on Banks Island to the point at latitude $72^{\circ} 46'$ north, longitude $122^{\circ} 00'$ and thence eastward along the parallel of latitude to shoreline of Banks Island and thence northeast following the shoreline of Banks Island to the southern limits of Zone 1 and thence westward following the limits of Zone 1 and the limits of Arctic Waters to longitude $141^{\circ} 00'$ west and thence south to the point at latitude $70^{\circ} 15'$ north.
7. Zone 5 consists of all waters enclosed within the boundaries from the point at latitude $69^{\circ} 30'$ north, longitude $84^{\circ} 00'$ west, west along the parallel of latitude $69^{\circ} 30'$ north to longitude $92^{\circ} 00'$ west and thence southward along the meridian of $92^{\circ} 00'$ west to latitude $67^{\circ} 00'$ north and thence eastward along the parallel of $67^{\circ} 00'$ north to longitude $84^{\circ} 00'$ west and thence northward along the meridian of $84^{\circ} 00'$ west to latitude $69^{\circ} 30'$ north.
8. Zone 6 consists of all waters enclosed between the boundaries from the point at latitude $69^{\circ} 30'$ north, longitude $84^{\circ} 00'$ west, a rhumb line to latitude $70^{\circ} 50'$ north, longitude $87^{\circ} 00'$ west and thence northwards along the meridian of $87^{\circ} 00'$ north to latitude $73^{\circ} 45'$ north and thence westward along the parallel of $73^{\circ} 45'$ north to longitude $95^{\circ} 00'$ west and thence northward along the meridian of $95^{\circ} 00'$ west to latitude $75^{\circ} 00'$ north and thence eastward along the parallel of $75^{\circ} 00'$ north to longitude $75^{\circ} 00'$ west and thence north along the meridian of longitude $75^{\circ} 00'$ west to latitude $78^{\circ} 05'$ north a rhumb line to the point at latitude $79^{\circ} 10'$ north longitude $71^{\circ} 30'$ west thence along the south eastern and southern limits of Zone 2 to the point at latitude $76^{\circ} 40'$ north, longitude $97^{\circ} 30'$ west thence east along the parallel of latitude $76^{\circ} 40'$ north to longitude $99^{\circ} 00'$ west and thence south along the meridian of longitude $99^{\circ} 00'$ west to latitude $70^{\circ} 00'$ north and thence eastward along the parallel of latitude $70^{\circ} 00'$ north to longitude $93^{\circ} 20'$ west and thence south along the meridian of longitude $93^{\circ} 20'$ to latitude $69^{\circ} 30'$ and thence along the parallel of latitude $69^{\circ} 20'$ to longitude $84^{\circ} 00'$ west.

9. Zone 7 consists of all the waters enclosed within the boundaries from the point at latitude $70^{\circ} 00'$ north, longitude $93^{\circ} 20'$ west, south along the meridian of $93^{\circ} 20'$ west to latitude $66^{\circ} 20'$ north and thence westward along the parallel of $66^{\circ} 20'$ north to the longitude $104^{\circ} 50'$ west and thence northward along the meridian of longitude $104^{\circ} 50'$ to latitude 70° north and eastward along the parallel of latitude 70° north to longitude $93^{\circ} 20'$ west.
10. Zone 8 consists of all the waters enclosed within the boundaries from the point at latitude $69^{\circ} 30'$ north, longitude $84^{\circ} 00'$ west along the eastern and southern limits of Zone 5 to the point at latitude $67^{\circ} 00'$ north, longitude $92^{\circ} 00'$ west and thence south along the meridian of longitude $92^{\circ} 00'$ west to latitude $64^{\circ} 20'$ north and thence along the parallel of latitude $64^{\circ} 20'$ to the west coast of Baffin Island and thence north along the west shoreline of Baffin Island to the eastern limit of Zone 6 and thence a rhumb line to the point at latitude $69^{\circ} 30'$ north, longitude $84^{\circ} 00'$ west.
11. Zone 9 consists of all the waters enclosed within the boundaries from the point at latitude $72^{\circ} 30'$ north, longitude $75^{\circ} 10'$ west a rhumb line to latitude $73^{\circ} 15'$ north, longitude $70^{\circ} 00'$ and thence south following the limits of Arctic Waters to latitude $66^{\circ} 35'$ north and thence west along the parallel of latitude $66^{\circ} 35'$ north to the east coast of Baffin Island and thence north along the east coast of Baffin Island to the point at latitude $72^{\circ} 30'$ north, longitude $75^{\circ} 10'$ west.
12. Zone 10 consists of all the waters enclosed within the boundaries from the point where the parallel of latitude $64^{\circ} 20'$ intersects the east coast of Baffin Island, northward along the shoreline of Baffin Island to the southern limits of Zone 9 and following the southern limits of Zone 9 to the north and the limits of arctic waters to the east and the parallel of $64^{\circ} 20'$ to the south.
13. Zone 11 consists of all the waters enclosed within the boundaries from latitude $70^{\circ} 00'$ north, longitude $104^{\circ} 50'$ west westward along the parallel of $70^{\circ} 00'$ north to longitude $117^{\circ} 20'$ west and thence southwards along the meridian of longitude $117^{\circ} 20'$ west to latitude $66^{\circ} 20'$ north and thence east along the parallel of latitude $66^{\circ} 20'$ north to longitude $104^{\circ} 50'$ west and thence north along the meridian of longitude $104^{\circ} 50'$ to latitude $70^{\circ} 00'$ north.
14. Zone 12 consists of all the waters enclosed within the boundaries from the point at latitude $66^{\circ} 20'$ north, longitude $117^{\circ} 20'$ west and from thence north along the meridian of $117^{\circ} 20'$ north of longitude to latitude $70^{\circ} 00'$ north and thence following the western limits of Zone 3 and the southern limits of Zone 4 to the point at latitude $70^{\circ} 15'$ north, longitude $141^{\circ} 00'$ west and from thence south along the meridian of longitude $141^{\circ} 00'$ west to latitude $66^{\circ} 20'$ and from thence east along the parallel of latitude $66^{\circ} 20'$ north to longitude $117^{\circ} 20'$ west.

15. Zone 13 consists of all the waters enclosed within the boundaries of, to the north and to the west of Zone 6, to the south by the limits of Zones 8 and 9 and to the east by the limits of arctic waters.
16. Zone 14 consists of all the waters enclosed within the boundaries of arctic waters south of latitude $64^{\circ} 20'$ north.



SCHEDULE A

Appendix B

SEEPAGE, POLLUTION AND CONTAMINATION CLAUSE NO. I

(Approved by Lloyd's Underwriters' Non-Marine Association)

This Insurance does not cover any liability for:

- (1) Removal of, loss of or damage to sub-surface oil, gas or any other substance, the property of others, provided always that this paragraph (1) shall not apply to any liability which would otherwise be covered under this Insurance for such removal, loss, or damage directly attributable to blow-out, cratering or fire of an oil or gas well owned or operated by, or under the control of, the Assured.
- (2) Loss of, damage to, or loss of use of property directly or indirectly resulting from subsidence caused by sub-surface operations of the Assured.
- (3) Personal Injury or Bodily Injury or loss of, damage to, or loss of use of property directly or indirectly caused by seepage, pollution or contamination, provided always that this paragraph (3) shall not apply to liability for Personal Injury or Bodily Injury or loss of or physical damage to or destruction of tangible property, or loss of use of such property damaged or destroyed where such seepage, pollution or contamination is caused by a sudden unintended and unexpected happening during the period of this Insurance.
- (4) The cost of removing, nullifying or cleaning-up seeping, polluting or contaminating substances unless the seepage, pollution or contamination is caused by a sudden unintended and unexpected happening during the period of this Insurance.
- (5) Fines, penalties, punitive or exemplary damages.

This Clause shall not extend this Insurance to cover any liability which would not have been covered under this Insurance had this Clause not been attached.

22/1/70
N.M.A. 1683

- 2 -

SEEPAGE, POLLUTION AND CONTAMINATION EXCLUSION CLAUSE NO. 2

(Approved by Lloyd's Underwriters' Non-Marine Association)

This Insurance does not cover any liability for:

- (1) Personal Injury or Bodily Injury or loss of, damage to, or loss of use of property directly or indirectly caused by seepage, pollution or contamination.
- (2) The cost of removing, nullifying or cleaning-up seeping, polluting or contaminating substances.
- (3) Loss of, damage to, or loss of use of property directly or indirectly resulting from subsidence caused by sub-surface operations of the Assured.
- (4) Removal of, loss of or damage to sub-surface oil, gas or any other substance, the property of others.
- (5) Fines, penalties, punitive or exemplary damages.

22/1/70
N.M.A. 1684

INDUSTRIES, SEEPAGE, POLLUTION AND CONTAMINATION CLAUSE NO. 3

(Approved by Lloyd's Underwriters' Non-Marine Association)

This Insurance does not cover any liability for:

- (1) Personal Injury or Bodily Injury or loss of, damage to, or loss of use of property directly or indirectly caused by seepage, pollution or contamination, provided always that this Paragraph (1) shall not apply to liability for Personal Injury or Bodily Injury or loss of or physical damage to or destruction of tangible property, or loss of use of such property damaged or destroyed, where such seepage, pollution or contamination is caused by a sudden, unintended and unexpected happening during the period of this Insurance.
- (2) The cost of removing, nullifying or cleaning-up seeping, polluting or contaminating substances unless the seepage, pollution or contamination is caused by a sudden, and unexpected happening during the period of this Insurance

- 3 -

(3) Fines, penalties, punitive or exemplary damages.

This Clause shall not extend this Insurance to cover any liability which would not have been covered under this Insurance had this Clause not been attached.

22/1/70
N.M.A. 1685

INDUSTRIES, SEEPAGE, POLLUTION AND CONTAMINATION EXCLUSION CLAUSE NO. 4

(Approved by Lloyd's Underwriters' Non-Marine Association)

This Insurance does not cover any liability for:

- (1) Personal Injury or Bodily Injury or loss of, damage to or loss of use of property directly or indirectly caused by seepage, pollution or contamination.
- (2) The cost of removing, nullifying or cleaning-up seeping, polluting or contamination substances.
- (3) Fines, penalties, punitive or exemplary damages.

22/1/70
N.M.A. 1686

Explanation

Seepage, Pollution and Contamination Clauses

I have pleasure in enclosing copies of the following Clauses which have been approved by your Committee and which are on sale at Lloyd's Policy Office:-

- (a) Seepage, Pollution and Contamination Clause No. 1 (N.M.A. 1683) replacing N.M.A. 1333.
- (b) Seepage, Pollution and Contamination Exclusion Clause No. 2 (N.M.A. 1684), which is new.
- (c) Industries, Seepage, Pollution and Contamination Clause No. 3 (N.M.A. 1685), which is new.
- (d) Industries, Seepage, Pollution and Contamination Exclusion Clause No. 4 (N.M.A. 1686), which is new.

The above clauses are designed for use worldwide, as follows:-

Clause No. 1 is intended for use on oil and gas industry risks. (Paragraph 1 excludes loss of or damage to sub-surface oil, gas or any other substance, but does not exclude any other liability attributable to blow-out, which is covered). (Paragraph 2 excludes subsidence caused by sub-surface operations). (Paragraph 3 deals with the "buy-back" of a Seepage Loss on an accident basis). (Paragraph 4 deals with the "buy-back" of the clean-up costs on an accident basis).

Clause No. 2 is intended for use on oil and gas industry risks to exclude all losses arising from seepage, pollution or contamination. It also excludes clean-up costs, subsidence caused by sub-surface operations, loss of or damage to sub-surface oil, gas or any other substance.

Clause No. 3 is intended for use on all industries other than the oil or gas industries. (Paragraph 1 deals with the "buy-back" of the clean-up costs on an accident basis).

Clause No. 4 is intended for use on all industries other than the oil and gas industries to exclude seepage, pollution, contamination and clean-up costs completely.

APPENDIX C

Membership on Working Group on Arctic Seas Pollution Prevention Regulations

Department of Indian Affairs and Northern Development (Chair)
Department of External Affairs
Department of National Defence
Department of Transport
Department of Energy, Mines and Resources
Department of Finance,
Department of Justice
Department of Fisheries and Forestry
Department of National Health and Welfare
Privy Council Office

Sub-Committee on Sections 4 and 10

Department of Indian Affairs and Northern Development (Chair)
Department of Transport
Department of Energy, Mines and Resources
Department of National Health and Welfare
Department of National Defence
Department of Fisheries and Forestry

Sub-Committee on Section 9

Department of Indian Affairs and Northern Development (Chair)
Department of Energy, Mines and Resources,
Department of Finance
Privy Council Office
Department of Transport
Department of Justice
Department of External Affairs

Regulations pursuant to Sections 11 and 12 and respecting the disposal of waste from ships pursuant to Section 4 were drafted by the Ministry of Transport.

REGULATIONS RESPECTING THE PREVENTION
OF POLLUTION IN ARCTIC WATERS

Short Title

1. These Regulations may be cited as the Arctic Waters Pollution Prevention Regulations.

PART I

Application

2. This Part applies to the deposit of waste of any type in arctic waters or in any place on the mainland or islands of the Canadian Arctic, but does not apply to the deposit of waste from ships.

Interpretation

3. In this Part,
- (a) "Act" means the Arctic Waters Pollution Prevention Act;
 - (b) "domestic waste" means any animal, vegetable or mineral matter or any suspension or solution or water originating from any single private dwelling or temporary camp that is not collected by a sewage works but does not include industrial waste;
 - (c) "domestic works" means any receptacle, other than a sewage works, for domestic waste;
 - (d) "industrial operation" means any operation carried out for commercial purposes and includes any process of industry, manufacture, trade or business, or the development or processing of any natural resources;
 - (e) "industrial waste" means any substance resulting from or used in an industrial operation, and includes raw materials, process chemicals, additives and industrial products;

- (f) "industrial works" means any works for the collection, storage, transmission, treatment and disposal of industrial waste;
- (g) "operator" means any person owning, operating or otherwise controlling an industrial or sewage works;
- (h) "sewage" means any liquid waste containing animal, vegetable or mineral matter or any suspension or solution of domestic origin entering sewage works; and
- (i) "sewage works" means any works for the collection, storage, transmission, treatment and disposal of sewage

and all other words have the same meaning as defined in the Act.

Deposit of Domestic Waste

4. Domestic waste shall be deposited in domestic works pursuant to and in accordance with the authority and all of the requirements of the applicable Sanitary Control Ordinance of the Northwest Territories and the Public Health Ordinance of the Yukon Territory and all applicable regulations made thereunder.

Construction, Alteration or Extension of Industrial Works

5. Where the Governor-in-Council has requested plans and specifications of an industrial works pursuant to Section 10 of the Act, those plans and specifications shall be submitted in a form satisfactory to the Governor-in-Council and shall contain, where applicable, the following detailed information:

- (i) the quantity of water used in a specific process or industrial operation or process area, together with estimated or measured quantity and quality of the waste arising from water use,

- 3 -

- (ii) information on the variation in rates of flow and maximum and average concentrations of significant waste components where the quantity and quality of waste varies according to industrial operating procedures;
- (iii) sketch plans in the form of flow diagrams of process units from which liquid wastes emanate;
- (iv) site plan of the undertaking showing topography, location of treatment facilities, proposed and existing development, access roads, point where effluent discharges from treatment facilities and relevant drainage courses;
- (v) information on proposed treatment facilities including description of method or process, nature and quality of effluent, including industrial waste, to be treated, expected effluent quality and quantity, capacities, factors used in design, anticipated scheme of operation, cost estimate and arrangement for effluent drainage;
- (vi) detailed plans and specifications for the construction of the proposed treatment facilities; and
- (vii) such other information as the Governor-in-Council may require.

Construction, Alteration and Extention
of Sewage Works

6. Where the Governor-in-Council has requested plans and specifications of sewage works pursuant to Section 10 of the Act, those plans and specifications shall be submitted in a form satisfactory to the Governor-in-Council and shall contain, where applicable, the following information:

...4

- (i) the site plan showing the area served by the collection system and the relative locations of pumping stations, pressure mains, treatment facilities and the location of the final discharge of the effluent;
- (ii) a plan of proposed and existing sanitary sewers including future areas to be served and information on the present and the estimated population, the present and estimated sewage flows and infiltration;
- (iii) a plan of proposed and existing storm sewers including future areas to be served, a topographical map of the natural watershed drainage area and all information on factors used in the design;
- (iv) plan and profile of collection system, or part thereof, proposed for immediate construction showing the location of the sewer in the street and other underground utilities, materials, size, length and gradient of pipes, ground and invert elevations, manholes and other appurtenances;
- (v) detailed plans of all sewer appurtenances such as manholes, catch basins, siphons and standard and unusual features of design,
- (vi) specifications for the proposed works, cost estimates and description of sewer location for each pipe size;
- (vii) such other information as the Governor-in-Council may require.

Plans and Specifications of
Existing Works

7. The operator of any existing industrial or sewage works the operation of which results or is likely to result in the deposit of waste in arctic waters, shall set out the conditions under which the waste is being or could be deposited by submitting to the Governor-in-Council, in a form satisfactory to him, such of the information as listed in Sections 5 and 6 as is applicable to the operation.

Modification of Plans and Specifications
and Prohibitions

8. Following a review of the plans and specifications submitted under Sections 6, 7 and 8, the Governor-in-Council may specify to the operator the modifications required to the works to prevent the deposit of waste, the manner in which the modifications are to be incorporated, or the Governor-in-Council may prohibit the carrying out of the construction, alteration or extension of works.

PART II

Application

9. This part applies to the deposit of waste in arctic waters from ships.

Regulations pursuant to this Part are included in the reference to the Canada Shipping Act and Regulations included in Section 26 of the Arctic Waters Regulations.

PART III

Application

10. The Part applies to the determination of limits of liability of operators of works or undertakings on the mainland or islands of the Canadian Arctic, on submarine lands subjacent to arctic waters or within arctic waters, the operation of which results or could result in the deposit of waste in arctic waters.

Interpretation

11. In this Part,

- (a) "industrial operation" means any operation carried out for commercial purposes and includes any process of industry, manufacture, trade or business, or the exploration, development or processing of any natural resources;
- (b) "operator" means any person owning, operating or otherwise controlling an industrial or sanitary operation, and, in the case of an abandoned well drilled on submarine land subjacent to arctic waters, means the person owning, operating or otherwise controlling the well immediately prior to abandonment;
- (c) "sanitary operation" means any operation carried out for the collection, transmission, treatment and disposal of sewage;
- (d) "sewage" means any liquid containing animal, vegetable or mineral matter or any suspension or solution of domestic origin entering sewage works;
- (e) "sewage works" means any works for the collection, storage, transmission, treatment and disposal of sewage;

and all other words have the same meaning as defined in the Arctic Waters Pollution Prevention Act.

12 (1) the operator of any industrial or sanitary operation is liable, subject to subsection (2), in respect of each incident of waste deposition resulting from the operation, to an aggregate amount of \$500 per unit of measurement of the substance stored, impounded, utilized or transported.

- (2) (i) in the case of a pipeline, the unit of measurement shall be 7 barrels;
- (ii) the total volume to be used in determining the liability of a pipeline operator shall not exceed the volume between adjacent automatic shut off valves;

- 7 -

- (iii) in the case of bulk storage of solids, the unit of measurement shall be 1,000 cubic feet;
- (iv) in the case of the bulk storage of non-toxic substances in the liquid state, the unit of measurement shall be 300 gallons;
- (v) in the case of impoundment of mill tailings, the unit of measurement shall be 1000 cubic feet;
- (vi) the total volume of mill tailings to be used in determining the operator's liability for each year shall be the estimated accumulated volume of tailings solids at the end of the year;
- (vii) in the case of sewage, the unit of measurement shall be the daily volume, in ten thousands of cubic feet, of sewage handled by the sewage works.

13. Except as specified in Section 4, the limits of liability for all operators involved in the bulk storage of solids as referred to in 12 (2) (iii), and, except for operators involved in storage of toxic chemicals, in all other cases not covered in 12 (2), shall be \$2 million.

14. The operator of an industrial operation involving the drilling for oil and gas on submarine lands subjacent to waters is liable in respect of each incident of waste deposition in arctic waters resulting from the operation in the amount of \$10 million per exploratory or producing well, including abandoned wells.

...8

PART IV

Application

15. This Part applies to the determination of the limits of liability of ships navigating in arctic waters that;

- (a) contains more than 16,000 cubic feet of any substance which, if spilled, could become waste;
- (b) contains in any one compartment more than 1,600 cubic feet of any substance which, if spilled, could become waste; or
- (c) tows a ship that contains substances in the volumes and conditions described in paragraphs (a) or (b).

Interpretation

16. In this Part;

- (a) "act" means the Arctic Waters Pollution Prevention Act;
- (b) "franc" means a unit consisting of sixty-five and one half milligrams of gold of millesimal fineness nine hundred; and
- (c) "ship's tonnage" means the net registered tonnage of a ship as determined under Part I of the Canada Shipping Act, with the addition of the amount deducted from the gross tonnage on account of engine room space for the purpose of ascertaining the net tonnage.

17. The owner of any ship shall be liable for damages in accordance with and subject to the provisions of the Act, in respect of any one incident involving the deposit of waste, to an aggregate amount of 2,000 francs for each ton of the ship's tonnage, except that the aggregate amount for which the owner of a ship shall be liable under these regulations shall not, for any one incident, exceed 210 million francs.

18. The owner of any cargo on board any ship referred to in section 3, other than the owner of a cargo to which subsection 7 (3) of the Act applied, shall be liable for damages, in accordance with the subject to the provisions of the Act, in respect of any one incident involving the deposit of waste, to an aggregate amount of 5,460 francs for each ton of cargo on board such ship.

PART V

Application

19. This Part applies to the prevention of pollution of arctic waters by ships.

Interpretation

20. In this Part,

- (a) "Act" means Arctic Waters Pollution Prevention Act;
- (b) "Board" means the Board of Steamship Inspection that is defined under section 379 of the Canada Shipping Act;
- (c) "oil" means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil;
- (d) "Control Zone" means a zone defined in the Shipping Safety Control Zone Order;
- (e) "first year ice" means ice formed in the first year of winter;
- (f) "second year ice" means ice which has survived one summer;
- (g) "multi-year ice" means ice that has survived more than one summer;

- (h) "crippling load" means a load which will cause a strength member to permanently deflect;
- (i) "arctic waters" means waters as defined under Section 3 of the Act;
- (j) "Steamship Inspector" is a person appointed pursuant to section 376 of the Canada Shipping Act; and
- (k) "Convention" means the Safety of Life at Sea Convention, 1960.

Application and Exemptions

21. (1) These Regulations apply to every ship navigating in arctic waters that;

- (a) contains more than 16,000 cubic feet of any substance which, is spilled, could become waste;
- (b) contains in any one compartment more than 1,600 cubic feet of any substance which, if spilled, could become waste; or
- (c) tows a ship that contains substances in the volumes and conditions described in paragraphs (a) or (b).

(2) Notwithstanding anything in this Regulations, the Board may, if satisfied that it can with propriety do so, exempt any ship from full compliance with any of the requirements of these Regulations.

22. Subject to subsection (2) of section 6, every ship navigating in arctic waters shall;

- (a) be constructed in accordance with the requirements set forth in Schedule A for the appropriate class;
- (b) be self-propelled and the machinery constructed and installed in accordance with the requirements set forth in Schedule B for the appropriate class; and
- (c) have a one compartment standard of subdivision at least in accordance with the requirements of the International Convention on Load Lines 1966.

...11

- 11 -

23. (1) Ships strengthened for navigation in arctic waters shall be divided into the following classes:

- (a) Class I: ships designed to navigate independently in arctic waters for twelve months of the year in all zones;
- (b) Class II: ships designed to navigate independently in areas having one hundred per cent ice coverage with up to sixty per cent multi-year ice and first year ice up to four feet thick;
- (c) Class III: ships designed to navigate in areas where up to one hundred per cent coverage of first year ice three feet thick will be encountered or eighty per cent coverage where up to forty per cent multi-year ice will be encountered;
- (d) Class IV: ships designed to navigate in areas where eighty per cent coverage of two foot thick first year ice will be encountered;
- (e) Class V: ships designed to navigate in areas where eighty per cent coverage of two foot thick first year ice will be encountered and icebreaker support is required;
- (f) Class VI: ships designed to navigate in areas where fifty per cent coverage of two foot thick first year ice will be encountered; and
- (g) Class VII: ships designed to navigate in open water.

24. (1) The periods of the year during which ships may operate in arctic waters are set forth in columns 2 to 15 in the table in Schedule C such periods being dependent on the class and zone.

(2) Non-self-propelled ships may operate in those zones and at times set forth for Class VII ships.

...12

25. (1) Plans shall be submitted for the approval of the Board showing that the ship complies with the requirements of these Regulations and the ship shall be inspected by a Steamship Inspector to ensure that the ship is built in accordance with such plans.

(2) In the case of vessels constructed outside of Canada, the Board may allow the approval of such plans and inspection of such ships by any of the following Classification Societies:

Lloyd's Register of Shipping
The British Committee of Bureau Veritas
The American Bureau of Shipping
Det norske Veritas
Germanischer Lloyd
Registro Italiano Navale

Non-Canadian Ships

26. In addition to the other requirements of these Regulations, every ship navigating in arctic waters that is;

- (a) registered in a country which is not a signatory to the Convention shall comply with all the requirements of the Canada Shipping Act and Regulations made thereunder with respect to hull construction, hull inspection, machinery construction, machinery inspections, load lines, navigating appliances, ships radio, dangerous cargoes, dangerous bulk chemicals, manning, oil pollution prevention and disposal of sewage and garbage as if it were a Canadian ship or in Canadian waters; or
- (b) registered in a country, other than Canada, which is a signatory to the Convention shall comply with the requirements of the Canada Shipping Act and Regulations made thereunder with respect to dangerous cargoes, dangerous bulk chemicals, manning, oil pollution prevention and disposal of sewage and garbage as if it were a Canadian ship or in Canadian waters and shall be in possession of valid Convention and Load Line Certificates.

Manning

27 (1) Within a shipping safety control zone, every self-propelled ship navigating in arctic waters shall comply with the provisions of the Canada Shipping Act and Regulations made thereunder with manning as if it were a Canadian ship except that requirements contained therein shall be subject to the provisions of this section.

(2) Within a shipping safety control zone, every self-propelled ship to which these Regulations apply shall, unless laid up in a place of security, be provided with a duly certificated master and with a duly certificated officer next in seniority to the master.

(3) When underway or at anchor, a deck watch shall be maintained on board any ship required by this section to be provided with a duly certificated master, which watch shall include sufficient trained and experienced personnel to keep a proper lookout and to make full and proper use of all navigating equipment and aids to navigation with which the ship is provided.

(4) When a ship to which these Regulations apply is underway within a shipping safety control zone, the crew member assigned to steering duties shall be at the steering position ~~whether~~ or not automatic steering equipment is in use.

(5) No person shall perform, be permitted to perform or engaged to perform on board any ship required by this section to be provided with a duly certificated master, the duties of a master or mate, unless he is duly certificated.

(6) For the purposes of this section, every person, other than a pilot, who is in command or has charge of a ship shall be deemed to be performing the duties of a master.

(7) For the purpose of this section, every person, other than a pilot, who is in immediate charge of the navigation, manoeuvring, operation, or security of a ship or performs any duty required to be performed by a mate, shall be deemed to be performing the duties of a mate.

(8) No person shall perform, be permitted to perform or engaged to perform lookout duties on board any ship required by this section to be provided with a duly certificated maste, unless

- (a) he is duly certificated as master, mate, able seaman or efficient deckhand;
- (b) his visual acuity is not less than 20/30 and any aids to vision necessary to achieve such acuity are worn when performing lookout duties; and
- (c) his colour vision is not defective and he does not suffer from any impediment of hearing or speech.

(9) No person shall perform, be permitted to perform or engaged to perform any duties on board any ship required by this section to be provided with a duly certificated master, unless he has undergone a complete physical examination by a medical practitioner within the previous two years and been found fit to perform the duties concerned.

(10) No person shall be deemed to be duly certificated unless he is the lawful holder of a valid certificate of competency or licence qualifying him to be employed in the ship, on the voyage and in the capacity concerned.

(11) For the purposes of this section, the Minister may accept a certificate or licence issued by a country other than Canada, provided he is satisfied that the conditions of issue are such as to show like qualifications and competency to those required for an equivalent certificate issued under the Canada Shipping Act.

(12) It shall be the responsibility of the owner or his agent to show that the certificates or licences held by the master, officers and crew members of a ship were issued under the conditions specified in subsection (10) of this section, and the Minister may refuse to accept any certificate or licence or class of certificate or licence for cause.

(13) The complement of a ship required by this section to be provided with a duly certificated master shall include at least one person trained in the maintenance of the navigation aids and equipment required to be carried by section 12.

28. Every ship navigating north of the parallel of latitude 60° 00' north shall have on board at least one person who is experienced in navigation in ice and such person shall be deemed to be an ice navigator.

Navigation Aids

29. Every self-propelled ship navigating in arctic waters shall comply with the provisions of the Canada Shipping Act and the Regulations made thereunder dealing with navigating appliances, except that the requirements contained therein shall be augmented by the following provisions if the ship is of 1,600 tons, gross tonnage, or more and is navigating within a safety control zone, any part of which extends north of 64° 20' north latitude;

- (a) the charts carried shall provide a complete up-to-date coverage for the intended area of operation and shall be supplemented by up-to-date pilot books, tide tables, lists of lights and sound signals and lists of radio aids to marine navigation and like publications;
- (b) the gyro compass installation shall consist of a main and emergency gyro compass with repeaters at all steering positions and bearing repeaters suitably located and equipped, both gyros being suitable for high latitude operation and provided with appropriate spares and maintenances and operating manuals;
- (c) a marine radar installation shall be provided, consisting of at least two marine radars each capable of independent operation and meeting the performance

- 16 -

- standards annexed to the Convention, being suitable for operation under severe cold weather and icing conditions and having appropriate spare parts and maintenance manuals;
- (d) the echo sounder installation shall consist of two echo sounders each having shallow and deep sounding capabilities with appropriate spare parts and maintenance manuals;
 - (e) a Loran A or AMEGA receiver shall be provided with associated lattice charts or rate tables for the intended area of operation with spare parts and maintenance manual;
 - (f) navigating instruments and publications necessary to fix position and determine azimuth by astronomical means shall be provided;
 - (g) in addition to the normal radio communications facilities meeting international requirements and standards, a VHF bridge to bridge radiotelephone operating in the maritime mobile band shall be provided;
 - (h) automatic steering equipment, if fitted, shall be capable of immediate manual override; and
 - (i) rudder, engine revolution and rate of turn indicators shall be provided at the conning position, together with such other indicators as may be necessary to provide all vital information concerning the manoeuvring of the ship.

Salvage Connections

30. (1) On every ship navigating in arctic waters, any tank containing more than 1,600 cubic feet of oil shall be fitted with an independent valve, cock or screwed plug placed in an accessible position at the deck so that;

...17

- (a) where the top of the tank extends up to the freeboard deck there shall be fitted to the deck above the tank
- (i) a gate valve of at least 6 inches bore, if the volume of the tank is more than 16,000 cubic feet;
 - (ii) a gate valve of at least 6 inches bore, if the tank contains oil having a viscosity of 4.3 centistokes or more at 100 degrees Fahrenheit, or
 - (iii) a valve, cock or screwed plug of at least 2 inches bore, if the volume of the tank is not more than 16,000 cubic feet and contains oil having a viscosity of less than 4.3 centistokes at 100 Fahrenheit; or
- (b) where the top of a tank does not extend up to the freeboard deck there shall be fitted to the tank vent at the freeboard deck, a gate valve of the same bore as the tank vent and so arranged as not to restrict the flow of vapour through the vent.

(2) Every gate valve of 6 inches bore or over, referred to in subsection (1), shall be fitted with a readily removable blank flange and every valve, cock and screwed plug fitting referred to in the subsection shall be capable of being connected to a hose or pipe of the same bore.

(3) Every ship navigating in arctic waters carrying liquid cargoes in bulk which, if spilled could become waste, other than oil, shall comply with such conditions of construction and operation as the Board may require, taking into account the degree of hazard and the nature of the cargo.

31. (1) Every ship making a voyage into arctic waters shall have on board sufficient fuel and water to enable it to reach its point of destination and return to the next port of call after leaving arctic waters.

(2) When estimates for fuel and water are made, due regard shall be given to reduced speed of the ship at full power when navigating in ice and for increased heating and domestic requirements in the case of the ship being beset.

(3) Every ship navigating in arctic waters shall be provided with a bunkering station on either side of the deck to which a hose may be connected and shall carry on board one or more lengths of hose the total length of which shall be at least 100 feet and shall have a bore of four inches.

32. Every ship shall be loaded in such a manner that those cargoes, that if spilled, could become waste, shall, where possible, be loaded away from the ship's side.

Certification

33. (1) No ship shall navigate in arctic waters unless the ship has been issued with a Pollution Control Certificate by a Pollution Prevention Officer, which shall not be valid for more than twelve months.

(2) The certificate shall be of the form set forth in Schedule D.

34. A Pollution Prevention Officer may require a ship to be escorted by an icebreaker.

Fees for Non-Canadian Ships

35. (1) The fee payable in respect of each inspection of a non-Canadian ship navigating in arctic waters shall be;

- | | | |
|-----|---|-------|
| (a) | for a ship not over 1,600 tons, gross tonnage | \$50 |
| (b) | for a ship over 1,600 but not over 3,000 tons,
gross tonnage | \$75 |
| (c) | for a ship over 3,000 tons, gross tonnage | \$100 |

- 19 -

(2) If the ship is inspected at a place outside Canada, an additional \$40 fee shall be paid for each day, or part thereof, that an inspector is necessarily outside of Canada to make the inspection, plus such reasonable expenses as may be incurred thereby.

(3) Fees for non-Canadian ships for the approval of plans approved by the Board and for inspection of the ship during construction by a steamship Inspector shall be paid in accordance with the Board of Steamship Inspection Scale of Fees required under the Canada Shipping Act as if the vessel were a Canadian ship.

(4) All fees and expenses shall be paid to the Receiver General of Canada.

SCHEDULE A

REQUIREMENTS FOR THE HULL AND SCANTLING DESIGN OF SHIPS NAVIGATING IN ARCTIC WATERS

1. This section refers to Class I cargo ships.
2. (1) The form of these ships shall be such that they shall have
 - (a) a bow shaped to break ice in an effective manner;
 - (b) a stern shaped to break ice in an effective manner;
 - (c) side flare to facilitate the freeing of the ship from a beset condition and to prevent ice rafting on deck;
 - (d) a bilge radius of not less than $.65 \times \sqrt{\text{maximum breadth}}$;
 - (e) a sloping deck at the side capable of shedding ice;
 - (f) a minimum bow height as set by the Board;
 - (g) void or clean water ballast side tanks fitted adjacent to the outer hull in way of tanks in which a substance which, if spilled could become waste, is carried and in way of machinery spaces extending from the shell bottom to the main deck, of a minimum width of six feet and the internal structure constructed in such a manner that crippling loads are not transferred to the inner tanks causing them to rupture; and
 - (h) double bottom tanks constructed in way of tanks containing a substance which, if spilled, could become waste and in way of machinery spaces and the internal structure constructed in such a manner that crippling loads are not transferred to the inner tanks causing them to rupture.
- (2) The ships shall be loaded in such a way that they shall have
 - (a) a minimum freeboard not less than that required by the International Load Line Convention (1966) but at no time must the deck edge become immersed with any one compartment flooded; and
 - (b) a maximum freeboard in all conditions where ice is encountered shall be as assigned by the Board.
- (3) The three areas of strengthening shall be the
 - (a) bow, which shall extend from the stem to a line 0.4 times the length of the ship aft of the line indicating the margin of the flat of bottom and side of the hull forward,
 - (b) mid-body shall be from the margin line at side forward as defined for bow, between the upper trim of bilge and deck line to the defined stem line at side aft; and
 - (c) stem shall be measured from stem end to a line 0.04 L forward of the line indicating the margin of the flat of side and bottom.
- (4) Parameters for strength of the bow shall be such that
 - (a) when navigating through loose or neutral sheet ice the shell and framing shall be a function of the ice hardness, ice thickness, ice pressure and forward speed and will vary with the frame spacing and strength of the steel and the webs and stringers shall be a function of the ice pressure beam and ice thickness and will vary with the span and strength of the steel; and

... 2

- (b) when ramming or when beset the shell and framing shall be a function of ice hardness, ice thickness and S.H.P. and it will vary with the frame spacing and strength of the steel and the webs and stringers shall be a function of ice pressure, beam and ice thickness, and S.H.P., and will vary with span and strength of steel.
- (5) Parameters for the strength of the mid-body shall be such that
 - (a) when navigating through loose or neutral sheet ice the shell and framing shall be a function of ice hardness, ice thickness, S.H.P. and tripping factor and will vary with frame spacing and strength of steel, and the webs and stringers shall be a function of ice pressure, ice thickness and S.H.P., and shall vary with spans and strength of steel; and
 - (b) when ramming or when beset the parameters for the shell and framing shall be a function of ice hardness, ice thickness, ice pressure and a tripping factor and it shall vary with the frame spacing and the strength of steel and the webs and stringers shall be a function of ice pressure and ice thickness and shall vary with spans and strength of steel.
- (6) Parameters for the strength of the stern shall be such that
 - (a) when backing and when beset the shell and framing shall be a function of ice hardness, ice thickness and astern speed and it shall vary with the frame spacing and strength of steel, and the webs and stringers shall be a function of ice pressure, beam and ice thickness and astern S.H.P., and it shall vary with the spans and strength of steel.
- (7) The specifications for the steel used in the construction of the ships referred to in this section shall comply with the requirements of the Canadian Standards Association 940.8 Grade B when normalized and shall have a charpy V-notch section 10mm x 10mm at 30 ft. lbs. when tested at -25° F or an equivalent.
- (8) The rudder and steering arrangements of ships referred to in this section shall have
 - (a) rudders stiffened to resist the ice conditions which will be encountered;
 - (b) ice horns fitted directly behind rudders of a thickness to give protection to the rudders of two degrees on either side of the centre line;
 - (c) a steering unit fitted with an approved overload device;
 - (d) rudder posts, rudder heads, pintles and steering engine dimensioned to the maximum the vessel can reach in open water navigation.
- (9) Ships described in this section shall be capable of heeling in order to free themselves when beset.

3. Class I icebreakers shall have a higher hull strength than present Canadian icebreakers and may have special compartmentation to the satisfaction of the Board.

... 3

4. Class II cargo ships shall have a form and compartmentation as required by the Board and shall have a strength standard to withstand the ice loads encountered in zones in which they will be permitted to navigate, the loads being dependent on speed of the vessel and ice thickness, pressure and hardness.
5. Class II icebreakers shall be of a standard at least equivalent to the existing Canadian icebreakers of the Louis St. Laurent Class.
6. Class III ships shall be compartmented as required by the Board and be of a strength standard to withstand the ice loads encountered in the zones which they shall be permitted to navigate; these loads being dependent upon the speed of vessel, ice thickness, pressure and hardness.
7. Class IV ships shall be compartmented as required by the Board and be of a strength standard to withstand the ice loads encountered in the zones which they will be permitted to navigate; these loads being dependent upon the speed of vessel, ice thickness, pressure and hardness.
8. Class V ships shall be compartmented as required by the Board and be of a strength standard to withstand the ice loads encountered in the zones which they will be permitted to navigate; these loads being dependent upon the speed of vessel, ice thickness, pressure and hardness.
9. Class VI ships shall be compartmented as required by the Board and be of a strength standard to withstand the ice loads encountered in the zones which they will be permitted to navigate; these loads being dependent upon the speed of the vessel, ice thickness, pressure and hardness.
10. Class VII ships shall meet the requirements of the Hull Construction Regulations made under the Canada Shipping Act as if they were Canadian ships.

SCHEDULE B

REQUIREMENTS FOR THE POWER AND STRENGTH OF THE PROPULSION
MACHINERY FOR SHIPS NAVIGATING IN ARCTIC WATERS

Power Requirements

1. (1) The shaft horse power developed by the propelling machinery shall not be less than that set out in Column 2 of Table 1

TABLE 1

COLUMN 1 CLASS	COLUMN 2 MINIMUM S.H.P.
I	$500 \times B$
II	$300 \times B$
III	$0.19 \times L \times B$
IV	$0.16 \times L \times B$
V	$0.12 \times L \times B$
VI	$0.09 \times L \times B$
VII	To the satisfaction of the Board

Where L = maximum
length at load water
line and B = maximum
breadth

(2) The thrust developed by the propelling machinery going astern shall be at least seventy per cent of the ahead thrust and shall be available on a continuous basis.

Machinery Protection

2. (1) Where turbines are used for the propulsion of ships of Classes I, II, III, IV or V, means shall be provided for protecting the turbines from shock.

(2) Where direct current electric motors are used as propulsion of ships of Classes I, II, III, IV or V, provision is to be made for automatically limiting the transmitted torque to a safe value.

... 2

(3) Where gearing is fitted between the engine and the propeller, such gearing shall be designed to transmit torque in excess of that corresponding to the engine power by the percentages shown in Column 2 of Table 2.

TABLE 2

COLUMN 1 CLASS	COLUMN 2 INCREASE IN DESIGN TORQUE
I	70%
II	60%
III	40%
IV	25%
V	12%
VI	0
VII	

except that where propeller blade tips, at their highest point are at least thirty feet below the summer load line, the design torque of the gears need not be increased by more than forty per cent.

Shafting

4. (1) For any ship referred to in this Schedule, the tailshaft diameter as required in the Machinery Construction Regulations made under the Canada Shipping Act, is to be increased as set forth in Table 3.

TABLE 3

CLASS	INCREASE OVER REGULATION SIZE
I	35%
II	30%
III	20%
IV	15%
V	10%
VI	5%
VII	Nil

... 3

except that where propeller blade tips at their highest point are at least thirty feet below the summer load line, the increase in shaft diameter need not exceed twenty per cent.

(2) The diameters of the crank, thrust and intermediate shafts, as required under the Machinery Construction Regulations are to be increased as set forth in Table 4

TABLE 4

COLUMN 1 CLASS	COLUMN 2 INCREASE OVER REGULATION SIZE
I	20%
II	18%
III	12%
IV	8%
V	4%
VI	Nil
VII	Nil

except that where propeller blade tips, at their highest point are at least thirty feet below the summer load line, the increase in shaft diameter need not exceed twelve per cent.

5. (1) Propellers are to be made of a material satisfactory to the Board.

(2) For fixed blade propellers:

- (a) the blade breadth at the radius of 1.5d shall be 2.5d;
- (b) the blade thickness T at the radius 1.5d shall be

$$T = \frac{.025d}{\sqrt[4]{\quad}} \quad \text{if } D \text{ does not exceed } 14d$$

$$\text{or } T = \frac{.025d}{\sqrt[4]{\quad}} \times \frac{D}{14d} \quad \text{if } D \text{ is greater than } 14d$$

... 4

- 4 -

Where T - blade thickness at radius $1.5d$ in inches
d - the diameter of the ice strengthened tailshaft
D - the diameter in inches of the propeller; and
i - number of blades

(c) the blade thickness t at radius $D/2$ shall be:

t - $.00024D$ if D exceeds 130 inches
or t - $.00012D + 0.375$ if D does not exceed 130 inches.

(3) The edges of the blades are to be suitably thickened for ice conditions and shall not be less than $0.7t$ measured at $1.25t$ from the edge of the blade.

(4) The blades controllable pitch propellers shall have similar dimensions and strength requirements to those of fixed blade propellers.

Sea Inlet Chests

6. Cooling water inlet chests shall be connected to the cooling water discharge line through a by-pass of the same diameter as the discharge line. Inlet chests shall be fitted as close to the keel as practicable and the total area of holes in the gratings shall be six times that of the total area of the sea suction served by the gratings.

Air Starting Systems

7. (1) Air receivers shall have sufficient capacity to provide twelve starts for each main engine without replenishing the receivers.

(2) Air compressors shall have sufficient capacity to change the air receivers from empty to maximum working pressure in thirty minutes.

(3) Notwithstanding the requirements of subsection (1), the air receiver capacity for ships with non-reversing engines need not exceed half that required in sub-section (1).

SCHEDULE C

- CONTROL ZONES -

Col.1	Col.2	Col.3	Col.4	Col.5	Col.6	Col.7	Col.8	Col.9	Col.10	Col.11	Col.12	Col.13	Col.14	Col.15
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
I	All Year	All Year	All Year	All Year	All Year	All Year	All Year	All Year	All Year	All Year	All Year	All Year	All Year	All Year
II											All Year	All Year	All Year	
III	Nil											All Year	All Year	
IV	Nil	Nil										1 Aug. to 30 Sept.	1 July to 30 Oct.	
V	Nil	Nil	Nil									1 Aug. to 30 Sept.	1 July to 30 Oct.	
VI	Nil	Nil	Nil				15 Aug. to 30 Sept.		1 Aug. to 30 Sept.	1 Aug. to 30 Sept.	15 July to 30 Sept.	1 July to 30 Sept.	1 Aug. to 30 Sept.	1 July to 30 Oct.
VII	Nil	Nil	Nil	Nil	Nil	Nil	15 Aug. to 30 Sept.	Nil	Nil	Nil	15 July to 30 Sept.	1 July to 30 Sept.	Nil	1 July to 30 Oct.

CLASS OF SHIP AS DEFINED IN SECTION 5

SCHEDULE D

CANADA
DEPARTMENT OF TRANSPORT

POLLUTION CONTROL CERTIFICATE

ISSUED FOR A SHIP OPERATING IN ARCTIC WATERS AS
DEFINED IN THE ARCTIC WATERS POLLUTION PREVENTION ACT.

NAME OF SHIP	OFFICIAL NUMBER	COUNTRY & PORT OF REGISTRY	GROSS TONNAGE	ICE CLASS CONSTRUCTION

The ship may navigate in the zones defined in the "Shipping Safety Control Zone Order"
as set forth in the table below and during the period stated.

ZONE	FROM	TO	ZONE	FROM	TO

SIGNED _____
POLLUTION CONTROL OFFICER.

WORKING PAPER ON CANADIAN DRAFT TREATY ON
NAVIGATION SAFETY AND POLLUTION CONTROL IN
ARCTIC WATERS

(To be submitted for interdepartmental consideration and cleared through Advisory Committee on Northern Development)

PREAMBLE

The Governments of Canada, the United States of America, etc.

Recognizing that navigation in Arctic waters is of potentially great significance to international trade and commerce,

Conscious of the peculiar ecological balance in Arctic waters and of the vital importance of the Arctic environment to the environment of the world as a whole,

Conscious also that navigation in Arctic waters presents special hazards and that a maritime casualty resulting in the pollution of these waters could have disastrous and irreversible consequences,

Determined to protect the existing ecological balance in Arctic waters and to preserve the Arctic environment for the benefit of all mankind and in particular the aboriginal and other inhabitants of the Arctic regions,

Convinced that international cooperation is required to this end and in particular to ensure safety of navigation in Arctic waters and the prevention and control of pollution which could result from such navigation,

Bearing in mind the sovereign rights and the special interests and responsibilities of the circum-Arctic States,

Have agreed as follows:

ARTICLE I

For the purposes of the present Treaty:

...2

- (a) "Arctic waters" means all waters whether in a frozen or liquid state, both within and beyond the limits of national jurisdiction north of the 60th parallel of north latitude, except as may otherwise be agreed by the Contracting Parties;
- (b) "Pollution" means the deposit or discharge, whether accidental or otherwise, from or by a ship in Arctic waters, of any pollutant as defined in sub-paragraph (c) of this Article;
- (c) "Pollutant" means
 - (i) any substance that, if added to any waters, would degrade or alter or form part of a process of degradation or alteration of the quality of those waters to an extent that is detrimental to their use by man or by any animal, fish or plant that is useful to man, and
 - (ii) any water that contains a substance in such a quantity or concentration, or that has been so treated, processed or changed, by heat or other means, from a natural state that it would, if added to any waters, degrade or alter or form part of a process of degradation or alteration of the quality of those waters to an extent that is detrimental to their use by man or by any animal, fish or plant that is useful to man;
- (d) "Ship" means
 - (i) any seagoing vessel of any type whatsoever, and
 - (ii) any floating craft, with the exception of an installation or device engaged in the exploration and exploitation of the resources of the seabed and the ocean floor and the subsoil thereof.

...3

ARTICLE II

Nothing contained in the present Treaty shall be interpreted as:

- (a) a renunciation by any Contracting Party of any rights of or claims to jurisdiction or sovereignty in or over Arctic waters;
- (b) derogating from the powers of any Contracting Party to take measures within its jurisdiction in respect of any matter to which the present Treaty relates;
- (c) prejudicing the position of any Contracting Party as regards its recognition or non-recognition of any other State's rights of or claims to jurisdiction or sovereignty in or over Arctic waters.

ARTICLE III

1. For the sole purposes of the present Treaty the Arctic waters are divided into the Zones described in Annex A to the present Treaty.

Comment: Annex A would provide for a separate Zone for Canada, the USA, USSR, Norway, Denmark, and perhaps special Zones for Iceland and Britain. It is suggested that the Canadian Zone should be coterminous with the so-called "Canadian sector" rather than the area of application of the Arctic Waters Pollution Prevention Act in order to avoid possible prejudice to the sector principle.⁷

2. Within the limits of its Zone the Contracting Party concerned (hereinafter referred to as the "Zonal Authority") shall prescribe regulations (hereinafter referred to as "agreed regulations"), including appropriate penalties for violations thereof, to give effect to the

standards, conditions, procedures and other provisions set out in Annex B to the present Treaty, for the purpose of ensuring safety of navigation and the prevention and control of pollution.

Comment: Annex B would be based on the regulations to be promulgated by Canada under the Arctic Waters Pollution Prevention Act, appropriately modified to be of general application. The Annex would provide for certain fixed standards with regard to such matters as evidence of financial responsibility, limitation of liability, navigation aids and standards, ship construction standards, etc., while allowing for certain defined types of variations from such standards to take into account seasonal, climatic and regional variations. Alternatively, paragraph 2 of this Article could be redrafted and Annex B could consist of the specific regulations to be prescribed by each Zonal Authority within its Zone, rather than a general set of agreed standards.⁷

ARTICLE IV

1. Each Contracting Party shall prohibit ships registered under its laws or flying its flag from:

- (a) depositing or discharging any pollutant in any Zone established under the present Treaty except as may be provided in the agreed regulations prescribed by the Zonal Authority concerned;
- (b) navigating in any such Zone unless they comply with the agreed regulations prescribed by the Zonal Authority concerned in respect of matters referred to in Part ____ of Annex B,

...5

provided, however, that in the case of warships of a Contracting Party or any other ship owned and operated by a Contracting Party or any other ship owned and operated by a Contracting Party and used, for the time being, only on government non-commercial service, it shall be sufficient for each Contracting Party to adopt appropriate measures ensuring that its ships of this description comply with requirements equivalent to those prescribed by the Zonal Authority.

2. Each Zonal Authority shall accept as satisfactory evidence of compliance with the agreed regulations it has prescribed in respect of the provision of evidence of financial responsibility or in respect of the matters referred to in Part ____ of Annex B, a certificate issued by any other Contracting Party evidencing such compliance by a ship registered under the laws or flying the flag of such other Contracting Party.

Comment: In sub-paragraph (b) of paragraph 1 of this Article, "Part ____ of Annex B" refers in effect to Section 1(a), (b) and (c) of the Arctic Waters Pollution Prevention Act. In paragraph 2 of this Article, "Part ____ of Annex B" refers in effect to Section 1(a) of the same Act.⁷

ARTICLE V

1. Without prejudice to the sovereign rights of States in their territorial and internal waters or to other rights of States beyond the limits of such waters, and for the sole purposes of the present Treaty, each Contracting Party delegates to each Zonal Authority the power to enforce within its Zone the agreed regulations prescribed by the Zonal Authority against any ship registered under the laws or flying the flag of the Contracting

Party concerned, subject, however, to the provisions of paragraph 2 of this Article. The power of enforcement so delegated shall include the power to arrest, to institute proceedings in the Courts of the Zonal Authority, and to impose penalties consequent to such proceedings, in respect of violations of the agreed regulations prescribed by that Zonal Authority.

2. Paragraph 1 of this Article shall not apply to any warship of a Contracting Party or any other ship owned and operated by a Contracting Party and used, for the time being, only on government non-commercial service. The respective rights of the Contracting Parties with regard to the ships referred to in this paragraph shall be limited to such rights as exist independently of the present Treaty, subject only to the provisions of Article IV.

ARTICLE VI

A Zonal Authority requiring assistance to deal with a pollution incident arising from a maritime casualty within its Zone may call on the help of the other Contracting Parties, starting with those which also seem likely to be affected by that incident. Contracting Parties called upon for help in accordance with this Article shall use their best endeavours to bring such assistance as is within their power.

ARTICLE VII

1. The Contracting Parties hereby establish, for the purposes of the present Treaty, the Intergovernmental Consultative Organization for Arctic Navigation (hereinafter referred to as "the Organization").

2. The membership of the Organization shall be composed of:

- (a) each Zonal Authority designated under the present Treaty;
 - (b) three other members elected by a majority vote of the Zonal Authorities from other Contracting Parties whose nationals or ships normally navigate, fish or conduct other substantial commercial activity in Arctic waters.
3. All Contracting Parties who are not Members of the Organization pursuant to paragraph 2 of this Article shall have the status of Associate Members and shall have the right to participate in any meeting of the Organization without, however, the right to vote.
4. The Organization shall elect from its Members at each regular meeting a Chairman and a Vice-Chairman who shall serve until the end of the next regular meeting.
5. The seat of the Organization shall be at a place to be chosen by the Organization.
6. The Organization shall hold a regular meeting at least once every two years at its seat or at such place as may be agreed upon by the Organization.
7. Any other meeting of the Organization may be called by the Chairman at the request of a majority of its Members.
8. Each Member shall be represented at meetings of the Organization by a single delegate, who may be accompanied by an alternate and by experts and advisors.
9. Each Member shall have one vote. Decisions of the Organization shall be taken by a two-thirds majority vote of the Members present and voting, except where otherwise specifically provided.
10. Subject to the provisions of this Article, the Organization may decide upon and amend, as occasion may require, by-laws and rules for the

...8

conduct of its meetings.

11. The Organization may employ personnel and acquire facilities necessary for the performance of its functions.

12. The Organization shall determine any joint expenses to be incurred by the Organization and the proportion in which such expenses shall be shared by Members.

ARTICLE VIII

The Organization shall have the following functions and responsibilities:

- (a) to provide machinery for consultation, cooperation and the exchange of information among Members;
- (b) to consider and approve or disapprove proposals referred to it under Article IX;
- (c) to encourage the development of fuller understanding of the Arctic marine environment and greater knowledge of the special problems and requirements of safety of navigation and the prevention and control of pollution in Arctic waters;
- (d) to this end, to coordinate the national research and development projects of Contracting Parties, to undertake cooperative research projects as appropriate, and to assemble, publish or otherwise disseminate relevant scientific and technical information.

ARTICLE IX

1. The Organization may consider and approve or disapprove proposals referred to it by a Contracting Party or Parties for the revision or amendment of the standards, conditions, provisions and other procedures set out in

...9

Annex B, in respect of a particular Zone or Zones or in respect of all Zones.

2. Subject to the provisions of paragraph 3 of this Article, the Contracting Parties agree to be bound by any proposal approved by the Organization under this Article, provided always that in every case such proposal is concurred in by each Zonal Authority to whose Zone the proposal may relate.

3. Where a proposal made by a Zonal Authority under this Article in respect of its own Zone is not approved by the Organization, that Zonal Authority may nevertheless revise or amend its agreed regulations in accordance with its proposal upon giving notice to the Organization of its intention to do so. Such revision or amendment shall have the same force and effect as a revision or amendment approved under paragraph 2 of this Article in relation to all Contracting Parties who do not object to it within a period of sixty days of the notice of intention by the Zonal Authority concerned.

4. An objection by a Contracting Party under paragraph 3 of this Article shall be effective only in relation to the revision or amendment to which the objection has been made, and the respective rights of that Contracting Party and the Zonal Authority concerned with regard to such revision or amendment shall be limited to such rights as exist independently of the present Treaty.

ARTICLE X

Each Zonal Authority shall send to all other Contracting Parties and to the Organization:

- (a) the text of laws, decrees, orders and regulations in force within its Zone with regard to safety of navigation and the prevention and control of pollution;

- (b) all official reports or summaries of official reports showing the results of the application of the present Treaty, provided always that such reports or summaries are not, in the opinion of that Zonal Authority, of a confidential nature.

ARTICLE XI

Annexes A and B to the present Treaty form an integral part of the Treaty, including revisions or amendments to Annex B under paragraph 2 of Article IX.

ARTICLE XII (et seq.)

Final clauses:

- States which may adhere to Treaty
- Entry into force
- Denunciation or withdrawal
- Settlement of disputes
- Termination

DOCUMENT ND-489

MEMORANDUM TO THE ADVISORY COMMITTEE
ON NORTHERN DEVELOPMENT

Ditchley Conference

The Ditchley Foundation, of Ditchley Park, Enstone, Oxfordshire, England, sponsors each year a series of conferences which provide a means for informal discussions of problems of mutual interest between informed individuals from the U.K. and the U.S.

Such a conference is being organized for the month of May, 1971, which will be of particular interest to this Committee and to Canada. The proposed conference is on the Arctic Ocean and the terms of reference are as follows:-

"To examine the possible consequences of the opening-up of the Arctic sea, through the development of the sea passage north of the North American continent, following the Russian use of the North East Passage; and through the developments by land and air with special reference to:

- a. the exploitation and distribution of oil, minerals, fisheries, and other natural resources of the area;
- b. questions of national or international jurisdiction over maritime and air traffic, and the claims of the coastal nations of the Arctic Ocean, and questions of defence;

- c. questions of safety, pollution and conservation;

and to consider any measures, indicated by this examination that should be taken by national or international authorities."

The organizers of this Conference intend to widen the participation for these discussions by extending invitations to such countries as Denmark, Iceland and Norway. They hope to have a widely representational team from Canada to include experts from government, industry and the universities.

The Committee may wish to consider the position that the Canadian government experts should adopt in relation to some of these questions and to ensure that they are adequately briefed before the conference.

Department of Indian Affairs
and Northern Development
July 24, 1970.

L.A.C.O. Hunt,
Secretary.

S 47.3-1-A

File pocket

7TH A.C.N.D
CO-ORDINATING
MEETING
JAN. 17/71

MR. H.B. ROBINSON
- 2 -

20
451
33
XND
ND
XND

THE
CORPORATION
NEW
JAN 1970
MR. H. B. BROWN
5

Department of Indian Affairs
and Northern Development

Ministère des Affaires indiennes
et du Nord canadien

DEPUTY MINISTER

SOUS-MINISTRE

TO:
À:

Mr Murray

DATE

REMARKS:
REMARQUES:

Geo. Th.

*Items 1 & 2
might be worth your
while to glance
through. As return*

MBM

**Advisory Committee
on Northern Development**



**Comité consultatif de la mise
en valeur du Nord canadien**

ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

The Seventh meeting of the Co-ordinating
Committee of the Advisory Committee on
Northern Development will be held on
Tuesday, January 19, 1971 at 2:00 p.m.
in the 14th floor Conference Room,
Centennial Tower, 400 Laurier Avenue West,
Ottawa

A G E N D A

1. Employment of Northern Residents
Document XND-30 distributed 14 January 1971.
2. The Mid-Canada Concept, and a Specific Proposal
by Mr. R. Rohmer.
Document XND-33 distributed 14 January 1971.
3. Marine Seismic Survey - a proposal by
Pallister and Associates.
Document XND-32 distributed 14 January 1971.

For information purposes:-

- I Further investment in Panarctic Oils Ltd.
(Document XND-35)
- II Review of status of Marine Terminal - Herschel Island
(Document XND-34)
- III Northern Atlas - A proposal
(Document XND-36)

Progress Reports

- IV Scientific Conference - T. Hyslop.
- V Land Use Regulations - J. Naysmith
- VI Planning Memo - Cabinet Decision - Chairman.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
January 13, 1971.

000667

Advisory Committee
on Northern Development



Comité consultatif de la mise
en valeur du Nord canadien

DOCUMENT XND-30

MEMORANDUM TO THE ADVISORY
COMMITTEE ON NORTHERN DEVELOPMENT

Employment of Northern Residents
Federal Government Departments
and Agencies

A.C.N.D. document ND-431 dated December 7, 1966, recommended the following action that was approved by the A.C.N.D. in January, 1967:

1. Federal departments and crown agencies working in northern Canada would:
 - (a) Establish an objective of filling 75 per cent of their northern positions with northern residents by 1977;
 - (b) Adopt a policy of training northern residents for northern positions through training on-the-job, apprenticeship, or other means whereby both formal education and practical training may supplement each other to lead to gainful employment;
 - (c) Consult Training and Selection and Placement Service Personnel of the Department of Indian Affairs and Northern Development to facilitate achieving the above objectives.
2. Training positions for apprentices who will be trained and work in federal departments should be added to the establishments of those departments.

On the basis of the methods listed in Appendix "A" to document ND-431, the objective was considered feasible, had they been used. It was recognized that the 75% figure could not apply to all occupations, but the A.C.N.D. agreed that the filling of 75% of the total positions in a department by Northern residents probably was an attainable goal. 11?

Since that time only one or two departments have taken any steps to use the formal training processes outlined in ND-431. As it is the shortage of qualifications and training that make it most difficult for northerners to get jobs, this lack of progress towards implementing objectives 1(b) and (c) and 2 above has had the inevitable result of slowing progress towards the 75% objective.

- 2 -

This is particularly so with respect to Indians and Eskimos who most need the up-grading training to qualify for jobs. At this moment, therefore, the validity of having and the possibility of reaching a specified percentage employment by 1977 must be questioned.

It is apparent that over the past four years only a very limited number of training positions have been set up by departments to provide apprenticeship training in both the skilled and classified position category. The Northern Canada Power Commission is the one agency which has taken the necessary formal steps to implement such a program.

Since most positions of federal departments and agencies in the North are in the skilled, semi-professional (technician) and professional categories, all of which require persons to be trained before occupying them, unless the training is either provided or arranged for by a government department or agency, there is little chance of these positions ever being occupied by Northern residents. It is suggested that these factors are the principal ones which have resulted in Indians and Eskimos making up only 13.3% and 8.6% respectively of the Northern residents employed by federal departments in the North as reported for the six month period ending in March, 1970. ||

In practice it has turned out that some actions taken by some departments in the staffing of Northern positions have in fact worked against the objectives that were agreed to in 1967. An unwillingness to recruit persons who do not meet all the regular enlistment standards or a cancellation of programs or positions after training courses have been commenced are examples of things that have happened. While cases like this may be explainable in terms of operational exigencies they do not further the objective of employing more Northern people. |

In discussions with officers intimately connected with the program, it is apparent that the A.C.N.D. document ND-431 had some effect on federal departments and agencies in the North providing employment opportunities for Northern residents who already possessed the appropriate skills and knowledge applicable to the job. In almost every case, however, the arrangements depended upon the personalities of the officers involved.

The Public Service Commission amended its regulations as follows:

1. Within the Government Service, Northern Service Trainee positions can be established with formal training programs. Northern residents can be brought into such positions with less than the formal qualifications provided that at the end of the training they meet all of the requirements of the positions.

. . . 3

- 3 -

2. For all positions at the unskilled and semi-skilled level and up to and including CR 2 and ST 4, competitions can be confined to any specific area of the N.W.T. Applicants who qualify in all factors except that of experience may be placed on the eligible list and appointed at a lower level and then promoted to the full level of the position as soon as they are capable.

What seems to have emerged is the fact that the major shortfall by departments has been in responding to and taking advantage of the training facilities that are available through D.I.A.N.D. and the Territorial Governments to prepare Northern residents to take the jobs that are available. This is particularly unfortunate with respect to the employment of native people and the pattern of filling a large percentage of government jobs by "southerners" has persisted.

With the assumption of the Administration responsibilities for various programs in the North, except Resource Development, by the Government of the Northwest Territories, paragraph (c) of the objectives is no longer applicable. These duties have now been taken over by the Government of the N.W.T. They, on behalf of the Department of Indian Affairs and Northern Development, administer a program of financial assistance with respect to the training, mobility and re-establishment of Indian and Eskimo residents of Canada in addition to their responsibilities for non-Indian and Eskimo residents. This program is operated in conjunction with the Department of Manpower and Immigration, Canada Manpower Service, (Manpower Mobility Regulations 1967 and the Adult Occupational Training Regulations) on the basis that no assistance will be given to an Indian or Eskimo unless that Indian or Eskimo does not qualify for assistance from the Canada Manpower Service. Details of the assistance provided by the Department of Manpower and Immigration and by the Government of the N.W.T. to Indians and Eskimos on behalf of D.I.A.N.D. is attached as Appendix "A". Under the programs listed, the relationship of a federal government department or agency with the Government of the N.W.T. is that of any other employer. In other words, where wages are involved as in apprenticeship or training on-the-job, such wages are the responsibility of the employer. Where training costs are involved, such costs are the responsibility of the Canada Manpower Service or, for Indians and Eskimos who do not meet Canada Manpower Regulations, that of the Government of the N.W.T.

It is suggested from the foregoing that all of the programs necessary to train and place Northern residents into employment situations are available now. To make the program effective, however, three additional ingredients are required. The ~~first~~ is more information and details of the human resources. This will be provided from the N.W.T. Manpower census, which D.I.A.N.D. has undertaken to have completed in May, 1971. The second requirement is

- 4 -

specific information on the actual employment of northerners by federal government departments and agencies in the North broken down by occupations, number and location. The third is the acceptance by all federal government departments and agencies in the North of their responsibility to implement the program which they agreed to in 1967. Without this, everything else is meaningless.

It is now suggested that the following approach and steps must be taken by all departments involved:

1. Departments and the Government of the N.W.T. must recognize the ever-increasing importance of employing northerners in their northern operations and accept the responsibilities implicit in the 1967 A.C.N.D. decision to which they were a party. The objective is to achieve as high a percentage as possible by 1977.
2. Departments and the Government of the N.W.T. should recognize the particular problems involved in employing native people and accept a specific obligation to increase the numbers employed as quickly as possible.
3. Departments and the Government of the N.W.T. will take positive steps to provide training positions and to utilize the facilities that are available to train northern residents to take advantage of the job opportunities that exist. The Department of Indian Affairs and Northern Development will undertake to discuss with the Department of Manpower and the N.W.T. Government the best methods by which departments can report vacancies in their northern establishments and arrange where necessary the proper training of northern residents to fill these vacancies.
4. Departments and the Government of the N.W.T. will continue to provide on a regular basis the necessary information on the employment of northerners in their organizations in the form previously agreed to by the Committee as outlined in detail in document XND-16.
5. The D.I.A.N.D. undertake to up-date the N.W.T. Manpower census yearly as a basis of information on human resources available in the North.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
January 12, 1971.

APPENDIX A

Training and Employment Assistance by Department of Manpower & Immigration and Department of Indian Affairs & Northern Development

<u>Program</u>	<u>Department of Manpower and Immigration</u>	<u>Department of Indian Affairs and Northern Development</u>
1. Allowances for full time instruction. (In-school, Apprenticeship Theory, Training in Industry)	<p>a. For all trainees who have been out of full time school for not less than 1 year and are at least 1 year past the applicable school leaving age, financial assistance covers the costs of the following:</p> <p style="padding-left: 40px;">Transportation Fees and books</p> <p>b. For trainees who have been in the labour force for 3 years or more, the following allowances are paid in addition:</p> <p style="padding-left: 40px;">Single trainee \$43/wk. with 1 dependent \$62/wk. with 2 dependents \$72/wk. with 3 dependents \$82/wk. with 4 dependents \$88/wk.</p> <p>Trainee living away from home who must contribute financially to his home while away:</p> <p style="padding-left: 40px;">Additional \$23 per week.</p>	<p>For all trainees, financial assistance is given to cover the costs of the following:</p> <p style="padding-left: 40px;">Clothing Transportation Fees and books</p> <p>Same allowances</p>
2. In-Service Training	No financial assistance	Financial assistance and allowances as in 1. Limited to maximum of 52 weeks.
3. Training on-the-Job	No financial assistance	Wage sharing with employer at "learner" rates with percentages dependent upon amount of actual work trainee produces. Limited to an average of not more than 50% of wages for 52 week period.
4. Training-in-Industry	a. Where employer sets up school within plant to be used exclusively for training, costs attributable to rental of buildings and equipment, and instructors' salary.	a. Same

- 2 -

<u>Program</u>	<u>Department of Manpower and Immigration</u>	<u>Department of Indian Affairs and Northern Development</u>
	b. Wage sharing with employer to maximum of 50% of wages at "learner" rates.	b. Financial assistance and allowances as in 1.
5. Apprenticeship Theory Courses	<p>a. For apprentice 1 year past school leaving age but less than 3 years in labour force, costs attributable to fees.</p> <p>b. For apprentice in labour force for more than 3 years, costs attributable to: Transportation Fees</p> <p>Allowances as in 1.b.</p>	<p>For all apprentices, costs attributable to: Transportation Fees and books</p> <p>Allowances as in 1.</p>
6. Full Time In-School Instruction	<p>Limited to one year of full time training in any one specific area, i.e. one year academic upgrading followed by one year occupational training.</p> <p>Financial assistance and allowances as in 1.</p>	<p>Financial assistance and allowances as in 1.</p>
7. Relocation of Trainees' Dependents	No financial assistance.	<p>If course is greater than 4 months in length, or Department is satisfied trainee will go directly to employment on completion, dependents may be relocated with the following assistance: transportation of dependents to training course, transportation of dependents' personal and household effects, plus relocation grant.</p>
8. Relocation of Trainee if Drop Out	No financial assistance.	<p>Return of trainee and dependents, plus personal and household effects to place of origin.</p>
9. Trainee or Worker going to Employment	<p>Transportation for trainee or worker if over 18 years of age and dependents, actual cost of moving personal and household effects of dependents, plus relocation grant.</p>	<p>For trainee or worker who is 1 year past school leaving age and out of school for one year, transportation for trainee or worker & dependents, actual cost of moving personal and household effects of dependents plus relocation grant and continuation of training allowance until first pay cheque</p>

until first pay cheque r000673 ed

- 3 -

<u>Program</u>	<u>Department of Manpower and Immigration</u>	<u>Department of Indian Affairs and Northern Development</u>
10. Special Contingency	No financial assistance.	Up to \$3,500 in aggregate to the trainee and his dependents to meet special expenses which must be incurred as a condition of employment or training which cannot be met from other allowances.
11. Exploratory Employment Grant	For worker who is 18 years of age or over and is unemployed, under-employed or about to become unemployed. a. Transportation costs to area of possible employment. b. Up to 4 weeks allowance for dependents. c. \$20 per week personal allowance for 4 weeks.	For worker who is unemployed, under-employed or about to become unemployed and who is 1 year past school leaving age & out of school for one year a. Transportation costs to area of possible employment b. Allowances as in 1.b. for worker and dependents covering period (i) Until he receives first pay cheque OR (ii) Until he returns home.

RESTRICTED

DOCUMENT ND-431

MEMORANDUM TO THE ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

Employment of Northern Residents

The Problem

To devise measures to increase the proportion of residents in the northern work force.

Background of the Problem

In the past it has been difficult to employ indigenous northern residents because of their lack of schooling and work experience. The growth of the education program is now resulting in young northern residents being better prepared to enter the work force in many capacities. The government, crown agencies, large mining companies, and the Hudson's Bay Company constitute the main employers in the north. There is an onus on the government to provide an example to private employers.

Present Policies and Procedures Used by the Department of
Indian Affairs and Northern Development

Considerable effort is being made by the Department of Indian Affairs and Northern Development to train and employ northern native residents in the work force.

In prevailing rate unskilled and semi-skilled trade position openings, local preference in departmental hiring is given. In skilled trades positions, local preference and modest Government apprentice training programs are offered.

In classified civil service positions for clerical, regulatory, secretarial, stenographic and typing services, local preference in employment is given. In addition, emphasis is being placed on qualifying local applicants through some training-on-the-job and apprentice training programs designed to meet the special needs of those not fully qualified. A program of Government apprenticeship has also been developed in this work which will provide the necessary theory and practical training not only in the clerical field but also in selection/placement work and engineering technology.

Selection and Placement Officers in five regions of the Northwest Territories select trainees and potential employees and place them in training or employment positions. Their work involves counselling and other services similar to those provided by Manpower Centres (National Employment Service) but directed at northern residents and northern employment.

... 2

- 2 -

Attached as Appendix A is a more detailed account of current practices together with a summary of the vocational training activity in the Northwest Territories for the fiscal year 1965-66.

Detailed statistics on employment in the private as well as public sector are not available pending completion of a labour and employment census now under way.

Recommendations:

It is recommended that,

1. Federal departments and crown agencies working in northern Canada:
 - (a) Establish an objective of filling 75 per cent of their northern positions with northern residents by 1977.
 - (b) Adopt a policy of training northern residents for northern positions through training-on-the-job, apprenticeship, or other means whereby both formal education and practical training may supplement each other to lead to gainful employment.
 - (c) Consult Training and Selection and Placement Service Personnel of the Department of Indian Affairs and Northern Development to facilitate achieving the above objectives.
2. Training positions for apprentices who will be trained and work in federal departments should be added to the establishments of those departments.

G.W. Rowley,
Secretary.

Department of Indian Affairs
and Northern Development.
December 7, 1966.

APPENDIX 'A'

Employment of Northern Residents

The Problem

Over the years the Department of Indian Affairs and Northern Development has assumed a major responsibility for certain operations in the Northwest Territories. In carrying out programs to meet the needs related to these responsibilities, difficulties have been experienced initially in obtaining the type of staff required, and subsequently in holding those persons who prove suitable. Similar problems are encountered in southern Canada, but they are more serious in the north. It must be anticipated that this situation will continue to hamper government operations in the north as long as the bulk of staff is recruited in southern Canada.

The problem is:

Assuming northern job tenure will be better amongst qualified indigenous residents of the north, how does Government increase the effectiveness of training, recruitment, and retention of northern people in northern Government positions?

Background of Problem

In almost every instance where position requirements call for a moderate level of academic knowledge and training, as well as a considerable amount of experience, which is the pre-requisite for most northern positions, departments have been forced, in the past, to recruit in southern Canada. The low academic level of native northern residents, more directly related to limited education opportunities than to ability, has made it difficult to recruit in the north even though the intent of the employing departments has been sincere. With the limited opportunities for employment thus imposed on northern residents there has been little opportunity for them to gain the experience which is the other basic requisite for employment.

There must also be a long range objective of reducing the financial burden of recruitment in the south, with its attendant high costs of relocation of families in the north only to have a large number, after a short period of service return south. There is also a moral obligation that northern people should have every opportunity to prepare themselves for employment in positions that have a direct influence on their own lives and the future of the north.

The education system of the north has now reached the stage where it is producing persons with education levels up to and including senior matriculation. Many of those who achieve senior matriculation will go on to higher education, while many who achieve a lesser standard will attend vocational training institutes of various types. On graduation from these programs, a number of the graduates will wish to return north. Of these, it is expected a number will find their way into

- 2 -

private industry while others, because of their educational background and training, will be able to obtain entry positions in the Government service through normal procedures.

It is recognized, however, that many with education of senior matriculation or below, will not wish to take further formal education and training and, unless special arrangements are made for them, there will be little opportunity for their employment or future advancement. All but a very small number of jobs in the public service require entrants to have not only a certain standard of education and training but also a considerable amount of practical experience.

Present Policies and Procedures of the Department of Indian Affairs and Northern Development

It is evident that the time has now come for formulating Government employment policies that will ensure placement of substantial numbers of northern residents in Government service. To be successful, these policies must recognize the special conditions existing in the north and make special provision for encouraging northern residents to enter Government employment with all departments and agencies operating in the north.

The intent of the Department of Indian Affairs and Northern Development is not only to provide local residents with employment per se, but also to provide them with a means whereby, through employment in government service in the north, they can achieve positions of responsibility.

To do this, the Department has adopted certain special procedures of hiring and training, which are the result of co-operation between the Department, the Treasury Board, the Civil Service Commission, and the Government of the Northwest Territories. These procedures are applicable to all residents of the Northwest Territories. Where it is beneficial to the Department that an employee be fluent in a specific language other than English, however, preference is given to those with this fluency. In some areas this preference could open the doors of employment to persons with Indian or Eskimo dialects and thus give them an advantage in employment opportunities.

The following policies are adopted by the Department of Indian Affairs and Northern Development for giving preference in the North to local residents:

Prevailing Rate Positions

Unskilled and Semi-skilled Classifications

In these classifications first preference is given to residents of the settlement in which the position is available, followed by area, region, and district preference.

... 3

- 3 -

Skilled Trades

Journeyman Level

Because of the general shortage of skilled tradesmen at journeyman level of occupational competence at the moment, preference is given to residents of a region, followed by district preference.

Apprenticeship for Prevailing Rate Trade Positions

To overcome the problems of shortage of skilled journeymen tradesmen in the north, apprenticeships have been established in the majority of skilled trades. Forty-one apprentice tradesman positions have been provided in Government service in which residents have the opportunity to begin work with varying levels of knowledge and background and be paid for their services in employment at a rate commensurate with their knowledge. They are trained over a period of time to a level where they can achieve a standard acceptable throughout Canada and the Government service. In many cases this is an interprovincial standard. Occupations chosen for apprenticeship by the Department are those for which the greatest difficulty in recruitment and retention has been experienced. These occupations have been analyzed and training programs produced. Under this program 25 occupations are included.

Classified Civil Service Positions

Clerical, Regulatory, and Secretarial, Stenographic, Typing Series

All positions at the entrance level in these series (that is up to and including C.R. 2 and S.T. 4) will be restricted by competition to residents of specific areas of the Northwest Territories. In competitions for these positions, two eligible lists will be established. The first will include those who meet all of the qualifications for the positions and the second will include those who meet the education requirements but not the requirements of knowledge and experience. Vacant positions will be offered initially to those who have fully qualified. If all these persons become employed and positions are still vacant, persons on the second list (that is those who have not met the knowledge and experience requirements) will be placed in the positions at a lower classification. In this classification they will be given a period of probation to reach the level of knowledge and experience required to fill the vacant position, although this may possibly be at a classification lower than that established. If by the end of the period of probation they do not meet the requirements they will be released.

... 4

- 4 -

Apprenticeship for Classified Positions

Since many of the classified civil service positions in the north not only require a large amount of knowledge and experience, sometimes of a specialized nature, but also specific levels of education in certain categories, the Department of Indian Affairs and Northern Development has established apprenticeship positions in the clerical field at two levels, in selection and placement work, and in engineering technology. All positions are specifically applicable to northern work and are administered in the same way as the other apprenticeships.

Selection and Placement Service

Selection and placement is one of the more important aspects of the Department of Indian Affairs and Northern Development work in the Northwest Territories. Through Selection and Placement officers in each region, the majority of whom have considerable experience in the north, the Department is kept in constant touch with the needs and requirements not only of trainees, employees and potential employees in the Northwest Territories, but also of employers. These officers offer the services of the Department and its facilities to any person requiring training or employment, or to employers who have job vacancies or a need for up-grading their employees. Selection and Placement officers counsel residents before they take training, while they are on a training course (if this course is in the Northwest Territories), on graduation from the course, and in the early period of employment. They work with employers by conducting interviews with potential employees, and recommend to employers those persons considered suitable for specific types of work. They also work with employers to set up training programs on the job, either for potential employees or for employees who need additional training. Since they also act as agents of the Department of Manpower and Immigration (National Employment Service) for the Northwest Territories, they are able to make arrangements for residents to use the services of that organization. In the field of apprenticeship and occupational certification they work with the apprentice and with the employer, whether civilian or governmental, to ensure that the stipulated training program is covered and that all requirements are met. In occupational certification, they administer the qualifying examinations and carry out all additional administrative procedures.

Recommendations for Solution to the Problem

The Department of Indian Affairs and Northern Development has been developing education programs whereby northern residents can be and have been up-graded to a level where their employment by all Federal departments and agencies working in the north can be increased. Continued training-on-the-job and the opportunity to gain experience in work situations is becoming increasingly essential.

... 5

- 5 -

In addition to the regular programs of academic and vocational education and placement, the Department is giving increasing emphasis to adult education and community development programs designed especially for the Indian, Eskimo and Métis people. These programs will result in a much better understanding of and adjustment to wage employment by these people.

The Department of Indian Affairs and Northern Development has established an objective of filling 75% of its positions in the Northwest Territories with residents of the Northwest Territories in the next ten years and will make every effort to achieve this. It is realized that in some departments where a very large percentage of total establishment consists of positions calling for high academic and technical qualifications, a similar objective might not be reached in ten years. The attainment of this objective would, however, be accelerated if training positions were established as suggested above. Under such circumstances it is felt that this objective is realistic. A well co-ordinated program can produce results, and employers, both government and private, will benefit by having a lower turnover in their work forces which, in turn, will result in reduced costs. Also, because of longer tenure and familiarity with local conditions, the work force efficiency should be increased.

how many?

Recommendations:

Based on government policy for Northern Development and in relation to the specific programs being developed by the Department of Indian Affairs and Northern Development, it is recommended that,

1. Federal departments working in northern Canada:
 - (a) Establish an objective of filling 75 per cent of their northern positions with northern residents by 1977.
 - (b) Adopt a policy of training northern residents for northern positions through training-on-the-job, apprenticeship, or other means whereby both formal education and practical training may supplement each other to lead to gainful employment.
 - (c) Consult Training and Selection and Placement Service Personnel of the Department of Indian Affairs and Northern Development to facilitate achieving the above objectives.
2. Training positions for apprentices who will be trained and work in federal departments should be added to the establishments of those departments.

SUMMARY OF VOCATIONAL TRAINING PROGRAM 1965/66

1965-66	Applicants Interviewed	3,100
	Job Placements	750 (Does not take account of employment found by other means)
1966-67 (To date)*	Employers Interviewed	205
	Applicants Interviewed	870
	Job Placements	274 (Does not take account of employment found by other means)

*These statistics cover only 2 months for Keewatin Region due to sickness of S & P Officer.

These statistics cover only 1 month for Frobisher Region - Job was vacant for remainder.

These statistics cover only 3 months for Fort Smith Region - Job was vacant for remainder.

SUMMARY OF VOCATIONAL TRAINING, APRIL 1, 1965 - MARCH 31, 1966.

<u>Type of Training</u>	<u>Location</u>		<u>No. of Trainees</u>			<u>Remarks</u>
	<u>In</u>	<u>Out</u>	<u>E</u>	<u>I</u>	<u>O</u>	
Academic Up-grading	12	21	13	14	6	
Academic Up-grading and Assessment	9			4	5	
Accounting	3				3	Correspondence courses.
Aircraft Maintenance Technician		1			1	
Agriculture		1	1			
Architectural Technology		1			1	
Art		3	1		2	One is taking Commercial Art.
Art and Academic Up-grading		2	2			
Art and Printmaking	5		5			
"Automotive"		1	1			
Automotive Mechanics (Theory)		1			1	Apprentice.
Automotive Service Technology		1			1	
Baking		2	2			One trainee, two courses.
Basic Bookkeeping	26			1	25	
Basic Inventory Control	1				1	Correspondence Course.
Barbering		2	1		1	
Beauty Culture		2	1		1	
Boat Building		6	3	1	2	
Caretaker	32		32			Two of the trainees took part of course outside.
Carpenter	1	21	14	4	4	Seven apprentice theory incl.
Child Nursing and Care		3		1	2	
Civil Technology		2			2	
Classroom Assistants		11	11			
Clerical	1				1	
Clerk Typist		3			3	
Commercial and Clerical Training		2	2			
Commercial Cooking	4		4			At Sir John Franklin School
Commercial Pilot	1	1			2	
Commercial Pilot (Instrument Rating)		3			3	
Commercial Radio Operator		2			2	
Commercial Teacher		2			2	
Community Health Worker	1	10	1	6	4	
Co-op Manager		5	2	2	1	
Craft Management	1		1			
Diesel Mechanics		2			2	
Domestic Service		1	1			

...2

- 2 -

<u>Type of Training</u>	<u>Location</u>		<u>No. of Trainees</u>			<u>Remarks</u>
	<u>In</u>	<u>Out</u>	<u>E</u>	<u>I</u>	<u>O</u>	
Electrical (Factory Worker)		2	2			
Electrician (Construction)		3		1	2*	*Theory for Apprentices.
Electrician (Plant Maintenance)		8	4		4	Seven are Apprentices (Theory).
Electronics Technology		8			8	
Equipment Mechanic	1		1			
Fish Processing		1	1			
Fur Grading		12	12			Course held at Churchill.
Grader Operator	1		1			
Guiding (Big Game)	20			13	7	
Hairdressing		5	1		4	
Handicrafts Art		1		1		Correspondence Course.
Handicraft Management	2		2			
Heavy Duty Equipment Mechanic		6	2		4	All six Apprentice Theory.
Heavy Duty Equipment Operators	1	13	7	3	4	
Heavy Duty Equipment Technology		1			1	
High School Commercial Pattern		1			1	
Home Economics Teacher		2			2	
Hospital Administration	1				1	Correspondence Course.
I.B.M. Accounting		1			1	
I.B.M. Computer Operator		1			1	
Industrial Electrical Technology		1			1	
Janitorial	12		8	4		
Laundry Worker	1			1		
Machinist		2			2	Both Apprentices. (Theory).
Marine Engineering		1			1	
Master, Minor Waters		1			1	
Medical Records Librarian	1				1	Correspondence Course.
Medical Secretary		1			1	
Mine Surveyor		1			1	
Mining Technology		1			1	
Motor Vehicle Operator (Taxis)	6			3	3	
Motor Vehicle Repair (Body)		1			1	Apprentice Theory.
Motor Vehicle Repair (Mechanical)		1			1	Apprentice Theory.
Music		1			1	
Nursing		4			4	
Nursing Aide		9	1	4	4	
Nursing Aide Screening Course	4			3	1	

...3

000684

- 3 -

Type of Training	Location		No. of Trainees			Remarks
	In	Out	E	I	O	
Outboard Motor and Pump Repair, Maintenance		1			1	
Painter	1			1		Apprentice.
Painting and Decorating		5	4		1	All apprentices.
Postal Clerk		1	1			Course at Church-ill.
Power Plant Engineering	4		2		2	All correspondence.
Practical Marine Mechanics	10		10			
Practical Mathematics	1		1			
Pre-employment (Assessment)	1				1	
Pre-employment (Assessment and Heavy Equipment)	1				1	
Pre-employment (Carpentry)	1				1	
Pre-employment (Mechanical)	1			1		
Pre-employment (Orientation)	6			4	2	
Pre-vocational (Assessment)	2			1	1	
Pre-vocational (Automotive)	1				1	
Pre-vocational (Carpentry)	1				1	
Pre-vocational (Municipal Labourer)	1				1	
Pre-vocational	1				1	
Public Administration	2				2	Correspondence Courses.
Public Health Inspector		1			1	
Radio and T.V. Arts		1			1	
Radio and T.V. Repair		1			1	
Recreation Leadership		1			1	
Resources Management Technology		1			1	
Sawmill Operation	5		1	2	2	
Science Lab Technician	1				1	
Secretarial		2			2	
Small Business Management (See also "Bookkeeping")	21		2		19	
Stationary Engineer	4		1		3	
Stenographic		2			2	
Structural Technology		1			1	
Surveying		1			1	Correspondence Course.
Tannery Operation	3		1	1	1	
Vocational Preparatory (Pre-carpentry)		1		1		
Waiter, Waitress	7		4	2	1	
Welding		2			2	
	222	222	167	79	198	(444 trainee courses.)

...4

- 4 -

<u>Vocational Training at Sir John Franklin School</u>	<u>E</u>	<u>I</u>	<u>O</u>	<u>Total</u>
Orientation	9	35	23	67
Auto Mechanics	2	4	4	10
Carpentry	-	6	-	6
Home Economics	6	5	6	17
Heavy Duty Equipment Operation	3	3	3	9
Heavy Duty Equipment Repairs	1	4	5	10
Commercial	10	5	12	27
Printing Shop Operation	-	-	1	1
Commercial Cooking	4	-	-	4
	<u>35</u>	<u>62</u>	<u>54</u>	<u>151</u>

Churchill Vocational Centre

Orientation	164	-	-	164
-------------	-----	---	---	-----

GRAND TOTAL:	<u>366</u>	<u>141</u>	<u>252</u>	<u>759</u>
--------------	------------	------------	------------	------------

- Notes:
- (1) "In" (first column of figures) means Inside the Northwest Territories.
 - (2) "Out" (second column of figures) means Outside the Northwest Territories.
 - (3) "E", "I", and "O" are abbreviations for Eskimo, Indian, and "Other".
 - (4) Of the 444 "trainee courses" outside our own vocational schools, 127 originated from the Arctic District Office and 317 from the Mackenzie District Office.

Advisory Committee
on Northern Development



Comité consultatif de la mise
en valeur du Nord canadien

DOCUMENT XND-33

MEMORANDUM TO THE ADVISORY
COMMITTEE ON NORTHERN DEVELOPMENT

Mid-Canada Development Foundation, Inc.

A concept for "Canada North Development Corridor" was presented as a planning report prepared by ACRES Research and Planning Ltd. This report was commissioned by Mr. Richard Rohmer. The planning concept was much publicized at the time, and the interest generated culminated in the Mid-Canada Development Corridor Conference held at Lakehead University in Port Arthur, August 18 - 22, 1969.

The Acres report focussed on an integrated transportation and development corridor extending from Newfoundland across the northern parts of the provinces to the west coast. Three northern projections of the corridor were shown extending into the territories, one along the west coast of Hudson Bay, another along the Mackenzie Valley into the Delta area and the third into the Yukon. The corridor concept with its proposal for massive transportation investments was studied within the federal departments most involved in northern development and on balance was not considered to be feasible. Accordingly, these departments (IAND & EMR) did not send delegates to the conference at Port Arthur.

It was supported by some 200 officials from various sectors of Canadian life, either on the full membership basis (\$5,000 fee) or as observers (\$200 fee). Two officers of the federal government attended as observers, Mr. André Saumier, Assistant Deputy Minister, Department of Regional Economic Expansion and Mr. R.R. Cope, Commissioner, Canadian Transport Commission, in accordance with a Cabinet decision. Messrs. Saumier and Cope submitted a report on the conference to the Minister of Regional Economic Expansion. There was, however, significant support from the public sector. Patrons included His Excellency Roland Mitchener, Governor General; the Right Honourable Lester B. Pearson; and the Honourable Leslie Frost. Senior public servants present included Dr. O.M. Solandt, Chairman of the Science Council; and Dr. W.G. Schneider, President, National Research Council.

The conference did not endorse the transportation links envisaged in the Acres report but did examine the advantages of establishing a nationwide plan which could be identified and supported by the

- 2 -

Canadian public as well as the federal and provincial governments. According to Messrs. Saumier and Cope many of those present supported Mr. Rohmer who suggested:

- (a) That it would be a good idea to define our nation's goals with respect to development of the Canadian Mid-North;
- (b) That development planning, both in the public and private sectors, should be initiated and expanded quickly if we are to meet these goals in a more efficient and orderly way;
- (c) That in our policy-making and planning, we must seek to avoid and overcome the mistakes of the past such as the degradation and exploitation of native populations, the wanton pollution of air and water, and the indiscriminate destruction of what is alleged to be the only pure and untouched habitable region left on the continent;
- (d) That early action may be necessary to preserve sovereignty and control over some parts of the nation.

Messrs. Saumier and Cope recommended the federal government keep in touch with the MCD CF through having observers in attendance at activities and that the question of full membership be held in abeyance. This is the course that has been followed.

Since the meeting at Lakehead University in August, 1969, members have participated in several field study trips to points in the "corridor" area. Members assigned to task forces have examined the fields of Ecology and Environment, Resources, Communications, Transportation, Urbanization, Industrialization and Financing and Trade Implications.

The report of the Mid-Canada Conference which will consolidate the results of these studies will be ready by about February 1st, 1971, and Mr. Rohmer has indicated that he will present this report to the Prime Minister as soon as possible after that date. As a possible response to the question as to what the Government is expected to do about the report and its recommendations, Mr. Rohmer (i.e. the Mid-Canada Development Foundation, Inc.) has now prepared a draft proposal for the creation of an independent agency called the Mid-Canada and Arctic Council. This has been given to the Department of I.A.N.D. on an informal basis with the request for comment. The Department feels that it is essential that the Prime Minister and the Cabinet receive comments and recommendations on the proposal, if possible, before it is presented to them.

- 3 -

The Department of I.A.N.D. has prepared the attached summary of and comments on the proposed Council as a possible basis for a paper to Ministers. It would be appreciated if Members of the Co-ordinating Committee would consider these comments and come to the January 19th meeting prepared to discuss them. This discussion would then lead to the preparation of recommendations from the A.C.N.D. to Ministers.

SUMMARY

PROPOSED MID-CANADA AND ARCTIC COUNCIL

PURPOSES

As an agency independent of government:

- to cause and direct such research as it deems fit into land use, economic, sociological, cultural and other matters concerning the planning and orderly development of the Mid-Canada and Arctic Regions, and to report to the government and people of Canada on its findings;
- to take inventory of the research being undertaken by all Canadian governments, institutions, agencies and others in connection with Mid-Canada and the Arctic; to create a data bank; and to coordinate the interchange and dissemination of such data and other research information;
- to inquire into and report upon such matters as governments or government agencies, industries or others might request concerning specific matters of concern having to do with the planning and orderly development of the Mid-Canada and Arctic Regions;
- to act as a repository for new planning and developmental concepts which might have application in the Mid-Canada and Arctic Regions and to aid in the furtherance of the examination and where practical, the implementation of such new concepts and approaches.

COMMENTS

The four purposes, if accepted, would establish an agency with very broad responsibilities for research, both for its own ends and on behalf of governments and private enterprise. The research could embrace all aspects of social, economic and industrial planning and development in and for the Mid-North. The agency would also have some basis for action in implementing plans for the Mid-North.

If it is to be "the" research agency for such a large area of Canada then there is the problem of relating with the several governments, the industrial interests, and the other research institutes oriented to the north.

There may well be a role for a Council to pull together, evaluate, record and disseminate information on research projects and perhaps also identify problems on which research is required. The Government must be free, however, to deal with all the other

- 5 -

agencies which are doing work in the northern area, e.g. The Arctic Institute, the National and Provincial Parks Association, the Canadian Council of Resource Ministers, the Canadian Wildlife Service, etc.

The proposed Council should not become a policy formulating or implementing body. Federal Government Departments do have statutory responsibilities for policies and programs in the North and these must be maintained.

CORPORATE STRUCTURE AND MEMBERSHIP

This Council would be an independent agency created by Federal Legislation which does not have as an integral part of its membership any of the various levels of government and which:

Alternative (1)

has as its Board of Directors (eg. 30) a broad cross-section of Canadians with an involvement and interest in the planning and orderly development of the Mid-Canada and Arctic Regions. Said Board to be elected by its membership;

has as its membership Canadians who have an interest in the planning and orderly development of the Mid-Canada and Arctic Regions; provided that non-nationals and foreign or foreign controlled Canadian corporations would be entitled to Associate Membership rather than full;

or,

Alternative (2)

the Council might be limited in number (eg. 30) with Council membership appointed by the Federal and Participating Provincial Governments from the national community who are not members of the Senate House of Commons or Legislature and are not persons engaged or employed by any of the Provincial or Federal Governments.

Membership in the Council would be open only to Canadians either as individuals or as representatives of Canadian controlled corporations.

Associate membership would be available to the Canadian public, including foreign controlled Canadian corporations.

COMMENTS

If the proposed Council is not in fact to be a policy formulating body it should not be "created by Federal legislation". It cannot be set up or operate like the Economic Council, for example, which is part of the Government structure and is an instrument of Government policy formulation and execution.

The Government should indicate it would be willing to support an organization in this field which would be independent of Government in the statutory sense and not dependent entirely on Government for financing. It would not be made up of members appointed by the Government but of interested citizens and a central organization to direct the work of the Council. This kind of structure will also make possible the involvement of Provincial Governments in the work and financing of the Council.

FINANCING

Primary financing to be by an annual Federal Government grant together with supplementary financing by:

- (a) Provincial grants
- (b) Private sector membership fees
- (c) Grants or fees paid for performance or specific projects.

COMMENTS

It is a question whether any organization or Council will emerge without some government financial assistance. An independent "non-governmental" body should not be funded primarily by the Federal Government as suggested in the proposal. It should generate its support from the community as a whole.

It is suggested, however, that it might be necessary for Governments to make some initial "start-up" grants to meet the funding requirements at the beginning, perhaps diminishing over a stated period and perhaps even ceasing when the group can support itself from non-government sources.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
January 12, 1971.

**Advisory Committee
on Northern Development**



**Comité consultatif de la mise
en valeur du Nord canadien**

DOCUMENT XND-32

MEMORANDUM TO THE ADVISORY
COMMITTEE ON NORTHERN DEVELOPMENT

Polarquest '71

Pallister and Associates has applied to the Department of Indian Affairs and Northern Development in order to obtain approval that allowable expenditures will satisfy work commitments under the oil and gas regulations.

This work is part of a 4 year program of geological and geophysical surveys covering a large area of the Arctic Ocean and Arctic Islands.

Under this intensive scientific probe of the Arctic, the following outline of disciplines will be included in the 1971 program.

Geologic Program

A completion of the air-photo interpretation will be the main objective.

Bathymetric Program

The Bathymetric surveys available in the 1970 program to be updated.

Environmental Program

A comprehensive multi-year ecologic survey will be presented in 1971, to be conducted by a team of Canadian scientists. This study will enable the oil industry to look into and solve some of the possible ecologic and pollution problems that will arise from exploration drilling or production in the Arctic.

Aeromagnetic Program

Regional aeromagnetic data are available through Polarquest covering nearly the complete region.

Gravity Program

Further regional gravity work is required in order to complete the coverage of the Arctic Islands. A survey of Banks Island is contemplated. Interpretation of new gravity data recorded by the Polar Continental Shelf Project in the Beaufort Sea is also considered.

Seismic Reflection Program

The following reflection surveys are scheduled for 1971.

- (a) A marine seismic survey in the waters of the Parry Channel and extended to the Sverdrup Basin.
- (b) A marine seismic profile along the west side of Banks Island.
- (c) A marine seismic survey from Atkinson Point northeast along the coast of Tuktoyaktuk Peninsula.
- (d) An on-ice survey in the area offshore Canada's north slope being carried out during winter 1970-71. Marine seismic crews will work in shallow water.

Offshore Drilling Feasibility Program

Included in the 1971 program will be phase 11 of the Offshore Drilling Feasibility Study and will involve the gathering of new data and make recommendations of design drilling equipment.

Remote-sensing Program

Use of newer remote-sensing and mapping techniques to be included in 1971 program.

Multi-Discipline Surveys

In addition to the individual surveys above, it is expected to include two integrated surveys which deal with particular geologic problems of interest to all companies exploring in the Arctic Islands.

- (a) Piercement Dome - a complete study of a particular piercement feature involving geologic, gravity, magnetic reflection/refraction and coring responses of this type of feature.
- (b) Sverdrup Basin - an integrated study involving geology, gravity magnetics and seismic refraction could be considered to be another in-depth study of value to all companies working in the Arctic.

This proposed comprehensive 1971 program is brought to the attention of all members, as it is considered to be a program which fits in with the general concept of northern development. Undoubtedly some of these surveys will require assistance in one form or another from those departments of the Federal Government who supply services.

- 3 -

It is recommended that the Committee endorse this program and where practical and if requested provide such services in support of this program.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
January 11, 1971.

**Advisory Committee
on Northern Development**



**Comité consultatif de la mise
en valeur du Nord canadien**

DOCUMENT XND-35

MEMORANDUM TO THE ADVISORY
COMMITTEE ON NORTHERN DEVELOPMENT

Further Investment in
Panarctic Oils Ltd.

-- The following documents are attached:

1. Summary of proposals.
2. Memorandum to Cabinet.
3. Annual Report 1969.
4. Canadian Resident Ownership
of Oil and Gas Resources in the North.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
January 13, 1971.

FURTHER INVESTMENT BY THE CROWN IN PANARCTIC OILS LTD.

SUMMARY

1. Problem

To provide Cabinet with information enabling it to determine the appropriate course or courses of action to be adopted in respect of future government participation in Panarctic.

2. Objectives

To continue government's 45% equity interest in and effective participation through Panarctic in the development of Canada's natural resources.

3. Factors

Include a detailed account of Panarctic's affairs and activities which have occurred subsequent to 19th January, 1970, including its plans in respect of its exploration programme for the years 1971 and 1972 and proposed recapitalization by the creation of 2,600,000 new preferred shares.

4. Alternatives

- (a) For the government to maintain its current 45% interest in Panarctic;
- (b) For the government to maintain less than its current 45% interest in Panarctic; or
- (c) For the government to veto the proposed capital expansion.

5. Financial Considerations

A further investment of the government of \$11,700,000 in Panarctic in addition to its current combined investment and obligation of \$22,556,250.

6. Public Relations Considerations

Basically speaking, good support for further investment.

7. Conclusions

A Government opportunity for a further profitable investment.

8. Recommendations

That the Minister of Indian Affairs and Northern Development be authorized to

- (a) vote the government shares in favour of recapitalization;
- (b) commit the government to the purchase of \$11,700,000 worth of preferred shares together with the authority to make payments therefor;
- (c) include requisite sums in the Estimates 1971-72 and 1972-73;
- (d) vote the government's shares in favour of future recapitalization made necessary to fund an annual Panarctic budget of \$17,800,000; and
- (e) commit the government to purchase shares in respect of new capitalizations to maintain its 45% interest together with the authority to make payments therefor in amounts not exceeding an aggregate of \$8,000,000 per year.

December 1970

THIS DOCUMENT IS THE PROPERTY OF THE GOVERNMENT OF CANADA

CONFIDENTIAL

December , 1970

MEMORANDUM TO THE CABINET

TITLE FURTHER INVESTMENT BY THE CROWN IN PANARCTIC OILS LTD.

BODY

1. Problem

The decision of the Cabinet Committee on Economic Policy and Programs at its meeting of 19th January, 1970, confirmed by the Cabinet, 22nd January, 1970, directed that a further review of the affairs and activities of Panarctic Oils Ltd. be submitted during the Autumn of 1970, prior to the Special General Meeting of the shareholders of Panarctic scheduled for 16th December, 1970, to enable the Committee to determine the appropriate course or courses of action to be adopted in respect of future government participation in Panarctic.

2. Objectives

To provide for the maintenance of the Government's 45 per cent equity interest in Panarctic Oils Ltd. through continuing investment of additional funds in order to continue the effective participation of the Government in the development of Canada's natural resources.

3. Factors

- (1) Under its farmin agreements, Panarctic may earn varying interests in areas of approximately 44 million acres in Canada's Arctic Islands. These agreements fix Panarctic with a legal obligation to drill 20 wells and carry out specific geological and geophysical surveys. By drilling additional wells at its option, Panarctic may further increase its percentage interest in the Arctic Island areas. Geophysical exploration conducted in 1968, 1969 and 1970 have indicated many first class drilling prospects in addition to those upon which wells must be drilled and the industrial participants in Panarctic would not consider reducing Panarctic's rate of exploration until at least some of these additional prospects have been tested. Nine of the drilling obligation wells and some of the option wells have been farmed out to other companies who may earn in turn, a portion of Panarctic's interest in certain portions of the Arctic Island areas.
- (2) Panarctic has drilled six wells, and is currently drilling two others - these include two gas discoveries. Panarctic Oil Drake Point N-67 in northeast Melville Island flowed gas at rates of 10 million and 13 million cubic feet per day from thick sand zones at approximately 3,700 and 4,700 feet respectively. Panarctic Oil King Christian D-18 on King Christian Island encountered gas at approximately 2,000 feet flowing at an estimated rate

- 2 -

of up to 50 million cubic feet per day. Current information of each of the Drake Point and the King Christian wells gives evidence of major gas accumulations rating in size possibly among the first 20 gas pools discovered in Canada to date.

Panarctic Drake Point N-67 blew out and took fire on 31st August, 1969, as did Panarctic Christian D-18 on 25th October, 1970. Panarctic has extinguished the fire and brought the Drake Point well under control and the total additional cost to Panarctic to finally secure the well is estimated at approximately \$4,000,000 after realizing upon the insurance coverage. The additional costs of the King Christian well may be in the order of \$2,000,000.

- (3) As of September 30, 1970, Panarctic has earned under the farmin agreements, pursuant to its exploration programme, an aggregate of 23,000,000 net acres out of a potential of 36,000,000 net acres and by means of farmout agreements has secured an interest in the residue.
- (4) By the end of 1970, Panarctic will have expended some \$39,000,000. Its presently authorized capital of \$50,000,000 (all of which has been issued in consideration of full payment by all participants in respect thereof by July 15, 1971) will provide sufficient funds to cover the remaining well which it is obliged to drill under the farmin agreements if costs of controlling and abandoning the Panarctic Drake Point well in Melville Island and the Panarctic King Christian D-18 well in King Christian Island remain within the amount presently forecast.
- (5) While drilling by Panarctic of wells to be completed on various dates by the end of 1971, will complete Panarctic's firm obligations under the farmin agreements, Panarctic is geared up to carry on a continuous drilling programme to drill at its option, additional wells under the farmin agreements that will earn for Panarctic the maximum interest obtainable under these agreements. In addition to completing the obligatory wells, and option wells to earn an interest in farmin lands through to the end of 1972, it is believed desirable in order to increase chances of making an early discovery that Panarctic also drill upon other locations which have been identified in the course of its exploration as the most prospective. It is proposed that the first of these 'geologically desirable' wells be drilled late in 1971, and two more in 1972.
- (6) Panarctic's exploration staff is set up to develop drilling prospects beyond those currently delineated and has expertise in Arctic work to proceed with an efficient balanced exploration programme if drilling can be planned ahead. Acting on the advice of its exploration department, Panarctic has contracted for essentially three drilling rigs and has established supply and support facilities for a continuous drilling programme. The timing for drilling has been scheduled by Panarctic, having regard to the most economic use of each rig suitable for a particular location, while meeting commitment dates under the farmin agreements.

...3

- 3 -

- (7) For this most efficient and effective exploration operation Panarctic has planned and budgeted \$17.8 million per year commencing 1971 - which, if the Government is to retain its 45 per cent equity interest, will involve the Government in an aggregate yearly expense of \$8,000,000.
- (8) In order to carry out the programme planned in 1971 and 1972 an additional \$26,000,000 is required over the currently authorized \$50,000,000, which will be expended under the current plan by August, 1971.
- (9) By notice of 6th November, 1970, all participants and shareholders of Panarctic including the Government were advised of the nature of the matters to be raised at the Special General Meeting of the shareholders of Panarctic scheduled for 16th December, 1970, namely
 - (a) the introduction of a by-law, increasing the authorized capital of Panarctic Oils Ltd. by the creation of an additional 2,600,000 preferred shares of the par value of \$10.00 each;
 - (b) the subsequent application for the issuance of supplementary letters patent authorizing the creation of the shares mentioned in item (a); and
 - (c) the consideration and subsequent commitment to take up the shares resulting from the recapitalization mentioned in item (a) by the Crown and the participants before 1st March, 1971, in the same ratio as at present.
- (10) Under the constitutional documents of Panarctic Oils Ltd., the Government has the right to veto the issue of supplementary letters patent authorizing the creation of additional share capital and thus may effectively prevent Panarctic from implementing its proposed recapitalization and it is essential that the undersigned have the direction of the Cabinet in respect of the further participation of the Government in Panarctic Oils Ltd. before the meeting of 16th December, 1970.

4. Alternatives

- (1) To acquiesce in and lend the support of the Government to the proposed recapitalization and continuing exploration programme of Panarctic in order to maintain the current 45 per cent interest of the Government. While it is currently impractical for Panarctic to consider a public offering of its stock, the public is aware of its activities (1969 Annual Report, attached as Appendix I) and indications are that the industrial

...4

- 4 -

participants in Panarctic would be more than willing to take up all or any part of the Government's shares to the exclusion of the general public. A continuing 45 per cent Government involvement in Panarctic will

- (a) maintain the Government's equity interest in what promises to become Canada's largest oil company and thus earn for the people of Canada a direct interest in a profitable venture;
 - (b) maintain the Canadian investment in Panarctic in excess of 70 per cent which, without Government participation, would be reduced to less than 57 per cent;
 - (c) maintain Canadian ownership and control of the oil and gas rights over a very large section of a potentially very rich oil and gas basin which, without the existence of Panarctic, would have been 24.5 per cent Canadian owned instead of the current 34 per cent (see Appendix II for other relevant relationships contingent upon Panarctic's existence and the current Government involvement therein);
 - (d) stimulate the possible development of latent resources to provide an economic base for the Arctic region with attendant benefits to help balance Canada's international payments;
 - (e) maintain the present good working relationship and influence of the Government directors within Panarctic, and reinforce the real sense of identity of Panarctic with respect to its employees and its capacity to become a vital and competitive member of the oil and gas business community independent of any one of the consortium of companies which may own many of its shares; and
 - (f) maintain all the existing checks and balances fixed by its constitutional documents in favour of the Government.
- (2) To acquiesce in and lend the support of the Government to the proposed recapitalization and continuing exploration programme of Panarctic and maintain a lesser or no additional Governmental financial interest therein.

If the Government interest is reduced to only 40 per cent, the Government will lose absolute control over the issue of any securities for which the consent of the owners of at least 60 per cent of the share capital of Panarctic is required.

If the Government interest is reduced to less than 10 per cent, the Government will lose the right to veto

- (a) the transfer by any shareholder of his shares in Panarctic; and
- (b) any amendment or modification of the by-laws or letters patent of Panarctic.

- 5 -

This right of veto permits the Government to ensure continuing Canadian ownership and control of Panarctic and to enforce reasonable programme planning, budgeting and relevant financing to ensure that it is not manouvered out of the venture because of its inability to respond quickly to novel financial demands.

- (3) To veto the issue of supplementary letters patent authorizing the creation of additional share capital and thus effectively prevent Panarctic from carrying on any further activities after 1971. This alternative would not appear to comprise a reasonable or responsible alternative course of action and is presented only as a nominal possibility.

5. Financial Considerations

- (1) The Government has acquired and maintained a 45 per cent equity interest in Panarctic Oils Ltd. through its previous investment in aggregate of \$22,556,250. Up to October 15, 1970, payments have been made in an aggregate amount of \$18,033,750 and further payments will be made in installments of

- (a) \$2,250,000 on or before the 15th day of January, 1971;
- (b) \$1,750,000 on or before the 15th day of April, 1971; and
- (c) \$ 522,500 on or before the 15th day of July, 1971.

To maintain a 45 per cent equity in the \$26,000,000 supplementary financing necessary with respect to Panarctic's 1971 and 1972 exploration programme, the Government must subscribe for an aggregate of 1,170,000 preferred shares of Panarctic's capital stock of the par value of \$10.00 each at a price of \$10.00 per share and undertake to pay to Panarctic the full purchase price in installments of

- (a) \$1,675,000 on or before the 15th day of July, 1971;
- (b) \$2,025,000 on or before the 15th day of October, 1971;
- (c) \$2,000,000 on or before the 15th day of January, 1972;
- (d) \$2,000,000 on or before the 15th day of April, 1972;
- (e) \$2,000,000 on or before the 15th day of July, 1972; and
- (f) \$2,000,000 on or before the 15th day of October, 1972.

- (2) To maintain a 45 per cent equity in further supplementary financing necessary with respect to Panarctic's exploration programmes beyond 1972, to be budgeted by Panarctic at a rate of expenditure of \$17.8 million annually, the Government must subscribe for Panarctic's capital stock and undertake to make payments in respect of that subscription at a rate, in the aggregate of \$8,000,000 per year.

- (3) If Panarctic were to make an oil discovery of commercial size, heavy additional expenditures would be required for the drilling of numerous development wells and for production, storage and transportation installations. It is expected that funding for such possible expenditures would be arranged largely through debt financing.

- (4) If the Panarctic venture is successful and leads to production of oil and gas for transport to national and world markets, significantly large expenditures will be required by Government departments to provide service to Panarctic principally through expansion of, and improvements to, the Arctic infrastructure, notably airports, harbours, navigation aids, etcetera. However, it is expected that cost associated with public services required will be offset by significant revenues accruing to the Government from its interest in Panarctic as well as from royalties on all oil produced.

6. Federal-Provincial Relations Considerations

Because of the Government's vested interest in Panarctic which may, with good fortune, become Canada's largest oil company, there will be problems concerning northern oil supplies in competition with oil supplies by the western provinces, particularly in relation to allocation of crude oil to national markets and to Canada's share of U.S. markets, and to the issue of pipeline licences, and authorities for marine transportation of crude oil in Canada's Arctic waters.

7. Interdepartmental Consultation

In accordance with Cabinet's decision of January 19, 1970, the Minister of Justice has been examining the legal implications of future participation by the Government in the Panarctic venture, and for the guidance of Cabinet will timely report in the respect of the legal obligations already entered into by Panarctic under its existing agreements.

8. Public Relations Considerations

- (1) The original announcement of the Government participation in Panarctic Oils Ltd. in December, 1967, drew the commendation of members of Parliament, the public and the press. Subsequent to the discovery of oil in northern Alaska, and the rush for similarly prospective land in northern Canada, some members of the Industry have criticized the Government involvement but in balance, the views expressed nationally and internationally continue to be overwhelmingly in favour of the Panarctic arrangement.

It is considered that a decision to maintain the Government equity interest at least until Panarctic has earned a maximum interest under the farmout agreements would in balance, be commended highly and almost universally, whereas a decision to discontinue Government participation, and hence to provide these rights under terms of the Agreements to the limited few industrial participants now in Panarctic, would be condemned as a give-away, both by the public and generally by excluded members of Industry, particularly as the Government's investment in Panarctic has so greatly appreciated since the initiation of this unique exploratory venture.

- (2) Panarctic's exploration programme alone as well as those which it has served to stimulate, are developing a significant increase in Canadian technology suitable to northern terrain and climate. Air transport and marine transport services in the Arctic are consequently expanding and attendant improvements are being made in the infrastructure. All of these acti-


vities serve to demonstrate an effective occupation of Canada's frontier and affords further protection of Canada's sovereignty of the land area, and indirectly at least, a related jurisdiction over the marine routes, albeit ice covered for most of the year.

9. Conclusions

The Government has an obvious opportunity for a further profitable investment in Panarctic Oils Ltd. which will maintain the current 45 per cent in the primary venture for the benefit of the people of Canada and serve to maintain a greater resident control over the nation's natural resources.

10. Recommendations

- (1) That the undersigned be authorized to vote the Government's shares in favour of a by-law to be put before a Special General Meeting of Shareholders scheduled for 16th December, 1970, increasing the authorized capital of Panarctic Oils Ltd. by the creation of an additional 2,600,000 preferred shares of the par value of \$10.00 each.
- (2) That the undersigned be authorized to commit the Government to the purchase of the preferred shares mentioned in item (1) in an amount not to exceed \$11,700,000, including authority to make payments in each quarter of a fiscal year commencing 15th July, 1971, not exceeding \$2,000,000 together with authority to make additional payments in any quarter in an amount not expended in any previous quarter in addition to the payments with respect to which the Government is already obligated. The Government's position in all respects to be protected consistent with the terms of the Crown Agreement, *mutatis mutandis*.
- (3) That the sum of \$5,727,500 is identified as an investment item under Vote L-62 in the 1971-72 Estimates and that the sum of \$5,972,500, (being the balance of the \$11,700,000 commitment) be included in the 1972-73 Estimates.
- (4) That the undersigned be authorized to vote the Government shares in favour of future by-laws necessarily placed before Special General Meetings of shareholders in respect of future increases in the authorized capital of Panarctic Oils Ltd. necessary to timely fund, an annual continuing budget of not more than \$17,800,000.
- (5) That the undersigned be authorized to commit the Government to the purchase of shares in an amount sufficient to maintain its 45 per cent interest including authority to make payments in each quarter of a fiscal year not exceeding \$2,000,000 together with authority to make additional payments in any quarter in an amount not expended in any previous quarter. The Government's position in all respects to be protected consistent with the terms of the Crown Agreement, *mutatis mutandis*.
- (6) That a further submission to Cabinet with respect to maintenance of the Government's 45 per cent equity interest in Panarctic Oils Ltd. through continuing investment of additional funds be made only if future circumstances require Panarctic to exceed an annual expenditure of \$17.8 million and thereby payment by the Government in excess of \$8,000,000 per year.


Minister of Indian Affairs
and Northern Development

PANARCTIC OILS LTD.

1969

ANNUAL REPORT



CONTENTS

3	President's Letter
4	Exploration
7	Transportation
8	Acreage Holdings
9	Arctic Islands Map
10	Financial
11	Participation and Capital Share Distribution
12	Financial Statements
Back	
Cover	Acknowledgements



Panarctic's Drake Point well on Melville Island.

COVER:

Early afternoon in November on Bathurst Island — loading Rig 3 for transportation to Ellef Ringnes Island. Aircraft provide the only means of transportation between islands and form the major supply line from Southern Canada.

DIRECTORS

- R. J. ARMSTRONG, *Montreal, Quebec*
Vice-President, Cominco Ltd.
- F. E. BURNET, *Montreal, Quebec*
Vice-President, Cominco Ltd.
- J. P. GALLAGHER, *Calgary, Alberta*
President, Dome Petroleum Limited
- C. M. HINTON, *Houston, Texas, U.S.A.*
President, Barber Oil Corporation
- A. D. HUNT, *Ottawa, Ontario*
Asst. Deputy Minister,
Department of Indian Affairs
and Northern Development
- E. A. JONAS, *New York, N.Y., U.S.A.*
Vice-President, Thor Dahl Inc.
- J. A. MacDONALD, *Ottawa, Ontario*
Deputy Minister, Department of Public Works
- J. W. McBEAN, *Kirkland Lake, Ontario*
Vice-President, Bankeno Mines Limited
- D. C. McGAVIN, *Q.C., Toronto, Ontario*
General Solicitor - Canada,
The International Nickel Company of Canada, Limited
- H. M. PICKARD, *Calgary, Alberta*
Executive Vice-President,
Canadian Pacific Investments Limited
- W. S. ROW, *Toronto, Ontario*
Executive Vice-President, Noranda Mines Limited
- D. K. SEAMAN, *Calgary, Alberta*
President, Bow Valley Industries Ltd.
- J. M. TAYLOR, *Calgary, Alberta*
President and Chief Executive Officer,
Central Del Rio Oils Ltd.
Canadian Pacific Oil & Gas Ltd.
- J. T. WANAMAKER, *Montreal, Quebec*
Vice-President Corporate Investments,
Cemp Investments Ltd.

OFFICERS

- PRESIDENT, AND CHAIRMAN OF THE BOARD*
J. M. TAYLOR
Canadian Pacific Oil & Gas Limited,
Calgary, Alberta
- VICE-CHAIRMAN*
J. A. MacDONALD
Department of Public Works,
Ottawa, Ontario
- EXECUTIVE VICE-PRESIDENT*
R. J. ARMSTRONG
Cominco Ltd.,
Montreal, Quebec
- VICE-PRESIDENT*
J. M. GODFREY
Dome Petroleum Limited,
Calgary, Alberta
- SECRETARY*
F. R. MATTHEWS, *Q.C.*
MacKimmie, Matthews, Wood, Phillips & Smith,
Calgary, Alberta

HEAD OFFICE

631 - Seventh Avenue Southwest
Calgary, Alberta



JOHN CAMPBELL SPROULE, B.Sc., M.A., Ph.D.

Dr. J. Campbell Sproule, the founder of Panarctic, passed away suddenly on May 21, 1970. The Directors and staff of Panarctic mourn the loss of this remarkable Canadian. He was one of the first to perceive the great potential of the Arctic Islands region and the opportunity available to Canadians to develop it. He pressed his convictions indefatigably, even when others faltered.

Much of the basic geological exploration was his own and it reflects his technical prowess and scientific honesty. That work, coupled with organizing ability and constant, forceful enthusiasm, showed the way to a firm beginning in the development of the region.

Panarctic Oils Ltd. owes its existence to the efforts of Dr. Sproule in bringing into association a number of companies, deliberately Canadian, and the Government of Canada to launch a major operation. It remains for us to prove with his inspiration the worth of this legacy for Canada.

Cam Sproule was internationally recognized as a scientist. He was also recognized as a warm sincere person with many interests and a concern for his fellow man. He impressed us all, and we share a great loss.

PRESIDENT'S LETTER

This is the second Annual Report since Panarctic was formed in December 1967. The following are the highlights of the Company's operations in 1969:

Widespread geological and geophysical surveys were completed in the Sverdrup Basin of the Arctic Archipelago.

A major supply base was set up at Rea Point on the East Coast of Melville Island.

The wildcat drilling program was started in April. By year-end three rigs were operating and 29,100 feet of hole had been drilled.

A substantial reserve of natural gas, accompanied by a small amount of crude oil, was discovered at Drake Point, on Melville Island.

All available geological and geophysical data were reviewed and incorporated into a comprehensive suite of maps covering the entire Archipelago.

Two advantageous farmouts of certain Panarctic land interests were negotiated, and one farm-in, on structure, was taken.

The Canadian Arctic has been subjected to geographic exploration of a difficult nature for four hundred years, and pioneering in the fields of transportation and logistics still continues. The weather station maintained by the Company at Rea Point, Melville Island, with equipment provided by the Department of Meteorology, has been and is compiling valuable data for the Northern weather systems reports. As our operations develop, we are acquiring knowledge which will eventually be available to all Canadians for use in future developments in the Arctic. The difficulties experienced in loading and unloading aircraft during the cold and dark winter months and the problems of unloading ships across ice-congested beaches

are adding greatly to the existing knowledge of working conditions in the North.

Panarctic shares the general concern that there shall be no appreciable damage to the Arctic environment and its ecology as a result of operations conducted on the terrain or at sea. The Company will be vitally concerned with the solution of any important problems that may be defined. Panarctic has no extensive system of roads or trails. During the summer months when the surface is not frozen, our geophysical crews have operated almost entirely by helicopter, and our drilling operations have also employed helicopters, and fixed-wing aircraft, with minimum ground travel. The areas in which operations have been conducted are mantled by weathered rock residues that support only a scanty, non-continuous veneer of vegetation.

During 1969, a careful program of developing and adding to the Panarctic staff was implemented. Several positions were filled during this period, with the result that the operation is performing smoothly.

During the period, we have advised our contractors of the necessity of hiring indigenous people where possible. During 1969, either directly or through sub-contractors, sixteen Eskimos were employed of whom five are still employed through Panarctic, while one is still engaged with an original contractor on a different job.

The Directors wish to acknowledge and record their appreciation of the excellent effort and performance by all who contributed to the program during the past year.

J. M. TAYLOR - *President*

EXPLORATION

Helicopters are an integral part of all geophysical operations such as this reconnaissance program carried out on Ellesmere Island in September.

Surveyors checking the site of Panarctic's Hoodoo Dome well on Ellef Ringnes Island.



The 1969 operations comprised a major geophysical and geological field program, and the initiation of the wildcat drilling program.

SUMMARY OF GEOPHYSICAL AND GEOLOGICAL OPERATIONS

Seismic Surveys

<i>Island</i>	<i>Reflection Miles</i>	<i>Refraction & Velocity Profile Miles</i>
Lougheed	124.04	1.50
Edmund Walker	12.00	—
Ellef Ringnes	327.72	42.00
Amund Ringnes	61.69	6.00
Cornwall	60.75	18.00
King Christian	14.56	—
Melville	17.25	—
Ellesmere	90.09	12.00
Totals	708.10	79.50

Total seismic 1969 - 787.6 miles, compared to 676.5 in 1968.

Gravity Meter Surveys

During 1969 two small gravity meter crews measured a total of 5,100 stations on the Islands worked by the seismic crew.

Geological Surveys

From 15th May to 15th August a geological field party was based at Eureka. This party measured and studied approximately 300,000 feet of out-crop sections on Ellesmere Island and Axel Heiberg Island.

SUMMARY OF DRILLING OPERATIONS

General

The peculiarities of the Arctic environment raise the cost of all operations, most of which are related to drilling. The expensive transport of equipment and supplies to and within this remote area, the cost of establishing ancillary facilities that are normally close at hand in industrial communities, the lack of gravels for construction and of water for drilling, and the more elaborate drilling program required for each deep wildcat, combine and compound to impose very high drilling costs.

Deep wildcats drilled through permafrost and high pressure formations require extra casing strings and consequently large-diameter hole, which drills slowly. The surface casing must be set through the thick surface layer of permafrost whether or not the wildcat will be deep. It is also necessary to install pilings, cribbing, and insulation as a drilling foundation to preclude thawing and softening of the surface soil by summer warmth or heat from the rig. Substantial extra cost is incurred in hauling sea water or melting snow for drilling-water, made necessary by the desert conditions that prevail over most of the prospective island areas. The cost of fuel used by a rig can exceed \$2,000 per day in winter.

Suitable sites for airstrips capable of handling large cargo-carrying airplanes are rare and construction of them is costly. Aircraft navigation in darkness requires that beacons, elaborate strip-lighting systems, and meteorological equipment be installed and manned at each strip. Most strips are unusable in the summer, and ground-blizzards frequently close them in winter. Ground-transport vehicles likewise contend with darkness, ground-blizzards and "white-outs" in navigation, and with the soft muddy terrain in summer.

By experimentation and experience the Company is learning how to overcome problems and how to minimize costs. There are few innovations available, and improvement is achieved by selection and by adaptation of equipment and methods used generally.

Drilling

During March and April two drilling rigs were flown to Melville Island. The smaller one, Commonwealth Hi-Tower Rig 2, drilled Panarctic Sandy Point L-46 to 6,895 feet and Panarctic Marie Bay D-02 to 4,175 feet. Both were on northwestern Melville Island, and both were obligatory wildcats on the Cominco-Bankeno acreage in that locality, close to the occurrence of the tar sands outcropping at Marie Bay. Seismic and gravity-meter surveys there had disclosed no good structures. Both wildcats were plugged and abandoned, after failing to find oil or gas. These two holes fulfil the drilling obligation on Cominco-Bankeno acreage to earn an 80% undivided interest in 3,637,779 permit acres, most of which remain to be evaluated, and some of which are well positioned.

Panarctic Drake Point L-67 was spudded by Commonwealth Hi-Tower Rig 1 on 19th April as a deep-hole test of an anticline on Sabine Peninsula of Melville Island. Two gas blowouts occurred, and damaged surface casing ultimately prevented control. The rig was moved off the hole, which had reached 8,454 feet, to commence Drake Point K-67A, 1,100 feet distant. This hole was carried to a depth of 10,671 feet. It discovered two gas-bearing sections: 10 million cubic feet per day from a sand encountered at 3,700 feet, and 13 million cubic feet per day from another at 4,600 feet. Small amounts of oil and water were recovered in the test of the lower sand. Three more porous zones below 9,800 feet were indicated to be hydrocarbon-bearing by gasified drilling mud, surges of gas, condensate in the mud, and by interpretation of the well logs. All five attempts to drillstem-test these sands failed because the hole was washed out to a diameter too large to bridge with testing tools. These thin zones were judged to be noncommercial at this remote location, and drilling to recognized deeper objectives was discouraged by the pressure of other drilling commitments. The hole was plugged back and a directional hole, started from the well bore at 1,700 feet, is now drilling to intersect the upper gas sand of the L-67 hole to permit cementing off the uncontrolled flow of gas.

The Commonwealth Hi-Tower rig stacked on Bathurst Island since 1964 was commissioned as Rig 3 after substantial reconditioning. It was flown to Ellef Ringnes Island to spud Panarctic Hoodoo Dome F-27 on 20th December. This is the first Panarctic test of one of the huge structures so evident at the surface in Mesozoic rocks of the Sverdrup Basin. Its area of uplift is at least 175 square miles (112,000 acres) and its vertical closure exceeds 5,000 feet. Planned total depth is at least 11,000 feet, the depth required to earn an undivided 50% interest in all rights on 787,475 permit acres on Ellef Ringnes farmed out to Panarctic by Dome Petroleum Limited. This wildcat is now drilling below 6,000 feet.

Drilling by Panarctic for the remainder of 1970 will be concentrated on the Sabine Peninsula of Melville Island, Ellef Ringnes Island, King Christian Island, and possibly on the Fosheim Peninsula of Ellesmere Island. All wildcats will test major structures.

Farmin

One of the wildcats is to be drilled on Canadian Homestead's Permit A-1832 on the west shore of Sabine Peninsula. This wildcat will earn Panarctic Participants an undivided 50% interest in that permit, which lies on a major structure.

Farmouts

Panarctic has been approached by a large number of companies wanting to earn an interest in Panarctic acreage. As a result, Panarctic has been able to negotiate two advantageous farm-outs so that nine of Panarctic's commitment wells will be drilled by third parties at no financial cost to Panarctic.

A farmout agreement has been arranged with King Resources Company whereby performance will evaluate 4,500,000 acres of the company's holdings by drilling 24,000 feet of hole on Bathurst Island, three wildcats on Melville Island and one deep test on Loughheed Island. This drilling program is expected to start late in 1970. King Resources will earn varying interests to a maximum of 50% of Panarctic's entitlement.

A second farmout agreement was negotiated with Triad Oil Co. Ltd. Triad will conduct a 400-mile seismic program and drill two deep wildcats, one on Vanier Island and one on either Prince Patrick Island or Emerald Isle. A third deep wildcat may be drilled by option on the island not drilled by obligation. The seismic shooting is under way and drilling will commence in 1971. By performing the contractual obligations Triad will earn a 40% interest in 1,200,000 acres, and earn for Panarctic a 40% interest in that 1,200,000 acres plus an 80% interest in an additional 2,487,000 acres.

These selective farmouts will contribute significant information in areas of unknown potential, evaluating not only the blocks farmed out but also the adjacent and extensive holdings that Panarctic retains. The farmouts require heavy expenditures that will permit Panarctic to apply equivalent funds on additional prospects of more obvious potential.

Helicopters being utilized on Ellef Ringnes Island during a seismic camp move in May.

Unloading a rig draw works under conditions often encountered in Arctic operations.



TRANSPORTATION

Due to the unpredictability of Arctic weather and to reduce the air-borne supply lines, sufficient mud, chemicals and pipe were landed at Rea Point on Melville Island, by freighter, to support the projected drilling program through 1971. In anticipation of drilling on Ellesmere Island, 2,000 tons of bulk drilling consumables were transported by sea, to a point about 25 miles due south of the weather station on Eureka Sound.

Although experience has shown that heavy bulky material can be transported to the Arctic cheaper by freighter than by air, many of the items have to be handled as often as 11 times from point of origin to final destination when using sea transport, greatly adding to the already heavy transportation costs. During the period under review some 11,000 tons of supplies were transported to the Arctic by sea, having been packaged and handled many times. During the same period of time, 10,000 tons were delivered directly to the various drilling and base camp locations by air. Airlift requires 75% less handling than sealift.

The airlift from Southern Canada was accomplished by the use of chartered Fairchild F-27's, Douglas DC-4's and DC-6's and by Hercules L-120. A Lockheed Electra freighter which went into service for Panarctic early in 1970 has further streamlined the freight and passenger hauls and is expected to allow greater flexibility with increased savings in transportation costs during the coming months. Inter-island positioning of material, stockpiled by sealift, was done largely by Hercules and in summer months by Bristol Freighters.

Helicopters were employed in support of geophysical and geological surveys, and aided in rig supply when their usual servicing runways became too soft for fixed-wing aircraft. In addition, helicopters were employed in moving Commonwealth Hi-Tower Rig 2 from Sandy Point L-46 location to Marie Bay D-02 on northwestern Melville Island.

All phases of the operation, that is, support, personnel transportation, geophysical surveys, material transfer and rig moves, required in excess of 12,000 hours of flying during the period.

The freighter CHESLEY A. CROSBIE unloading in Eureka Sound during the August 1969 sealift.



ACREAGE COMMITTED TO PANARCTIC

FARMOR	TOTAL ACREAGE UNDER AGREEMENTS	PERCENTAGE TO BE EARNED UNDER FARMOUT (MAX. PROGRAM)	ACREAGE EARNED UNDER MAXIMUM PROGRAM (1)
Acroll Oil & Gas	411,613	100%	411,613
Acroll Oil & Gas (Axel Heiberg)	25,324	80%	20,259
Acroll Oil & Gas (Ellef Ringnes)	24,958	90%	22,462
Alminex	1,986,821	85%	1,688,797
Bankeno Mines et al	1,920,933	80%	1,536,746
BP Exploration	3,297,359	80%	2,637,887
Canada Southern	709,135	80%	567,308
Canada Southern & B.P. Exploration	62,650	80%	50,120
Canada Southern, Clark, Skelly	57,210	80%	45,768
Canadian Gridoil	1,316,546	80%	1,053,236
Canadian Homestead	1,225,652	85%	1,041,804
Canadian Homestead (Permit A-1832)	30,420	50%	15,210
Canadian Industrial Gas & Oil	822,701	85%	699,295
Canadian Montana Gas	495,397	80%	396,317
Chevron Standard	960,086	16.7%	160,017 (2)
Cominco & Bankeno Mines	3,637,779	80%	2,910,223 (3)
Consumers Co-operative	1,482,542	85%	1,260,160
Dome Petroleum	2,616,732	50%	1,308,366
Dominion Explorers	4,030,395	75%	3,022,796
Elf Exploration & Production	2,327,186	80%	1,861,748
Francana Oil & Gas	1,779,245	85%	1,512,358
Great Plains	3,863,359	50-60%	2,124,848
Kuma Oils	722,637	90%	650,373
Norpet Oil & Gas	449,365	85%	381,960
Northwest Gas & Oil	85,490	80%	68,392
Panarctic	5,494,618	100%	5,494,618
Pembina Pipe Line	660,982	80%	528,786
Plains Petroleum et al	1,303,878	76.5%	997,466
Prairie Oil Royalties	1,526,214	77.5%	1,182,815
Thouvenelle, B.E.	162,663	85%	138,263
Triceetee Group	3,634,806	80%	2,907,845
United Canso (Devon & Axel Heiberg)	1,062,947	80%	850,357
United Canso (Somerset)	1,720,780	66.7%	1,147,192
Western Minerals	792,620	90%	713,358
TOTALS	50,701,043		39,408,763

Note (1) The acreage shown assumes that all farmout options are exercised.
Note (2) Chevron now earned; no further drilling obligations required.
Note (3) Drilling obligations satisfied.



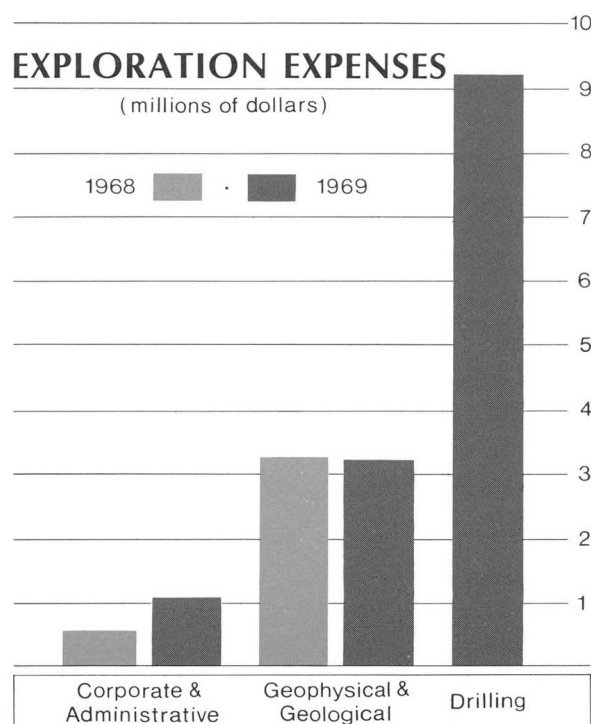
FINANCIAL

The Company has made a change in its fiscal year-end from 30th September to 31st December and the financial statements presented in this Annual Report cover the fifteen month period ended 31st December 1969.

During the period under review Panarctic Oils Ltd. and the Panarctic Syndicate completed the initial phase of the exploration operations and the commitments of the Government of Canada for cash grants of \$9,022,500 and the Syndicate Participants for an aggregate expenditure of \$11,027,500 on the exploratory program have been met. Late in 1969 the Government and the Participants unanimously agreed to the expansion of the program from \$20 million to \$30 million and have pledged cash and expenditure commitments for the issuance of capital stock of an equivalent value.

Since inception Panarctic Oils Ltd. and the Syndicate have expended a total of \$24,350,000 in the furtherance of the program. Of this amount, \$4,000,000 has been invested in capital equipment and facilities to support the program and a further \$1,900,000 has been spent in the accumulation of inventories of materials for future drilling requirements. Accounts receivable at the year-end include an amount of \$1,700,000 for insurance recovery of costs of controlling the Drake Point L-67 well blowout and drilling a relief well.

Recently, the Government of Canada expressed its intention to continue its 45% participation in the Panarctic venture beyond the present commitments to its proportionate share of a total \$50 million program. We anticipate that the Syndicate Participants will agree to this further expansion and that capitalization and the requisite commitments will be increased accordingly during 1970.



PANARCTIC OILS LTD.

PARTICIPATION AND CAPITAL SHARE DISTRIBUTION

	PERCENTAGE	PREFERRED SHARES	COMMON SHARES
Bankeno Mines Limited	2.25875	67,763	16,941
Bocadel Oil Corporation	4.51745	135,523	33,881
Bow Valley Industries Ltd.	2.25875	67,763	16,941
Campbell Red Lake Mines Limited . . . . .	.40655	12,197	3,049
Canadian Gridoil Limited . . . . .	.94865	28,459	7,114
Canadian Industrial Gas & Oil Limited . . . . .	.67760	20,328	5,082
Canadian Nickel Company Limited	4.51745	135,523	33,881
Canadian Pacific Oil & Gas Limited	9.03490	271,047	67,761
Cominco Ltd.	9.03490	271,047	67,761
E. Connelly . . . . .	.11295	3,388	847
Conick Petroleums Ltd. . . . .	.27105	8,131	2,033
Dome Mines Limited . . . . .	.81315	24,395	6,098
Dome Petroleum Limited	4.06570	121,971	30,493
Eagle Ridge Petroleum Ltd.	4.51745	135,523	33,881
Westburne Petroleum & Minerals Ltd.	2.25870	67,762	16,941
Noranda Mines Limited	4.51745	135,523	33,881
Sigma Mines (Quebec) Limited . . . . .	.13555	4,067	1,017
Scenic Oils Ltd. . . . .	.13555	4,067	1,017
Thor Exploration Company Ltd.	4.51745	135,523	33,881
Government of Canada (1)	45.00000	1,350,000	337,500
Directors' qualifying shares	—	—	5
Option Shares	—	—	5,000
	<u>100.00000</u>	<u>3,000,000</u>	<u>755,005</u>

(1) 450,000 preferred shares and 112,500 common shares issued to the Government of Canada early in 1970 are included herein.

CONSOLIDATED BALANCE SHEET

AS AT DECEMBER 31, 1969

ASSETS

CURRENT ASSETS:

	December 31, 1969	September 30, 1968
Cash	\$ 130,719	\$ 12,816
Accounts receivable	14,713	4,200
Estimated amount recoverable from insurance claims (Note 7)	2,577,795	—
Inventory of drilling supplies in the Arctic, at cost including freight	1,919,679	—
Prepaid insurance and sundry advances	198,937	—
	<u>4,841,843</u>	<u>17,016</u>

INVESTMENT IN ALEXBOW CANADA LTD.,

a wholly-owned subsidiary:

Shares, at cost	6	6
Advances	106,232	50,506
	<u>106,238</u>	<u>50,512</u>

CAPITAL ASSETS, at cost:

Trucks and track vehicles	1,151,503	224,427
Furniture and office equipment	62,606	—
Aircraft	864,075	387,565
Barges	236,780	594,864
Camp and portable buildings	746,017	307,690
Other equipment	940,201	266,037

	4,001,182	1,780,583
Less - Accumulated depreciation	961,682	244,733
	<u>3,039,500</u>	<u>1,535,850</u>

Petroleum and natural gas permits	68,984	36,500
Exploration expenditures, per accompanying statement (Note 9)	18,364,735	4,177,505
	<u>21,473,219</u>	<u>5,749,855</u>

OTHER ASSETS:

Government of Canada cash grants to be made (Note 4)	188,725	7,022,500
Exploration and drilling expenditures to be incurred by Panarctic Syndicate (Note 3)	5,335,906	8,054,679
Advance to Panarctic Syndicate	—	333,333
	<u>5,524,631</u>	<u>15,410,512</u>
	<u>\$31,945,931</u>	<u>\$21,227,895</u>

PANARCTIC OILS LTD.

LIABILITIES

	December 31, 1969	September 30, 1968
CURRENT LIABILITIES:		
Accounts payable and accrued liabilities	\$ 400,650	\$ 118,118
Due to Panarctic Syndicate	1,081,030	1,059,276
Bank loan (secured)	4,900,000	—
	<u>6,381,680</u>	<u>1,177,394</u>

SHAREHOLDERS' EQUITY:

Preferred shares -

6% non-cumulative, redeemable preferred shares of a
par value of \$10 each

Authorized - 3,000,000 shares

Issued -

Number of
shares

For an undertaking by the Government of

Canada to make cash grants (Note 4) 900,000

9,000,000 9,000,000

For participants' exploration commitments including

550,000 shares issued in 1969 (Note 3) . 1,650,000

16,500,000 11,000,000

2,550,000

25,500,000 20,000,000

Common shares -

Authorized - 1,000,000 shares of no par value

Issued -

For an undertaking by the Government of Canada

to make cash grants (Note 4) 225,000

22,500 22,500

For participants' exploration commitments including

137,500 shares issued in 1969

(Note 3) 412,500

41,250 27,500

For cash 5,005

501 501

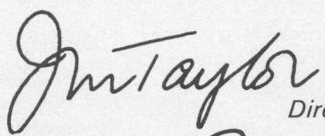
642,505

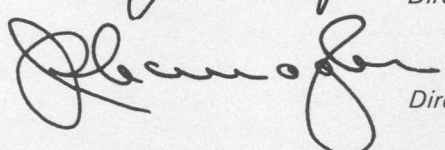
64,251 50,501

COMMITMENTS AND CONTINGENT LIABILITY

(Notes 2, 5 and 6)

APPROVED ON BEHALF OF THE BOARD:


Director


Director

\$31,945,931

\$21,227,895

PANARCTIC OILS LTD.

STATEMENT OF EXPLORATION EXPENSES CAPITALIZED TO DECEMBER 31, 1969

	<i>From inception to September 30, 1968</i>	<i>Fifteen months ended December 31, 1969</i>	<i>Total</i>
Geophysical	\$ 2,794,157	\$ 2,972,901	\$ 5,767,058
Geological	149,027	304,673	453,700
Drilling, per accompanying statement	—	9,216,508	9,216,508
Depreciation	244,733	754,536	999,269
Administrative and general	571,710	1,074,532	1,646,242
Purchase of geological and geophysical data	350,000	—	350,000
Other	129,901	—	129,901
Interest income (net)	(62,023)	(83,985)	(146,008)
Miscellaneous income	—	(51,935)	(51,935)
	<u>\$4,177,505</u>	<u>\$14,187,230</u>	<u>\$18,364,735</u>

STATEMENT OF DRILLING EXPENSES FOR THE FIFTEEN MONTHS ENDED DECEMBER 31, 1969

Drilling costs:		
Drake Point L67 Well		\$2,022,045
Sandy Point L46 Well		949,171
Marie Bay D02 Well		313,485
Drake Point K67A Relief Well		1,273,534
Towson Point G63 Well		268,763
Hoodoo Dome F27 Well		788,358
Other expenses:		
Mobilization costs of three drilling rigs		1,217,299
Losses in excess of insurance coverage —		
Barges	\$590,451	—
Inventory	292,150	—
Wharf	54,499	937,100
Base camp expenses		1,177,425
Equipment operating expenses and other		269,328
		<u>\$9,216,508</u>

PANARCTIC OILS LTD.

NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1969

1. The company changed its fiscal year end from September 30 to December 31 and, accordingly, the financial statements reflect the results of operations for the fifteen months ended December 31, 1969.
2. Under Farmout Agreements held by the company covering an aggregate of approximately 45,000,000 permit acres in the Arctic Islands it is currently committed to the expenditure of \$20,000,000 on exploration operations including the drilling of wells to varying depths. By December 31, 1969 the dollar commitment had been met but a number of the commitment wells remain to be drilled. The company is further obligated to maintain the farmout permits in good standing by performance of work and/or payment of rentals until at least June 1, 1972.

The company has the right until June 2, 1971 to elect to commit additional expenditures on its exploration program on the farmout lands and thereby earn additional interests in such lands.

3. The subscribers for capital stock in the initial financing have honoured in full their commitment for the expenditure of \$11,027,500 in the conduct of the exploration operations on company lands. By an enlargement agreement dated November 17, 1969 the subscribers have committed to a further exploration expenditure of \$5,513,750 as consideration for the issuance of additional capital stock of an equivalent value. As at December 31, 1969 \$177,844 has been expended in satisfaction of the latter commitment.
4. Subsequent to December 31, 1969 the Government of Canada subscribed for additional shares of the company, the consideration being a commitment to make a cash grant of \$4,511,250. This cash grant was paid on April 3, 1970 and 450,000 preferred shares and 112,500 common shares were issued in respect thereof.
5. The company has issued to Great Plains Oil & Gas Ltd., as Farmor, work performance bonds supported by non-interest bearing promissory notes, required by the Farmout Agreement, in the principal sum of \$2,250,000 guaranteed by endorsement of the company's bankers, to be held as security for drilling commitments.

As at December 31, 1969 the company had issued and deposited with the Government of Canada a \$292,320 non-interest bearing demand promissory note, endorsed by the company's bank, to be held as security for work performance under the company's Oil and Gas Exploration Permits.

6. Under the terms of a lease agreement covering an Electra Aircraft the company is required to pay a rental of \$55,270 per month for the two years ending December 31, 1972 and \$31,000 per month for the year ending December 31, 1973. After the first two years the company has the right to purchase the aircraft for \$600,000 and for \$400,000 after three years.

7. As at December 31, 1969 approximately \$1,700,000 of the costs of controlling a blowout well at Drake Point has been recorded as a recoverable insurance claim. The company estimates that an additional amount of \$1,000,000 will be expended in 1970 to control this well; \$300,000 of this amount will be recovered from the insurance underwriters.
8. By agreement the company has undertaken that it will not claim for income tax purposes expenditures which would otherwise be deductible under the Income Tax Act until the aggregate amounts of such expenditures, together with 45% of the company's capital expenditures (non-deductible amounts), is equal to the cash grants made by the Government of Canada. The company has also undertaken to waive forever all claim to a deduction in respect of such allowable deductions included in such aggregate.

Expenditures on the company's permit lands which were incurred by the Syndicate members are not deductible by the company for income tax purposes.
9. The activities of the company are in the exploratory stage and all expenses, less sundry income, have been capitalized, including exploration expenditures actually made by shareholders pursuant to the commitments referred to in Note 3; the company is deemed to have earned no profit and sustained no loss and therefore no statement of profit and loss is submitted.

AUDITORS' REPORT

TO THE SHAREHOLDERS OF PANARCTIC OILS LTD.

We have examined the balance sheet of Panarctic Oils Ltd. as at December 31, 1969 and the statement of exploration expenses capitalized to that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

As explained in Note 9 to the financial statements the company's activities are still in the exploratory stage and all expenses, less income, have been capitalized from inception to December 31, 1969. The company is deemed to have realized no profit and sustained no loss to December 31, 1969 and therefore no profit or loss account is submitted.

In our opinion these financial statements present fairly the financial position of the company as at December 31, 1969 and the results of its operations for the fifteen months then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

CALGARY, ALBERTA
April 15, 1970

PRICE WATERHOUSE & CO.
Chartered Accountants.

ACKNOWLEDGEMENTS

We would like to express our appreciation to the Marine Service Branch of the Department of Transport for their assistance during our 1969 sealift. Although we were not able to save the two barges which were sunk during the latter part of August, the "JOHN A. MACDONALD" promptly answered our request for assistance and later conveyed the tug "IRVING BIRCH" to Rea Point on Melville Island. The "LABRADOR" provided assistance to the freighter "THORA DAN" and the "D'IBERVILLE" accompanied a similar freighter the "CHESLEY A. CROSBIE" to Eureka, Ellesmere Island on that history-making voyage. This assistance which was so readily provided during a very busy season was much appreciated.

Dominion Hydrographics Survey conducted a survey of the harbour facilities at Rea Point on Melville Island, in order that we could berth the "THORA DAN". This survey, conducted under most difficult weather and ice conditions, aided considerably in the discharge of the cargo. We are grateful for the service which was provided on such short notice.



C.C.G.S. LABRADOR

Panarctic or its contractors have employed Eskimos on their projects since operations commenced early in 1969.

It is Panarctic's intention to continue employing northern residents and thereby contribute, by encouragement and training, to the development of the Canadian North.



Appendix II

CANADIAN RESIDENT OWNERSHIP AND CONTROL OF THE OIL AND GAS RESOURCES IN THE NORTH

A study completed in October of 1970 by the Northern Economic Development Branch, Department of Indian Affairs and Northern Development, entitled *Non-Resident Ownership and Control of Non-Renewable Resources in the North*, insofar as the oil and gas industry in Canada's north is concerned deals with

- (a) a measure of non-resident ownership in 56 selected oil and gas companies actively operating in Canada's north; and
- (b) a measure of the proportion of non-resident control of the total area, measured in acres, held under oil and gas exploratory permit in Canada's north.

The study indicates that each of the 56 oil and gas companies mentioned above hereinafter called "the selected companies" hold oil and gas exploratory permits in Canada's north and have made exploration expenditures in respect of these permits in excess of \$100,000 and comprise all the companies who satisfy these two criteria. The selected companies hold 269.7 million acres under permit and this represents 63.1 per cent of the total acreage held under permit in Canada's north. Of this area 100.9 million acres are located in the mainland of Canada's north, 144.1 million acres in the Arctic Islands and 24.7 million acres in the Arctic Coast. To 30th June, 1970, the selected companies had made aggregate exploration expenditures of \$254.7 million.

The study further indicates that

- (a) 14.3 per cent of the selected companies hereinafter called the "resident companies" are effectively controlled by residents of Canada;
- (b) resident companies hold 24.3 per cent of the 269.7 million acres held under permit by the selected companies;
- (c) resident companies hold 40 per cent of the areas held under permit by the selected companies in the Arctic Islands; and
- (d) resident companies made 15.7 per cent of the total exploration expenditures of \$254.7 million made by the selected companies.

Panarctic Oils Ltd. is one of the resident companies, and if Panarctic did not exist

- (a) resident companies would only comprise 12.7 per cent of the selected companies;
- (b) resident companies would only hold 6.6 per cent of the 269.7 million acres held under permit by the selected companies;
- (c) resident companies would only hold 7.1 per cent of the areas held under permit by the selected companies in the Arctic Islands; and
- (d) resident companies would only have made 6 per cent of the total exploration expenditures made by the selected companies.

- 2 -

The study recites the fact that at the end of 1969 an area of 427.6 million acres was held under oil and gas exploratory permit in Canada's north by 262 permittees. Of this area 138.2 million acres were in the mainland, 251.6 million acres were in the Arctic Islands and 37.8 million acres were in the Arctic Coast area. Seventeen of the permittees are trust companies, it is impossible to determine the identity or residence of the persons beneficially entitled to their permits and they are excluded from the determination of the extent of resident and non-resident control of the areas held under permit in Canada's north. Accordingly, the study is confined to an analysis and examination of an area of 403.3 million acres in Canada's north, hereinafter called the "permit acreage" held by 245 permittees.

The study further indicates that

- (a) residents of Canada hereinafter called "resident permittees" comprise or control 42.9 per cent of the 245 permittees in Canada's north;
- (b) resident permittees control 34.1 per cent of the permit acreage; and
- (c) resident permittees hold 48.7 per cent of the permit acreage located in the Arctic Islands.

If Panarctic Oils Ltd. did not exist

- (a) resident permittees would only comprise 42.6 per cent of the 245 permittees in Canada's north;
- (b) resident permittees would only control 24.5 per cent of the permit acreage; and
- (c) resident permittees would only hold 34.5 per cent of the permit acreage located in the Arctic Islands.

The study further estimates that in Canada as a whole, non-residents control about 82 per cent of the total assets of the oil and gas industry. Thus, the percentage non-resident ownership of oil and gas industry assets in the north, at 84.3 per cent, exceeds the estimate for Canada as a whole by 2.3 per cent. The importance of Panarctic Oils Ltd. in reducing the degree of non-resident control of the oil and gas industry in the north is significant.

**Advisory Committee
on Northern Development**



**Comité consultatif de la mise
en valeur du Nord canadien**

CONFIDENTIAL

DOCUMENT ^{XND-34}
~~ND-498~~

MEMORANDUM TO THE ADVISORY
COMMITTEE ON NORTHERN DEVELOPMENT

Review of Status of Marine Terminal
Study - Herschel Island

In late 1968, Humble Oil and Refining Company began to investigate the feasibility of moving oil from Prudhoe Bay to U.S. East Coast markets via the Northwest Passage. One of the difficulties associated with such a transportation system is that waters along the Arctic Coast are very shallow and mooring facilities for supertankers at Prudhoe Bay would have to be located 30 miles offshore. Herschel Island has been known to contain an excellent deep water port since the days of Arctic whaling operations (1889-1906) and in early 1969 officials of Humble Oil Limited and British Petroleum Limited approached the Department with regard to the possibility of using Herschel Island as a port. Imperial Oil Enterprises (the Canadian subsidiary of Humble) applied for surface rights to shore acreage on the Island. However, since preliminary studies indicated that the deep water basin extending off the southeast shore of the Island may provide one of the few suitable supertanker loading sites in the region, the application was refused pending an assessment of the harbour potential.

In order to determine how best to carry out such an assessment a number of interdepartmental meetings were held involving our Department, Public Works, and Energy, Mines and Resources to determine what data was available and how the problem could be attacked. The result was that in the fall of 1969 the Department of Public Works applied to Treasury Board for authority to carry out an engineering feasibility study for a marine oil terminal to handle large tankers in the vicinity of Herschel Island. Treasury Board approved a \$500,000 budget and Mr. Ken Rowsell, a consulting engineer familiar with the north and with vast experience in harbour design was engaged as project manager. He assumed the post on February 1, 1970.

Mr. Rowsell soon determined that the Herschel Island harbour is not accessible from the Beaufort Sea by tankers larger than 75,000 d.w.t. because a five mile wide ridge blocks the eastern entrance and a series of offshore bars block the western entrance. Mr. Rowsell determined that the most advantageous location for a terminal is

at Babbage Bight, 30 miles southeast of Herschel Island (see sketch) and that deep water harbours could also be built at Darnley Bay and Franklin Bay respectively. The feasibility study that is now being carried out is directed toward the Babbage Bight location. However, the study will be largely applicable to any Arctic location.

The project, up until now, has largely been in the data gathering phase. Mr. Rowsell compiled and analyzed the physical data available from government and other sources, determined what data was lacking, and arranged for various branches of the Department of Energy, Mines and Resources to amend and enlarge their 1970 field programs to provide the additional data required. Industry, agencies, notably the Arctic Petroleum Operators Association, have also assisted Mr. Rowsell by providing data.

The announcement by Humble to the effect that the Manhattan tests had shown that a Northwest Passage supertanker route was physically possible but not economically viable cast some doubt on the relevance of the feasibility study. However, since the study is at such an advanced state D.P.W. felt it should be completed and propose to do so.

This decision received a strong measure of support at a joint industry-government meeting on Herschel Island held December 7 where it was brought forth that oil from the Canadian Arctic would still need a transportation system and that tankers had an advantage over a pipeline in that the size of a tanker fleet could be expanded readily as needed but a pipeline could not. Moving Canadian oil through the proposed Aleyska pipeline (formerly TAPS) is considered too expensive.

Several "harbour requirement studies" are now being carried out by consultants. These include:

1. Ice management
2. Wave study
3. Submarine permafrost study

In addition two other contracts will be let almost immediately. These are for:

1. Conceptual design of terminal.
2. Terminal functional design, i.e. anchorage areas, turning areas, access routes, etc.

All these studies are to be completed by the end of January 1971 and that should mark the end of the data gathering phase.

- 3 -

CONFIDENTIAL

Mr. Rowsell has indicated that the study will be completed by March 31, 1971. D.P.W. has given no indication as to what form any published version will take. Their first thought is that such a report will not contain all the physical data but that such data will be organized and placed in some repository for future use.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development.
January 6, 1970.

PROGRESS REPORT NO. 10 - MONTH OF NOVEMBER

MARINE TERMINAL STUDY - HERSCHEL ISLAND

DEPARTMENT OF PUBLIC WORKS

Table of Contents

	<u>Page</u>
1. Progress Report No. 10	1
2. Location Plan	3
3. Study Schedule and Progress Chart	4

MARINE TERMINAL STUDY
HERSCHEL ISLAND

PROGRESS REPORT NO. 10 - MONTH OF NOVEMBER

During November Ice Management Studies by Dr. B. Michel progressed well. A mathematical model has been developed and calibrated to simulate the growth of ice over a range of meteorological conditions. From this model, the thickness of ice can be predicted for any point in time provided meteorological conditions are known up to the point in question. A second mathematical model has been developed for the growth of new ice in areas previously broken by the passage of vessels. The next stage in this work will be to determine the amount of ice produced over a range of icebreaking activity and to develop methods of ice management. The work was about 50 percent completed by the end of November.

At the end of the month the investigation of the effect of structural foundations on the existing submarine permafrost regime, by Elmer W. Brooker and Associates, was about 25 percent completed. The first part of this investigation, i.e., determination of the thermal influence of marine structures, will be completed towards the end of December. Before proceeding to the next phase, i.e., determination of the thermal influence of appurtenant pipelines radiating higher than ambient temperatures, the results will be reviewed at a meeting of the N.R.C. Northern Geotechnical Group and the Consultant, in early January. The findings will determine the advisability of proceeding to the next scheduled phases of the work.

Wave Climate Studies by Mr. Wu, D.P.W., are about 90 percent completed. Forecasting of deep-water significant waves, using statistical wind data has been completed for

Mackenzie Bay, Franklin Bay and Darnley Bay. Wave refraction analyses have been completed for Franklin Bay and are in progress for the other sites. Fair progress was made on the development of information from the Waverider measurements to provide a check on the validity of wave forecasting in Arctic waters.

Some preliminary planning was done to investigate the possibility of seabed trenching caused by an ice island of glacial origin observed to be grounded in Babbage Bight about mid-September. It is expected that this survey will be carried out in January 1971.

Mr. Aubrey Murphy, draftsman, on loan from the International Joint Commission for a period of about six weeks, reported for work on November 16th. Drafting of various plans for this study was started.

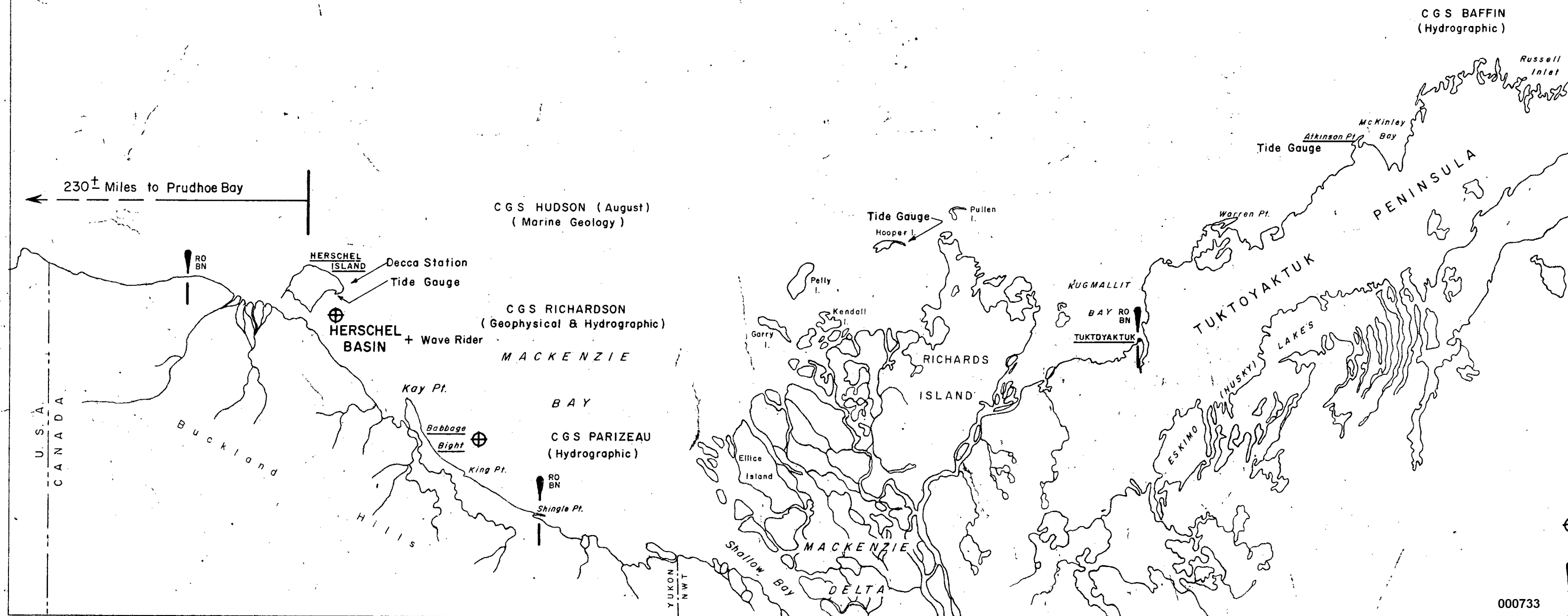
Towards the end of the month, an assignment was awarded to Northern Consultants (Holdings) Limited (Commodore Robertson) for Terminal Functional Design (Marine) and another to Surveyor Nenninger and Chenivert for Terminal Conceptual Design.

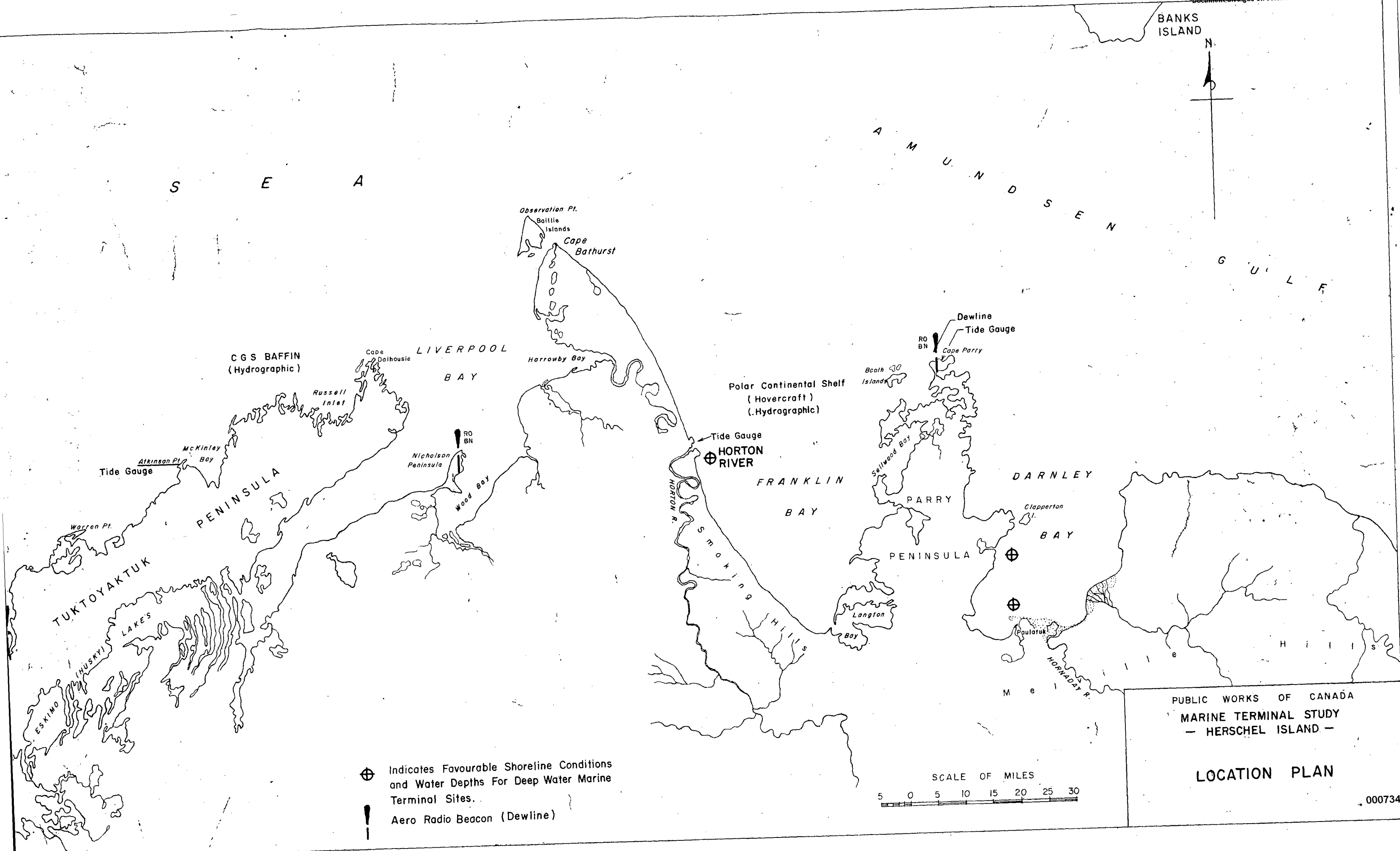
On November 30th the third meeting was held of government representatives from D.I.A.N.D., E.M. & R., M.O.T. and D.P.W. It was unanimously agreed that in view of its value to the Arctic in general, the study should be completed. Minutes of this meeting will be distributed at a later date.

Work on Terminal Conceptual Design will begin about December 12th and Terminal Functional Design about December 14th. Other work during December will proceed as scheduled.

LOCATION PLAN

B E A U F O R T S E





STUDY SCHEDULE

and

PROGRESS CHART

STUDY SCHEDULE & PROGRESS

	DESCRIPTION	1970												1971									REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
		FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
1	Wind Wave Measurements (D.P.W.)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

LEGEND:

Time Schedule

Percent Complete

Completion Date Revised to March 31, 1970.

**Advisory Committee
on Northern Development**



**Comité consultatif de la mise
en valeur du Nord canadien**

DOCUMENT XND-36

MEMORANDUM TO THE ADVISORY
COMMITTEE ON NORTHERN DEVELOPMENT

Proposed Northern Atlas

On January 8 and 9 the Department of Geography at the University of Ottawa called a meeting to discuss the proposal they are putting forward for the publication of a Northern Atlas. The Board of Governors of the University has approved in principle the suggestion that the Department of Geography should undertake the co-ordination of this project and the meeting was attended by geographers from the University of Toronto, the University of Manitoba and the University of Saskatchewan. The Director of the Institute of Northern Studies at Laval was also present. The Department of Indian Affairs and Northern Development was asked to send representatives to the meeting as it was clear that the project would depend very largely, if not entirely, on funding from the Federal Government. Mr. Graham Rowley, the Scientific Adviser, and Mr. W.D. Mills, Assistant Director, Northern Economic Development Branch, attended for the Department. During the two half-day sessions the discussion ranged over a very wide range of subjects as it was the first formal meeting to discuss the project and therefore was wholly exploratory in nature. Among the basic issues that were discussed were the needs that such an Atlas would fill, the extent of the geographical and subject areas that it should cover, the methods and sources of financing, the kind of administrative and technical structure that would be needed, and the time frame within which the Atlas could be produced. The Director of the Department of Geography, Professor H. Morissette, who chaired the meeting made it clear that while the University would provide the mechanism through which the project would be undertaken and hence some of the indirect costs, the direct financing for the preparation and production of the Atlas would come from sources outside the University. It was recognized that this inevitably meant government financing and he emphasized that the University hoped that the Federal Government would be the principal source of such financing. He suggested that the University did not want to approach individual departments and that indeed it wanted to deal with only one source of financing within the Federal Government.

It was also clear during the meetings that a good deal of research and planning would have to be done before it would be possible to have any realistic assessment of the viability of the project in

- 2 -

all its aspects. The representatives from D.I.A.N.D. suggested that rather than try and answer all the questions concerning the scope of the Atlas, the source structure for financing, the administrative necessities, etc., the first priority should be on producing a detailed and concrete proposal including an assessment of whether such an Atlas should be produced at this time and its cost. The Department's representatives indicated that the Federal Government's involvement in a project of this kind could be co-ordinated through the A.C.N.D. which would provide for an in-put of information required for the Atlas, of professional assistance that might be required and for financial contributions from Departments which had an interest in seeing such an Atlas produced. It was suggested that D.I.A.N.D. would be sympathetic to a request for financial support for a group to undertake the research and planning of such an Atlas over perhaps a six to twelve month period. It was made clear that an undertaking to finance a study at this stage would in no way imply a commitment on the part of any Federal Department or the A.C.N.D. to provide any substantial long term financial support for the project.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
January 14, 1971.

**Advisory Committee
on Northern Development**



**Comité consultatif de la mise
en valeur du Nord canadien**

DOCUMENT XND-37

MEMORANDUM TO THE ADVISORY
COMMITTEE ON NORTHERN DEVELOPMENT

University of the North

There have been a number of proposals for establishing a university of the North. It is understood that the report by the Mid-Canada Development Foundation, Inc. now being prepared by Mr. Richard Rohmer and to be presented to the Government of Canada will contain such a proposal as part of its recommendations. It is one of a number of proposals which the Foundation believes is essential for the economic and social development of Canada's mid and far North.

One of the earliest suggestions for a university of the North was initiated by Mr. Jim Lotz of the Centre Canadien de Recherches en Anthropologie, Ottawa, and the idea was to transform Grandin College at Fort Smith, N.W.T., by letters patent, into a university. However, the idea was modified over the years. In his book "Northern Realities", Mr. Lotz outlines his views by suggesting that insufficient northern people to fill a university situated in the North is not a reason for delay. He does not believe in imitating the American or English model, i.e. to produce a degree-factory. He suggests a northern university would have a research role, and that the northern environment provides the right milieu. The university should engage in direct social action and that it should engage in northern problems, and utilize research to assist the local population.

The details of the proposition by Mr. Rohmer are not known at this point other than he considers Whitehorse as a suitable location. Mr. Rohmer did attend and may well have been influenced by the Seminar convened by Dr. Arthur Porter of the University of Western Ontario which among other things suggested that the university itself should be primarily a repository of information rather than a collection of buildings, the emphasis being on software rather than hardware. The core of Porter's idea is a communications network computer and television connecting universities. It would probably consist of developing computer aid instruction systems capable of serving thousands of students from a single computer. This would be a further use of the Canadian satellite "Anik" to be launched in 1972.

This proposition is outlined in full in the report attached to this paper as an appendix. In any case, there are statistics today to indicate that universities in southern Canada are becoming overcrowded while the newer institutions of higher learning in northern parts of the provinces suffer from a lack of students. Laurentian University at Sudbury, Ontario, is in financial and other difficulties. Quite obviously, a traditional type university situated in the North where the total population hardly exceeds 52,000 will not in its initial stages cater for many students. On the other hand the proposition by the University of Western Ontario has some merit. Undoubtedly the Federal Government will be asked to meet the costs, and one wonders whether an outlay of funds likely to be required for a university of the North would at this time, be out of all proportion to the number of people it would serve.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
January 14, 1971.

3. Relation to Original Peoples

The original peoples of Canada possessed and still possess the land in the only sense that this is possible without violence, namely by entering into the ecology of the region as collaborators rather than conquerors. By respecting the wildlife and other natural resources they were able first of all to discover technologies of defence and preservation. But they have done much more than invent refined instruments of habitation, agriculture and hunting; they also developed, in the heart of their cultures, inimitable conceptual approaches which have much to offer the modern world.

Until now it would have been easy to deny the global value of these cultures but with the staggering ambivalence of Western culture in its combination of technical development and widespread pollution problems, the values of native cultures are no longer easily dismissed. They are, in fact, the strongest reasons for thinking that the nations which ignore their native cultures are neglecting the one source which can help to save them from the headlong growth of systems which have gotten out of hand. If cultures, like objects of art and technology, are structures emerging at the intersection of the external medium of a region and the internal psychological medium of human character, they are likely to contain within them "social technologies" (Jim Lotz) with much to offer other peoples.

But whatever the arguments may be in general for respecting different cultures they are particularly strong for Canada. If we are, as is said, "a nation which has learned to live without an identity" (MacLuhan) it is not entirely because we have passively accepted a negative attitude, but because there has been encouragement for a cultural pluralism. It seems very likely that Canada's position in the world stands or falls by its ability to live this characteristic. That we have not succeeded very well until the present is not an indication that this must always be the case.

It is too much of course, to expect the University of the North to be the bearer of all of these influences. What it can do is act as one of a number of ways by which the native cultures meet Western cultures. Above all, there must be a sense in which the University expresses and communicates the significance of native cultures much as the great European universities have always expressed the elements of Western intellectual traditions.

These and other arguments support the position that the University of the North should exist primarily as the expression of the original peoples of Canada. But it would not be to isolate but rather to communicate native cultures in the conviction that we have much to offer the nation and the world.

4. A University Via Microwave Technology

The central structural plan of the University of the North is that it is to be built around microwave technology including computers and television. There are to be a minimum of buildings

and no permanent library and hence no localized administrative departments. The faculty and students would be expected to be located throughout the North rather than assembled in one place.

All services are to be contracted to agencies in the South wherever possible. In particular, the University would make use of accounting and registration systems supplied by the Canadian computer industry. The use of transactors similar to the Air Canada reservations system makes this an inexpensive approach even when distances are great. The existence of standardized accounting and registration systems and the expansion of data bank facilities makes this approach particularly attractive. It is also rapidly extending to library information systems and management services.

The telecommunications service would be expected to play contrary centralizing and diffusing roles. Administrative services would be centralized in the sense that the data is stored in a central computer and transmitted to widely separated points. However, there would be strong decentralization insofar as decision-making is concerned. Thus, part of the same network would be used for electronic voting and communications systems to facilitate participation by the student body and resource people. Thus, for example, the meetings of the Senate would be held by this means. Such a system would be costly but it is this, rather than the upkeep of permanent buildings, which is the underlying structure of the University.

5. Curriculum

A few aspects of curriculum can be sketched to indicate the general direction. The university curriculum could emphasize three main areas:

1. native studies
2. Western technological skills
3. Courses for peoples of Western background residing in the North

As an indication of the courses to be offered, there might be an initial set of courses for First Year university as follows:

1. Native studies (Descriptive)
2. Mathematics
3. Information Science
4. Theories of Knowledge and Culture (Culture and knowledge from operational viewpoint)
5. Physical and Biological Science

In addition to courses acceptable at Universities in the South, the University of the North would act as expeditor of courses in Applied Technology, in such fields as carpentry, electronics, automotive mechanics, plumbing, etc. Since apprenticeship and personal contact is important, the University will call upon its resource people to make extended stops in the North with the intention of instructing groups of residents in the skills and types of knowledge required. However, the most important step is to train native peoples to carry this out themselves.

The main difficulty of establishing educational services of the kind envisaged is in the amount of preparation to produce suitable courses for TV and computers. This time might be

shortened however, with the help of the Association of Extension School Directors. Courses currently offered in extension by existing universities might be televised and offered at remote points by agreement among the directors and the Governments of the Territories concerned.

As a preliminary step, it might be possible to secure the agreement of the participating Universities involved to permit a certain maximum of courses (up to say seven) to be allowed toward a Bachelors Degree. This would imply that the University of the North could not seek a charter for about five years or until students of the program had completed their degrees in the South and could provide opinions concerning development.

Under this procedure the University of the North would consist essentially of an agreement among Extension Departments to sponsor courses for remote regions. However, the plan would not exclude the eventual creation of an organization deserving to take its place among Canadian universities.

6. Relation to Canadian Universities

Main points:

- coordination of courses through the Association of University Extension Directors and through them the A.U.C.C.
- universities of the South continue to grant degrees to northern students. No more than seven of fifteen courses for a degree are to be taken via the microwave network.
- charter for the University of the North not to be sought for at least five years.
- courses in applied technology are to be expedited under the auspices of the Community Colleges and Technical Schools of Canada.

7. Relation to Governments and Industry

Main points:

- the Governments of the Yukon and Northwest Territories and the Federal government are to be invited to participate from the beginning.
- a central role is to be requested of the Federal Department of Communication in order to prepare the communications technology.
- the facilities of the Canadian Broadcasting Corporation and other mass media organizations are also to be sought from the outset.
- industries, particularly oil industries and others with personnel and plants in the north, are to be actively involved.

8. Teaching and Administrative Structures

Main points:

- the University is to be administered by the students themselves. It should be noticed that most students of the

University are expected to be adults.

- there will be no faculty in the usual sense, rather resource people from all sectors of society.
- the active resource people will consist of a 2/3 majority of native peoples, resident in the North
- an important element in the academic structure will be the functions of totality normally supplied by creative people in the arts, religion, etc.
- the Senate will consist of a 2/3 majority of students plus 1/3 resource people
- Senate meetings will be held via television circuitry
- a Steering Committee will direct the University for an initial limited period to raise funds, and arrange the first course offerings. An Advisory Committee will also be required.

It will be essential to realize that the scarce resource is not space, as in the Universities of the South, but time. Thus, a very important administration post will be the program controller who allocates TV and computer time for elections, political discussions, courses and computer programs.

9. Facilities

Main points:

- television facilities, ultimately by satellite
- computer retrieval system for journals, etc.
- computer system, for registration and accounting contracted from a commercial organization
- C.A.I. programs available on small computers in the North, with central facilities located at Institutes in the South.
- Local community halls, schools, churches to be used as classrooms
- contractual arrangements with Centres of Learning to provide the latest in pedagogical techniques and develop special methods for use in the North
- establishment of preparation centres at Canadian universities for courses to be presented for use in the North
- hiring of residents of the North for all phases and preparation of operating personnel so that they may participate

10. First Steps

- establishment of Steering and Advisory Committees
- approach by Steering Committee to provincial and federal governments
- trial presentation of extension courses by TV and computer as soon as possible

11. Acknowledgment:

This draft has been prepared with suggestions from Professor Arthur Blue, Althouse College, Professor Peter Denny, Psychology Department and Professor Don Simpson, Department of International Education. □

**Advisory Committee
on Northern Development**



**Comité consultatif de la mise
en valeur du Nord canadien**

DOCUMENT XND-38

MEMORANDUM TO THE ADVISORY
COMMITTEE ON NORTHERN DEVELOPMENT

Document XND-33 which was circulated with the agenda for the January 19th meeting of the Co-ordinating Committee sets out in detail the proposal for the establishment of a Mid-Canada and Arctic Council that is being brought forward by the Mid-Canada Development Foundation, Inc. of which Mr. Richard Rohmer of Toronto is presently the Head.

One of the other proposals that is contained in the report that will be made to the Prime Minister involves what is called the "twinning" of radio stations in Northern Canada with southern stations. Under this plan at the moment a 1,000 watt radio station is being established at Tuktoyaktuk, N.W.T. The process involves an arrangement under which southern Canadian radio stations undertake to provide the basic requirements for the installation of a radio station in the North at locations where reception is irregular and infrequent. This includes assistance with engineering work, the provision of station and transmitting equipment and the installation of it. The first project involves the twinning of a station at Tuktoyaktuk with private radio station CHUM in Toronto.

While there are, of course, certain advantages accruing to the sponsoring stations in the form of tax deductability, there is no question that the northern communities will benefit from the arrangements which will provide them with regular broadcasting with some "outside" programming from the sponsoring station. One of the most interesting principles involved in the arrangement is that the ownership and operation of the stations established in the North will remain with the local people.

The CBC which has never had adequate funds for the installation of radio stations in all the northern communities where they are needed, is supporting this first twinning experiment by providing training for station and technical personnel. Mr. Rohmer has advised that the Foundation is trying to expand the program to cover as many centres as possible.

As of the date of this memorandum, the Tuktoyaktuk Station has not gone on the air but the CBC has trained a total of four Eskimos and has indicated its willingness to assist in other ways including the provision of some program material. Mr. Rohmer has indicated that the communities of Baker Lake and Cape Dorset have been suggested as centres in which other twinned radio stations might be established. The CBC Northern Service does, of course, have its own criteria and priorities for the extension of radio service in the North and these may not coincide with those of the Mid-Canada Development Foundation. However, the possibility of some collaboration and affiliation between the two programs should not be ruled out as there seems little doubt that the service provided under the twinning arrangement is quite adequate and acceptable to the communities involved.

It would seem that one of the advantages to the Foundation's proposal is that it probably can be carried out with a minimum investment being required by either the CBC or other Departments of Government. The basic responsibility for ensuring the success of the twinned stations would rest with the sponsoring station in the south. It also will undoubtedly fill a gap which exists now between the service that is available to the very few number of communities in the North and the comprehensive broadcast service that will probably be provided via satellites in the relatively near future. In the meantime, there is a lack of radio coverage in many northern communities which might well be provided by the Foundation's program.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
January 18, 1971.

CLOSED

CLOSED

87
13
1
E
2
2
7
0
5
3
E
V04

S87-3-1A
File Pocket

83rd MEETING

A. C. N. D.

MAY 6, 1971

MR. H. B. ROBINSON

**Advisory Committee
on Northern Development**



**Comité consultatif de la mise
en valeur du Nord canadien**

**MEMORANDUM TO THE ADVISORY
COMMITTEE ON NORTHERN DEVELOPMENT**

*Anne
Prepare a
folder of
papers for
this and for
10/1/71*

In connection with the attached Agenda, please note that
papers will be tabled for

Items I
IV
V (Encl)
VI

and will be forwarded as soon as they are available.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
April 27, 1971.

Advisory Committee
on Northern Development



Comité consultatif de la mise
en valeur du Nord canadien

ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

The 83rd meeting of the Advisory Committee on Northern Development will be held on Thursday, May 6 at 2:30 p.m. in the 14th floor Conference Room of the Department of Indian Affairs and Northern Development, 400 Laurier Avenue West, Ottawa

AGENDA

- I Arctic Transportation Administration
- II Arctic Science Conference
- III Arctic Treaty
- IV Arctic Waters Pollution Act
- V Terms of Reference -
Sub-Committee on Northern Communications
- VI Canadian Arctic Sovereignty (a paper for
information purposes prepared for the
Ditchley Conference)
- VII Other Business

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
April 22, 1971.

**Advisory Committee
on Northern Development**



**Comité consultatif de la mise
en valeur du Nord canadien**

DOCUMENT COMS-1

SUB-COMMITTEE ON NORTHERN COMMUNICATIONS
ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

Terms of Reference

- a) To report to the Advisory Committee on Northern Development on plans for the development of northern communications.
- b) To consolidate where possible communications requirements and assist in the formulation of national system plans which will satisfy needs in the context of overall northern development.
- c) To maintain a continuous review of developments in northern communities in order to assist all federal and territorial departments and agencies interested and active in the North to coordinate communications requirements and planning.
- d) To consider which communication systems and techniques can best meet communication requirements, and review the latest research and development which could technically and commercially be exploited for application in the North.
- e) To transmit to the A.C.N.D. information received by the Department of Communications on plans for northern communications in which federal departments might be interested.

D. S. Loftus,
Chairman,
Sub-Committee on
Northern Communications.

March 29, 1971.

**Advisory Committee
on Northern Development**



**Comité consultatif de la mise
en valeur du Nord canadien**

ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

The 83rd meeting of the Advisory Committee on Northern Development will be held on Thursday, May 6 at 2:30 p.m. in the 14th floor Conference Room of the Department of Indian Affairs and Northern Development, 400 Laurier Avenue West, Ottawa

AGENDA

- I Arctic Transportation Administration
- II Arctic Science Conference
- III Arctic Treaty
- IV Arctic Waters Pollution Act
- V Terms of Reference -
Sub-Committee on Northern Communications
- VI Canadian Arctic Sovereignty (a paper for
information purposes prepared for the
Ditchley Conference)
- VII Other Business

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
April 22, 1971.

**Advisory Committee
on Northern Development**



**Comité consultatif de la mise
en valeur du Nord canadien**

DOCUMENT ND-504

MEMORANDUM TO THE ADVISORY
COMMITTEE ON NORTHERN DEVELOPMENT

Attached is a document prepared by the Ministry of Transport outlining the organization and structure of the proposed Arctic Transportation Administration.

The purpose of this paper is to explain its functions and to indicate the close relationship between the Department of Indian Affairs and Northern Development and the Ministry of Transport and the need to provide a practical channel for consultation on the planning of northern programs which both departments administer.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
April 27, 1971

A PROPOSAL FOR THE FORMATION OF AN
ARCTIC TRANSPORTATION ADMINISTRATION
IN THE MINISTRY OF TRANSPORT

Introduction

The plan for restructuring the Department of Transport into a Ministry provides for the establishment of a separate Administration to be responsible for federal transportation activities in the Arctic. Approval in principle is contained in a directive of Cabinet dated 19 December, 1969, and in a letter from the Secretary of the Treasury Board, 6 April, 1970, T.B. 695407, approval was obtained for the organizational relationship of the Arctic Transportation Administration (ATA) in the Ministry. The chart at Appendix "A" shows this relationship.

The Task Force Report on the Objectives and Structure for the Portfolio of the Minister of Transport identified the need for "a separate intermodal agency to provide a single focus for the operation, adjustment and development of all modes of way and terminal activities in the North in accordance with technological progress and the changing market for transportation services."

While the Implementation Report of Project Intertrans, which dealt with introduction of the Ministry System in the Ministry of Transport, identified certain objectives and made reference to the relationship of ATA to other organizations, it proposed that the development of more specific approaches to the elements of a system of management for the Administration be undertaken by another group at some later date.

In December 1970, an Arctic Transportation Conference was held at Yellowknife, N.W.T., under the joint sponsorship of the Minister of Indian Affairs and Northern Development and the Minister of Transport. Papers prepared by Government and non-government officials which were later discussed at ten separate panel sessions by the 275 participants has contributed to a clarification of the scope, relative importance and complexity of transportation in Arctic regions.

As a result of the improved perspective and insight obtained during the examination and re-assessment carried out over the past year it is considered that the Ministry now has a more firm basis for proceeding with the formation of the ATA and in particular for the formulation of a system of management and an administrative structure.

Objective

The purpose of this paper is to propose for your consideration, that the ATA be established within the framework of the Ministry and that it take the form outlined under the heading "Proposals". The overall role of this Administration would be - "to promote, coordinate and control for the Ministry the multi-modal transport plans and

(Revision of April 22, 1971; please destroy all other drafts.)

- 2 -

programs in furtherance of the government's national objectives for Northern Canada". A statement of these national objectives which were approved by Cabinet on 3 December, 1970, is set out at Appendix "B". It is expected that Cabinet will soon indicate in a planning memorandum the priorities to be given to these objectives. This will, of course, influence the approach each Department must take to the various aspects of northern activity.

Factors

Geographic scope of ATA responsibility

Definition of the geographic area to be included in the ATA is not clearly identified in the foregoing documents. There is no doubt that it includes all of the Yukon Territory and the Northwest Territories and possibly other locations. The predominantly North-South pattern of transportation, communications and the organizational boundaries of the Regions of the Administrations suggest that other centres in the northern parts of the provinces might also be included. An additional reason for including such locations as Churchill, Goose Bay and Fort Chimo in the Administration's area of responsibility would be the great similarity in natural conditions and in the type of transportation problems and their solution. Any decision to include such locations south of 60° Northern Latitude or in the northern parts of Ontario and Quebec, should be made on the merits of each individual location which would be reviewed with each of the Administrations.

The term "Arctic" is retained in the title of this Administration as first proposed in the Task Force Report. "Arctic" properly refers to that area of the Polar Region north of the Tree Line. The phrase "Northern Canada" or just "Northern" has been suggested in place of "Arctic". However it is much less specific and usually includes some portions of provincial territory. Throughout this paper the two terms are used interchangeably to refer to the Territories in Canada and the waters associated with them, located north of the ten provinces.

Transportation as a primary element in northern development

Transportation will continue to be a key factor in meeting the social and economic needs of Northern Canada. Three features will be particularly significant in the coming decade. First, today's accelerated economic development is placing new demands on Arctic transport. Secondly, the sovereignty which Canada needs to demonstrate in the high Arctic can only be effective if supported by adequate Canadian transport. Finally, any transportation system must be compatible with the environment and must not disturb the sensitive ecology of the North. Each of these three features points directly to the need for a special approach to the planning of transportation in the Arctic as distinct from that in Southern Canada.

Complexity of present organizational arrangements

This heavy dependence on transportation in the achievement of a variety of federal government programme objectives in the Northwest Territories and the Yukon Territory is made more complex because of the number of separate organizations determining or influencing the nature of the requirement for transportation and the number of separate modally based federal Administrations and Regional Offices managing the facilities and services. Fragmentation is so prevalent in both the user and provider organizations that a direct course of action is overwhelmingly difficult to achieve. Federal government departments with large scale activities in the North include Indian Affairs and Northern Development, Solicitor General, National Defence, Public Works, Health and Welfare. Some of the programmes of these departments contain a further subdivision of responsibility and resulting complexity because of the responsibility being shared with the Yukon and Northwest territorial governments. The way in which we have managed northern transportation programmes in the past has tended to compound the problems associated with responding to a wide variety of requirements because of two Administrations and three Regional Offices being involved with their differing approaches to similar situations and without the benefit of a single office responsible for their coordination.

The divided responsibility for federal government activities in the North and the multiplicity of government and outside interests in Arctic transportation matters has resulted in a perplexing situation which has served to detract from a comprehensive evaluation of transportation requirements and the attainment of optimum solutions. Full recognition of this situation is essential in considering any alternative arrangement. All federal interests are represented on the Advisory Committee on Northern Development which has been organized for many years under the Minister of Indian Affairs and Northern Development as the office responsible for coordinating economic development in the North. This forum provides the opportunity for the integration of transportation with all other aspects of federal activities in the North. A similar single interface with groups outside of the federal government is necessary if the planning of transportation services and facilities is to be responsive to the social and economic community which it serves.

Retention of operational and regulatory arrangements

The quality and level of operational and regulatory functions of both the Air and Marine Administrations is satisfactory and the formation of ATA should not disturb or alter present effectiveness. Retention of the functional expertise and organizational affinity on a North-South basis, is considered to be a continuing requirement in order to maintain the unity of operational systems and the integral nature of national and international regulations.

- 4 -

On some occasions, the work of the Administrations would have been facilitated if there had been a point established where the multiple lines of interest outside of the Ministry could have converged before the technical aspects of the problem became the predominate consideration.

Need for early recognition of separate standards and criteria

As stated in the report of the Task Force "provision of transportation services in the Arctic has traditionally presented unique difficulties and peculiarities caused by great distance, sparse population, difficult terrain and long periods of severe climate these conditions and the higher costs of northern transportation point to the need for intermodal development". The need for transportation facilities and services in the Arctic is likely to continue to accelerate during the foreseeable future. With few exceptions, transportation services in the Arctic are only beginning to be established on a regularly scheduled basis and a good amount of the service is tailored to a particular purpose which may be required for a short period or the need may continue but in a modified form. It is during these early formative stages that patterns of transportation facilities and levels of service will be established for some considerable time into the future. Full consideration of the alternative methods of satisfying a transportation requirement and sustained coordination of functions is therefore of unmistakable importance particularly during the early stages. Duplication can be eliminated and effectiveness improved through a striving for optimum use of available resources.

Not only must duplication be avoided but alternative choices must be gauged against the same type of criteria expressed in terms of social or economic benefit. It is also important that separate criteria applicable to Arctic regions be developed for the provision of transportation facilities and changes in the application or the introduction of special operating regulations where considered necessary. The tendency in the past has been to evaluate proposals using the same criteria and standards applicable to southern locations. This fails to recognize the peculiar and unique differences of transportation in northern parts of the country and the need to develop a directly applicable basis for assessing new requirements. With the ever present situation of requirements being in excess of available funds, the effect of applying prevailing standards has been to attract available funds to southern locations; northern locations being those that least meet the higher standards applicable to southern Canada with its higher population density and more diversified economy.

Need for separate programme activity

Political representation, personal and organized group pressures are in inverse proportion to the comparative reliance on transportation as a means of developing and sustaining the social and

economic viability of this region. This is attributable to more widely separated population centres, difficulty in communicating, maturity of local government and inverse numbers of representatives to area served when these are compared with southern counterparts. This greater pressure in southern areas produces the greater flow of transportation facilities and services. Administration of federal transportation services on a basis that unites and brings a degree of cohesiveness to Arctic transportation of all modes appears to be the best and hopefully the most favoured method of attaining a point of equilibrium which recognizes these differences and at the same time allows for the provision of the service or facility at the least overall cost.

In order to manage Arctic operations and to allocate resources for the greatest effectiveness, there is a need for data pertaining to budgets, expenditures and revenue that are directly applicable to Arctic operations. A separate programme activity is therefore required in order to isolate the costs and revenue pertaining to Arctic operations from those pertaining to operations elsewhere in Canada.

Need for separate monitoring of programme implementation

Monitoring the implementation of transportation programmes in the Arctic has in the past been uncoordinated. Not only have Air and Marine programmes been operated separately but even within these programmes the several Regional Offices and component specialist and functional offices have performed their work individually and without the opportunity to obtain a full awareness of the need for sustained coordination at the senior and lower levels of the organizational hierarchy. Indeed, the pressures generated in respect to monitoring operations in the southern parts of these regions has been inclined to favour southern projects at the expense of those in northern locations. This divided, disproportionate and uncoordinated monitoring of northern transportation needs to be replaced by a system providing an improved perspective of transportation which cuts across modal and geographic lines prevalent in the operational and managerial functions. The result being to bring Arctic transportation into a more direct relationship to the national socio-economic objectives for this part of the country and placing it in a position where it can influence the nature and direction of those programmes to which it provides support.

Need for separate revenue structure

Arctic transportation presents a separate group of problems for the Air and Marine Administrations as they move toward a more balanced position in respect to cost and revenue. Self-sufficiency is an exceedingly more remote possibility for northern transportation than for those parts of the country where the economies of scale have an opportunity to register to a greater degree. The Air and Marine Administrations could well be relieved of the burden of costly northern installations in order that each of them may achieve as completely as possible the user pay principle enunciated by the Minister. Their

financial statements should also show as favourable a financial position as their actual operations permit without distortion by the inclusion of costs arising from extraneous objectives.

True costs of providing and operating Arctic transportation facilities and service will in many instances be more obscure or indefinable than in southern areas. This not only makes management decisions more susceptible to error when based on inaccurate information, but it also means that charges to other government programs are less easily discerned and the opportunity is lost to benefit through the transfer of funds from those classed as beneficiaries.

Using the same scale of user charges for southern and northern parts of the country could result, if they have not already done so, in inequalities which may render the past overall approach unacceptable. There appear to be valid reasons for a close look at airport landing fees, fuelling, concession charges, en route aviation charges, etc. Such a study should be closely related to the Government's objectives in the North, in particular the high priority objective to provide an equality of life and an equality of opportunity for Northern residents.

Function, location and name of ATA Headquarters

In the proposal of the Task Force, ATA was being thought of as an operating Administration and consequently it was considered that the headquarters should be located somewhere in the northwest close to the major area of operations, and that a small office could be established in Ottawa to provide co-ordination with headquarters elements of the Ministry. The role of ATA in this proposal however is quite different, in that the interests of ATA would be centered in planning, programming, policy making, financial resource allocation and costs for transportation activities throughout Canada's North. In order to integrate these management functions with like functions being performed in the Air, Marine and Surface Administrations, it would be necessary that the headquarters be located in Ottawa. This difference in roles is generated by the intention to concentrate endeavours in the areas where improvements are considered necessary and to leave untouched those areas which are operating satisfactorily and where any adjustment would serve to detract from the present situation.

This paper employs the title "Arctic Transportation Administration" as used by the original Task Force and not "Arctic Transportation Agency" as proposed by Intertrans. It is suggested that the former title denotes more accurately its function of programming and controlling an annual budget of several million dollars for the

- 7 -

ongoing operation of a transportation system. The use of the term "Agency" indicates that it is either a centre where the work is performed as the agent of a more senior body, in which case it would convey the opposite relationship to that intended, or it implies it will only promote or influence rather than make decisive recommendations on priorities and allocation of resources across that entire system.

Coordination with Department of Indian Affairs and Northern Development

DIAND is responsible for coordinating all activities of the Federal Government which are directed towards its objectives for Northern Canada. As transportation is a key factor in these, special arrangements are required to ensure that the plans of the Ministry of Transport for the Arctic are consistent with the plans of the Department of Indian Affairs and Northern Development.

The primary instrument for achieving government-wide coordination in Arctic programs is the Advisory Committee on Northern Development. A Sub-Committee on Transportation has also been established.

The Ministry of Transport approach to coordination of its programs is the setting-up of Advisory Boards for each of its Administrations. These are now beginning to function although, in their formative stages, on an "intra-" rather than an "inter-departmental" basis. Because of the direct relationship between the proposed ATA and the programs of DIAND, DND, and other departments the ATA Advisory Board may have to be constituted from the start on a fairly broad base.

There could be duplication of effort between the ATA Advisory Board and the ACND Sub-Committee on Transportation. Discussions with DIAND suggest that the latter might be phased out if the Advisory Board provided adequate opportunity for inter-departmental coordination of Arctic transport programs.

Financial Considerations

In the plan proposed, the cost of the ATA during 1971-72 will not exceed \$120,000. Recruiting for nine vacancies will proceed progressively through that year. However for 1972-73, based on 9 man-years the annual cost will approach \$215,000. This will include travel, office supplies and equipment. Costs of studies and use of consulting services would be extra but these are as yet unidentifiable.

Federal-Provincial Relations

The formation of ATA as an organization will have no immediate bearing on Federal-Provincial relations. However, many of the provinces look to the Territories as an important factor in their own economic development. The normal resupply for Arctic Operations, the exploration for resources and their delivery, all hold promise for economic returns. The improvement of northern transportation will therefore have a direct bearing on provincial aspirations. The provision of transport facilities in the Territories will also prompt requests for similar facilities in northern sections of provinces. It is possible that certain marine and air terminals within the provinces which are essential links between the Territories and southern cities will have to be considered as Arctic facilities for planning and policy purposes. It is therefore to be assumed that as ATA develops, Federal-Provincial problems will arise requiring special attention and negotiations. All such problems will have to be co-ordinated with the other Administrations concerned.

Northern Community Relations

An essential aspect of transport planning will relate to the Government's objectives to provide for the interests of Northern residents by methods which are compatible with their own preferences and aspirations. ATA must be sensitive to local community needs and avoid decisions based only on economic factors. ATA staff will have to acquire firsthand experience of the sociological problems in the differing sections of the Arctic and may occasionally seek outside assistance for their resolution. Special training courses, now available, will be used to develop this expertise. In any case, consideration should be given to appointing a community planner qualified to deal with the transportation problems of Northern residents.

Proposals

In the light of the above factors, the following recommendations are made:

Organization

1. An Arctic Transportation Administration (ATA) be established within the Ministry of Transport to promote, co-ordinate and control the Ministry's plans and programs in line with the national objectives for Northern Canada and the priorities of these as set out by the Government. The ATA will have the same relationships to the Ministry Executive, the Transportation Development Agency and the Canadian Transport Commission as do the other Administrations within the Ministry.
2. ATA's geographic scope of responsibilities be the Yukon Territory and Northwest Territories which later may be extended to include plans, programs and policies relating to certain designated facilities serving north-south links into the Territories (e.g., Churchill) as determined in consultation with the other Administrations.
3. An Advisory Board of ATA, consisting of the following members plus the Administrator as Chairman, be established along the lines approved by Transportation Council for the other Administrations: Senior Assistant Deputy Minister, Senior Ministry Executive - Policy, Planning and Major Projects, Assistant Deputy Minister Finance, Administrators of the Air, Marine and Surface Administrations, President of Northern Transportation Co. Ltd., two representatives from Department of Indian Affairs and Northern Development and one each of the Canadian Meteorological Service, Department of Communications and Department of National Defence. Membership on this Board should also be considered from the new Department dealing with environmental matters (as well as CMS). Liaison with CTC will be required through membership on the Board and/or through some direct channel. Records of the proceedings of the Advisory Board will be filed with the Advisory Committee on Northern Development to ensure co-ordination of Arctic transportation matters at Deputy Minister level.
4. The establishment of the ATA will not alter the responsibility of DIAND in carrying out its present program of Northern road construction and administration. With respect to its role in the construction of airports, that Department will continue to administer a program for the construction and operation of small remote airstrips and resource airports which do not form part of the basic airport network in the Arctic. In the case of both roads and airports, consultation between DIAND and ATA will ensure that plans for these will conform to total transportation concepts in the North.

- 10 -

5. ATA Headquarters, located in Ottawa, be structured into two divisions, Planning and Finance, as indicated in Appendix "C".
6. ATA, in its formative years, consist of approximately 10 personnel only, and that the responsibility for, and the control and direction of, all other employees and those employed under contractual arrangements, located at points in the northern territories, remain permanently with the Air, Marine and Surface Administrations.

Responsibilities

7. ATA be responsible for the initiation and development of new policies and short and long range programs of the Ministry with respect to transport in the Arctic and be the focal point within the Ministry for all problems relating to these. ATA to carry out this responsibility by:
 - a) Initiating and co-ordinating proposals for new policies and programs.
 - b) Reviewing and making recommendations on other proposals of a like nature received from other sections of the Ministry and from outside sources.
 - c) Assisting the Ministry in replying to queries on Arctic transportation policies and programs.
8. ATA be responsible for the preparation and presentation to the Ministry Executive for approval an annual program forecast and estimates submission and any changes thereto, relating to all transport activities of the Ministry in the North, excluding programs of NTCL, TDA and CTC. For sake of uniformity, ASTA has been included on the same basis as the other Administrations although it is appreciated that the operating role of ASTA in the Arctic has still to be examined. ATA will carry out this responsibility and any adjustments thereto, in collaboration and with the assistance of the other Administrations by:
 - a) Identifying the Arctic Program, through the activity coding system as the summation of all operational activities carried out by CATA, CMTA and CSTA in the Arctic plus those of ATA itself.
 - b) Leaving with the other Administrations the present operational planning function in which specific plans for the Arctic are initiated and developed in accordance with approved policies and long range programs.
 - c) Initiating proposals for specific operational plans in response to outside requests, these plans to be developed by the Administration concerned.

- 11 -

- d) Recommending priorities for the various elements of the Arctic program.
 - e) Reviewing the development of operational plans with each Administration in the light of priorities established by the Ministry.
 - f) Consolidating programs thus developed within the Administration and presenting them to the Ministry for approval and onward transmission to Treasury Board as an Arctic Transportation Activity.
9. ATA subdivide its approved programs for implementation by CATA, CMTA or CSTA and develop in co-operation with them a reporting system which will, on the management by exception principle, reveal items not being implemented according to plan. In such cases, ATA will be responsible for resolving any adjustments in priorities or difficulties thus created.
10. ATA serve in an advisory role with respect to the establishment and enforcement of Regulations. These responsibilities would remain with the other Administrations. ATA would develop programs consistent with minimum safety requirements established by these Administrations, but might exceed them where considered desirable in order to remove restrictions to Arctic transport (e.g., more navigational aids than prescribed by national standards).

Relationships and Liaison

11. ATA establish close liaison with DIAND, the Territorial Commissions, Regional Offices of CATA, CMTA and other departments, and with the users of the northern transportation system including the location of a field officer of the Planning Division in Yellowknife. Another such field officer will be established in Frobisher or Montreal if experience indicates this is necessary. Functions of the field officers will be:
- a) Learning at first hand the problems of northern transport, and receiving proposals in the field and reporting them to the ATA and other Administrations involved.
 - b) Proposing specific operational plans (see 8(c)) in response to outside requests.
 - c) Monitoring the progress of the development of operational plans in the Administrations (see 8(e)).
 - d) Recommending to the Chief of the Planning Division priorities for various elements of the program.

- 12 -

e) Co-ordinating procedural problems in planning and financial matters with Regional Offices of CATA and CMTA.

12. A Community Planning Officer position be established later within the Planning Division to ensure that adequate priority be given to those Northern objectives which are designed to protect the interests of Northern residents and the ecology of the region.

Implementation

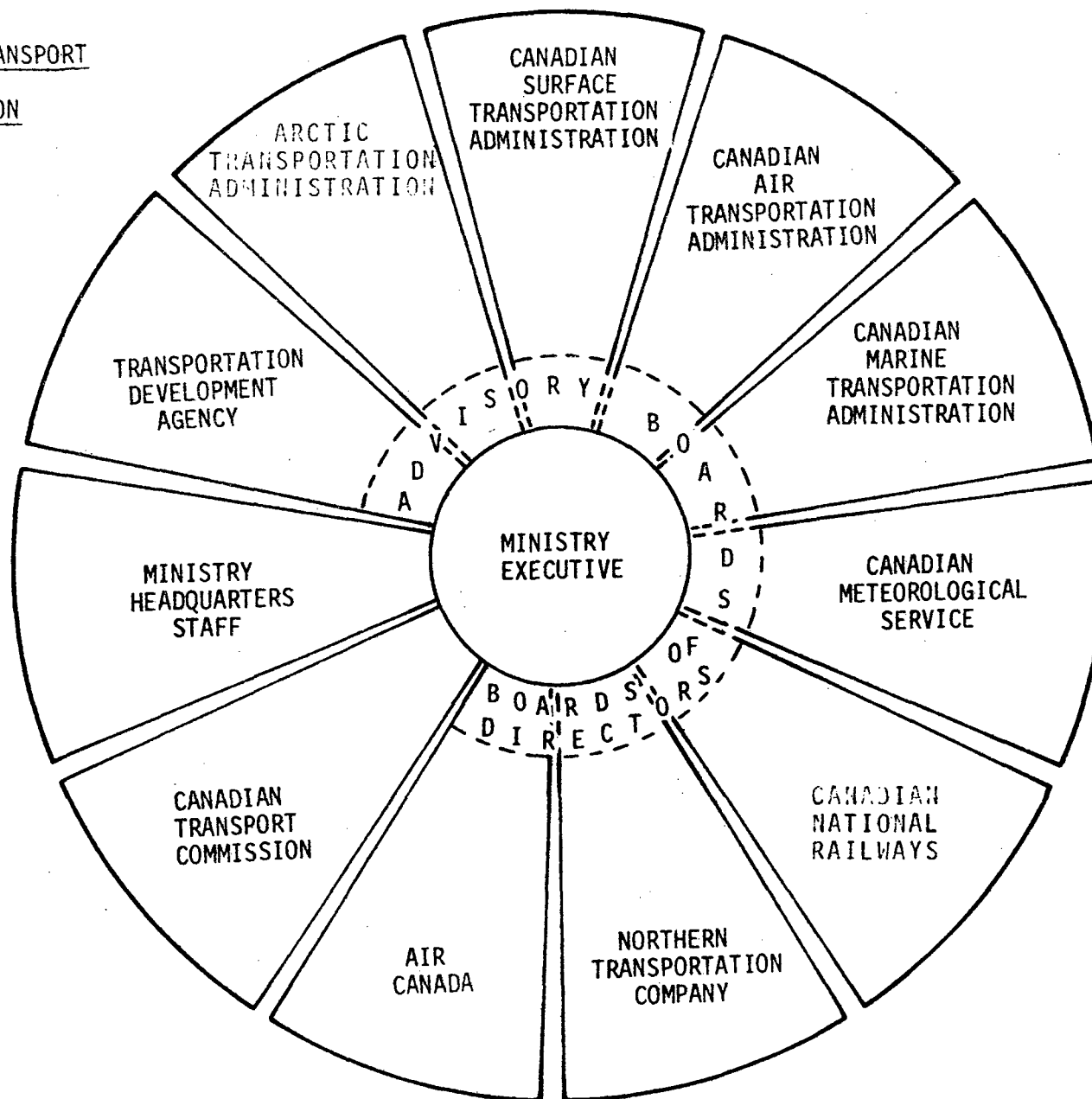
Agreement is sought on the following points:

1. That this Proposal be given to the Minister of Indian Affairs and Northern Development for his concurrence and that the Prime Minister be advised of the agreed plan.
2. That a submission be made to Treasury Board for approval of the organizational structure, program responsibilities, activity structure and classification of senior level positions, and following the Board's approval that appointments be made to all the vacancies so created.
3. That estimates for 1971-72 be prepared to enable the Arctic Transportation Administration to function during that fiscal year and these be included as a 1971-72 Supplementary Estimates item and in the Main Estimates for 1972-73. These estimates would include salaries and administrative costs for a staff of approximately ten.
4. That the entire program of the Arctic Transportation Administration including all Air, Marine and Surface programs in the Arctic, be incorporated as a separate Program and Vote in the Ministry's Program for 1973-74 and thereafter.
5. That the staffs of the Air, Marine and Surface Administrations be requested to give effect to the foregoing proposals by developing, in conjunction with the nucleus of the Arctic Transportation Administration staff, appropriate and satisfactory administrative and financial systems and procedures.

(Revision of April 22, 1971)

MINISTRY OF TRANSPORT

ORGANIZATION



APPENDIX B

National Objectives for Northern Canada

These national objectives set out an overall policy framework for programs relating to the development of the Northern Territories. They were submitted by the Department of Indian Affairs and Northern Development in a memorandum to Cabinet of November 10, 1970. The Cabinet Committee on Priorities and Planning considered and approved the memorandum on November 17, 1970, and this was further confirmed by the Cabinet on December 3, 1970. In addition, the Minister of Indian Affairs and Northern Development was requested to provide additional information with respect to a planning memorandum to set out the workable alternative weights of objectives and a paper on Eskimos and the concept of aboriginal rights. These are in course of preparation.

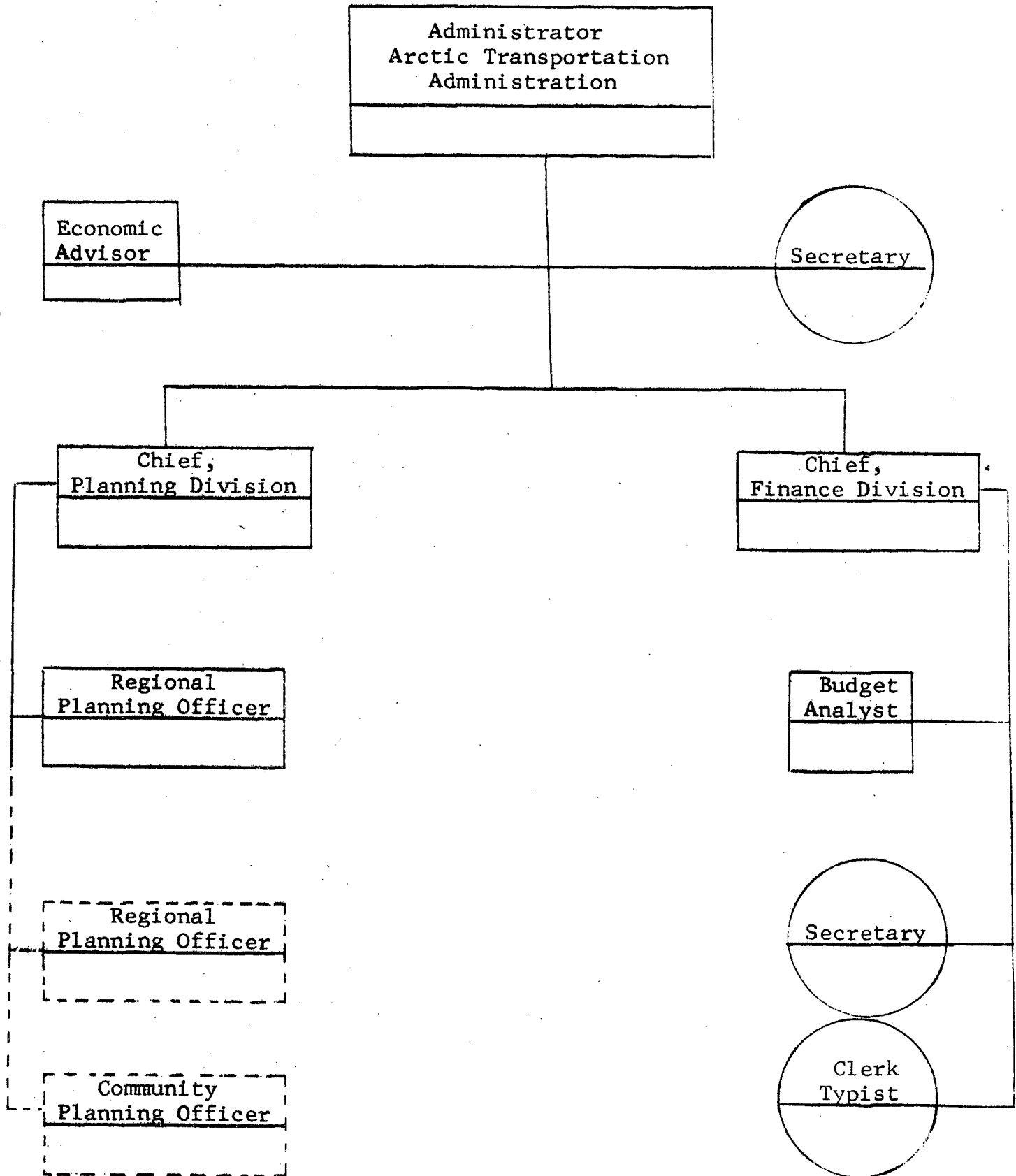
The following objectives are not ranked in any order of importance. Their sequence is meant to suggest that political, social, and economic development must provide the foundation for action in other fields:

- To further the evolution of government in the northern territories.
- To provide for a higher standard of living; quality of life, and equality of opportunity for northern residents by methods which are compatible with their own preferences and aspirations.
- To realize the potential contribution of the northern territories to the social and cultural development of Canada.
- To encourage viable economic development within regions of the northern territories so as to realize their potential contributions to the national economy and the material well-being of Canadians.
- To maintain Canadian sovereignty and security in the North.
- To maintain and enhance the northern environment with due consideration to economic and social development.
- To develop fully the leisure and recreational opportunities in the northern territories.

MINISTRY OF TRANSPORT

APPENDIX C

ARCTIC TRANSPORTATION
MINISTRATION



INTERGOVERNMENTAL CONFERENCE ON ARCTIC SCIENTIFIC PROBLEMS

My letter of April 15 to members of the Advisory Committee on Northern Development outlined the situation regarding the proposed conference. In accordance with the recommendations of the Sub-Committees on Science and Technology, I proposed in this letter the following approach:

1. Cancel plans for the conference.
2. Give active support to appropriate scientific conferences on Arctic matters by ensuring adequate Canadian representation, and by encouraging the holding of such conferences in Canada.
3. Resume closer liaison on co-operative and complementary research between Canada and the U.S.A. as agreed at Montebello.
4. Pursue with the U.S.S.R. their suggestion of expanding bilateral co-operation in Arctic scientific studies.
5. Encourage bilateral discussions with other states on co-operative arctic research.

All replies received (16 out of 21) concurred. A draft memorandum to the Cabinet has now been prepared and is with External Affairs for comment. The memorandum includes a recommendation that A.C.N.D. be assigned responsibility to propose for Cabinet consideration by September 1, 1971 machinery to ensure adequate Canadian representation at international arctic conferences and to suggest means to encourage the holding of such conferences in Canada as mentioned in (2) above. (Reference paragraphs 4d and 8d of draft memo to Cabinet)*

* For background on this item please see the attached note.

CTWH/al
4/5/71

May 5, 1971.

At the last meeting of the Conference Planning Committee of the Sub-Committee on Science and Technology, the view was expressed that:

- (a) Canada is currently at a disadvantage when it is desirable to use scientific activities to aid expression of policy, to demonstrate interest or to provide a response when others use science as a policy instrument because there has rarely been government involvement in Canadian representation or briefing of Canadian participants.
- (b) Government departments with responsibility for specific areas of science have left participation in conferences and international exchanges in these areas very much up to the interest and convenience of individual scientists. There was rarely any co-ordination between and sometimes even within departments.
- (c) It was important that these shortcomings be corrected in order that Canada's northern scientific activities can be brought to the forefront and more fully exploited for scientific and government purposes.
- (d) Because of the specialized nature of various government departments the ACND, through the Sub-Committee on Science and Technology, was the appropriate agency through which to co-ordinate Canadian participation in conferences highlighting scientific activities pertaining to the Arctic.

The sort of study the Sub-Committee might carry out would review probable Arctic conferences over the next few years and recommend the nature and extent of any government encouragement. It should also propose means of ensuring adequate Canadian representation.

THIS DOCUMENT IS THE PROPERTY OF THE GOVERNMENT OF CANADA

CONFIDENTIAL

May 1971

MEMORANDUM TO THE CABINET

Intergovernmental Conference on Arctic Scientific Problems

1. OBJECT

To seek approval to cancel plans to hold an intergovernmental conference on Arctic scientific problems in Canada in the spring of 1971 and to seek concurrence in an alternative course of action.

2. BACKGROUND

On June 11, 1970, the Cabinet confirmed a recommendation of the Cabinet Committee on Science Policy and Technology that an international conference on problems of the Arctic environment be held in Canada in the spring of 1971. On October 27, 1970, approval was given to the agenda and other arrangements for the conference (Cab. Doc. 1298/70). During discussion in Cabinet Committee, the view was taken that it would be most desirable to ensure Soviet participation. It was therefore concluded that an informal approach should be made to the U.S.S.R. before formal invitations were issued. After considerable delay, the Soviets replied that in their view an international scientific conference would be inexpedient under present conditions and instead suggested bilateral co-operation in this sphere. Further representations have failed to change their attitude.

3. FACTORS

- a) In reflection of the government policy of collaboration with other nations in scientific studies of arctic problems, planning of the conference has been based from the outset on a multilateral approach. The Soviet reaction has been consistently opposed. An international scientific conference without Soviet participation would lose much of its value.
- b) The U.S.S.R. has indicated a willingness to discuss co-operative Arctic research with Canada on a bilateral basis citing previous experience in this direction.
- c) The negotiations for the international scientific conference were considered by the U.S.S.R. to be linked to the proposal for a legal conference on navigation safety and pollution control in Arctic waters arising from the United States call for an Arctic conference following the introduction of the Arctic Waters Pollution Prevention Act. Informal discussions have now been held with the U.S.A. and U.S.S.R. on a proposed multilateral conference intended to discuss the terms of a treaty that would raise an international legal umbrella over the special rights and responsibilities of Arctic coastal states.
- d) Following the U.S.-Canadian joint seminar on arctic research held at Montebello in April, 1970, it was agreed to co-operate more fully in arctic research on a bilateral basis. While bilateral co-operation has continued during the past year it was de-emphasized pending the result of negotiations with the Soviets on the holding of a multi-national arctic scientific conference.

- 2 -

- e) During the past year, the U.K., U.S.A. and other nations have taken certain initiatives through organizations like the Ditchley Foundation to hold conferences dealing with arctic scientific matters as well as conservation, natural resource exploitation, jurisdiction, navigation safety, pollution, and claims of arctic coastal states. In order to offset these initiatives, it is important both domestically and internationally that Canada be seen to be in the forefront in arctic activities. It is therefore advantageous to encourage greater international collaboration on arctic research on both a bilateral and multi-national basis.

4. ALTERNATIVE

In view of the foregoing factors and in order to:

- Demonstrate the Canadian intention to collaborate in multi-national scientific studies of arctic problems, maintain Canadian initiative in Arctic scientific matters, and increase the exchange of information and expertise,

The following measures are proposed as an alternative to calling an international conference at this time*

- a) To pursue with the Soviets the possibility of developing bilateral co-operation in Arctic scientific research, and investigation, including the practical implementation of the forms and orientation of such co-operation, leading possibly to the co-sponsoring of an international conference.
- b) To resume the closer liaison on co-operative and complementary research between Canada and the U.S.A. as agreed at Montebello in April, 1970. This had been de-emphasized while discussions were proceeding with the U.S.S.R. on the international arctic science conference on the grounds that the Soviets might consider it evidence of collusion in planning the conference.
- c) To undertake bilateral discussions with other states as appropriate in order to encourage co-operative and complementary arctic research. In this way Canada could continue to broaden the exchange of scientific and technological information and expertise on a multi-national basis.
- d) To demonstrate Canadian determination to collaborate in multi-national studies of Arctic scientific topics by giving financial and other support to appropriate non-governmental scientific conferences on Arctic matters, by assuring adequate Canadian representation at such conferences at home and abroad, and by encouraging the holding of such conferences in Canada. To this end (for Cabinet consideration, the Advisory Committee on Northern Development could undertake a study of how such conferences would be supported, and establish criteria for the selection of suitable Canadian representation.

5. INTERDEPARTMENTAL CONSULTATION

Interdepartmental consultation has been conducted through the medium of the Advisory Committee on Northern Development which has discussed the matter and concurs in the recommendations.

6. PUBLIC RELATIONS CONSIDERATIONS

This subject has not been developed for the purposes of this memorandum.

...3

- 3 -

7. CONCLUSION

The holding of an international arctic scientific conference would lose much of its value in view of the Soviet refusal to attend. To retain Canadian initiative and to provide the multi-national exchange of information and expertise on Arctic scientific matters, it is necessary to foster bilateral discussions on co-operative and complementary research with the U.S.A., U.S.S.R. and other countries as appropriate.

8. RECOMMENDATIONS

- a) That the Cabinet approve cancellation of plans to hold an international conference on problems of the Arctic environment in Canada, in 1971.
- b) That active support be given to appropriate scientific conferences on Arctic matters by ensuring adequate Canadian representation and by encouraging the holding of such conferences in Canada.
- c) That the Cabinet give approval:
 - i) to resuming closer liaison on co-operative and complementary research on Arctic matters between Canada and the U.S.A. as agreed at Montebello in April, 1970.
 - ii) to pursuing with the Soviets their suggestion of expanding bilateral co-operation in Arctic scientific studies between Canada and U.S.S.R.
 - iii) to undertaking bilateral discussions with other states so as to encourage co-operative Arctic research with Canada in order to benefit from multi-national exchanges of information and expertise.
- d) That the Advisory Committee on Northern Development be assigned the responsibility to propose before September 1, 1971, machinery to ensure adequate Canadian representation at international arctic conferences and to suggest means to encourage the holding of such conferences in Canada.

Advisory Committee
on Northern Development



Comité consultatif de la mise
en valeur du Nord canadien

DOCUMENT ND-502

MEMORANDUM TO THE ADVISORY
COMMITTEE ON NORTHERN DEVELOPMENT

Arctic Waters Pollution Prevention Act

At the 79th meeting of the Advisory Committee on Northern Development, the regulations under the Arctic Waters Pollution Prevention Act were tabled. The working group was requested to report back to the Committee after considering a number of points which were raised, some of which were procedural, and others involving the implementation of the regulations.

The attached report and schedule represent a review in detail of the five recommendations.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
Ottawa, April 26, 1971.

ARCTIC WATERS POLLUTION PREVENTION ACT

On July 31, 1970, a report and tabling of draft regulations was made at the 79th meeting of the Advisory Committee on Northern Development by Mr. J.K. Naysmith, chairman of a special Working Group on Arctic Waters Pollution Prevention Act Regulations. Five recommendations were put forward, which are reviewed in this paper as the framework for reporting on subsequent work.

1. Liability

Recommended that the A.C.N.D. commission a special Working Group to study the question of pollution liability and to recommend ways of dealing with the problem.

Comment

This is clearly a most difficult problem to resolve, and involves balancing the likely costs of clean-up in the Arctic against the ability of potential polluters to "provide evidence of financial responsibility" in an amount to be determined according to Liability Regulations. Clean-up costs will obviously be high for reasons of climate and logistics - estimates as high as \$2,000 per ton for crude oil have been offered by authorities on the subject. The Working Group has viewed \$500 per ton as a somewhat arbitrary compromise figure. For off-shore drilling, it is proposed that pollution liability be limited to \$10 million per well.

- 2 -

The position of the insurance industry in providing coverage for a potential polluter's financial responsibility can be summarized as follows:

- (a) Shipping - The Act specifies absolute liability, and the "joint and several" liability of both shipowner and cargo owner. International marine insurance underwriters will not provide absolute liability coverage to shipowners, and there is no pollution liability insurance available to cargo owners.

The international marine insurance market will provide insurance to shipowners under the conditions of the Inter-governmental Maritime Consultative Organization (IMCO), International Convention on Civil Liability for Oil Pollution Damages, in respect of oil only, in the amount of \$134 per ton to a maximum of \$14 million per vessel.

Such coverage is available subject to escape clauses that are excluded by the absolute liability provision of the Arctic Waters Pollution Prevention Act, e.g. acts of war, third party negligence, fault or privity of the shipowner, etc.

- (b) Offshore Installations (oil and gas drilling and production) - No pollution liability insurance is available.
- (c) Onshore Installations (tank farms, etc.) - Limited insurance coverage is available (in the order of \$1 - \$2 million maximum) for costs attributable to "fortuitous accidents" or "acts of God".

- 3 -

For shipping and offshore installations there remain two alternatives:

- (a) Mutual, or self-insuring by industry;
- (b) Underwriting by government.

In the case of (a), voluntary mutual funds for oil cargo owners, such as TOVALOP (Tanker Owners Voluntary Agreement Concerning Liability for Oil Pollution) have been organized internationally, and will likely evolve into the proposed IMCO sponsored International Compensation Fund.

Because the Arctic Waters Pollution Prevention Act departs from international practice in its pollution liability provisions, it is unlikely that the Fund, or its predecessors, would be available to shipping in arctic waters.

Arrangements for mutual insuring by offshore drilling interests who operate in arctic waters would logically be undertaken by the petroleum industry.

It will be extremely expensive to successfully combat a major oil spill in the Arctic, whether it originates from an oil tanker or from offshore oil and gas activities. Clean-up of bunker C oil spilled in Chedabucto Bay from the 18,000 ton Arrow will cost the government approximately \$4 million. A major spill in arctic waters, involving, for example, a 250,000 ton tanker carrying crude oil of largely unknown behaviour under Arctic conditions, could cost scores of millions of dollars, and the polluter is required, by law, to reimburse the government for these costs.

- 4 -

The overriding issue concerns how arctic shipping and offshore petroleum interests can meet their liability requirements under the Act and still be able to economically operate in the far North.

Recommendations

- (a) A basic intent of the Act appears to be that the major oil companies would have to make part of their own Canadian assets available as a guarantee of financial responsibility for pollution damages. Discussions have not been held with the major producers in this regard, and it is recommended that they be conducted, at a senior level, before Liability Regulations are promulgated.
- (b) The Shipping Federation of Canada has recently expressed concern about the impact of the Arctic Waters Act liability provisions on shipping to Churchill and other ports on the Hudson Bay shipping route. Ships represented by the Federation may also navigate the high Arctic. It is recommended that a meeting be held with the Federation, initiated by the Ministry of Transport, to examine the interests of shipping companies carrying general cargo in arctic waters.
- (c) It is recommended that the above be followed by a senior level meeting, chaired by the Department of Indian Affairs and Northern Development, to review the implications of the Act for northern development and to examine the question of government underwriting of arctic waters pollution liability insurance.

*recommend how the liability aspect
shd be handled.*

2. Arctic Waters Quality Criteria

Recommended that the National Research Council Associate Committee on Scientific Criteria of Environmental Quality address itself to questions of criteria and standards for Arctic Waters.

Comment

The Committee has examined the question of criteria upon which to regulate discharge of wastes into arctic waters. A continuing liaison between National Research Council authorities and the administrators of the Act will ensure that regulations concerning waste deposition will be based on the best scientific knowledge available.

3. Administration

Recommended that the Governor in Council delegate authority to administer the shipping provisions of the Act to the Ministry of Transport, offshore undertakings in Hudson Bay arctic waters to the Department of Energy, Mines and Resources, and land based and other arctic waters offshore undertakings to the Department of Indian Affairs and Northern Development.

Comment

This recommendation follows from section 26 of the Act. A draft submission to the Governor General in Council in this regard is attached. It should be noted that the draft submission is not concerned with the preparation of regulations.

4. Pollution Control Officers

Recommended that the Governor in Council appoint Pollution Control Officers in accordance with recommendations of the responsible Ministers.

Comment

Action is being withheld pending issuance of the Order-in-Council referred to above. It should be noted that the Ministers of Indian Affairs and Northern Development and of Energy, Mines and Resources, under the proposed split in administrative responsibility, could themselves appoint pollution prevention officers for land based and offshore undertakings. Appointment of such officers for shipping purposes only must be approved by the Governor in Council (Subsection 26(2)).

5. Promulgation

Recommended that the draft regulations (submitted to the A.C.N.D. at the 79th meeting), after certain refinements be forwarded to the Department of Justice for final review before promulgation.

Comment

- (a) Arctic Waters Shipping Regulations have been circulated to industry by the Ministry of Transport, accompanied by a draft Order-in-Council setting out the Shipping Safety Control Zones in which the regulations will apply. Comments by industry indicated that a redrafting was necessary. A second circulation is planned for this summer.

- 7 -

- (b) Arctic Waters Pollution Prevention Regulations, covering waste deposition from land based and offshore installations or activities, are being developed in the Northern Economic Development Branch. ^{2/ANB} The scope of these regulations was originally thought to be quite restricted by the wording of the Act. A recent interpretation of the intent of section 4 by Justice enables taking a broader approach, including issuance of permits to potential polluters, e.g., tank farm owners on the Arctic coast. The Department of Indian Affairs and Northern Development would enforce these regulations (except for Hudson Bay offshore activities) by the personnel in each territory who administer the Northern Inland Waters Act, and the Oil & Gas Production & Conservation Act. The prevention of pollution from ships (garbage, bilgewater, etc.) is provided for in the Arctic Shipping Regulations.
- (c) Arctic Waters Liability Regulations have experienced slow progress for the reasons outlined in 1 (above). The draft presented to the A.C.N.D., with refinements, has been approved by Justice on a strictly legal basis. Because the insurance industry is unwilling to provide absolute liability insurance for pollution damages, it must be determined how much proof of financial capability can be realistically carried by industry, and how much pollution liability risk the federal government is willing to assume, before practical Liability Regulations can be promulgated.

PRECIS FOR THE CLERK OF THE PRIVY COUNCIL

Authority to delegate responsibilities under the *Arctic Waters Pollution Prevention Act* respecting shipping to the Minister of Transport, responsibilities respecting land based undertakings to the Minister of Indian Affairs and Northern Development, and responsibilities for off-shore undertakings to the Ministers of Indian Affairs and Northern Development and Energy, Mines and Resources.

To His Excellency the Governor General in Council:

The undersigned have the honour to represent:

That it is in the public interest that responsibility for administering those provisions of the *Arctic Waters Pollution Prevention Act* concerning shipping be assumed by the Minister of Transport, and that responsibility for administering those provisions of the said Act concerning land based undertakings be assumed by the Minister of Indian Affairs and Northern Development, and for those provisions concerning off-shore undertakings in arctic waters south of the line described in the attached schedule be assumed by the Minister of Energy, Mines and Resources, and for those provisions concerning off-shore undertakings in all other arctic waters be assumed by the Minister of Indian Affairs and Northern Development.

The undersigned, therefore, recommend that Your Excellency in Council may be pleased, pursuant to section 26 of the *Arctic Waters Pollution Prevention Act*, to designate that power and authority under the following provisions of the *Arctic Waters Pollution Prevention Act* be delegated to the following members of the Queen's Privy Council for Canada.

Minister of Transport

Subsection 5 (2)
Subsection 6 (2), in reference to
paragraph 6(1) (c)
Subsection 8 (1), in reference to
paragraph 8(1) (d)
Subsection 12 (2)
Section 13
Section 23
Section 24
Section 25

Minister of Indian Affairs
and Northern Development

Subsection 5 (1)
Subsection 6 (2), in reference to
paragraphs 6(1) (a)
and 6(1) (b)
Subsection 8 (1), in reference to
paragraphs 8(1) (a),
8(1) (b) and 8(1) (c)
Section 10
Section 14, in reference to subsections
15(1) and 15(2)

Minister of Energy, Mines
and Resources

(for off-shore undertakings in arctic
waters south of the line described in
the attached schedule)
Section 5(1)
Subsection 6(2), in reference to
paragraphs 6(1) (a)
and 6(1) (b)
Subsection 8(1), in reference to
paragraphs 8(1) (a),
8(1) (b) and 8(1) (c)
Section 10
Section 14, in reference to sub-
sections 15(1) and 15(2)

Respectfully submitted,

Minister of Transport,

Minister of Indian Affairs
and Northern Development

Minister of Energy, Mines
and Resources

Schedule

A line, commencing at the intersection of the sixtieth parallel north latitude and the west coastline of Hudson Bay, thence along the low water mark of Hudson Bay to Cape Fullerton, thence to Cape Kendall on Southampton Island, thence along the south shore of Southampton Island to Seahorse Point, thence to Lloyd Point on Foxe Peninsula, thence along the low water mark of the southern part of Baffin Island to the southeastern tip of Baffin Island (including the adjacent islands), thence to the Savage Islands, thence to the northwest corner of Resolution Island, thence along the low water mark of the southern shore of Resolution Island to its southernmost point, and thence along parallel 61°18' north latitude to the easternmost boundary of Canada.

**Advisory Committee
on Northern Development**



**Comité consultatif de la mise
en valeur du Nord canadien**

5

DOCUMENT COMS-1

SUB-COMMITTEE ON NORTHERN COMMUNICATIONS
ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

Terms of Reference

- a) To report to the Advisory Committee on Northern Development on plans for the development of northern communications.
- b) To consolidate where possible communications requirements and assist in the formulation of national system plans which will satisfy needs in the context of overall northern development.
- c) To maintain a continuous review of developments in northern communities in order to assist all federal and territorial departments and agencies interested and active in the North to coordinate communications requirements and planning.
- d) To consider which communication systems and techniques can best meet communication requirements, and review the latest research and development which could technically and commercially be exploited for application in the North.
- e) To transmit to the A.C.N.D. information received by the Department of Communications on plans for northern communications in which federal departments might be interested.

D. S. Loftus,
Chairman,
Sub-Committee on
Northern Communications.

March 29, 1971.

Advisory Committee
on Northern Development



Comité consultatif de la mise
en valeur du Nord canadien

DOCUMENT ND-505

MEMORANDUM TO THE ADVISORY
COMMITTEE ON NORTHERN DEVELOPMENT

Arctic Sovereignty

The attached document prepared by the Bureau of Legal and Consular Affairs, Department of External Affairs, is for the information of the members of the Committee.

It discusses the rights and responsibilities of Arctic coastal states from the Canadian point of view.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development
Ottawa, April 29, 1971.

Notes for a Statement by Mr. J.A. Beasley,
Legal Adviser/Director General, Bureau of Legal and Consular Affairs,
Department of External Affairs

Ditchley Conference, April 1971

RIGHTS AND RESPONSIBILITIES OF ARCTIC
COASTAL STATES: THE CANADIAN VIEW

ARCTIC SOVEREIGNTY

The term "Arctic sovereignty" has recently gained in currency, and nowhere more so than in Canada. Unfortunately, however, the term suffers from an inherent imprecision which has been aggravated by misuse. Indeed the very term "the Arctic" is itself used and understood in different ways in different contexts, thus compounding the confusion surrounding the notion of Arctic sovereignty.

What geographers refer to as the Arctic comprises the islands and continental fringes north of the Arctic Circle as well as the more than five million square miles of the Arctic Ocean (which itself is often referred to simply as "the Arctic"). Here precisely is the fundamental difference between the Arctic and Antarctic regions: whereas the Arctic consists of an ice-covered sea surrounded by land, the Antarctic is an ice-covered continent surrounded by open sea. The distinction is an essential one not only in geographic terms but also in terms of the applicability of legal principles to the two regions. Unfortunately, however, there is too often a tendency to treat the Arctic and Antarctic together from the legal point of view.

To speak of Arctic sovereignty in a generic sense, with reference to everything north of the Arctic Circle, is to suggest,

- 2 -

contrary to all geographic, climatic, legal and political realities, that there exists a single Arctic region and that the sovereignty of that region remains somehow unsettled. In fact, of course, the Arctic comprises many distinct and widely varying continental, insular and marine regions. So far as the land regions are concerned, there are few if any questions of Arctic sovereignty which remain unsettled.

While I cannot speak for other Arctic states, I must say that Canada is aware of no challenge to its sovereignty over the mainland and islands of the Canadian Arctic. Canada's sovereignty over these territories has been established beyond dispute under every test of law and fact since Canada fell heir to the rights of Great Britain in the 1860's and progressively extended its administration to the vast and complex system which today covers every sphere of activity throughout the whole of the Canadian Arctic. Similarly with respect to Canada's exclusive sovereign rights to explore and exploit the resources of its Arctic continental shelf. These rights, in the Arctic as elsewhere, are firmly established under both customary and conventional international law and flow from Canada's sovereignty over the lands adjacent to the shelf areas concerned.

I raise these non-issues only to dispose of them at the outset in order to ensure that our discussion here is not diverted down any false trails connected with popular misconceptions about "Arctic sovereignty".

What, then, are the issues of international law which arise in the current debate on Arctic policy? The essential issue, and the one which I propose to examine, relates to the present and potential

- 3 -

uses of the various regions of water and ice which together comprise the Arctic Ocean. Those uses are assuming ever greater importance as a result of the quickening pace of Arctic development, particularly as regards the large-scale commercial maritime traffic which will almost inevitably follow that development. The issue can be stated in these terms: Under what authority will the uses of the Arctic waters and ice be regulated and controlled (leaving aside the question of the exploration and exploitation of the continental shelf)? This, of course, is what is often loosely referred to as the "Arctic sovereignty" issue. It is also directly related to issues of international environmental law which in turn reflect national shipping policies and policies of resource development. Finally, the possible approaches to these matters are linked with the varying perspectives which have been adopted in considering the nature and status of the Arctic waters and ice from the legal point of view.

ARCTIC WATERS AND ICE: VARYING PERSPECTIVES

A number of states, and the USA in particular, have made clear their view that the Arctic Ocean as a whole is an ocean like any other. The proponents of this view hold that beyond the traditional narrow maritime belt of the territorial sea and contiguous zone (in the sense in which the latter term is used in the relevant 1958 Geneva Convention), the Arctic Ocean constitutes high seas and thus the regulation and control of activities therein is subject to the usual regime of the freedom of the high seas, that is to say to flag state jurisdiction so far as shipping is concerned.

- 4 -

Other views of the nature and status of the Arctic waters and ice have been expressed in other quarters. Professor Johnston of the University of Toronto has recently written that the Arctic "is an ocean because people have thought of it as such for a long time. More exactly it is a unique geographical area with some important oceanic properties.... The Arctic Ocean is largely hypothetical, a peculiar combination of hypothetical waters and hypothetical islands, the distinction mostly covered over by large masses of ice."

The importance of the ice factor is also emphasized in an article in the US Naval Institute Proceedings of September, 1961 by Commander Partridge (a Law Specialist then on duty in the Executive Office of the Secretary of the Navy). He wrote that "the Arctic ice pack is, in fact, subject to occupation and usage very similar to that of certain land areas" and made the point that many Eskimos "are born, live and die on the ice pack without ever having set foot on any form of land or even on ice supported by land". In spite of limited operations by vessels within the Arctic Ocean area, he asserted,

"the ice pack cannot be accurately described as freely and completely navigable by any known type of vessel. As a route of trade and commerce between nations, the pack ice is more likely to be traversed by dog sled and snowcat than by seagoing vessels. The forcible navigation of this area by icebreakers is more in the nature of a rape of the frozen seas than it is the free movement of seagoing commerce upon which the doctrine of the freedom of the high seas is based. It is no more navigation in the accepted high seas sense of the word than is the creation and navigation of a canal or ditch by a floating clam shell dredge. The ice so penetrated does not become sea any more than the land so penetrated becomes sea."

... 5

- 5 -

The views of Professor Johnston and Commander Partridge as quoted above are very similar to those of the Canadian Government as expressed in a Note to the US Government of April 16, 1970 (in reply to a US Note objecting to Canada's Arctic waters pollution legislation). In that Note the Canadian Government stated that traditional concepts of the law of the sea were irrelevant "to an area having the unique characteristics of the Arctic, where there is an intimate relationship between the sea, the ice and the land". The Canadian Note added further that it is "idle to talk of freedom of the high seas with respect to an area, large parts of which are covered with ice throughout the year, other parts of which are covered with ice most of each year, and where the local inhabitants use the frozen sea as an extension of the land to travel on it by dogsled and snowmobile far more than they can use it as water".

The permanent or quasi-permanent presence of ice in vast parts of this "hypothetical ocean" gives rise to yet further special characteristics having legal implications. Thus, there are many Arctic regions - such as Canada's Northwest Passage and the USSR's Northeast Passage - where no international shipping routes have developed. Where shipping routes do exist in these regions they have been developed through the efforts of the adjacent coastal state, for which these routes have a vital significance. Navigation through such routes can normally be carried out only with the provision by the coastal state of a complex of special facilities and measures of assistance (such as meteorological and communications services, ice reconnaissance, aerial escort and ice-breaking and pilotage services).

- 6 -

A final special characteristic of the Arctic waters and ice relates to what might be called the environmental perspective. The Arctic waters and ice have been described by Prime Minister Trudeau (in a statement made in April, 1970) as "one of the most significant surface areas of the globe, for it controls the temperature of much of the Northern Hemisphere and thus its continued existence in an unspoiled form is vital to all mankind." The unique environmental characteristics of the Arctic, with its minute rate of decomposition, its relatively low restorative capacity, and the hazards it presents for navigation, all make it particularly susceptible to pollution, and led the Prime Minister to observe on the same occasion:

"Involved here, in short, are issues which even the more conservative of environmental scientists do not hesitate to describe as being of a magnitude which is capable of affecting the quality, and perhaps the continued existence, of human and animal life in vast regions of North America and elsewhere."

If all these special characteristics are such that the Arctic waters and ice do not constitute high seas to which the traditional freedoms apply, what then is the status of these areas and what regime should govern their use? So far as Canada is concerned, the special characteristics of the Arctic waters and ice combine to give them a special status - however defined - which implies special rights and responsibilities for the Arctic coastal states. Accordingly, for many years Canada has exercised effective control over the uses of the waters of the Canadian Arctic archipelago and over a wide range of activities carried out on their ice-cover. Indeed, as was most recently reaffirmed

... 7

- 7 -

by the Secretary of State for External Affairs in April, 1970, "Canada has always regarded the waters of the Arctic archipelago as being Canadian waters [and] the present Government maintains that position."

It should be noted here that Canada's view of the special status of Arctic waters and ice and the concomitant special rights and responsibilities of Arctic coastal states is very similar to the attitude of the USSR as revealed in the writings of Soviet jurists and in Soviet state practice. Soviet jurists have gone so far as to describe the Kara, Laptev, Chukchi and East Siberian seas as internal waters, although the Soviet Government has never officially advanced such claims. The Soviet Government, however, has administered the Northeast Passage which crosses these seas as a national shipping route of the USSR. The Soviet Government has also clearly indicated its support for Canada's Arctic waters pollution legislation, to which I shall now turn.

CANADA'S ARCTIC WATERS POLLUTION LEGISLATION

The Arctic Waters Pollution Prevention Act which received Royal Assent on June 26, 1970 manifests in legislative terms Canada's view of the special status of Arctic waters and ice and the special rights and responsibilities of the Arctic coastal states, with particular respect to the preservation of the Arctic ecology. It reflects also the Canadian Government's policy on the environmental implications of economic development. As was stated in the Speech from the Throne by the Governor-General on October 23, 1969:

... 8.

- 8 -

"With resource development, and the benefits it entails, may come grave danger to the balance of plant and animal life on land and in the sea, which is particularly precarious in the harsh polar regions. While encouraging such development, we must fulfil our responsibility to preserve these areas, as yet undespoiled and essentially in a state of nature."

This position was further elaborated by Prime Minister Trudeau in the House of Commons on October 24, 1969. He said then that the Canadian Government would never sacrifice, in the name of progress, a clean and healthy environment to industrial or commercial development. With reference to the water, ice and land areas of the Canadian Arctic archipelago, he said:

"We do not doubt for a moment that the rest of the world would find us at fault, and hold us liable, should we fail to ensure adequate protection of that environment from pollution or artificial deterioration. Canada will not permit this to happen.... It will not permit this to happen either in the name of freedom of the seas, or in the interests of economic development."

It was against this background that the Arctic Waters Pollution Prevention Act was adopted. That act makes clear the Canadian Government's determination to discharge its responsibilities for the preservation of the Arctic environment, but without denying access to shipping from all nations in the waters of the Canadian archipelago and the Northwest Passage in particular. It seeks in essence to preclude the passage of ships threatening pollution of the environment. Commercially-owned ships intending to enter waters of the Canadian Arctic designated by the Canadian Government as shipping safety control zones will be required to meet Canadian design,

- 9 -

construction and navigational safety standards. These zones may extend up to 100 miles offshore. The owners of vessels and cargoes will be required to provide proof of financial responsibility and will be liable for damage caused by pollution. Their liability will be limited but will not depend upon proof of fault or negligence. In the case of ships owned by another state the necessary safety standards will be given effect by arrangement with the state concerned. Similarly, protective measures will apply to exploration and exploitation of the submarine resources of Canada's northern continental shelf.

In introducing the Arctic waters pollution legislation in the House of Commons, the Secretary of State for External Affairs, the Honourable Mitchell Sharp, emphasized that the problem of environmental preservation transcends traditional concepts of sovereignty and requires an imaginative new approach based on objective functional considerations rather than territorial imperatives. While reaffirming that Canada has always regarded the waters of the Arctic archipelago as Canadian waters, he made clear that the Arctic waters pollution legislation did not represent an assertion of sovereignty but rather a constructive and functional approach whereby Canada will exercise only the jurisdiction required to achieve the specific and vital purpose of environmental preservation.

The Arctic waters pollution legislation does not make and does not require an assertion of sovereignty, no more than it constitutes a denial of sovereignty or is inconsistent with any basis for sovereignty. Together with this legislation, however, the Canadian Government adopted

... 10

- 10 -

another act extending the territorial sea of Canada from three to twelve miles. An important affect of this action is that it brings two key "gateway" areas of the Northwest Passage, Barrow Strait and Prince of Wales Strait, indisputably under complete Canadian sovereignty under any realistic and reasonable view of existing international law, regardless of differences of views as to Canada's claim to sovereignty over the whole of the Northwest Passage.

INTERNATIONAL ENVIRONMENTAL LAW

Canada's Arctic waters pollution legislation responds to Canada's view of the special status of Arctic waters and ice and the special rights and responsibilities of Arctic coastal states. However, even if viewed from the perspective of the traditional law of the sea with all its deficiencies in terms of environmental preservation, the legislation finds support in both principle and practice.

The traditional law of the sea in general is oriented towards the concept of unfettered freedom of navigation on the high seas and thus favours flag-state jurisdiction while seeking to limit the jurisdiction of coastal states. As a result this essentially laissez-faire system is inadequate in its provisions for the prevention and control of marine pollution. Those provisions, as they are found in various conventions, do not properly recognize the paramount need for environmental preservation and do not strike a proper balance between the interests of the flag states in unfettered rights of navigation and the fundamental interest of the coastal

- 11 -

states in the integrity of their shores. Flag-state jurisdiction does not carry with it, for instance, the logical consequence of flag-state responsibility for damage to the environment. The whole system is particularly inadequate, as the principle on which it rests is particularly irrelevant, to the special situation pertaining in the Arctic.

At the same time, however, the freedom of the high seas has never been applied in absolute terms and has been qualified, for instance, to provide for universal jurisdiction with regard to crimes of piracy. Moreover, state practice - and the practice of the major maritime powers in particular - conclusively establishes that states may and do exercise authority over foreign vessels on the high seas in order to prevent injury to their territory and to defend their security and well-being. In the view of the Canadian Government a serious threat to the environment of a state represents a threat to its security. The right to environmental integrity corresponds, after all, to the right to territorial integrity. Thus the fundamental principle of self-defence permits the state so threatened to take the reasonable preventive protective measures which may be appropriate to the situation. This principle of self-defence against a threat to environmental integrity was invoked by the Canadian Government in bringing forward its Arctic waters pollution legislation, which stresses preventive measures of protection above all and accordingly is at variance with the 1969 Brussels Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties which in effect stipulates that the stable door should be locked only after the horses have been stolen.

... 12

000796

- 12 -

It should be recalled here that one of the primary justifications for President Truman's unilateral assertion of United States jurisdiction over the resources of the continental shelf was the principle of "self protection" which compelled the "coastal state to keep close watch over activities off its shores which are of the nature necessary for utilization of these resources". Security and self defence are concepts which have been broadly interpreted within the framework of the law of the sea, as noted by McDougal and Burke (in "The Public Order of the Oceans"): "In terms of impacts on its total value position - that is, security most broadly conceived - coastal states commonly and realistically perceived that acts beyond the territorial sea may have harmful effects". These learned authors go on to state:

"The proposed limitation of permissible purposes for contiguous zones in the reference to 'customs, fiscal, sanitation, and immigration' is certainly no accurate summary of the purposes for which states have in the past demanded, and been accorded, an occasional exclusive competence in contiguous waters. Their mutual demands, and reciprocal deferences, have extended, as we have seen, to important common interests in relation to security and power, as well as to other forms of wealth protection. With developing technology and expanding enlightenment, new uses of the oceans, portending also new benefits and harms unique to particular states bordering on the oceans, would appear certain to emerge. It can scarcely be regarded as an appropriate clarification of the common interests of states to project a formulation of the purposes for which they may exercise a reasonable exclusive competence which both omits important contemporary shared interests and forecloses the future protection of new, emerging interests, whatever their importance or urgency....

... 13

- 13 -

"The projection of a single permissible width of twelve miles, similarly, bears no discernible relation to the flexibilities in widths demanded and honored in past practice. States have in the past found very different widths necessary to the reasonable protection of different interests under different circumstances, and upon occasion have insisted upon, and been accorded, an exclusive competence at distances much beyond twelve miles from their coasts."

With specific reference to the pollution of the marine environment, McDougal and Burke conclude as follows:

"Since the impact of pollution is usually upon coastal residents, the coastal state has an understandable interest in preventing the discharge of oil and other substances in such a way that harmful pollution results. If it were practicable for the coastal state to enact and enforce prohibitory regulations applicable in adjacent seas, there would seem to be sufficient justification for considering this permissible under general community policy."

It would be a distortion of the freedom of the high seas to view it as a license to pollute the marine environment and the shores of other states, and to argue that states are barred from taking preventive protective measures against polluting activities on the high seas. Such a view runs counter to the fundamental principle of international law laid down in the Trail Smelter Arbitration more than thirty years ago. The tribunal in that case declared that "under the principles of international law....no state has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or to properties or persons therein when the case is of serious consequence and the injury is established by clear and convincing evidence." Many of the precedents

... 14

- 14 -

cited in this case related to water pollution controversies, and it is not unreasonable to assume that what the Tribunal had to say about pollution by fumes is equally applicable to water pollution. Indeed it has long been accepted that the users of a common water resource should not pollute this water so as to cause damage to one another. This is one of the fundamental provisions of the 1909 Boundary Waters Treaty between Canada and the USA and has been recognized as a rule of general applicability by the IAEA panel of experts on the disposal of radioactive waters in fresh water. Further authority in this field is also provided by the decision of the International Court of Justice in the Corfu Channel Case which held that every state is under an obligation "not to knowingly allow its territory to be used for acts contrary to the rights of other states."

If a state is forbidden to use its own territory, where it enjoys full sovereignty, in such a manner as to cause injury to another state, it would be only good law and good logic for this same principle to apply even more forcefully to areas not under its sovereignty or exclusive authority, such as the high seas. Canada like many other states has been the victim of incidents arising from an irresponsible use of the seas which have resulted in serious damage to the marine and coastal environment. For Canada, with its long coastline, much of it within Arctic areas, remedial measures are not enough. Preventive protective steps such as those embodied in Canada's Arctic Waters Pollution Prevention Act are required.

... 15

- 15 -

CONCLUSION

There is, in the Canadian view, an urgent need for concerted international action to accelerate the pace of development of a body of international environmental law capable of meeting the challenges of modern technology and the requirements of modern society. So far as the marine environment is concerned, in the absence of international regimes capable of providing the necessary protection for coastal states, unilateral measures based substantially upon customary international law but to some extent breaking new ground, have imposed themselves. State practice is an essential part of the international law-making process and, where there is a lacuna in the law, may be the only means for a state, acting reasonably and responsibly, to protect itself. This applies with particular force to the Arctic waters and ice in view of their special characteristics and the special rights and responsibilities to which they give rise for the Arctic coastal states, especially with regard to the preservation of the uniquely vulnerable Arctic environment. Thus the Canadian Government embarked upon a unilateral course of action which is both compatible with existing law and in advance of it; both based on the most fundamental principle of the law and pressing against its furthest frontier. It is for this reason that the Canadian Government, at the time of introducing the Arctic waters pollution legislation, simultaneously terminated its declaration of acceptance of the compulsory jurisdiction of the International Court of Justice and submitted a new reservation excluding disputes related to the control of marine pollution and the conservation of the living resources of the

... 16

- 16 -

sea. In a statement to the House of Commons on April 8, 1970, the Prime Minister reaffirmed that Canada strongly supports the rule of law in international affairs. He pointed out, however, that Canada was not prepared to engage in litigation with other states concerning vital issues where the law is either inadequate or non-existent and thus does not provide a firm basis for judicial decision. In this connection it should be noted that the new Canadian reservation does not apply to the establishment by Canada in June, 1970 of a 12-mile territorial sea, since the Government considers that international law on the latter question, while unsettled, is sufficiently developed to permit the Court to arrive at a judicial decision in any dispute on this matter.

Meanwhile Canada is not ignoring the multilateral approach to environmental protection. The Canadian Government is consulting and cooperating with a number of other states on the possibility of convening an international Arctic conference which might develop internationally agreed standards of navigational safety and pollution control in Arctic waters both within and beyond the limits of national jurisdiction, to complement the protective action taken by Canada itself under its own legislation. This multilateral initiative, it is hoped, would cast an international legal umbrella over the exercise of the special rights and responsibility of Arctic coastal states with respect to the preservation of the Arctic environment, while avoiding any prejudice to the positions of contracting states on the law of the sea and the appearance of a precedent for unwarranted encroachments on the freedom of the seas.

... 17

000801

- 17 -

In summary, Canada's position with respect to the protection of the Arctic environment rests upon the special situation pertaining in the Arctic, the fundamental right of self-defence, and the general principle that states have a duty not to use or permit the use of their territory or of areas beyond national jurisdiction in such manner as to cause injury in or to the territory or environment of another state. These latter two points apply as well to the protection of the coastal environment generally. On the basis of these concepts, and with its combined unilateral and multilateral approach to the Arctic waters problem, Canada is seeking to contribute to the progressive development of international environmental law. It was with the development of such a body of law in mind that Prime Minister Trudeau described the Arctic waters pollution legislation as "an assertion of the importance of the environment, of the sanctity of life on this planet, of the need for the recognition of a principle of clean seas, which is in all respects as vital a principle for the world of today and tomorrow as was the principle of free seas for the world of yesterday."

587-3-1A
File Pocket. PK

AGENDA & DOCUMENTS
74TH MEETING A.C.N.D.

CONFIDENTIAL

ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

The 74th meeting of the Committee will be held on Thursday, June 26, 1969, at 2:30 p.m., in the conference room of the Department of Indian Affairs and Northern Development, 14th floor, south wing, Centennial Tower, 400 Laurier Avenue West.

AGENDA

I. Munro Para-Pole Expedition.

(Secretary's memorandum, Document ND-474, distributed 14 February, 1969).

II. Report on "Ad Hoc" Committee on Northern Construction.

(Secretary's memorandum, Document ND-475, distributed 26 February, 1969).

III. Frobisher Bay Centre and Development.

(Secretary's memorandum, Document ND-476, distributed 26 March, 1969).

IV. Requests for Assistance at D.E.W. Line Sites.

(Secretary's memorandum, Document ND-478, distributed 6 June, 1969).

V. Atlas of the N.W.T. and Yukon Territory.

(Secretary's memorandum, Document ND-479, distributed 14 May, 1969).

(Note - Secretary's memorandum, Document ND-477, allocated to annual publication - "Government Activities in the North - 1968" which will appear in English and French)

VI. Items of General Interest:

- (a) Progress Report on Committee to Consider Relationship Between Government of Canada and Arctic Institute of North America.

- 2 -

- (b) Conference on Production and Conservation Problems in Northern Circumpolar Lands, Edmonton, Alberta - October 15, 16 and 17.
- (c) Progress Report - Manhattan Project.
- (d) Symposium on Winter Construction, Edmonton, Alberta - 3-7 February, 1970.
- (e) Establishment of an Eskimo Language School.
- (f) C.C.-7 Hovercraft Trials at Tuktoyaktuk.

VII. Other business.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development.
June 18, 1969.

NOTES FOR THE CHAIRMAN

74th meeting of the A.C.N.D. - June 26, 1969.

I. Munro Para-Pole Expedition

To note only, Mr. Munro and two companions jumped at a point 150 miles from the Pole.

II. Report on "Ad Hoc" Committee on Northern Construction

Dr. Legget has already reported to you his findings, and the main recommendations are contained in the Document ND-475, attached. There may be some discussion as to whether all or only part of the recommendations should be accepted. Should the Committee approve in principle the report, the terms of reference have still to be worked out.

III. Frobisher Bay Development - Document ND-476

All members of the A.C.N.D. have been informed and according to present calculations the following departments and agencies have agreed to taking space -

I.A.N.D.	9000	sq.	ft.
Health and Welfare	400	"	"
Public Works	400	"	"
N.W.T. Government	900	"	"
R.C.M.P.	760	"	"
N.C.P.C.	560	"	"
Cnd. Nat. Telegraphs	400	"	"
Bell Telephone	2400	"	"

There is still 4000 sq. ft. of unallocated space.

The 172 units for family accommodation may be insufficient in view of the demands being received and additional units may have to be built.

It is suggested that departments carefully review their total space requirements.

.../2

- 2 -

IV. Requests for Assistance at D.E.W. Line Sites - Document ND-478

This paper introduces the possibility of a new concept in dealing with D.E.W. line airstrips, and it should generate some discussion. The D.N.D. are sending some senior officials to discuss this paper, and in addition have also prepared a further paper suggesting some ideas for consideration. I would expect that after discussion the issue may have to receive "in depth" review by an "ad hoc" committee. Should you decide this, I suggest that D.O.T. be offered the chairmanship, since in the long term they will have a major part to play in any policy adopted.

V. Atlas of N.W.T. and Yukon Territory

This has been distributed to all members.

VI. Items of General Interest

- (a) Progress report - I will report as Chairman of the sub-committee.
- (b) Conference on Production and Conservation Problems in Northern Circumpolar Lands - I can report.
- (c) Progress report - Manhattan project.

The latest report indicates that the S.S. "Manhattan" should be ready to sail July 15-25. Capt. T. Pullen, RCN (retired), has been appointed to represent Canada on the Manhattan. Among other duties he is charged with ensuring that the laws pertaining to game, harassment by aircraft of polar bears and other mammals, defacement of archaeological sites, etc., are scrupulously observed. He will act as co-ordinator in case of marine disaster, should search and rescue operations become necessary.

Should the probe of the S.S. "Manhattan" prove successful, the oil company concerned has indicated that to move 500,000 barrels of crude oil per day it would take 13 tankers of 250,000 tons dead weight each making 9 voyages of 37 days.

.../3

- 3 -

(d) Symposium on Winter Construction, Edmonton, Alberta, 3-7 February, 1970. I can report on this.

(e) Establishment of an Eskimo Language School.

Approved in principle by Treasury Board. The student body primarily will be composed of Area Administrators, teachers and Development Officers, presently employed in the Arctic and Mackenzie District. At a later date, invitations will be extended to other departments and the Territorial Government to participate.

(f) C.C.-7 Hovercraft Trials at Tuktoyaktuk.

The C.C.-7, an amphibious air cushion vehicle capable of carrying ten persons, or up to 3000 lbs. of freight, will be in the Mackenzie Delta area July 28 - August 6, 1969. The craft is in Canada for the period May 14 - August 19, for trials and demonstrations, sponsored by the manufacturer, Britten-Norman of the Isle of Wight, the British Ministry of Technology and the Canadian Department of Transport. A number of government and other agencies will have the opportunity to observe the C.C.-7 carry out a series of tasks. The Canadian itinerary includes operation at Montreal, the lower St. Lawrence, Ottawa, the Upper St. Lawrence, the Mackenzie Delta and the West Coast at Vancouver. Wherever possible, the craft will undertake real or simulated work assignments.

In the Mackenzie the craft will be used in support of surveys conducted by the Polar Continental Shelf Project of E.M.&R., near Tuktoyaktuk. The Canadian Petroleum Association, and I.A.N.D., have suggested tasks or exercises to evaluate the comparative effect on tundra, of traffic by the C.C.-7 and other available vehicles. An evaluation of the practicality of operating over relatively flat coastal terrain, without a prepared roadway, and navigation problems involved, may be attempted. Demonstrations will be held at Inuvik where representatives of companies engaged in oil exploration will be present.

The C.C.-7 program in Canada is co-ordinated by Hoverwork of Canada Ltd., Ottawa.

L.A.C.O. Hunt,
Secretary.

UNCLASSIFIED

DOCUMENT ND-474

MEMORANDUM FOR THE ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

Munro Para-Pole Expedition

A team of three parachutists, headed by a veteran war time pilot, Mr. Ray Munro, will attempt a parachute landing at 90° N latitude, during the latter part of the month of March.

The logistical arrangements call for a rendez-vous at Resolute Bay during the week ending March 22 and to utilize the Twin Otter aircraft belonging to Atlas Aviation to fly to Ward Hunt Island. The expedition will then wait favourable weather conditions before making the flight to the Pole. Ice reconnaissance will be done preliminary to the jump since ideal landing conditions for the subsequent pick-up are necessary.

This jump according to Mr. Munro is the culmination of five years' study and 499 previous descents to determine the psychological and physiological effects on parachutists under abnormal conditions. The North Pole has been selected for the 500th descent, probably to focus attention on the studies being made and for the publicity this generates.

Having met the requirements for polar basin expeditions, the Commissioner, N.W.T., has issued a Scientists and Explorers licence. The entire expedition depending on favourable weather conditions should not take more than one week to complete.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development.
February 14, 1969.

ND-474

UNCLASSIFIED

DOCUMENT ND-475

MEMORANDUM TO THE ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

At the 72nd meeting of the Advisory Committee on Northern Development an "ad hoc" committee was established to study the scientific and technological aspects of northern construction. The Chairman of that committee, Dr. R.F. Legget, has now submitted his report based on two meetings with representatives from those departments and agencies involved in northern construction.

Under paragraph (13) on page 10 of the report, the "ad hoc" committee recommends:

- (a) the establishment of a new sub-committee on construction;
- (b) that the terms of reference for this sub-committee be prepared and approved by the A.C.N.D.;
- (c) a committee of co-ordination for immediate construction projects in the Eastern Arctic should be established through D.P.W. in Montreal;
- (d) a secretariat for the sub-committee charged with receiving and storing factual information about northern communities and northern building;
- (e) the construction sub-committee to produce an illustrated printed annual and report on "Building in the North".

It is proposed to submit to the Committee these five recommendations together with suggested terms of reference for approval and, at the same time, to recommend the discharge of the "ad hoc" committee.

Submitted with this report is the construction work program for the Northwest Territories, less the Eastern Arctic, as prepared by the Northern Planning and Co-ordinating Committee.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development.
February 26, 1969.

CANADA
ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

Report from the Ad Hoc Committee on Northern
Construction Techniques
(14 January 1969)

Mr. J.A. MacDonald,
Chairman,
Advisory Committee on Northern Development.

CONSTRUCTION IN NORTHERN CANADA

At the 72nd Meeting of the Advisory Committee on Northern Development, it was decided to establish an "Ad Hoc" Committee to study the scientific and technological aspects of northern construction. This decision was based upon consideration by the Committee of document ND 546 in which the current situation in regard to building in northern Canada was reviewed.

(2) The members of the Ad Hoc Committee, representing most of the federal agencies involved in northern construction, either as constructors or users of construction, are listed at the end of this report. Mr. J.R. Atkinson served as Secretary to the Committee. The Committee was greatly assisted in its work by the advice of Mr. L.A.C.O. Hunt, Secretary of the Advisory Committee. Dr. R.F. Legget, Director of the Division of Building Research of the National Research Council,

.../2

- 2 -

served as Chairman.

(3) The Committee met twice - on 11 July and 18 November, 1968. It was found that its task could best be done by a general review of construction in northern Canada. The Committee therefore considered also the two other matters that were discussed by the Advisory Committee at its 72nd Meeting, in connection with northern building, and trusts that this rather more general review will be of service to the Advisory Committee.

(4) The Committee is glad to be able to render this unanimous report to the Advisory Committee on Northern Development. It represents the considered opinion of all its members with their varied backgrounds and their wide experience of northern construction in almost all of its aspects.

Review of Present Situation

(5) The work of the original Construction Subcommittee of ACND was carefully reviewed. The success achieved by this first group in co-ordinating northern construction was noted. The value of the annual reports of "Construction in Northern Canada" was duly appreciated. It is clear that the original Subcommittee performed a most useful task.

.../3

- 3 -

(6) It became evident that co-ordination is still needed not only with regard to immediate construction during each twelve month period but also with regard to long term plans for construction. Co-ordination is necessary in relation to major jobs as well as for the smaller operations which have thus far called for most attention. The paving of the airstrip at Inuvik was mentioned as one example of the use of equipment that might well have been also used by other Departments before it was withdrawn. A number of other examples were considered all pointing to the need for continued and careful co-ordination of all publicly financed construction in northern Canada.

(7) These general considerations were necessary for a proper assessment of the necessary flow of technical information about northern building. This would clearly seem to be a two-way operation. On the one hand, there should be readily available to those concerned with design and construction in the north the best available information from research and other sources. On the other hand, there should be a corresponding flow of information based on construction experience in the north from the job to a proper custodian of such information where it can be processed for proper public future use.

.../4

- 4 -

(8) The decentralization of the administration of northern construction was noted. A Yukon Interdepartmental Co-ordinating Committee under the Chairmanship of the Commissioner of the Yukon, which includes representatives from all federal departments operating in the Yukon, and which meets at Whitehorse, has been established with the approval of ACND. There is also in operation a committee which co-ordinates construction in the Western Arctic, convened by the Edmonton regional office of the DPW and including representatives from all federal government departments and the N.W.T. Territorial government. There is no corresponding committee for the Eastern Arctic at present, but it is clearly desirable that such a committee should be established initially, perhaps, under the auspices of the DPW regional office in Montreal. The Ad Hoc Committee has been unofficially advised that such an arrangement might be possible.

(9) These considerations led the Committee to see the need for definition of the areas involved when "Construction in the North" is under discussion. For the purposes of this report, all public construction north of 55°N was considered as Northern Building. The boundary between the Western Arctic and the Eastern Arctic is almost automatically defined by the range of the Eastern Arctic Annual Sea-lift. At the same time, it was observed that

.../5

- 5 -

there is as yet no interdepartmental agreement on the subdivision of the north into regions. It is therefore hoped that the efforts of the ACND in this direction will be fruitful.

(10) The members of the "Ad Hoc" Committee are all convinced that the volume and complexity of construction in northern Canada will increase in the future. The proposed construction of a 13 storey apartment building in Yellowknife can be taken as an indication of things to come. The Committee are convinced that means must be provided not only for the proper co-ordination of northern building but also for the best possible exchange of technical information that will assist in improving the efficiency of both design and construction in northern Canada.

The Committee's Findings

(11) Against this background the Committee agreed that:

- (a) There is a continuing need for the co-ordination of immediate (i.e., one to two year) construction activities of government departments in that part of Canada north of 55°N;
- (b) There is a similar need for the co-ordination

.../6

- 6 -

of long term planning (for periods up to five years or even more) of similar northern construction so that the plans of each responsible agency can be developed in concert with others dealing with the same area;

- (c) It is essential that planning for such northern construction be co-ordinated with the Annual Eastern Arctic Sea-lift and similar joint planning operations, such as the U.S./Canada Joint Arctic Weather Stations Conference;
- (d) There should be available suitable means for collecting and sharing for public benefit the experience gained by all individual groups engaged in public northern construction;
- (e) There should be well recognized and efficient channels of communication to all departments and agencies concerned with northern building for the provision to them of all available technical information on northern design and construction;

.../7

- 7 -

- (f) There is a clear need for the publication by the Government of Canada of an annual report on "Building in the North" to contain not only a list of current projects and their sponsors, and a nominated liaison officer for each project, but also an annual summary of work that has been done, preferably illustrated, with an outline of new information that is gained in this way;
- (g) It is most desirable that there should be a proper means of determining the priorities for research in northern building and for a continually up-dated listing of those aspects of northern construction on which additional information is still needed;
- (h) It is desirable that the committee responsible for the "Building Code for the North" should have direct liaison with all agencies concerned with northern building so that this public document may be kept under continual review and improvement.

The Necessary Mechanics

(12) Without going into too much detail as to how the foregoing objectives can be achieved, the Committee did

.../8

- 8 -

discuss the desirable mechanism in general terms. The following notes may therefore be of assistance to the Advisory Committee:-

- (a) The situation in the Yukon is covered by the existing Committee;
- (b) Construction in the Western Arctic is being co-ordinated by the Edmonton DPW Committee;
- (c) There should be a corresponding committee for the Eastern Arctic;
- (d) It is clearly essential that the work of these three committees should be co-ordinated with those activities in the north that are still directed from Ottawa, such as the work of the Department of National Defence;
- (e) This points to the need for a revised type of Construction Subcommittee under ACND to serve the dual function of co-ordinating the work of the regional committees and of ensuring the necessary availability and flow of technical information on all aspects of northern construction, both to jobs in the north and from northern construction;

.../9

- 9 -

- (f) This new Subcommittee could usefully hold one major meeting every year, immediately prior to the regular annual meeting at which the Eastern Arctic Sea-lift is planned;
- (g) Such a subcommittee and its service would have to be staffed by an appropriate secretariat which could also be responsible for the maintenance of continuing records from the north, such as site plans for each northern community;
- (h) The need for general agreement as to the limits of "northern regions" used by different public agencies is urgent;
- (i) The Division of Building Research of the National Research Council should be a repository for technical information on northern building and for the listing of research needs in this field; the advice of the proposed new committee will naturally be helpful to the Division in its northern research work.

.../10

- 10 -

RECOMMENDATIONS

(13) The Ad Hoc Committee on Northern Construction therefore recommends to the Advisory Committee on Northern Development that:-

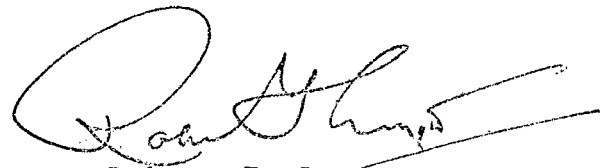
- (a) There should be established a new Construction Subcommittee of ACND consisting of senior officers of those federal agencies that are directly concerned with responsibility for northern building, such as IA&ND, DPW, DND, DOT, RCMP, DEMR, CMHC, NCPC, and NRC. The membership of the Subcommittee should be kept as small as possible. It should include also one liaison member from each of the three regional committees that are responsible for the annual co-ordination of northern building projects, the Permafrost Research Subcommittee of the Associate Committee on Geotechnical Research, NRC, and the Standing Committee on the Building Code for the North, also of NRC;
- (b) If this proposal is acceptable, then new and carefully prepared terms of reference for the new Subcommittee should be prepared and approved by ACND;

.../11

- 11 -

- (c) A committee for the co-ordination of immediate construction projects in the Eastern Arctic should be established as soon as possible through the DPW regional office in Montreal;
- (d) The secretariat for the proposed new Subcommittee might be provided by IA&ND and could be charged with useful tasks involving the receiving and storing of factual information about northern communities and northern building;
- (e) If approved, the Construction Subcommittee should be charged with the preparation of a first-class illustrated printed annual review and report on "Building in the North"; this could develop into an outstanding publication;
- (f) The Ad Hoc Committee be discharged.

RFL/rm



Robert F. Legget,
Chairman.

* * * * *

Division of Building Research
National Research Council
Ottawa, Ontario .
First Draft 28 November, 1968
Final Report, 14 January, 1969

000821

ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

AD HOC COMMITTEE ON NORTHERN CONSTRUCTION TECHNIQUES

MEMBERS

R. F. Legget (Chairman)	Director, Division of Building Research National Research Council
G. T. Armstrong	LAND, Resource & Economic Development
G. C. Barr	RCMP, "G" Division, Property Manager
J. J. Bolton	DOT, Chief General Buildings Division
L. J. Brown	DND, Director General Construction
D. W. Findlay	Dept. Manpower & Immigration
W. H. Frost	NH&W, Northern Health Service
T. A. Harwood	Defence Research Board
L. A. C. O. Hunt	LAND, Northern Admin., Engineering
G. H. Johnston	NRC, Building Research Division
E. E. Lessard	Fisheries Research Board
N. T. Long	LAND, Northern Admin., Engineering
J. M. Lowe	Northern Canada Power Commission
M. N. McCulloch	RCMP, Services and Supply Directorate
C. L. Merrill	LAND, Advisory Committee on Northern Development
J. A. Redick	RCMP, Services and Supply Directorate
E. F. Roots	EMR, Co-ordinator of Polar Shelf Project

- 2 -

G. Y. Sebstyan	DOT, Chief, Engineering Design Division
D. L. Turnbull	DPW, Northern Co-ordinating Architect
R. H. Young	DND, Director of Engineering Construction
J. R. Atkinson (Secretary)	LAND, Advisory Committee on Northern Development

UNCLASSIFIED

DOCUMENT ND-476

MEMORANDUM TO THE ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

Frobisher Bay Centre

The attached Press Release and other documents describe the construction program for additional public facilities at Frobisher Bay, N.W.T.

The new development will be available for the use of all federal agencies, as may be required. Mr. G.B. Allen, Head Architect, I.A.&N.D., has contacted, at H.Q. level, those federal agencies with a resident staff at Frobisher Bay, to obtain space requirements.

Liaison has also been established at Frobisher Bay, between the consortium (development agency for construction and rental), Indian Affairs and Northern Development (the contracting department), the field representatives of federal agencies at Frobisher, and others in the community. This liaison has facilitated communication between the consortium and planning authorities on the one hand, and those who will use the facilities on the other. It is intended to continue this liaison as required.

The purpose of this paper is to advise members of A.C.N.D. of the project, and the consulting machinery that is functioning to evaluate federal needs at Frobisher Bay. The new facilities will be of special interest in relation to future plans of all interested federal departments.

It is believed there will be a need for interdepartmental discussion on this project, regarding future plans or other matters. A suitable meeting will be arranged by the Secretary, Advisory Committee on Northern Development.

L.A.C.O. Hunt,
Secretary.

Attachments.

Department of Indian Affairs
and Northern Development.
March 26, 1969.

ND-476



Department of
Indian Affairs and
Northern Development

Information Services
Telephone
992-3139/992-5663

Ministère des
Affaires indiennes et
du Nord canadien

Services d'information
Téléphone
992-3139/992-5663

1-68174

FROBISHER CENTRE AWARDED TO EDMONTON FIRMS

Ottawa, December 23, 1968 - Construction will soon start on the Frobisher Bay complex -- a modern planned town centre with business, recreation and shopping buildings, row houses complete with patios and a six-storey apartment block.

The proposal of a consortium of Edmonton firms - Solar Construction Co. Ltd., Lockerbie-Hole (Western) Ltd., and Batoni-Humford, - has been accepted, it was announced today by Northern Development Minister Jean Chrétien.

- 2 -

Mr. Chrétien pointed out that the Frobisher complex brings a new social and economic approach to northern development. "Arrangements have been made" Mr. Chrétien said "to make sure that apartments and town houses will be available for both Eskimos and non-Eskimos at Frobisher". "There will be no discrimination" Mr. Chrétien emphasized, "and the recreational facilities, the theatre, bowling alley, swimming pool, sauna and tennis court will be available to all. The Eskimo and non-Eskimo residents of the community will also have a voice in their management", the Minister said.

In June the Department invited proposals from private enterprise for two sites to be developed in accordance with the master plan and terms of reference prepared by the Department. Five proposals were received.

The consortium will build a civic square complex (see artist's sketch). A system of modular pre-cast concrete units developed by Batoni-Humford will be used for the town centre buildings. The on-site manufacture and assembly of the pre-cast units will permit the use of local labour for all phases of construction as well as for the ongoing operation and maintenance of the buildings.

- 3 -

The government will lease the site to the developers for a 20-year term, at the end of which the rental buildings (apartment blocks, office area and row housing units) revert to the government for \$1.00. The entrepreneurs will be responsible for the operation, leasing and maintenance of the buildings. The government will provide housing for Eskimos and public servants by leasing accommodation from the entrepreneur and sub-letting to occupants - the equivalent of a guaranteed rental scheme. The various government departments having offices in Frobisher Bay will also rent office space in the complex.

"We are willing to share the risk of northern development with the private sector," Mr. Chrétien has stated. "The results of such developments will benefit all Canadians".

- 30 -

attachments: background paper
sketch

D. Armstrong (99)2-3625
K.W. Stairs (99)2-6080

FROBISHER BAY CENTRE - BACKGROUND

The primary objectives of the Frobisher Bay complex are:

- the establishment of the town centre
- the tying together of existing scattered settlements
- the development of a fully integrated community
- the provision of urgently needed housing which would be allocated on the basis of need
- the extension of water and sewer services through the complex to an unserviced area
- the attraction of private investment capital to the north
- the transfer to private enterprise of functions not normally a government responsibility (catering and the provision of transient accommodation)

Special advantages of the proposed system of building with modular, pre-cast concrete units are:

- local rock can be used as aggregate reducing the amount of material which must be shipped into the settlement
- the manufacture of components under cover can continue through the winter when outdoor construction is difficult
- concrete is more durable and fire-proof than materials previously used
- the modular form permits both vertical and horizontal extension to the buildings without disruption of the general appearance.

This built-in flexibility was a significant factor in the selection of the scheme and reflects a new attitude towards development in the north. In the ensuing two decades a new breed of northerner will emerge - young, well-informed educated and town oriented.

- 2 -

New social systems will be established which can accommodate constant change and keep pace with the evolution of the community. Similarly, a rigid town plan that constrains the individual must give way to dynamic, flexible plans that can adapt to the physical needs of the community and free it from the problems that threaten older cities - environmental pollution, traffic congestion, noise, overcrowding and the attendant evils of disease, petty crime and violence.

The Frobisher town centre embodies this new philosophy for the north.

Buildings can expand or contract - upwards, sideways or in length. They can be joined or overlapped. The modular form also allows for the demolition and replacement of a building or part of the building without detriment to the complex as a whole. Similarly the interiors of the buildings are equally flexible with greater possibilities for adoption of change.

In the residential sector of the town the apartments and town houses will provide a wide range of accommodation in contrast to the single family dwellings built in the past. They will be made available to both Eskimo and non-Eskimo families without discrimination.

Recreational facilities will also be made available to Eskimo and non-Eskimo families, and residents of Frobisher Bay will have a voice in their management.

- 3 -

The introduction of multiple family dwellings reduces servicing costs, provides for a more tightly knit community and concentrates the highest density of population near the town centre.

This is a large-scale project, even by souther standards:

- 26,000 square-feet of offices
- 6,000 square feet of prime commercial space
- 49-bedroom hotel with restaurant and lounge
- 300 seat theatre, bowling alley, swimming pool, sauna and tennis court
- 152 apartment suites (50 Bach., 84 1-BR, and 18 2-BR)
- 70 3-and 4-BR town houses.

The apartment and the town houses which are intended primarily for families with young children are located on the inside of the complex adjoining a large central park. There children may play, safely distant from the traffic on the new ring road surrounding the central business district.

The construction schedule is rigorous - more than 25% of the houses ready for occupancy by the end of 1969 and the balance of the complex completed by July 1971. The principals of the construction firms are confident that they can meet their targets. They believe that the experience gained on construction projects in the Mackenzie and the high Arctic gives them insight into the problems which will be encountered in Frobisher Bay.

- 4 -

They will draw on the expertise of the Engineering (Northern) Division, Technical Services Branch, Department of Indian Affairs and Northern Development who are overseeing the project.

- 30 -

APPENDIX 2

Excerpt from an address by Mr. K.W. Stairs, Chief, Engineering Division, Northern, to the Arctic Institute of North America Conference on Community Development in the Middle North, Hanover, N.H., February 26, 1969.

Frobisher Bay was discovered by Sir Martin Frobisher in 1576, while seeking a Northwest Passage to the Far East. However, a settlement was not established in Frobisher Bay, or in the vicinity, until 1914, when the Hudson's Bay Company established a trading post on the shore of Frobisher Bay about 30 miles from the site of the present town.

The next development of Frobisher Bay occurred in 1942 when the airport was constructed as part of the Crimson Air Staging Route. The facilities were constructed by the United States Army Air Force and at the end of World War II Canada reimbursed the U.S. Government for the cost of the airfield, and the R.C.A.F. was given control of the Frobisher airport. The airport was then relatively inactive until the commencement of the Korean war. At that time the United States Air Force prepared plans for construction of major air bases throughout north eastern Canada and Greenland, and as part of this plan established the north east Air Command with headquarters in St. John's Newfoundland.

-2-

Frobisher Bay then became an alternate airport used by the United States Air Force for planes proceeding to and from Thule air base in northern Greenland. A small contingent of men was placed there by the U.S.A.F. in 1952, and in 1953 major repairs to the runway were carried out by the engineering force of the U.S.A.F. Frobisher Bay also became a support airfield for radar communication, and a meteorological base. In 1959 a major re-construction and lengthening of the runway took place; and, in preparation for use as a re-fuelling base for the United States Air Force, facilities were constructed in a building which became known as the SAC base - a combined building housing personnel, warehousing and administration, also wing hangers for repairing aircraft motors. These buildings were completed in 1960 and remained in use until 1962 when the long range program of the U.S.A.F. changed and they became obsolete.

During the time that the facilities were being constructed for the U.S.A.F. the Canadian Government was considering Frobisher Bay as an administrative centre for the eastern Arctic, and also a centre for transportation, communication and education. A team of consultants was appointed by the Federal Government. This team was given instructions to investigate, study and produce a proposal which would take into consideration, prevailing winds, shelter, snow, drifting, temperature, sunlight, soil, permafrost, and meet the present and future needs of the community.

The consultants visited Frobisher Bay several times, and other communities in the North and studied materials available for construction and, in general, carried out investigation of towns and villages constructed in the northern hemisphere. In 1960 they completed this study which recommended construction of facilities on Astro Hill, a rock hill on the edge of the existing community. This would necessitate removing the top of the Hill where a permanent town centre would be constructed on rock foundations. It envisaged a town centre with buildings inter-connected and high rise buildings of about eight stores.

000833

-3-

A presentation was then made to the Federal Government. This proposal was accepted, and they approved a program that provided essential services only, vocational school, housing, office building, hospital, power, water and sewage facilities. They also approved as Phase 1 a program for construction of the power plant, water and sewage facilities, hospital, warehousing and for the removal of the top of Astro Hill. A contract was awarded in 1963 for this work in the amount of \$3,711,165.00. These facilities were completed in May of 1964.

During 1963 the U.S.A.F. announced that they had no further requirements for use of the SAC building, and under the agreement with the Canadian Government it was turned over to that Government for their use. A study was then made to determine ways in which this building could be utilized. It was decided that it should be used as an administrative centre, housing of single personnel, warehousing, and vehicle maintenance and storage area. This building has continued in use in accordance with this decision since that time. Also, at the time this building was turned over to the Canadian Government, a re-study was made of facilities for Frobisher Bay. All work on the development of the school and residences ceased while the future of Frobisher Bay was re-studied. As part of the re-study, the Town Planning Section of the Engineering Division of the Department of Indian Affairs and Northern Development carried out several town planning studies of the area, based on a modification of the Frobisher Bay consultants plan and changes in the concept required by the changing role of the air base.

During this period, in order to provide satisfactory housing for the people of the area, it became necessary to erect housing for Eskimos and staff of a standard type in and around the air base at Frobisher Bay. This siting was carried out in accordance with the modified plan, Astro Hill being the centre of the community.

000834

-4-

In the summer of 1967, it became evident that additional facilities were required in this area. School facilities in the Baffin Region, Baffin Island, Resolute, Igloolik, Hall Beach and Grise Fiord provide for education up to Grade VIII only. These facilities had been in use for approximately 8 years and the children were reaching the stage where a High School was required. A further town plan was prepared envisaging a town centre on Astro Hill, together with the school facilities and modification of the former SAC building into a pupil residence. Different schemes were contemplated to provide these facilities. The final scheme chosen provided for construction of an office building, to accommodate the administrative facilities now in the SAC building, construction of living quarters to replace the single staff quarters used in the SAC building and construction of an occupational academic High School. In addition to this, it was envisaged that there was a requirement for other facilities in the town centre, i.e. hotel, shopping centre and recreational facilities. A presentation was made to the Ministers of the Federal Government, and they approved in principle the recommendations of the Department. They did consider it would be advantageous to have these facilities provided on a rental basis with the exception of the school and hostel, that is they would be constructed by private enterprise and the Crown would rent these facilities from the entrepreneur. As a result of this decision of the Board, tenders were called in the spring of 1968 for the provision of an office building of approximately 25,000 sq. ft. 152 unit apartment building and 70 units of row housing for which the Federal Government would pay a guaranteed annual rental. In seeking proposals for this work, the Department wished to achieve the following objectives:-

- (a) The construction, operation and maintenance of real estate by private enterprise rather than the Federal Government.
- (b) The attraction of private capital into the North.
- (c) The establishment of service industries supporting the construction program which might subsequently become full time businesses offering permanent employment for the local population.

-5-

- (d) The attraction of commercial undertakings to the North.
- (e) The provision of development which would tie together the existing scattered settlements and permit the extension of municipal services into the new subdivision south of Astro Hill.
- (f) The creation of a prominent central business district which would serve as the focal point for commercial, administrative, entertainment and recreational functions in the community, and at the same time introduce contemporary architecture to Frobisher Bay.
- (g) The creation of a firm basis for predicting the government's financial commitments for accommodation.
- (h) The complete integration of population within the new residential development.

The tenders for these facilities closed in September, 1968. The 5 proposals which were received for this work were submitted by:-

1. Solar Construction Co., Ltd.,
and Lockerbie-Hole (Western) and
Batoni-Humford.
(All of Edmonton, Alberta).
2. Ron Engineering and Construction Ltd.,
Ottawa, Ontario.
3. Tankoos Yarman Ltd.,
Pitts Quebec Ltd.,
Fruchter and Kagan Real Estate Ltd.,
and W. Sefton and Associates Ltd.,
Montreal, Quebec.
4. Janin Construction-Tower Company (joint venture)
Montreal, Quebec.
5. A.H. MacLeod and Son (Vancouver) Ltd.,
North Vancouver, B.C.

In reviewing the proposals submitted by these companies, the Department not only looked at facilities they required but considered the additional facilities being supplied which would meet the wishes of the Department, and provide a functional and useable town centre. The Government accepted the proposal of the consortium of the Solar Construction Co., Ltd., and Lockerbie-Hole (Western) Ltd., and Batoni-Humford as being the most acceptable for their requirements and met the intent for other facilities included in the proposal documents. It also met the planning objectives and would provide a dominant town centre. It was the most economical of the proposals submitted.

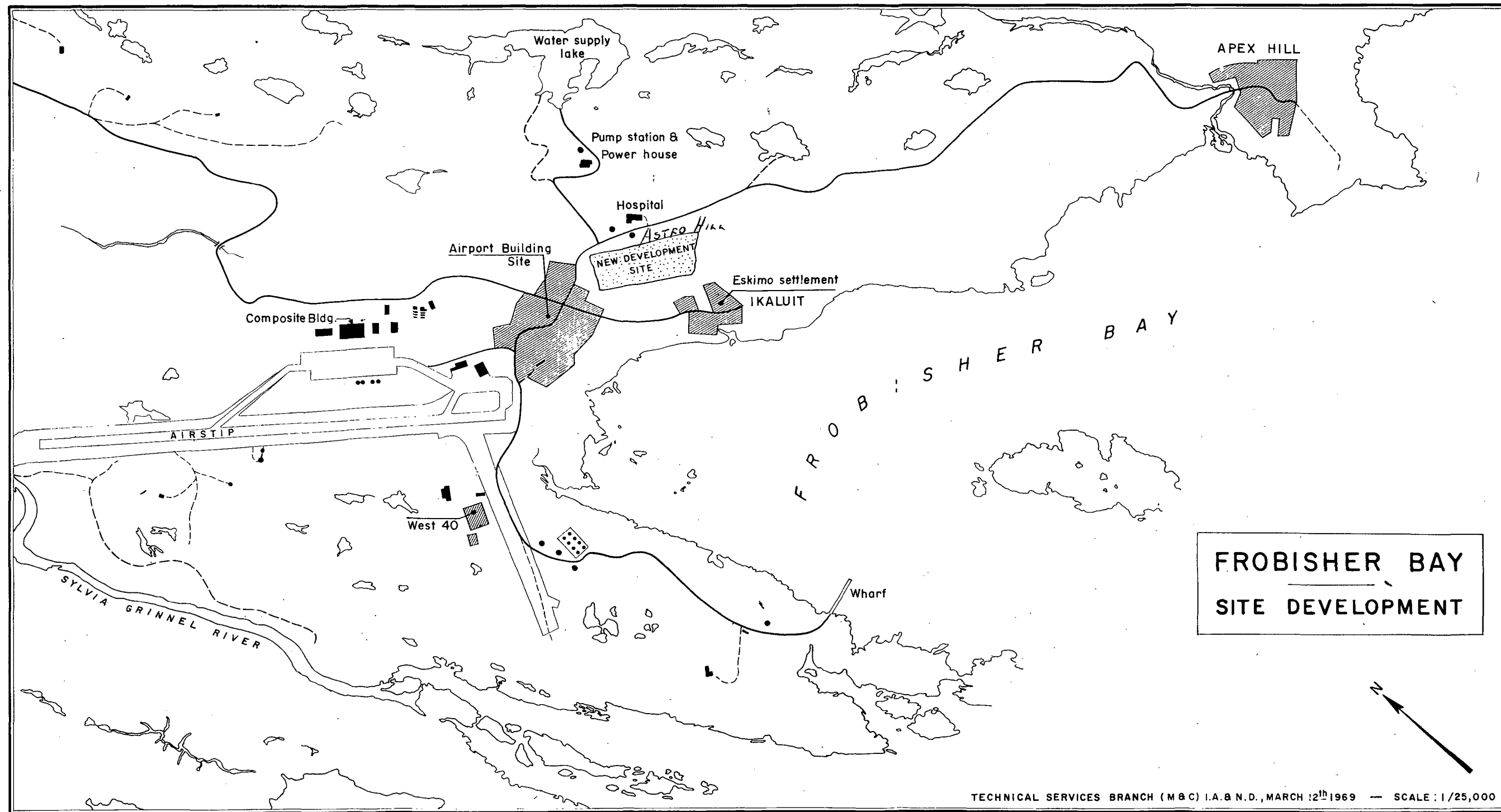
-6-

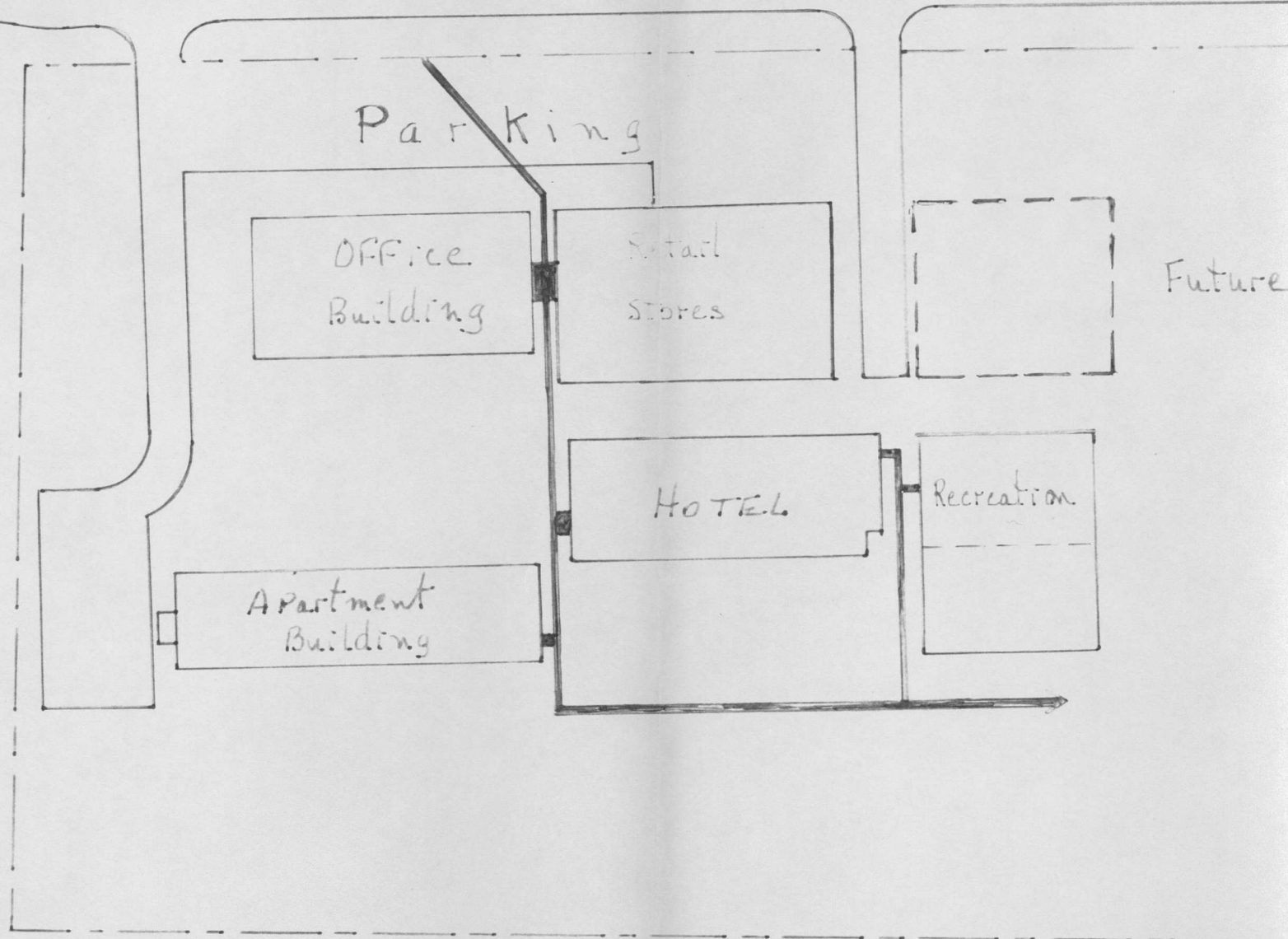
The structure would use steel, re-inforced concrete with precast concrete panelling for the exterior.

It introduced system building and provided a new architectural form in the area which would substantially reduce fire hazard and could possibly form a basis for a new industry in the community. It had the advantage of flexibility and easily permitted future expansion of the buildings, both horizontally or vertically without disrupting their general appearance.

The buildings being supplied by this firm consist of an 8 story apartment building, 3 story hotel, 2 story office building, single story shopping area, single story recreational area and town housing. Provision has also been made for future expansion of the shopping and recreational areas.

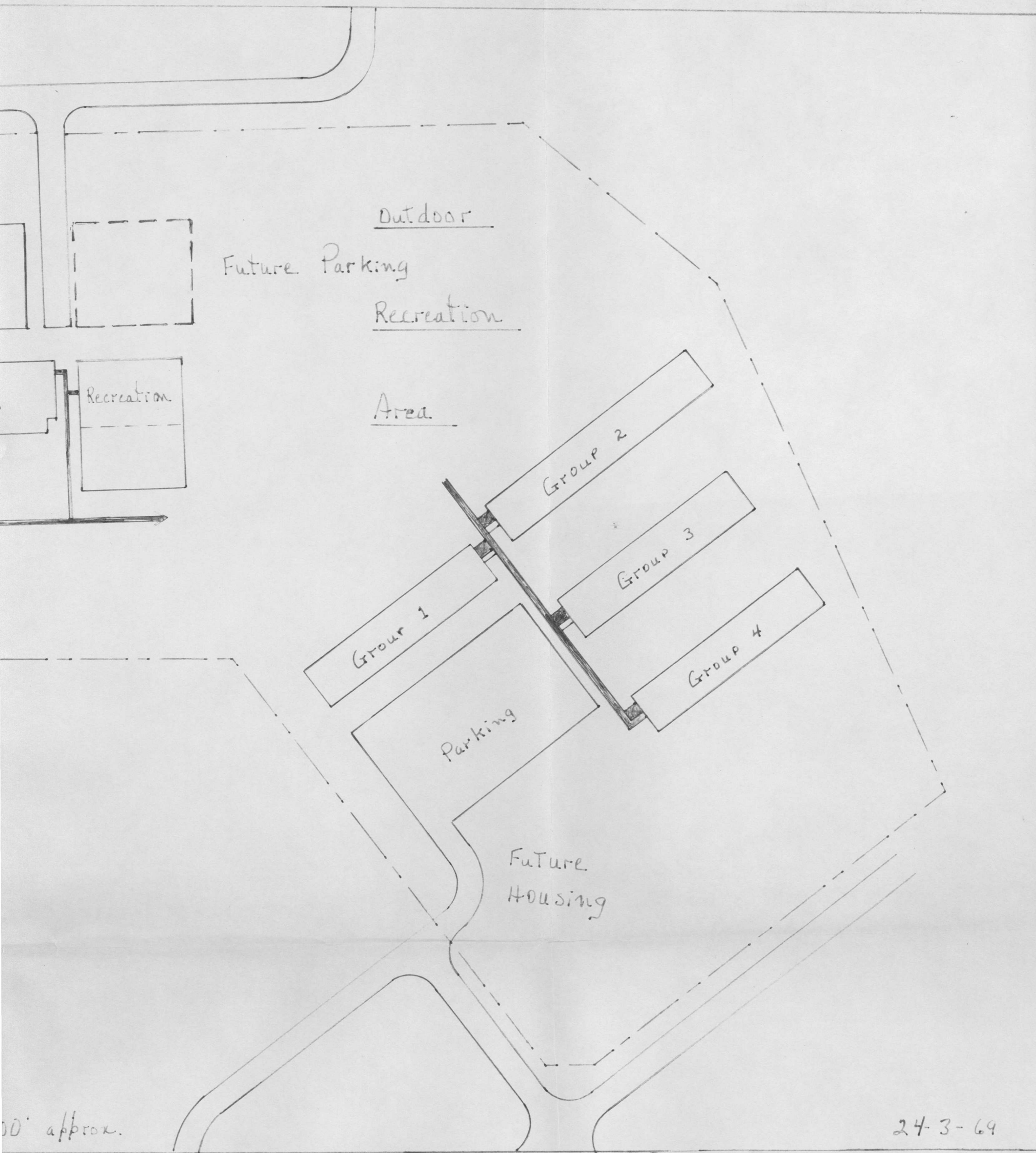
The buildings are arranged with inter-connected walkways and a covered mall. They are also connected to the town housing by a covered walkway. All the buildings under this proposal will be serviced from a central heating plant which was constructed as part of Phase 1 of the original program for Frobisher Bay in 1962. Heating will be provided through a high pressure hot water system; water and sewer service will be provided from this same heating plant and power will be supplied by the Northern Canada Power Commission from a diesel generating plant in the community.





Frobisher Bay Development

scale = 1" = 100' approx.



GOVERNMENT ACTIVITIES IN THE NORTH - 1968

ND-477

UNCLASSIFIED

DOCUMENT ND-478

MEMORANDUM TO THE ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

Requests for Assistance at D.E.W. Line Sites

1. The Statement of Conditions, forming part of the Agreement concluded by Exchange of Notes between Canada and the USA on 5 May, 1955, which governs the establishment and operation of the Canadian portion of the D.E.W. line includes, as paragraph 15, the following provisions on the use of airstrips:

"Airstrips at installations in the D.E.W. System shall be used by the United States solely for the support of the System. If it should be desired at any time by the United States to use an airstrip for other purposes, requests should be forwarded through appropriate channels. The airstrip shall be available for use by the RCAF as required. The airstrip shall also be available for use by Canadian civil air carriers operating into or through the area, whenever such use would not conflict with military requirements, and subject to the understanding that the United States Air Force will not be responsible for the provision of accommodation, fuel, or servicing facilities of any kind. Proposals and arrangements for such use of USAF-operated airstrips by Canadian air carriers shall be submitted to the RCAF which shall consult the USAF before granting any such permission".

2. Since the initial establishment of the D.E.W. line, the USAF, through its contractor, the Federal Electric Corporation, has been most cooperative in providing gasoline, food, and accommodation to travellers in the Arctic. There is no contractual obligation on the USAF or the Federal Electric Corporation to provide these services, and they have done so in the general spirit of mutual assistance in remote areas. The Federal Electric Corporation cannot, however, be expected to continue to provide these services to the point where doing so unduly taxes their facilities, in order to meet expanding demands for them arising from increasing activities in the Arctic unrelated to the D.E.W. line.

3. All supplies at D.E.W. sites are primarily for D.E.W. line support. The logistic arrangements are not planned on the basis of D.E.W. line sites being stocked to serve beyond this requirement. Moreover, under the D.E.W. line logistic plan, the USAF pay all transportation costs to move aviation gasoline and all other logistic support to D.E.W. sites.

.../2

ND-478

- 2 -

4. With increasing Government and commercial activity in the Arctic, and greater activity by the Northwest Territories Government, pressures on D.E.W. line facilities for support in fuel, accommodation, meals, local transportation, etc., have been increasing and will continue to increase unless some other arrangements are made to provide the necessary services. Indicative of the trend is the Canadian Transport Commission's approval of a number of extensions to existing air services, which include some D.E.W. line sites, referred to in Document ND-473 circulated at the 73rd meeting of the Advisory Committee on Northern Development, held on 9 December, 1968.

5. It is evident that some air companies operating charter services into the Arctic, including a number doing charter work for Federal Government departments, are requesting the Federal Electric Corporation to supply large quantities of aviation gasoline as and when required. Some of the chartered air services, which are airlifting equipment for exploration and other purposes, are apparently quite unaware of the locations at which they can reasonably expect assistance, either in the form of supplies of gasoline and oil or of accommodation and hangar facilities for repair.

6. Recent information received from the USAF indicates that the D.E.W. line facilities at Hall Beach have been taxed to the limit. A recent request on behalf of Transair Ltd. for aviation fuel has been turned down because the increased requirement for Avgas related to D.E.W. line activities will not allow the release of fuel for commercial purposes on a routine basis. In addition, to the problem of providing Avgas and other facilities the lack of air traffic control is of concern to the USAF. This lack, aggravated by the fact that some aircraft operating in the area have inadequate radio equipment, has created a situation at the D.E.W. line site at Tuktoyaktuk (Bar-3), considered to be a flight safety hazard with an increasing risk to life and property. During the month of March, 483 takeoffs and landings were conducted at Bar-3 and an increase is expected as the season progresses. The D.E.W. line is not staffed nor are the personnel trained to handle this volume of aircraft traffic. The increased air traffic has also resulted in a volume of radio traffic that the console operator cannot cope with and many calls must go unanswered.

7. The foregoing factors give evidence that there is a growing requirement for the appropriate Canadian departments to give serious consideration to developing support arrangements at strategic centres in the north to look after requests for the general types of assistance which have been directed in an increasing volume on D.E.W. line sources.

.../3

000843

- 3 -

8. While this matter has been raised on previous occasions, it is quite obvious that alternate arrangements must now be found to satisfy the demand for local services arising from increasing volume of northern activity. In the short term, departments, who are relying on charter air operators to handle their programs this summer, should ensure that the resupply through D.O.T. Marine Services can handle the additional fuel supplies required. In the longer term, it may be necessary to consider the deployment of independent storage facilities and such other facilities at D.E.W. line and other sites, as may be required in support of these activities.

L.A.C.O. Hunt,
Secretary.

Department of Indian Affairs
and Northern Development.
June 6, 1969.

UNCLASSIFIED

DOCUMENT ND-479

MEMORANDUM TO THE ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT

The Department of Indian Affairs and Northern Development (Technical Services Branch) has recently completed a booklet containing 49 information and activity charts of the Northwest Territories and the Yukon Territory.

It is believed that much of the material in this booklet which has been updated from all known sources will provide departments with a variety of useful basic information and will have much relevance when planning their long-range programs.

Additional copies of this booklet should be directed to Physical Planning Division, Technical Services Branch, Department of Indian Affairs and Northern Development.

L.A.C.O. Hunt,
Secretary,
Advisory Committee on
Northern Development.

Department of Indian Affairs
and Northern Development.
May 14, 1969.

ND-479